

The phonological process of *Rongga* language from the phonemic into phonetic realization

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Abstract

Purpose – The current study aims firstly to explain the origin of the morphemic segments of *Rongga* language, either at the phonological or the phonetic level and the terms of the morphemic structure of *Rongga*, whether related to positive or if-then conditions. The second objective is to describe the phonological process of *Rongga* from the changing process of phonemic into phonetic realization.

Design/methodology/approach – As far as the methodology is concerned, three methods are applied including (1) method of collecting data, (2) data analysis methods and (3) method of presenting the result of data analysis. The literary method is defined as a way of obtaining written materials that can support the primary data as additional data.

Findings – The findings of compression placement on *Rongga* reveal that firstly, the monosyllabic words, whether or not preceded by a consonant, whether or not preceded by a consonant stressed on a single syllable and whether or not preceded by a consonant or before the second syllable, both of which either precedes the consonant or do not follow a word boundary. Second, three and four monosyllabic words will be stressed on the last syllable if they precede the consonant or not.

Originality/value – The results are expected to be considered as one of the primary contributions to the determination of the orthographic system of *Rongga*, in particular, the consonant and unique vowel in *Rongga*.

Keywords Placement, Stress, Syllable, Primary, Secondary

Paper type Research paper

1. Introduction

Before 2004, a research study on *Rongga* language, hereafter *Rongga*, was scarcely made. The study was so not done in the realm of language varieties but rather as the dialect of *Ngadha* language. *Rongga* language is considered as part of *Ngadha* language that is used in Rongga region. However, the local community recognized the Rongga variety as its own language (Antonius *et al.*, 1997, p. 1). The research confirms that this is the fact found in the study site (see Plate 1).

Rongga is one of the Austronesian languages that is increasingly documented. Approximately 7,000 people speak this language (Population Report of April 2005, Kota Komba district, *Manggarai* Regency). Most of the people who speak this language are in Tana Rata Village. Nevertheless, a small number of speakers are also found in the adjacent village of Waelengga. These villages are administratively included in Kota Komba District, West Flores Regency or *Manggarai* (Arka, 2004). The areas who use *Rongga* are Tana Rata Village, Watu Nggene Village, Bamo Village and Komba Village. Geographically, *Rongga* is located in southern Central Flores.

Rongga is used as a means of communication among the family members and among Rongga community members. In addition, *Rongga* is also used as a means of Rongga culture as in religious ceremonies such as *Vera* demonstration (the combination of dance with the song of Rongga people), *Peti* ceremony (the New Year eve ceremony) and *Dasa Jawa* ceremony (planting ceremony). *Rongga* is also used as a means of instruction in education in the district of Kota Komba from the first to the third grade of primary school.

Geographically, *Rongga* is located in the southern area of Central Flores (Arka, 2003, p. 3). The island of Flores is inhabited by people speaking 18 local languages, namely *Manggarai*,



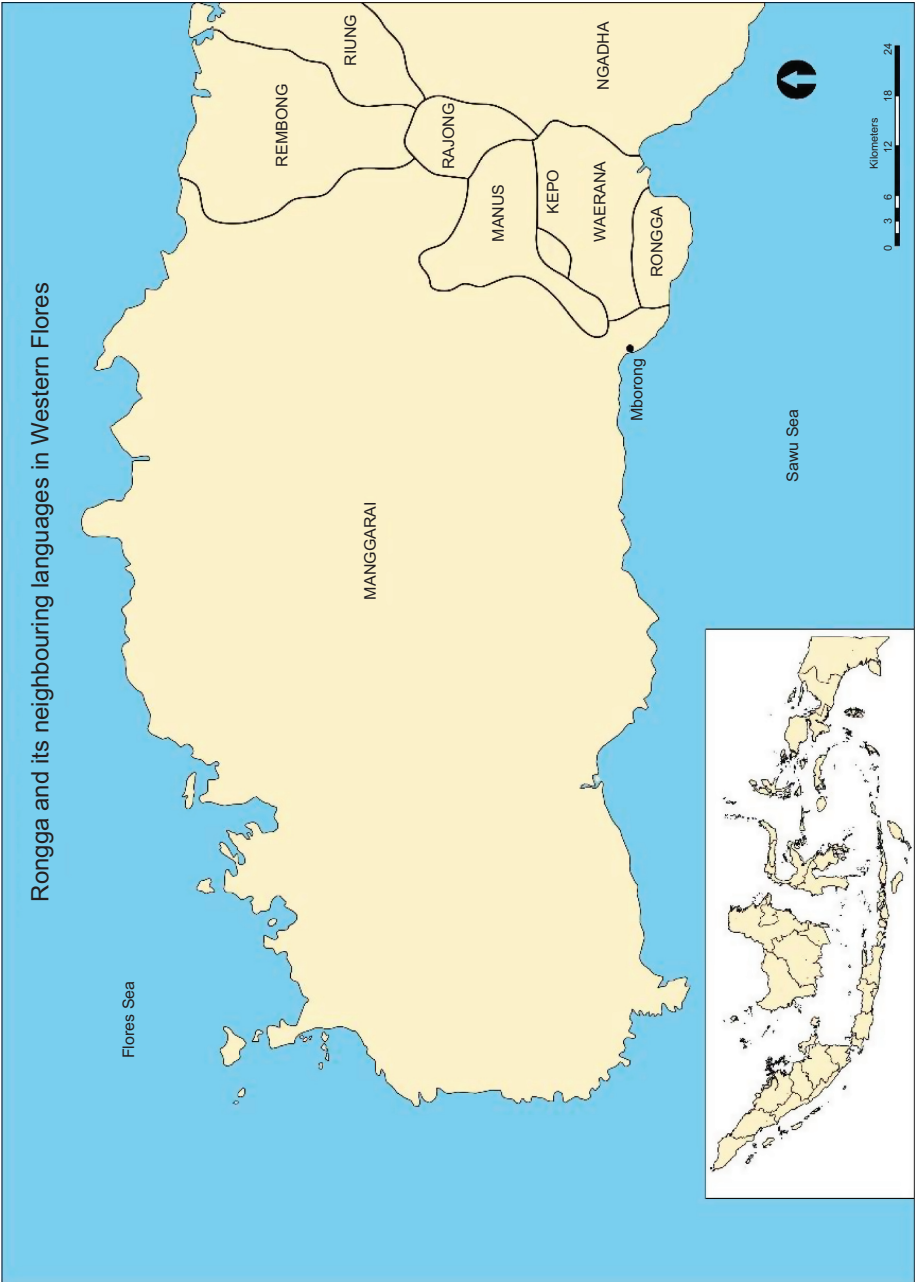


Plate 1.
Rongga enclosed by a
number of languages
(ANU 06-090)

Rembong, Rajong, Manus, Kepo', Waerana, Rongga, Riung, So'a, Ngadha, Nage, Keo, Ende, Lio, Sikka, Lamaholot, Lewotobi, and Komodo (SIL, 2001, p. 1). The group of language on Flores is divided into two subgroups namely the sub-group of West Flores and the sub-group of East Flores. The West Flores sub-group includes *Manggarai, Ngadha* and *Lio* while the East Flores sub-group includes *Sikka, Lamaholot* and *Kedang*. The West Flores sub-group is also divided into two. The first one consists of *Lio, Ngadha* and *Palue* language, and the second one consists of *Manggarai, Rembong* and *Komodo* language (Fernandes, 1996, pp. 175–176; Kosmas, 2008, p. 2). The grouping of languages performed by Fernandes has nothing to say about *Rongga*. Nevertheless, based on the research, it can be assumed that *Rongga* is included as a member of West Flores sub-group, especially *Ngadha* and *Lio* language. It is based on the vocabulary data of *Rongga* that resembles *Ngadha* and *Lio* language (Kosmas, 2008, p. 2). Because of the similarity of vocabulary in *Ngadha* language, it is natural that other researchers believed *Rongga* to be a dialect of *Ngadha* language.

In this study, *Rongga* variety is not seen as a dialect of *Ngadha* language but as a separate language (SIL International, 2001). This is based on the four reasons including first, according to history. *Rongga* is used in the poem of *Vera* (a ritual performed in the form of songs and dances) which remains maintained until today, and the name of *Rongga* is closely related to the name of the couple, a husband and wife. It is believed to be the ancestor of *Rongga* community, namely *Tete* and *Re*. They lived in Wolo Rongga Cave “Gunung Rongga”. From *Gunung Rongga* (Mount Rongga), their descendants spread to the surrounding areas, from Watu Lamba to Lia Mbala. Under the names of these two residences, it can be ascertained that they lived in such big caves. Second, from the socio-cultural aspects, *Rongga* ethnic has a patrilineal system, while *Ngadha* ethnic adheres to the matrilineal system. Due to this different cultural system, it is reasonable that one ethnic community has its own language as a means of communication and as a cultural language. This is in line with their recognition that they have the language of *Rongga*. Thirdly, the speakers of *Rongga* do not understand and cannot use *Ngadha* language when they meet and talk. In contrast, *Ngadha* speakers do not understand and cannot use *Rongga* when they meet and speak to each other. Lastly, it is known that *Rongga* has a grammatical difference compared to *Ngadha* language.

The difference among *Rongga, Ngada,* and *Lio* language lies in the grammatical aspects, especially in the active and passive diathesis. *Rongga* has active and passive construction, while *Ngadha* and *Lio* language do not. In addition, *Rongga* has a strategy to convert the core arguments into noncore arguments through syntactic mechanisms, whereas *Ngadha* and *Lio* language do not share a strategy to convert core arguments into noncore arguments. *Ngadha* language only has OV (*objective voice*) structure other than AV structure (*agentive voice*). *Lio* language also has the AV structure with the order of agent–verb–patient sequence and OV structure with the order of patient-agent-verb (Kosmas, 2008, pp. 3–4; Sawardi 2000, p. 42).

With such phonological phenomena, *Rongga* does not recognize the orthographic system; the phonological aspects of *Rongga* need to be investigated to discover the speech sound systems that later can be used as the basis for making the orthographic system of *Rongga*. Based on the observations in this research, *Rongga* and several other local languages in Flores belong to a vocal language because every syllable in *Rongga* is always terminated by vowels. However, for the other uptake elements from other languages, the words ended in consonants are attached to the end of a syllable (*coda*). This tends to be maintained especially among the educated speakers. Due to this propensity, some uptake elements adjusted to the speech sound system of *Rongga* are also found. Consonant sounds (such as voiced alveolar resonant consonants /d/ [d] in the word “*jadi*” /dʒadi/ in Indonesian will turn into voiced alveolar implosive consonants /ɖ/ [ɖ] on the word “*jadhi*” /dʒaɖi/ [dʒaɖi] in *Rongga*) or conform to the syllable pattern of *Rongga* language that does not end in a consonant, (e.g. the name of “*Petrus*” that has the pattern of CV.CC.VC will be transformed into “*Petu*” with CV.CV pattern in *Rongga*). Other than that, the word “*putus*” in Indonesian will be “*putu*” in *Rongga* language. There is

also a combination of syllabic pattern adjustment and sound adjustment, with *Rongga* (e.g. *adat* /*adat*/ [adat] in Indonesian becoming *adha* /*aɗa*/ [aɗa] in *Rongga*).

In addition, it should be noted that *Rongga* belongs to an *isolating language* in the sense of having no affixes (prefix, infix, suffix, confix or simulfix). What is meant by an isolating language here is a language that has no morphological process. Words and morphemes in this isolation language correspond to one on another or it can be said that each word is a morpheme (Comrie, 1983, p. 39). Therefore, it can be assumed that the phonological process as a result of interaction between affix and the basic morpheme is potentially not occurring in *Rongga* language.

Based on the background above, this study aims to: (1) explain the origin or realization of the morphemes segments of *Rongga*, either at the phonological level or the phonetic level, (2) account for the terms of the morpheme structure of *Rongga* language, whether related to positive or if-then conditions and (3) describe the phonological process of *Rongga* from the changing process of phonemic into phonetic realization.

The results of this study are expected to be a reference for similar research, especially for the research of languages on the phonological aspects. In addition, it can also motivate the interest of the linguists to examine the phonological aspects by using generative phonology theory in particular. The results of this study are very useful for the speakers of the language itself. During this time, they have never seen and read the research of *Rongga* especially on the aspects of phonology. The results are expected to be one of the considerations to determine the orthographic system of *Rongga*, primarily the necessity of definite determination of consonant orthography and unique vowel in *Rongga*.

The scope of this study is the placement of stress on the primary stressing pattern on the word, either one, two, three or four in the *Rongga* language. Stress patterns on sentences are not discussed because the stress pattern at the sentence level is more complicated. Meanwhile, the problem in this research is, how the placement of stress in *Rongga*?

2. Literature review

This literature study provides very important information in broadening the horizons to trace the previous researches on a number of languages understudy, in particular, the ones applying a generative phonological theory.

The research models used in this study are varied. At the stage of data collection, in the *Rongga*-speaking community, the methods used are field linguistic and library methods equipped with paleography technique, elicitation and recording. Meanwhile, at the stage of data analysis, the researcher used the generative phonological method in the form of determining the existing morpheme, registration of the existing interruptions, writing the rules and assessing the written rules.

The theories used in data analysis are phonetic theory, the so-called articulatory and acoustic phonetics and auto-segmental phonology theory in determining the complex consonants as a segment as well as the theory of generative phonology transformation. Articulatory phonetics is needed to determine the location of the sounds produced precisely. Acoustic phonetics is also necessary to determine the phonetic and phonemic transcriptions, vertical lines (vocal cords) of the consonant sounds and the vocal beam sounds that need to be observed. The generative phonology transformation theory is used to find a number of segments of the *Rongga*, the distinctive features of the phonological segments, the terms of the morpheme structure-positive conditions, the if-then terms of the segments, the if-then terms of the segment sequences, the segments at the beginning and the end of the basic phonological morpheme, the phonological processes and rules and lastly, the determination of the *Rongga* language orthography.

Concerning a phoneme, Hyman (1975, pp. 9, 60) puts forward three opinions. The first notion is phoneme as phonetic reality, the second is phoneme as a phonological reality and, the third is the phoneme as a psychological reality. Of the three opinions, generative

phonologists follow the third opinion, namely phonemes as psychological reality because the mental representation of the speaker gives birth to the sounds of words in his language

The morpheme structure requirements were originally called lexical redundancy rules which are also called morpheme structure rules (Harms, 1968, pp. 88–89). Stanley distinguishes the morpheme structure requirements for three conditions, namely (1) if-then conditions, (2) positive conditions and (3) negative conditions. The if-then conditions are divided into two, namely if-then conditions for segments and if-then conditions for a series of segments (Hyman, 1975, pp. 110–112).

Phonetics plays a very important role in phonological research. Therefore, phonetics can determine the number of segments that exist in a language (phonemic). Phonemics provides a technique for processing rough phonetic data to obtain a significant unity of sound and then symbolizes it into an alphabet that is easy for the speakers to read. Phonetics examines three differences, but those differences depend on each other's point of view, investigating the instruments of speech through the use of articulation of speech sounds, investigating sound waves that are physically emitted through the air from one person to another and investigating how humans take in receiving sounds through the ear intermediary. These three modes of science are generally labeled articulatory, acoustic and auditory (Crystal, 1976, p. 170). Correspondingly, phonetics is divided into three types or branches including (1) articulatory or organic phonetics, (2) acoustic phonetics and (3) auditory phonetics.

3. Research methods

This study applies three methods, covering (1) method of collecting data, (2) data analysis methods and (3) method of presenting the result of data analysis. The data collection uses field linguistic method and literary methods. Field linguistic method is a method used to obtain linguistic data in the field and study the phenomenon by means of observation and interview. What is observed is the location of the research and speakers of the *Rongga*. Meanwhile, the interviews are conducted in a structured manner by preparing in advance the questions to be asked, and unstructured interviews are done abruptly. To obtain the data, a recording technique is used with a speech analysis program and an elicitation technique. This research is conducted in Komba town covering three villages, namely Tanah Rata urban village, Watu Nggene village, Bamo village, Komba village of East *Manggarai* district on the island of Flores of East Nusa Tenggara Province. The literary method is defined as a way of obtaining written materials that can support the primary data as additional data.

The data analysis method uses a qualitative method, *i.e.* analyzing data based on data found in the field not using statistical data. The method used in presenting the results of data analysis is a descriptive method by describing the results of data analysis

4. Placement of stressed syllable in general

Words comprising rhythmic units are called syllables. Generally, most languages are having words of two syllabic types. One of two syllables is more striking or more powerful than the other syllables, which is the so-called *stress*. According to IPA notation (The International Phonetics Alphabet), the primary stress is [ˈ] and the secondary stress is [ˌ] placed before the stressed syllable (Gussenhoven and Jacobs, 1998, p. 17). Stress is not a phonological feature but rather a structural position. That structural position is the syllable, a phonological constituent above the phoneme or segment. In particular, it is characterized by a strong and weak syllable. One syllable is said in particular to strongly become more prominent than other syllables (Gussenhoven and Jacobs, 1998, pp. 206–207).

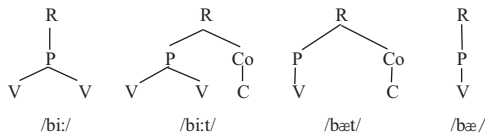
Being able to know which syllable gets the point of stress, it is necessary to note the link between cores with *pada* (“feet”). A typical case of *pada* is described in the following (Gussmann, 2002, pp. 216–217).

- (1) A single core that does branching for example: on Munster Irish Language two alternately vowels on the word are diphthong because it consists of the single-branched core.
- (2) A sequence of two cores perhaps it is more than do not branch, for example: on Monster Irish language *fada* /fada/ [ˈfa.da] “long” [ˈfa.da]
- (3) Unbranched single-core, such as Munster Irish Language *ba* /ba/ [ˈba] “carabau”

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However, Roger Lass inquires some terminologies to discuss the structure of syllable. A syllable consisting of the initial syllable or the Onset (*O*) and Rhyme (*R*) and *R* consists of Peak (*P*) and Coda (*Co*). Each of these categories, except for *P* may be empty (example *oh, ah*). Here are naturally expressed as a form of a syllable constituency (σ) that can be represented as a branching tree.

These nodes, peak, are controlled by categories such as vowels (*V*); consonants (*C*) in turn are controlled by specific segments. When monosyllabic words are chosen in English, we must get its tree branch. The use of the same approach can be seen on why the English language as a definite limitation on the shape of the final syllable is stressed. We cannot deny that a VC syllable is a branch of *R* with no branches *P*, *Co* and P VV branching, while VVC branched *R* with branches *P*. Simply putting stress in the final syllable in the English language has a structure Rhyme, such as:

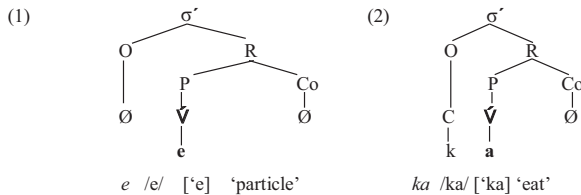


5. Placement of stress in Rongga

Placement of stress focuses on the primary stress pattern in words; either it has single, double and triple syllable. Stress on the sentence patterns is not discussed because the stress pattern at the sentence level is more complicated. Stress in *Rongga* is not phonemic, meaning that stress does not cause a new meaning if the position is moved around, for example,

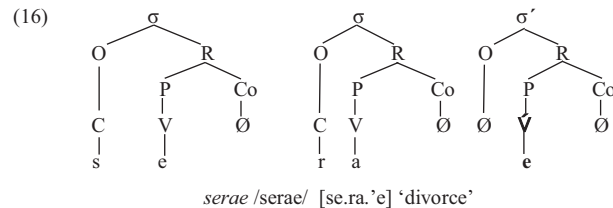
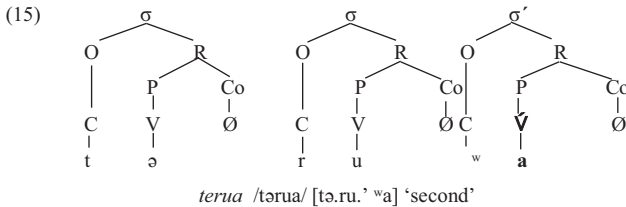
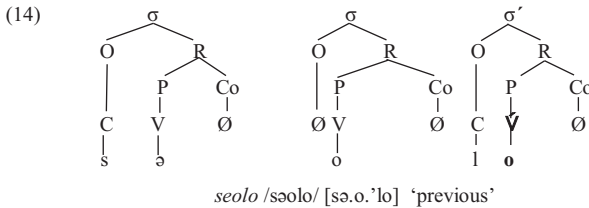
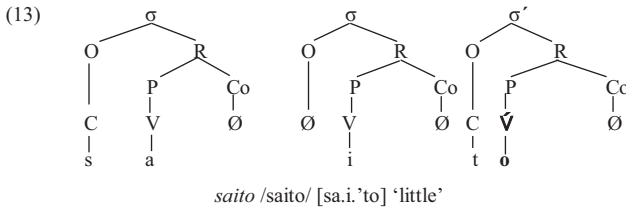
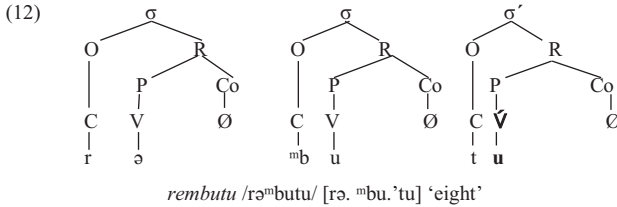
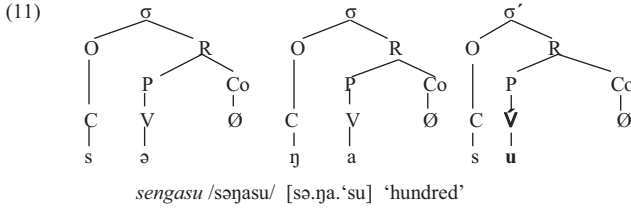
paka /paka/ [pa.'ka] 'have to'
[pa.ka] 'have to'

Stress in *Rongga* falls in the core (nucleus) syllable, i.e. the vowel of the syllable. But the quality is not the same stress as every syllable nucleus. Strong stress (primary) is marked with (') in front of the core syllable meaning intense stress, and there is also weak stress (secondary), for example, to know the position of the primary stress on *Rongga* language; then consider the following data:



whether or not preceded by a consonant or before the second syllable, whether or not preceded by a consonant followed by a word boundary.

However, it is not the case with the following data, namely three monosyllabic and four monosyllabic words. Generally, the primary stress is on the last syllable of three monosyllabic and four monosyllabic words. For more details, then consider the following data.



Based on the tree diagrams (which is branched) above, it can be said that the primary stress falls on the last syllable vowel (σ') of three monosyllabic words derived from *P* which is a branch of *R* syllables. Plate 2 below shows that the primary stress is on the last vowel of the syllable receiving primary stress of three monosyllabic words. First, second and third vowel syllable respectively indicate the magnitude of the linear 46%, 47%, and 49 (as read in Plate 4 below)

Example: the primary stress falls on four monosyllabic words

- (17)
-
- lekosui* /lekosui/ [le.ko.su.'wi] 'name of places'
- (18)
-
- lukamai* /lukamai/ [lu.ka.ma.'i] 'tomorrow'
- (19)
-
- sunggisina* /su.ŋgi.si.na/ [su.ŋgi.si.'na] 'name of forefather of Motu'

Based on tree diagrams (which is branched) above, it can be said that the primary stress falls on the last syllable (σ') of four monosyllabic words derived from *P* which is a branch of *R* syllables. Plate 5 below shows that the primary stress is on the last vowel of the syllable that gets the primary stress. The first, second, third and fourth vowel syllable shows a linear magnitude 12%, 23%, 25%, and 49%.

Based on the above data, it can be formulated in the following phonological rules.
Phonological rules (PR) 2

[+syl] → [+stress]/[(-syl)] — # Or more easily can be written as

#(C)V((C)V) ((C)V) ((C)V)# → [+stress] /#(C)V((C)V) ((C)V) ((C)V)#

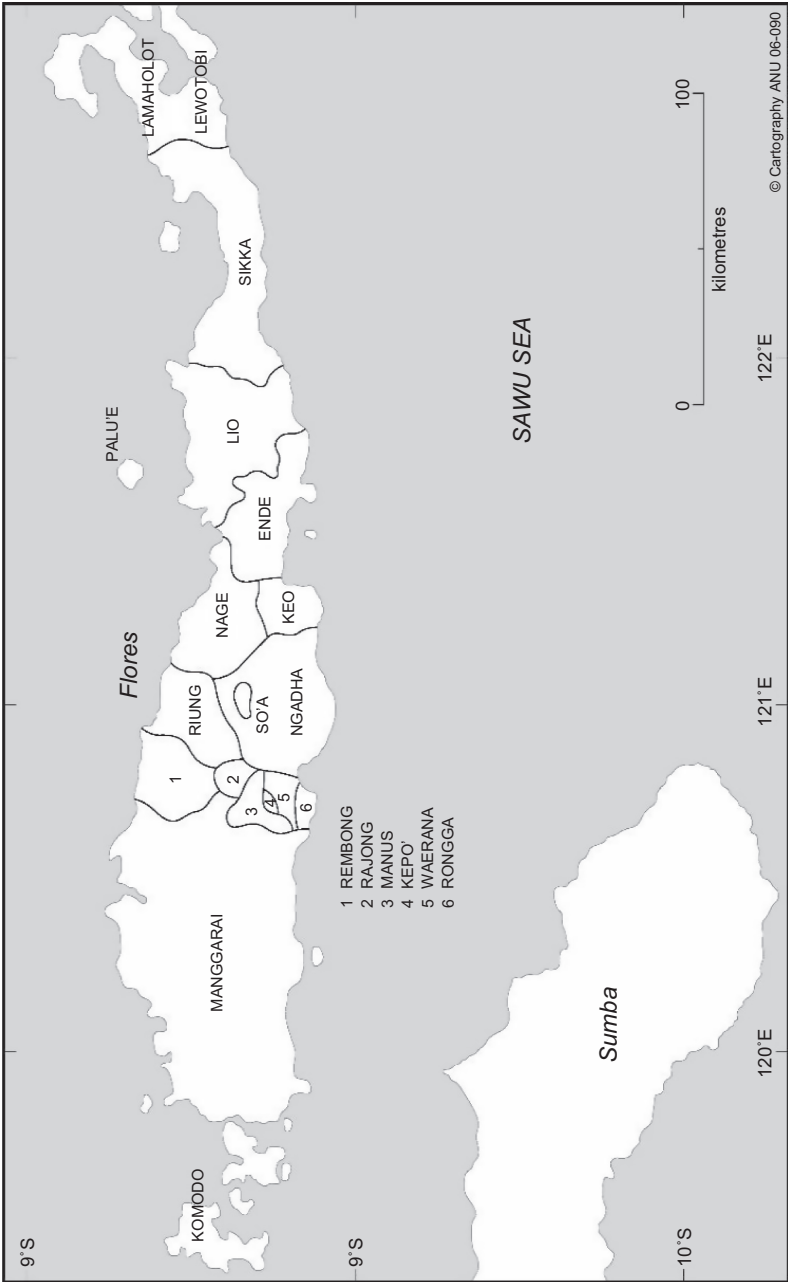


Plate 2.
Rongga on the south coast of East Manggarai regency in the border with Ngadha regency (ANU 06-090)

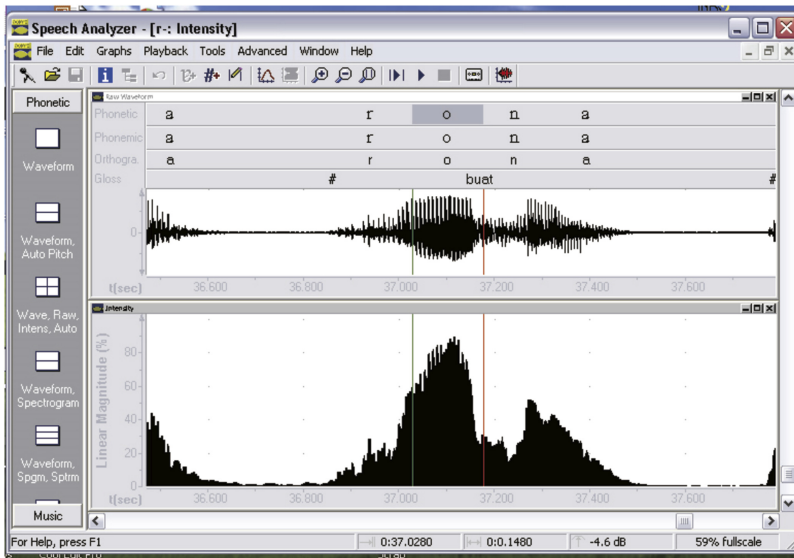


Plate 3.
Shows the primary
stress on the first
syllable *rona* /rona/
[ro.na] “make” (data
source rona-i-1 JPEG)

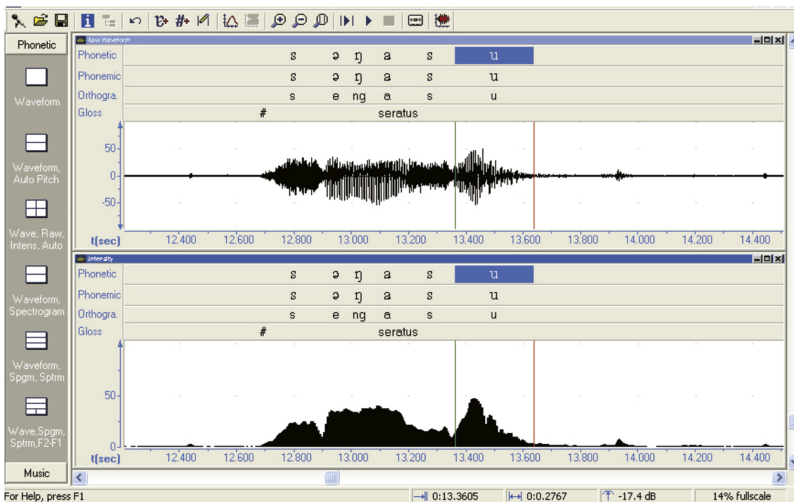
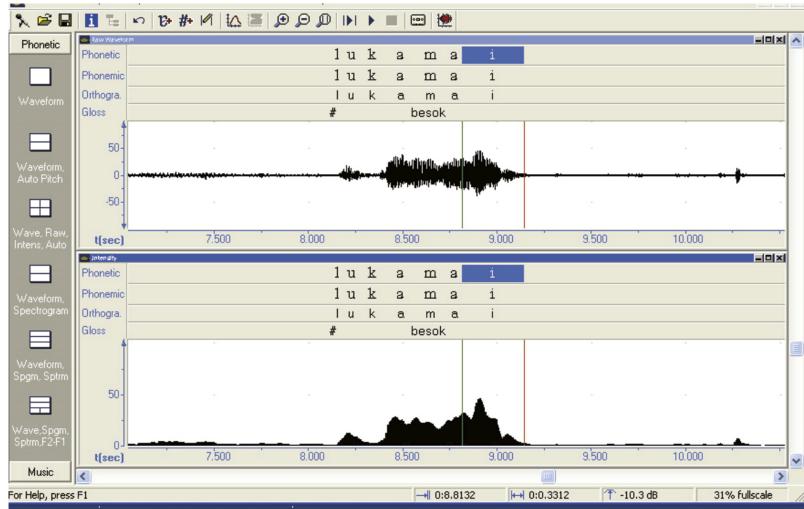


Plate 4.
Shows the primary
stress on the last
syllable words *sengasu*
/səŋasu/ [sə.ŋa.su]
hundred (data source:
data t-1: Intensity
sengasu-i JPEG)

Plate 5.
Shows the primary stress on the last syllable words *lukamai* /lukamai/ [lu.ka.ma.i] “tomorrow” (data source: DT: 8 Intensity lukamai-i JPEG)



The formulation of phonological rules above can be described that the vowel ([+syll]) becomes stressed ([+stress]) (σ) on the last syllable, both of which precede the consonant ([−syll]) or not.

6. Conclusion

Placement of the stress in the *Rongga* can be concluded as follows. First, monosyllabic words, whether or not preceded by a consonant or the first syllable of disyllabic words, whether or not preceded by a consonant becomes stressed (σ) on the condition of a single syllable, whether or not preceded by a consonant followed by a word boundary. Second, the three monosyllabic words and four vowels ([+syll]) are to be stressed ([+stress]) (σ) on the last syllable, whether both of them precedes the consonant ([−syll]) or not.

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