

Relationship Tolaki Language and Taloki Language (Lexicostatistic Study)

La Ino^{1,*} Yazid A.R.G², Samsul³

^{1,2,3}Faculty of Humanities Halu Oleo University

*Corresponding author. Email: laino@uho.ac.id

ABSTRACT

Tolaki and Taloki are two languages spoken by people in Southeast Sulawesi Province. Taloki language is spoken in Maligano District of Muna Regency while Tolaki language is spoken in parts of Kendari City, Konawe District, South Konawe District. The data was collected with a questionnaire containing 200 words of Moris Swadesh. After the data was collected, the questionnaire was filled with only 191 words, using lexicostatistic methods it was found that Taloki and Tolaki were related languages. Cognat is related between Taloki and Rejact languages as much as 72 words or 38%. Then based on the calculation of the separation time, it is known that Taloki and Tolaki have separated since 230 years ago.

Keywords: kinship, lexicostatistics, kognat

1. INTRODUCTION

Taloki and Tolaki are two Austronesian languages in Southeast Sulawesi Province. Taloki language is spoken by the people in Maligano district of Muna Regency and Wakalambe village of Kapuntori district of Buton Regency. It is a minority language and is flanked by several languages, namely Muna, Wolio, and Kulisusu. Taloki language research was conducted by. Ira [1] researched Taloki Language Shift in Maligani village Maligano district of Muna regency. The result of the research is that Taloki language shifts occur among the elderly and young people, characteristics of Taloki language shifts are found in several areas, namely the family realm, the realm of education, the realm of transactions, the realm of government, the realm of livelihood, the realm of telephone, the realm of SMS. The Tolaki language is spoken by people who are in parts of Kendari City, Konawe District, southern Konawe district, northern Konawe district. Research on the Tolaki language was conducted by Ino [2] on the Lexicostatistic Study of Culambacu Language with Tolaki language. This study uses lexicostatistic methods. The results showed that Culambacu and Tolaki are cognate languages with a 39% percentage of kinship, with a split time of 3070+-230 years ago. Further research relevant to this paper is Ino [3] on The Reconstruction of Protolanguage Muna and Kambowa. The study used synchronic and synchronic methods of being equal. The results of the study were that the proto-

language Muna and Kambowa experienced apocope, syncope, and metathesis.

2. METHOD

The relationship between cognate languages in comparative studies can be proven based on inherited elements from the original language or proto-language [4]. The concept of the original language or proto-language is not a real form of language, but a form designed to wake up or be reassemble as a picture of the past of a language. In other words, it is a theoretical idea designed in a very simple way to connect language systems as hard as using several rules [5]; Bynon [6]. The facts of language in the form of order, the sequence found in the languages of relatives show evidence of a shared authenticity inherited from a common ancestor [6]. With the same inherited characteristics, the harmony between relative languages can be found and the proto-language system can be traced.

Lexicostatistics is one of the techniques of grouping languages or dialects that prioritize statistical calculation of words to find out the number of similarities of relative words compared [7]. Lexicostatistics contains a list of the basic vocabulary of each language to be compared. Swadesh [8] proposed 200 universal basic vocabularies, which included pronouns, number words, limb words (their nature and activities), nature and its surroundings, and everyday cultural tools.

Lexicostatistics as one of the methods of language grouping has been widely used by linguists in this world. This method uses statistics in the form of numbers as the basis for sorting. The method attempts to find a kinship between two or more languages by taking into account the elements of the equation in the vocabulary.

According to Nothofer [9], lexicostatistic methods have several advantages when compared to other methods. The advantages in question are (1) as a list of basic vocabulary that can quickly determine the kinship of one language (kinship language), (2) as a tool of grouping languages/dialects as hard as the proto-language is not so old/ancient, and (3) as a tool/method of grouping that can be used in the early stages to determine the classification of languages.

Furthermore, Nothofer [9] established three basic assumptions of lexicostatistic methods: (1) basic vocabulary is replaced at the same speed in all languages at the same time. According to this assumption that every 1000 years about 18-20% of basic vocabulary changes and is generally accepted in all languages simultaneously, (2) all the basic vocabulary contained in the basic vocabulary list is most likely changed simultaneously, and (3) there is a so-called basic vocabulary that is considered generally accepted in every language in the world.

Lexicostatistics follow the patterns put forward by Keraf [10] namely, (1) collecting several words from the basic vocabulary, and (2) determining the same basic vocabulary pair. Further to that, efforts to determine basic vocabulary as hard as following the steps put forward by Keraf [10] namely, (1) looking for vocabulary that is not from the language/loan word, (2) experiencing a single morpheme / free only by isolating all bound morphemes, and (3) comparing all word pairs to determine the number of words that are as difficult as based on recursion, co-occurrence, and analogy. Efforts to determine the same word pair are done by identifying all the same word pairs, phonetically similar word pairs, voice-corrected word pairs, and word pairs that only have one phoneme difference on one phoneme.

There are three formulas in the lexicostatistic method that are very important, namely (1) the formula that determines the percentage rate of kinship relationships, (2) the formula looking for the separation time, and (3) the formula looking for the error period. These three formulas will be briefly explained as follows.

Kinship Relationship Percentage Formula

The degree of kinship of two or more languages can be known by using the following formulas:

$$H = \frac{J}{G} \times 100\%$$

Description: H = Kinship relationship
 J = Number of relatives
 G = Glos (item)

Split Time Formula

The separation time of two or more languages can be known by applying the following formulas:

$$W = \frac{\text{Log C}}{2 \text{ Log R}}$$

Information:
 W = split time
 C= percenttaee said relatives
 R = retention (resilience) of basic vocabulary

Formula Calculates Error Length

For miscalculation in statistics does not occur it is necessary to give an estimate that something happens not in a certain time but a certain period. Thus, in that particular period at that time, there is an accumulation of differences of two or more languages that gradually get higher which results in the separation of languages [10].

Statistics have three assumptions developed to prevent miscalculation. These three assumptions are (1) 70% (0.7) contains truth, (2) 50% (0.5) contains truth, and (3) 90% (0.9) contains truth. According to (Keraf, 1996) that the higher the certainty of truth the greater the duration of the year, on the contrary, that the lower the certainty of truth the smaller the year term.

As said earlier that statistics acknowledge the existence of three standard errors. The standard error is usually chosen middle ground, which is 70% (0.7) contains the truth. The standard error is taken into account with the formula:

$$S = V \frac{C(C-1)}{n}$$

Information
 S = Standard error
 C= Percentage of relatives
 n = Number of words compared

In this research, the only thing used in calculations is the formula of calculating kinship relationships. Other formulas are not used because the study focuses on the reconstruction of the proto-language of the target does not calculate the time of separation of these languages. In other words, the study will target sound changes, determine proto-language, and reconstruct targeted proto-language.

3. ANALYSIS

The body text starts with a standard first-level head **ANALYSIS**

Based on the results found that the percentage of Taloki and reject relatives is 72 words with a list of Swadesh filled with 191. This indicates that there are 9 words that their partner does not find. Thus, it can be analyzed as follows

Kinship Rate Percentage Formula

$$H = \frac{I}{C} \times 100\%$$

$$H = \frac{72}{191} \times 100\%$$

$$H = 38\%$$

Thus, the kinship relationship in Taloki and Tolaki languages resulted in a 38% percentage of language kinship and was included in language kinship, according to Crowley [11] and (Keraf [10].

a. Percentage of Tal and Tol languages = 38%

b. Length of time split I

$$t = \frac{\log c}{2 \log r}$$

$$= \frac{\log 38\%}{2 \log 86\%}$$

$$= \frac{0,302}{-0,420}$$

$$= 0,302$$

$$t = 1,4$$

$$= 1,4 \times 1000$$

$$= 1400 \text{ years}$$

c. Length of time split II

$$t_1 = \frac{\log c + \sqrt{\frac{c(1-c)}{n}}}{2 \log r}$$

$$= \frac{\log 38\% + \sqrt{\frac{38\%(1-38\%)}{191}}}{2 \log r}$$

$$= \frac{\log 0,38 + \sqrt{\frac{0,38(1-0,38)}{191}}}{0,302}$$

$$= \frac{\log 0,38 + \sqrt{\frac{0,38(0,62)}{191}}}{0,302}$$

$$= \frac{\log 0,38 + \sqrt{\frac{0,24}{191}}}{0,302}$$

$$= \frac{\log 0,38 + \sqrt{0,12}}{0,302}$$

$$= \frac{\log 0,38 + 0,35}{0,302}$$

$$= \frac{-0,420 + 0,35}{0,302}$$

$$= \frac{-0,07}{0,302}$$

$$t = 0,23$$

$$= 0,23 \times 1000$$

$$= 230 \text{ tahun}$$

d. Error period

$$t - t_1 = 1400 - 230 = 1170 \text{ years}$$

e. Separation of Taloki and Rejct languages from their ancient languages:

1. 1400 years±1170 years, meaning between (1400+1170) years and (1400-1170) years ago, or

2. In 894 BC + 1170 years, meaning between 1170 years after and before 894 BC.

4. CONCLUSION

Based on the results of the analysis can be concluded Taloki and Tolaki are two related languages. The percentage of kinship is 38%. These two languages separated from proto-languages about 1400 years±1170 years.

AUTHORS' CONTRIBUTIONS

This paper is the result of collaborative research conducted by La Ino, Yazid, and Samsul. La Ino as the team leader was in charge of coordinating the team and analyzing the data, Yazid as a member in charge of collecting data in the field and assisting the lead researcher in analyzing the data, Samsul as a member of the researcher assisted in research as a data collector and assisted the chairman in analyzing the data.

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