

# Linguistic Map of “Breast” in Zhuang and Its Interpretations

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**Abstract:** The term “breast” is one of the basic words in a language. It has numerous lexical forms in Zhuang dialects, which can be divided into 13 groups. The lexical forms of the term “breast” can also be divided into five types, including n-, m-, p-, tɛ-, and ʔ-, based on initials. Geographical distribution and etymological research showed that different forms emerged because of influences such as internal innovation, borrowing, and tonal derivation. Additionally, the word “breast” is intimate to women and is inappropriate for direct address. Therefore, people frequently use borrowed or invented forms to avoid this taboo, which contributes to the overlap of many forms.

**Keywords:** Zhuang language, “breast”, geographical distribution, diachrony

## 1. Introduction

### 1.1. The motivation for the research question

The word “breast” is one of the core words for body parts, appearing at position 51 on Swadesh’s list of 100 words. Generally, it is believed that terms for body parts are among the most stable core words. Monosyllabic forms of “breast” are used in the Zhuang language, however, there are complicated lexical differences within dialects and unclear correspondences within Tai-Kadai.

Why do Zhuang dialects have many complicated expressions for a single monosyllabic core word? How can its category distributions and their hierarchical connections be explained? This is the question that underlies this work.

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### 1.2. Literature review

Wu (2017:752) reported that synonyms like “chest” “nipple” and “milk” have etymological ties to the term “breast” in Eurasian languages. In the Zhuang language, “breast” and “milk” have the same forms in most dialects, however in certain dialects, “milk” is expressed as “water + breast”. Endo (2016) discussed the types of “milk” in Tai-Kadai and analyzed the chronological sequence of each category based on their distribution characteristics, including different synonyms of “breast” in the Zhuang language. However, due to the limited length of the article, the discussion cannot be fully explored, and there is still an opportunity for further investigation by combining the geographical distribution with etymological information and performing a comparative analysis.

Therefore, this article aimed to create a linguistic map of the word “breast” in Zhuang dialects by examining its distribution patterns, investigating the origin of various synonyms, and drawing a conclusion regarding their diachronic sequence.

### 1.3. Source of data

Most of the information regarding the word “breast” in the Zhuang language in the article came from a study of 61 Zhuang dialects conducted in 2019 and 2020. The works *A Study on Zhuang Dialects* (1999) and *Vocabulary of Minority Languages in Guangxi* (2008) were also used as additional sources. To give a comprehensive description of the word “breast” in the Zhuang language, different expressions for the same dialect, different pronunciations in different towns for the same site, and results different from findings of previous research are presented on the map.

## 2. Lexical forms of “breast” in the Zhuang language and their geographical distribution

The synchronic distribution of the lexical forms for “breast” in the Zhuang language is shown in Figure 1<sup>1</sup>:

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<sup>1</sup> The language mapping software developed by Nankai University and Tianjin Xinhui Network Technology Service Center is used in all the language maps listed in this paper; the base map is based on Gaode map (©2023AutoNavi—GS (2022)1061).

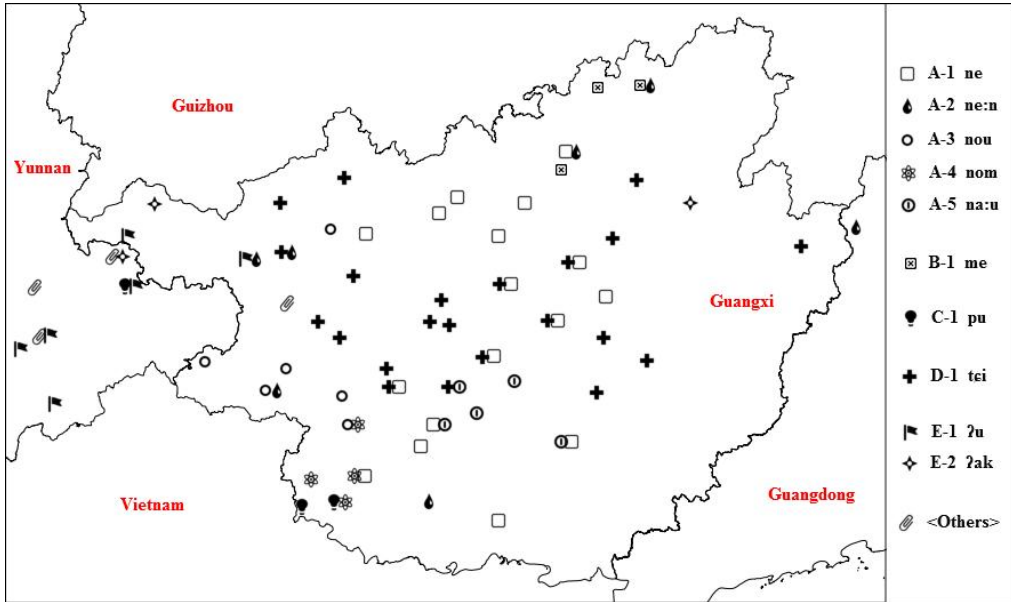


Figure 1: Geographical distribution of “breast” in Zhuang dialect.

From Figure 1, it is evident that the lexical forms for “breast” in modern Zhuang dialects are complex. The word for “breast” in various Zhuang dialects is monosyllabic, and different lexical forms reflect different origins. Based on the initials, they could be classified into five categories (Table 1).

Table 1: Lexical forms of “breast” in the Zhuang language.

Type	Legend	Variation	Number of types and the proportion
<b>Type A</b> <i>n-</i>	A-1 <i>ne</i>	$ne^{1/3/4/5}$ ; $ne^{3/5}$ ; $ni^1$	17, 21.3%
	A-2 <i>ne:n</i>	$ne:n^5$ ; $n\grave{a}n^5$ ; $n\grave{e}:n^3$ ; $ni:n^3$	7, 8.7%
	A-3 <i>nou</i>	$nou^4$ ; $nu^{4/5}$	6, 7.5%
	A-4 <i>nom</i>	$nom^2$ ; $num^2$	4, 7.5%
	A-5 <i>na:u</i>	$na:u^5$ ; $ne:u^{1/5}$	5, 6.2%
<b>Type B</b> <i>m-</i>	B-1 <i>me</i>	$me^5$ ; $me^5$ ; $mei^1$	3, 3.8%
	<Others>	$m\breve{o}^1$	1, 1.2%
<b>Type C</b> <i>p-</i>	C-1 <i>pu</i>	$pu^{1/3/5}$	3, 3.8%
	<Others>	$pe^6$	1, 1.2%
<b>Type D</b> <i>tɛ-</i>	D-1 <i>tei</i>	$tei^{3/4}$ ; $ei^3$ ; $t\ddot{e}i^3$ ; $t\ddot{e}e^4$ ; $\ddot{e}e^4$	22, 27.5%
<b>Type E</b> <i>ʔ-</i>	E-1 <i>ʔu</i>	$ʔu^3$	6, 7.5%
	E-2 <i>ʔak</i>	$ʔak^7$ ; $ʔa^5$	3, 3.8%
	<Others>	$ʔ\epsilon m^2$	2, 2.5%

The division into the five aforementioned types is based on phonetic forms, hence the links between the subcategories within each category are not particularly close. The relationships among these forms and surrounding languages will be analyzed in the following text to explain their origins, determine the nature of different lexical forms, and make assumptions about the ancient forms of the Zhuang language.

## 2.1. Type A: *n-*

### 2.1.1 A-1 *ne*

There are mainly five forms of *n-* type, and the A-1 *ne* type distribution is relatively widespread, found in both the southern and northern dialects of the Zhuang language. However, there are differences in tones among different dialects. Similar  $ne^6$  form can also be found in the Mulam language. Liang and Zhang (1996: 288, 595) reconstructed the Proto Kam-Tai form \* $mle$  based on  $ne^5$  in the Liujiang Zhuang dialect,  $me^3$  in Bouyei,  $ne^6$  in Mulam, and  $me^1$  in the northern Kam dialect. Endo (2016) reported that the *ne* type might be caused by the drop of the final consonant of A-2 *ne:n* type. However, within the Zhuang language itself, there are as many as four tone categories for the *ne* type. If it is a native word, there should not be as many tone categories associated with it.

According to Cao (2008: 76), a considerable number of Chinese dialects in Guangxi refer to the breast as “*nai*” (奶). Yu (2016:212) reported that in the Ping dialect of northern Guangxi, the term for “breast” is pronounced as  $[ni^5][ne^3]$ , which is very similar to the pronunciation in the Zhuang language. The Chinese dialects commonly use “*nai*” (奶) or “*naizi*” (奶子) to refer to the breast. In the *Guangyun* dictionary, “*nai*” has two entries: “*milk, nu xie qie*” (乳也, 奴蟹切) and “*Chu people call mother, nu li qie*” (楚人呼母, 奴礼切). The pronunciation “*nu li qie*” (奴礼切), derived from “mother”, can explain various pronunciations such as  $ni^5/ne^3$  in Guangxi Chinese dialects. Due to the various dialect locations and times after borrowing into Zhuang language, different tones and vowels were produced.

Therefore, we speculate that A-1 *ne* might not be an inherent form but rather a newly borrowed word.

### 2.1.2 A-2 *ne:n*

The distribution of A-2 *ne:n* is relatively scattered and often co-occurs with other lexical forms. Jin (2012:193) reported that *ne:n* is a variant form of *ne*, which is the result of merging the overlapping forms. Endo (2016) reported that *ne:n* type is located in the most peripheral places in isolated districts and it should be the oldest form in this

area. It is worth noting that *ne:n* type is similar to the Sinitic word *nin* which is dominant in Min, Cantonese, and Hakka dialects. They probably share a common origin. Since there is no Chinese character for *nin* in Sinitic, the origin may be Tai-Kadai. Liu (1998), Tang (2009), and Takashi (2016) also reported that the *nin* and *nen* in Southern Chinese dialects are borrowed from Tai-Kadai. We agree with Prof. Endo’s viewpoint on the relationship between the Zhuang language’s *ne:n* and the Min, Cantonese, and Hakka dialects of Chinese. However, further research is needed to investigate whether they share the same origin, the direction of borrowing, and their strata in Tai-Kadai.

*The Vocabulary of Chinese Dialects* (1995:254) records *nen*, *nin*, and *nĩ* as phonetic characters for the word “*nai*” (奶), which are also written as “羴” and “羴” and are recorded as “朧” in the Min dialect. However, these colloquial characters are not included in *Guangyun*, *Jiyun*, or *Chinese Dictionary*. It can be assumed that these characters were created by locals. Therefore, we put forward a question, Do these characters (羴、羴、朧) used in dialects represent underlying words of the Tai-Kadai? If so, why do they occur sporadically within the Tai-Kadai proper but have a very widespread distribution in southern Chinese dialects? Chinese dialects were compared with the Zhuang language *ne:n*, Thai language *nom*, Zhuang language *na:u*, and Be language *no?* by Liu (1998) and Tang (2009), respectively. However, it is challenging to pinpoint the path of borrowing because *ne:n* is only sporadically spread across the Zhuang language in Guangxi. The forms *nen*, *nin*, *nĩ* in Chinese dialects and *nom*, *na:u* in the Zhuang language, apart from having nasal initials in common, it difficult to prove a genetic relationship.

Xie (2003:2-3, 101-108) reported that *nen* in Hakka is not directly related to the pronunciation of “milk” in southern minority dialects. He thought it was an er-final formed by merging *ne* and *-n*, which developed from “*nu li qie*” (奴礼切), which can be represented as *ne+n*→*nen*. In the Min, Gan, Hui, and Cantonese dialects, the pronunciation of “milk” is also derived from er-final of the character “奶” (*nai*). In this study, we agree with Xie’s argument, which postulates that the word “奶” (*nai*) in southern Chinese dialects has undergone a widespread fusion of er-final.

The Zhuang’s *ne:n* is distributed in Rong’an, Shangsi, and Lianshan in Guangdong Province, where the Hakka or Cantonese dialects are used. The pronunciation forms of *ne:n* and *ni:n* are also used in Lingle, Tianlin, and Jingxi, but it is noteworthy that these three places surround Baise, where Cantonese has a considerable influence. Therefore, based on the geographical distribution, we found that the distribution of *ne:n* and its surroundings often overlap with the distribution of the Cantonese, Hakka, and other

Chinese dialects. Chinese dialects may have influenced the *ne:n* in Zhuang, therefore borrowing should be from Chinese to Zhuang.

Furthermore, in the map provided by Endo (2016), there is also a distribution of *ne:n* in Hlai dialect of Hainan, but only one point. In the Hainan region, there is also a distribution of the Min and Cantonese dialects, thus it cannot be ruled out that the Tai-Kadai form *ne:n* in the border areas of Hainan is influenced by Chinese dialects. If the borrowing direction of *ne:n* is indeed from Chinese to Zhuang, then *ne:n* is not the oldest form in Tai-Kadai. Let us continue exploring the early forms of the Tai-Kadai language.

### 2.1.3 A-3 *nou* and A-5 *na:u*

The A-3 *nou* and A-5 *na:u* are two different forms. The *Zhuang-Han Vocabulary* also recorded them as *noux* and *nauq* in different Zhuang scripts. The *nou*<sup>4</sup> is relatively concentrated in the Dejing dialect, while *na:u*<sup>5</sup> is only distributed in the border area between the northern and southern dialects of the Zhuang language.

Xing (1999: 457) used the Chinese character “穀” to correspond to the Tai ʔu<sup>3</sup>. The term “穀” in *Shuowen Jiezi* means “gou, milk” (穀乳也). It is pronounced as “*gu hou qie*” (古候切). In *Yupian*, it is divided into two pronunciations, “*nu dou qie*” (奴豆切) and “*gong dou qie*” (公豆切). Prof. Xing pointed out that the correspondence between Chinese “穀” and Tai is prescient, but the specific form corresponding to Tai is open to discussion. Meng (2010: 44) pointed out that in the Wuming Zhuang dialect, the term for “breast” is *na:u*<sup>5</sup>, and he believed that *na:u*<sup>5</sup> can correspond to the pronunciation of “*nou*” (穀) and they have a similar meaning. While, according to the annotations in *Guangyun*, the pronunciation of “穀” is divided into two entries “*gu hou qie*” (古候切) and “*nai hou qie*” (乃后切), which both mean “milk”. The form “*nai hou*” is pronounced very similar to “*nou*<sup>4</sup>/*nu*<sup>4</sup>” in Zhuang, the initials, finals, and tones are all in a corresponding relationship. Therefore, it is speculated that Zhuang’s *nou*<sup>4</sup>/*nu*<sup>4</sup> may be borrowed from the Chinese character “穀”.

The variations of A-5 *na:u* include *ne:u*<sup>5</sup>/*ɲe:u*<sup>1</sup>. Endo (2016) suggested that *ne:u* may be the result of A-1 *ne* with an added sound -u. Cao (2008: 76) marked it as *ne:u* on the Chinese dialects map, and it only appears within the Guangxi region without a corresponding character. The form *na:u*<sup>5</sup> is only found near Guangxi Yongning with a narrow range. It has a primary variant of *na:u*, which cannot be explained by paragoge. Therefore, we assume that it is an innovation that emerged at the line separating dialects.

### 2.1.4 A-4 *nom*

The A-4 *nom* is mainly found in the Zuojiang dialect and it is an important form in the Southwest and Central branches of Tai. In Saek, this form is used to refer to “milk”.

nom<sup>2</sup> Thai      nom<sup>2</sup> Lao      num<sup>2</sup> Dai      nom<sup>2</sup> Shan      nom<sup>2</sup> Nung      nom<sup>2</sup> (milk) Saek

Zhengzhang (2014) reported that Chinese [njo] “乳” is related to Thai /nom/, Saek /nɔm/, Dai /-num/ for “breast” or “milk”. He also compared it to Burmese /nou/ and Tibetan /nu-ma/ for “milk”, “breast” or “nipple”. However, the formal comparison is not strict enough, and the similarities between these words are only limited to having nasal initials. Additional proof of phonetic correlation should be offered if there is a comparable relationship.

Liang and Zhang (1996: 322) pointed out that in Yongning, “breast” is called ne:u<sup>1</sup>, but “fig” is called nɔm<sup>2</sup> tsi<sup>2</sup>, which means “the breast of a cow”, indicating that nɔm<sup>2</sup> was used to mean “breast” in Yongning, which can be represented as nɔm<sup>2</sup> → ne:u<sup>1</sup>.

Based on the relationship between the Central and Southwest branches of Tai, It is assumed that the development of *nom* should have been an early invention between two different linguistic branches. Therefore, it is speculated that its stratum is relatively early.

### 2.2. Type B: *m-*

There are only two forms of *m-* type: *me* and *mv*.

Yu (2016: 225) proposed two main origins of “breast/milk” words in the Chinese dialects in Guangxi province: “mother” and “grandmother”. The Binyang dialect uses the same word, 弥 [mɛ<sup>1</sup>] [mi<sup>1</sup>], to express both “breast” and “milk”, in the Cantonese of Nanning, the word is 弥弥 [mɛ<sup>2</sup> mɛ<sup>3</sup>], while in Cantonese of Wuzhou, the word is *nai*(奶). Wang (2018: 218) pointed out that the “*nai*”(奶) and the “*ma*”(妈) are two important forms of the breast in the Chinese dialects, and they are respectively associated with the taboo nature of “*nai*” and the fact that breast is a characteristic of mothers. There are two possible origins from which B-1 *me*<sup>5</sup> in Zhuang derived: first, by borrowing from neighboring Chinese dialects; second, by tonal change of the word [mɛ<sup>6</sup>], which means “mother” in Zhuang language. Further evidence from Bouyei: [mɛ<sup>4</sup>] “breast” may come from the tonal change of the word [mɛ<sup>6</sup>] “mother”. Although different languages and dialects employ the same tonal modification approach to create new words, the kind of tones that are altered may differ. The second source is more reliable in our opinion.

The <Others> [mɔ<sup>1</sup>] in Yanshan Zhuang is thought to be borrowed from the Chinese word (妈), which means “mother”.

### 2.3. Type C: *p-*

There are also two forms of *p-* type, *pu*, and *pe*.

The C-1 *pu* type forms have the same consonant and vowel but different tones, indicating a consistent origin. Wang (2018:218) proposed that the reduplicated form *nainai*(奶奶) in Chinese dialects is an important term for “breast” and is widely distributed. However, the real pronunciation often differs from the term *nainai*(奶奶) which means “grandmother”. In Zhuang dialects, *pu*<sup>2</sup> is used to mean “grandmother”, and we speculate that *pu*<sup>1/3/5</sup> may be a tonal change derivation of *pu*<sup>2</sup>. Additionally, in the Bouyei language, both “breast” and “maternal grandmother” are pronounced as *po*<sup>4</sup>, suggesting a similar strategy of word formation. Considering Chinese and Tai languages, we suspect that there might be some interlinguistic similarities in the sound variation of “grandmother/maternal grandmother” indicating “breast”. The “breast” is an important organ for female offspring nurturing, and the B-1 *me* mentioned above and the C-1 *pu* can be interpreted as tonal change derivation of kinship terms for female close relatives.

According to Cao (2008:76), in many locations in western Guangxi, the term “breast” is represented as *pe*<sup>35</sup>, but there is no Chinese character for it. Xie (2007:1473) documented that in the Baise Nabi Ping and the Fusui Longtou Ping dialects, the pronunciation of “breast” is *pe*<sup>55/45</sup>, also without a native character. The striking similarity in the Ping dialects across different locations, combined with the fact that only Qiubei Zhuang has the form *pe*<sup>6</sup>, leads us to speculate that <Others> *pe*<sup>6</sup> in Qiubei Zhuang is borrowed from the Ping dialect.

### 2.4. Type D: *te-*

There are numerous *te-* type word variants, which are particularly common in the northern dialects of the Zhuang language, also *te-* type accounts for the largest percentage among 5 types.

There are many cognates of [te<sup>3</sup>] in other Tai-Kadai languages:

ei <sup>3</sup> Zhuang <sub>Du'an</sub>	tei <sup>3</sup> Zhuang <sub>Tiandong</sub>	teiu <sup>3</sup> Zhuang <sub>Guangnan</sub>	tʃe <sup>4</sup> Zhuang <sub>Leye</sub>	ʃe <sup>4</sup> Zhuang <sub>Lingyun</sub>	
tcei <sup>3</sup> Zhuang <sub>Hezhou</sub>	eu <sup>4</sup> Jin	cu <sup>3</sup> Saek	tju <sup>4</sup> Sui	se <sup>1</sup> ;tse <sup>5</sup> Maonan	tʃi <sup>5</sup> Hlai <sub>Tongshi</sub>
tsei <sup>1</sup> Hlai <sub>Baoding</sub>	tsu <sup>4</sup> Then	co <sup>33</sup> Lachi	teəu <sup>35</sup> Gelao	tsu <sup>33</sup> Paha	

Jin (2012:193) suggested [tʃi<sup>4</sup>] to be the inherent form of Tai-Kadai, considering its extensive distribution. Later, it was replaced by new forms in many languages and dialects.

For Zhuang dialects, first, [te<sup>3</sup>] is an unmotivated form, which means “breast, milk”, and has no connection with Chinese dialects. Second, phonetically, the initials



are affricates or fricatives having similar places of articulation, the vowels are [-low], and the tones are of B-type. Third, geographically, *te-* type shows a slightly symmetrical distribution in the northwest-southeast direction. To some degree, it can be seen as an ABA distribution with *n-* type, as shown in Figure 2.

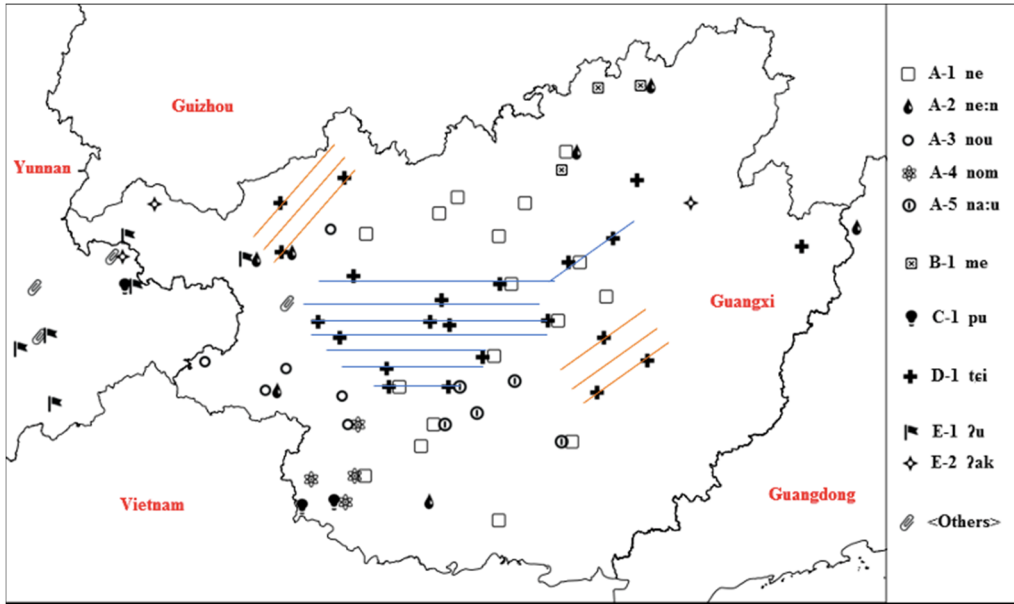


Figure 2: ABA distribution of *te-* and *n-* types.





Therefore, we agree that the lexical forms of *te-* type are native. Also, we suggest that their historical strata are earlier than *n-* type.

### 2.5. Type E: ʔ-

There are three forms of ʔ- type: ʔu, ʔak, and ʔɛm.

The E-1 ʔu<sup>3</sup> is a common form to represent “breast” in Dai language. Endo (2016) pointed out that the ʔu type is mainly found in Yunnan Province. Also, we found that the dialects using ʔu in the Zhuang language are mostly located in the border area between Yunnan and Guangxi. According to the records of four books in the *Baiyi Yiyu* [百夷译语], including *Mangshi Yiyu* [芒市译语], *Lujiang Yiyu* [潞江译语], *Wandian Yiyu* [湾甸译语], and *Gengma Yiyu* [耿马译语], the word “breast” had several forms in Dehong Dai during the Qing dynasty, as illustrated in Table 2.

Table 2: The “breast” in the *Baiyi Yiyu* of the Qing Dynasty.

	Dai Scripts	Dai Transcription	Zhuyin Scripts	Modern Dai
<i>Mangshi Yiyu</i>		$\tau u^1$	五	$\tau u^1 \tau au^3$
<i>Lujiang Yiyu</i>		$\tau u^1$	唔	$\tau u^1$
<i>Wandian Yiyu</i>		$lom^2$	淪	$\tau u^1 \tau au^3$
<i>Gengma Yiyu</i>		$nom^2$	浓	$\tau u^1 \tau au^3$

As is shown in Table 2, there are two forms to express “breast” in Dehong Dai in the Qing dynasty,  $\tau u^1$ , and  $nom^2$ . However, the modern Dai has only one form  $\tau u^1$  ( $\tau au^3$  means gourd). Historically,  $\tau u^1$  replaced  $nom^2$  in Dehong Dai. The A-4  $nom^2$  is a relatively earlier form in Tai languages. Therefore, we suggest that the  $\tau u$  form replaced the  $nom^2$  in Yunnan province.

Therefore, where does the  $\tau u^3$  form originate? From Figure 1, it can be noticed that the dialects using the form  $\tau u^3$  are mostly located near the Sino-Vietnamese border. The common expression for “breast” in Vietnamese is  $vú/vu^{45}$ , moreover, the Qabiao language which is spoken in the Sino-Vietnamese border area also uses the form  $\tau u$  to represent breast (according to Wei 2019). Consequently, it can be speculated that  $\tau u$  in Zhuang and Dai languages might have been borrowed from Vietnamese. It is thought that the borrowing most likely took place no earlier than the Qing Dynasty based on the alternation of terms in the *Baiyi Yiyu*.

In the Zhuang language, the term E-2  $\tau ak^7$  originally means “chest, thorax”, but in some dialects, the distinction between “chest of a man” and “breast of a woman” is no longer made, and both are represented by  $\tau ak^7$ . This can be explained as semantic broadening. Using  $\tau ak^7$  to refer to the “breast” is a euphemistic way of replacing the body organ with a body part.

$\tau em^2$  is found in Youjiang district in Baise and northern Guangnan in Wenshan, Yunnan province. It could also be found in the Buyang language, pronounced as  $\tau em^{55}$ . They are similar to  $\tau em$  and  $m\epsilon:m$  in Austroasiatic languages, suggesting that they have connections.

What mentioned above (from 2.1 to 2.5) provides the geographical distribution and lexical explanations of the term “breast” in the modern Zhuang dialects. Therefore, our question is as to what the hierarchical relationship between these lexical forms is.

### 3. Historical strata for “breast” in Zhuang

The term “breast” in modern Zhuang dialects exhibits complex lexical forms and has deep relationships with neighboring languages. The hierarchical relationships can be analyzed based on two different sources, including inherent words and borrowed words.

Regarding correspondences within the same linguistic family, *te*- type has relatively clear cognates in Tai-Kadai, which is widely spread in Tai, Hlai, Kam-Sui, and even Kra branch. Combining the ABA distribution pattern of the *te*- type and *n*-type within the Zhuang language, it is believed that *te*- type is the oldest form, despite it is lacking in southern Zhuang dialects. The *nom*<sup>2</sup> is the second oldest form and has a quite restricted distribution among the modern Zhuang dialects. We believe that there is an innovation in Central and Southwestern Tai branches after comparing with Dai and Thai languages. The *na:u*<sup>5</sup> is a spontaneous innovation in Zhuang and only appears along the border of southern and northern dialects, suggesting that it is relatively new. The inherent forms in Zhuang are speculated to have a hierarchical order of *tei*<sup>B</sup> → *nom*<sup>2</sup> → *na:u*<sup>5</sup>.

The word *nou*<sup>4</sup> corresponds to the Chinese character “毅” in terms of Chinese loanwords and conforms to the correspondence law of borrowing words in Middle Chinese. The *ne:n*<sup>5</sup> form is related to the er-final of the word “奶” in southern Chinese dialects, possibly borrowed from the Cantonese or Hakka dialect. According to the time when Cantonese entered Guangxi, it is speculated that *ne:n*<sup>5</sup> was not earlier than the Ming Dynasty. The forms *ne* and *mv* are newer loanwords, which borrowed from *nai* (“奶”), *ma* (“妈”), respectively. The *pe* type is borrowed from the Ping dialect. These are the forms of Chinese loanwords, and their relative chronology is believed to be *nou*<sup>4</sup> → *ne:n*<sup>5</sup> → *ne*<sup>5</sup>/*mv*<sup>1</sup>/*pe*<sup>6</sup>.

It is speculated that *ɲu*<sup>3</sup> is a loanword from Vietnamese. According to records of *Baiyi Yiyu*, there is an alternation between *nom*<sup>2</sup> and *ɲu*<sup>3</sup> in the Dehong Dai language during the Qing Dynasty. As we mentioned above, *nom*<sup>2</sup> is the main form of the Central and Southwestern branches of the Tai language, suggesting that *nom*<sup>2</sup> was replaced with *ɲu*<sup>1</sup> along the border of China and Vietnam. Based on the alternation, it is likely that the borrowing of *ɲu* has not taken place before the Qing Dynasty.

### 4. Conclusion

- (1) The lexical forms of “breast” in Zhuang dialects are complex because of a variety of factors such as internal innovation, borrowing, and tonal derivation.

- (2) We could figure out that the strata of inherent forms are in the order  $tei^B \rightarrow nom^2 \rightarrow na:u^5$ . Besides, the strata of loanwords are:  $nou^4 \rightarrow ne:n^5 \rightarrow ne^5/mv^1/pe^6$ . Additionally, it is speculated that  $\eta u^3$  is a loanword from Vietnamese. In the Zhuang and Dai languages along the Sino-Vietnamese border,  $nom^2$  has been replaced by  $\eta u^1$ , which can be represented as  $nom^2 \rightarrow \eta u^1$ .
- (3) Furthermore, it is hypothesized that the term “breast” is thought to be unsuitable for direct addressing because of its intimate nature to women, which explains why Zhuang dialects have numerous forms and strata for the term “breast”. People frequently use borrowed or invented forms of the term “breast” to avoid this taboo, making them more euphemistic and discreet.

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