

Numeral Classifiers in Ersu*

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This paper analyzes the numeral classifier system in Ersu, a previously under-documented Tibeto-Burman language spoken in Sichuan Province, China. Ersu numeral classifiers obligatorily follow a numeral in the context of counting. The language has a rich set of numeral classifiers, including sortal classifiers, mensural classifiers, time classifiers and repeaters. Their functional range involves individualization, classification, referentialization and emphasis. The paper concludes that Ersu not only shares common features with other Tibeto-Burman languages in this area, but also has some unique typological characteristics.

Key words: Ersu, numeral classifiers, Tibeto-Burman language

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The abbreviations and symbols used in the examples of this paper are:

*: wrong or not acceptable example; -: affix boundary; =: clitic boundary; +: compound boundary; 1: 1st person; 2: 2nd person; 3: 3rd person; ACC: accusative; ADJ: adjective; AGT: agentive; CL: classifier; CSM: change of state; DEM: demonstrative; DIM: diminutive; DIR: directional noun; EXT: existential verb; EVID: evidential; FEM: feminine; GEN: genitive; IDFT: indefinite; INT: intensifier; MAS: masculine; MC: Mandarin Chinese; MN: modifying noun; Nh: head noun; NP: noun phrase; NUM: numeral; PFT: perfect; PFV: perfective; PN: proper noun; PRST: present speaker; REDP: reduplicative; REPT: repeater; RLN: relator noun; sg: singular; SFX: suffix; SLF: self-referent; TOP: topic; PROG: progressive; PROS: prospective.

The transliteration used in the paper follows IPA except that I use /y/ in *pinyin* Romanization, a tradition of transliterating Mandarin Chinese, to represent IPA /j/ and I add it to monosyllabic ‘i’, e.g. *yi* (in this paper) = *i* (in IPA format). Moreover, in realization, the sound of /a/ is a bit closer to /ʌ/. *Pinyin* Romanization is, as normal, used for Mandarin Chinese in this paper.

Tonal marking: All tones for Ersu transcribed in this paper are given in isolation without considering that tonal variations often occur in realization. High level is formally unmarked. Other tones are marked with diacritic signs as follows: mid level: ˘, middle rising: ˊ, falling–rising: ˘ˊ. Tonal marking for Mandarin Chinese follows the tradition of *pinyin* Romanization.

1. Introduction

Ersu is a ‘highly endangered’ language (Bradley 1997; Moseley 2010) with about 25,000 speakers (Wang 2010:6). According to Sun (1982, 1983) and Liu (1983[2007]), the language has three dialects—the eastern dialect Ersu, the central dialect Tosu, and the western dialect Lizu. Sun (1982, 1983) hypothesizes that Ersu, with its three dialects, should be classified as a subgroup of the southern Qiangic branch in the Tibeto-Burman language family. However, some linguists have recently pointed out that the Qiangic branch remains problematic.¹

The three dialects are spoken in the seven counties in the southwest part of Sichuan Province, China. More specifically, the eastern dialect, Ersu, is spoken in the counties of Ganluo, Yuexi, Hanyuan, and Shimian; the central dialect, Tosu, is spoken in the county of Mianning; and the western dialect, Lizu, is spoken in the counties of Mianning, Muli, and Jiulong (Huang & Renzeng Wangmu 1991; Liu 1983[2007]; Sun 1982, 1983; Wang 2010:3).

In this paper, the name ‘Ersu’ will refer to the eastern dialect rather than the language as a whole. Ersu is a head-marking, verbal-final and tonal language with a strong isolating tendency. The canonical constituent order of a simple clause is AOV/SV. However, the syntactic constituent order may vary due to pragmatic motivations. Like many other Tibeto-Burman languages in the southwest of China, for example Yongning Na (Lidz 2007), discourse organization in Ersu is also mainly driven by semantic and pragmatic principles rather than syntactic functions (LaPolla 1992). A ‘tail–head’ linkage strategy (Aikhenvald 2008:544–545; Vries 2005) is frequently used in discourse, especially in narratives. ‘Topic–comment’ constructions (Huang 2004:248–263; Li & Thompson 1981:85–103) occur with high frequency in the language. Noun phrases (NP) are mainly head-initial, except that demonstratives, genitive phrases, and modifying nouns can occasionally precede a head noun (Nh). Gender and number agreement is not found in predicates and ellipsis is frequently observed, especially in narratives and long conversations.

All the data for this paper have been obtained through my one-year ‘immersion fieldwork’ (Dixon 2007) in an Ersu village—Lajigu (28° 79' 77" N, 102° 57' 85" E).² Examples presented here are mainly extracted from notes taken through participant observation, or audio-recordings of

¹ Jacques & Michaud (2011) have proposed a novel Na-Qiangic branch to replace the established Qiangic branch through their comparative studies on Naxi, Na, Laze, and some other Qiangic languages. In their opinion, the Na-Qiangic branch forms a Burmo-Qiangic branch together with Lolo-Burmese. The Na-Qiangic branch comprises three primary subgroups, which are Ersuic, Naic, and Qiangic (as the core subgroup). Chirkova (2012) has not argued for a new branch to replace the Qiangic branch, but she holds the opinion that the hypothesis of the Qiangic branch is problematic and needs readjustment.

² Lajigu is an Ersu village in Bao'an Township, Yuexi County, Liangshan Yi Autonomous Prefecture, Sichuan Province, China. The population census in 2011 indicated that there were 365 permanent residents in the village and all of them are Ersu by origin. However, in fact, younger, more able, and better educated adults who speak good Mandarin have moved away and seek jobs outside the Ersu communities. Only older people and children numbering about 150 still stay in the village. The majority of them are Ersu–Mandarin bilingual and a few of the older people are either Ersu monolingual or Ersu–Yi bilingual. Among those who are Ersu–Mandarin bilingual, their Ersu is much better than their Mandarin. Consequently, when they communicate with each other, the dominant language is Ersu, not Mandarin.

long conversations, or folkloric, mythological, biographical, and procedural narratives recorded in a natural way. Examples obtained through elicitation are also used. However, this ‘elicitation’ was inspired by similar examples previously found in the language, not based on any prescriptive framework (e.g. Aikhenvald 2014; Bower 2008; Rice 2006).

This paper discusses Ersu numeral classifiers. It is organized as follows: §2 introduces the structure of Ersu noun phrases; §3 gives some general remarks; §4 explores the origin of numeral classifiers; §5 presents the subtypes of numeral classifiers; §6 discusses the functional range of numeral classifiers; §7 summarizes and concludes the paper.

2. The structure of Ersu noun phrase

The noun phrase (NP) structure of Ersu, like that of many other Tibeto-Burman languages, is fairly rigid, with the constituent order not changeable (Doley & Post 2012). The basic constituent order and the structure for an NP in Ersu are illustrated in Figure 1:

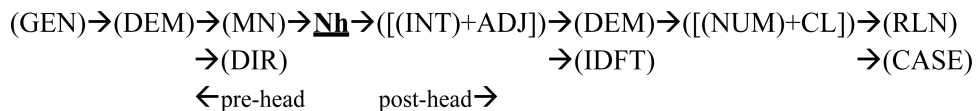


Figure 1: Basic order and structure of an Ersu NP³

As indicated in Figure 1, the core element of an NP is the head noun (Nh), which could be a lexical noun, a pronoun, a nominal compound, a nominalization, etc. The elements preceding an Nh could be a genitive phrase (GEN), a demonstrative (DEM), a modifying noun (MN) or a directional noun (DIR). The elements that follow an Nh could be an adjective (ADJ) or an adjective taking a pre-adjectival intensifier (INT), a demonstrative (DEM), a numeral–classifier construction ([(NUM) + (CL)]) or an indefinite article (IDFT), and a relator noun (RLN), or a case marker (CASE). Note that not all the elements listed in Figure 1 will occur together in the same context (see fn.3). However, whenever there are more than two elements co-occurring in the same NP, their constituent order can never be reversed, as shown in Figure 1. The simplest NP could be a sole lexical noun (Nh) without any modifying elements. In addition, some of the modifying elements are incompatible with each other. For example, a demonstrative is always incompatible with a directional noun and the two never co-occur. More details about the Ersu NP structure are given in Zhang (2013:294–348). Here, I only present the most frequently seen form of NPs, that is, [Nh+NUM+CL] used in the context of enumeration, as shown in (1).

- (1) *tʂʰo* *nə* *wo*
 dog two CL:general, non-sticklike
 ‘two dogs’

³ In Figure 1, an element in parentheses indicates that it is not an indispensable component of an NP, and its use is driven by context. Two elements in square brackets implies that they often occur together, forming a rigid construction. Two elements listed in the same line shows that they occupy the same slot in an NP and they never co-occur.

In (1), the Nh *təʰo* ‘dog’ is enumerated through the unit of [NUM+CL]. Theoretically, the numeral in an NP like that in Example (1) can be from the smallest *tə* ‘one’ to any bigger number. However, a number larger than one hundred is rarely found, except for round numbers such as *tu* ‘thousand’ and *nbotəʰo* ‘ten thousand’. Additionally, in the context of counting, both the numeral and the numeral classifiers are obligatory in an NP.

When the numeral is *tə* ‘one’, either *tə* ‘one’ or the classifier can be optionally used. This implies that an NP structure of [Nh *tə*], [Nh CL], or [Nh *tə* CL] is acceptable. In fact, these alternatives have different grammatical functions. Specifically, [Nh *tə*] marks indefiniteness and singularity, in which *tə* ‘one’ has been grammaticalized into an indefinite article. [Nh CL] marks definiteness and also singularity, while [Nh *tə* CL] is neutral and is used for counting, just like other numerals used in a [NUM+CL] construction. This further demonstrates that both the numeral and the classifier are obligatory in an enumerative NP, as explained above. Section 6.3 will give more details about classifiers and referentialization (definiteness/indefiniteness) and only an example is given here.

- (2) a. $[t_s^h o \quad t\partial \quad w\partial]_{NP}$ $\partial' = g\partial$
 dog one CL:general, non-sticklike bark=PROG
 ‘One dog is barking.’
 b. $[t_s^h o \quad t\partial]_{NP}$ $\partial' = g\partial$
 dog IDFT bark=PROG
 ‘A dog is barking.’
 c. $[t_s^h o \quad w\partial]_{NP}$ $\partial' = g\partial$
 dog CL:general, non-sticklike bark=PROG
 ‘The dog is barking.’

3. Ersu numeral classifiers: general remarks

The existence of a numeral classifier system is a well-acknowledged areal feature of languages in Southeast Asia (e.g. Aikhenvald 1998, 2000:121; Bisang 1993, 1999; Enfield 2004; Sun 1988). As discussed in §2, Ersu numeral classifiers obligatorily follow a numeral in the context of counting. Consequently, an Nh is always enumerated by the unit of [NUM+CL] rather than by a bare numeral. In addition, the syntactic constituent order [Nh→NUM→CL] can never be reversed. This is unlike some other languages in this area, for example, Thai, which allows a reversed numeral–classifier structure triggered by contextual factors (Haas 1942; Hundius & Kölver 1983).

Nouns and verbs can be the source of classifiers, and this grammaticalization pathway can be tracked from a synchronic perspective as discussed in §4 later.

Sun (1988) hypothesizes that if a Sino-Tibetan language has an enumerative construction of [NUM+CL], the language might have a well-developed classifier system with a fairly large number of numeral classifiers. This is the case in Ersu. Just like many classifier languages, such as Mandarin Chinese (e.g. Chao 1968:584–620; Huang & Ahrens 2003; Li & Thompson 1981:106; Lyons 1995), Ersu also has a rich set of numeral classifiers, consisting of ‘sortal classifiers’ (e.g. Aikhenvald 1998, 2000:115, 2004, 2006; Craig 1992), ‘mensural classifiers’ (e.g. Aikhenvald 2000:115; Lyons 1977:463, 1995; Post 2007:386), ‘time classifiers’ (also called ‘quasi-measures’ or ‘autonomous measures’, as in Mandarin Chinese; see Chao 1968:608–609) and ‘repeaters’ (e.g. Aikhenvald

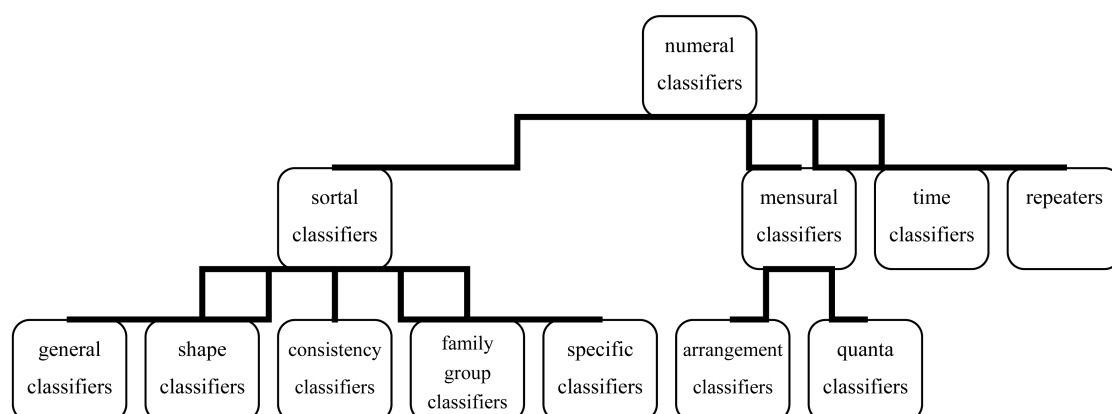


Figure 2: Subclassification of numeral classifiers in Ersu

2000:103; Hla Pe 1965), or ‘auto-classifiers’ (Matisoff 2003). Sortal classifiers can be further subcategorized as general classifiers, shape classifiers, consistency classifiers, family group classifiers, and specific classifiers. Mensural classifiers consist of arrangement classifiers and quanta classifiers. Details about different subtypes of numeral classifiers are discussed in §5.1 (sortal classifiers), §5.2 (mensural classifiers), §5.3 (time classifiers), and §5.4 (repeaters), respectively. The subclassification of Ersu numeral classifiers is shown in Figure 2 above.

Besides the function of enumeration as discussed above, the functional range of Ersu classifiers (§6) may also involve individualization (§6.1), classification (§6.2), referentialization (§6.3), and emphasis (§6.4).

4. Origin of Ersu numeral classifiers

Due to the high degree of indeterminateness of nouns and verbs in mainland Southeast Asian languages, they have a strong tendency to be grammaticalized (Bisang 1996). Allan (1977:293) states that ‘Many languages have lexemic classifiers which derive from verbs’. Bisang (1993, 1996) reports that numeral classifiers can be one of the products of the grammaticalization of nouns. The source of Ersu classifiers may be either nouns or verbs. This is so because many classifiers show no phonological or morphological difference from nouns or verbal roots after the process of grammaticalization. Furthermore, the meanings of some nouns and verbs can be fully or partially attested when they have grammaticalized into classifiers. The noun *ts^ha* ‘leaf’ is a good example for illustrating the grammaticalization pathway of a noun-sourced classifier: noun (‘leaf’) → repeater (‘leaf’) → classifier 1 (‘two-dimensional (thin, flat and paper-like)’) → classifier 2 (a song).⁴ More specifically, when *ts^ha* is used as noun, it means ‘leaf’. However, while counting leaves, speakers have to use the same *ts^ha* in an NP with a [NUM+CL] construction, as shown in (3).

⁴ I am very grateful to an anonymous reviewer who inspired me to figure out this grammaticalization pathway of Ersu classifiers. In addition, this description supports Bisang’s assertion: ‘... repeater and semi-repeater constructions are important for reconstructing the development of classifier systems’ (Bisang 1999:127).

- (3) *si ts^ha na ts^ha*
 tree leaf two REPT:leaf
 ‘two tree leaves’

Gradually, the semantics of *ts^ha* is extended to encode all those two-dimensional and paper-like referents whose shape and other properties have key similarities to a leaf, as in (4).

- (4) *vula ta ts^ha*
 cloth one CL:two-dimensional and paper-like
 ‘a piece of cloth’

ts^ha can also be used to classify a song in Ersu. This might be a particular cultural phenomenon. Several older Ersu speakers in Lajigu said that the Ersu had to write down the verse and the rhythm of a song on tree leaves in ancient times when there was no paper. Consequently, when the Ersu talk about songs, they also employ *ts^ha* as a classifier, since a song was previously closely associated with tree leaves. For example:

- (5) *nga si ts^ha*
 song three CL:a song
 ‘three songs’

Examples (6) and (7) below respectively show that a term for a container is used as a mensural classifier and that a verb is used as a sortal classifier.

- (6) a. [*pua nə wo*]_{NP} *a=va tchⁱ*
 bushel two CL:general, non-sticklike 1sg.SLF=ACC give
 ‘Give me two bushels.’
 b. [*ntɕ^hə ta pua*]_{NP} *a=va tchⁱ*
 rice one CL:bushel 1sg.SLF=ACC give
 ‘Give me a bushel of rice.’
- (7) a. *a [la tə wo]_{NP}*
 1sg.SLF chicken one CL:general, non-sticklike
tɕi lá
 take something (often with hands) come.PFV
 ‘I brought a chicken here.’
 b. *a [batɕa tə tɕi]_{NP} xo*
 1sg.SLF knife one CL:any tool with a handle need
 ‘I need a knife.’

In (6a) above, *pua* ‘bushel’ is used as an Nh and is enumerated through the numeral–classifier construction [*nə wo*] ‘two CL:general, non-sticklike’. In addition, the NP [*pua nə wo*] ‘bushel two CL:general, non-sticklike:two bushels’ functions as an O (object) of the clause ‘Give me two bushels’.

In contrast, in (6b), *pua* ‘bushel’ is used as a mensural classifier, occurring with the numeral *ta* ‘one’ to modify the Nh, that is, *ntɕʰə* ‘rice’. In (7a), *tei* ‘take something (often with hands)’ is used as a transitive verbal predicate; it has been grammaticalized into a numeral classifier to categorize a tool with a handle, as shown in (7b).

There are also a considerable number of classifiers whose origins remain unknown at the present stage, however. According to Hopper & Traugott (1993:1), the study of grammaticalization can be either traced back to the sources of grammatical forms from a diachronic perspective or based on the borderline between the syntax and pragmatics of lexical words from a synchronic perspective. Consequently, the grammaticalization pathway of those ‘unknown’ classifiers might be discovered from a diachronic perspective. Since this paper concentrates on a synchronic description of the Ersu numeral classifier system, the origin of those ‘unknown’ classifiers will be investigated in the future. Synchronically, almost all terms denoting a container can be used as mensural classifiers and most of the temporal terms can be used as time classifiers. Furthermore, repeaters are those nouns that categorize themselves. Finally, there are a number of verbs that can be used as numeral classifiers in Ersu, as shown in (7) above. In the following subsections, whenever a classifier has been grammaticalized from a noun or a verb, I shall point it out, although no more contrastive examples like (6) and (7) are given.

5. Subtypes of Ersu numeral classifiers

Allan (1977) proposes dividing classifiers into seven subclasses: (1) material, (2) shape, (3) consistency, (4) size, (5) location, (6) arrangement, and (7) quanta. In a similar way, classifiers are generally further subcategorized as 10 subtypes by Aikhenvald (2000:272–274). They are: (1) dimensionality or shape, (2) interiority, (3) size, (4) consistency, (5) constitution or state, (6) material, (7) inherent nature or time-stable, (8) function, (9) arrangement, and (10) quanta. Both of these authors have pointed out that arrangement classifiers and quanta classifiers often relate to the temporary state of a referent (i.e. mensural classifiers), while the other subcategories relate to the time-stable, or the inherent properties of a referent (i.e. sortal classifiers). With reference to the criteria discussed above and the particular properties of Ersu numeral classifiers, as mentioned in §3 and shown in Figure 2 above, I subcategorize Ersu classifiers into four main types: ‘sortal classifiers’ (§5.1), ‘mensural classifiers’ (§5.2), ‘time classifiers’ (§5.3) and ‘repeaters’ (§5.4). Sortal classifiers consist of general classifiers (§5.1.1), shape classifiers (§5.1.2), consistency classifiers (§5.1.3), family group classifiers (§5.1.4), and specific classifiers (§5.1.5); mensural classifiers consist of arrangement classifiers (§5.2.1) and quanta classifiers (§5.2.2).

5.1 Sortal classifiers

A sortal classifier categorizes the Nh in terms of its inherent properties such as animacy, shape, size, consistency, kinship, etc. (e.g. Aikhenvald 1998, 2000:115, 2004, 2006; Craig 1992). The subcategorization of Ersu sortal classifiers is presented in the following subsections from §5.1.1 to §5.1.5.

5.1.1 General classifiers

Similar to Lizu (Chirkova 2012) and Liangshan Yi (Hu & Sha 2005), in which there are two ‘general classifiers’, Ersu also has two general classifiers: *wo* and *ka*. These share some semantic similarities with Mandarin Chinese *gè* (*wo*) and *tiáo* (*ka*): *wo* is associated with almost all ‘non-sticklike’ referents and *ka* is used for almost all ‘one-dimensional, sticklike or elongated’ objects. Both can categorize both animate and inanimate referents. Besides this, they are both also observed to modify a conceptually abstract Nh (see Table 1). I view the two classifiers as general classifiers for the following reasons: (1) Their semantic range is so broad that many small children in the village of Lajigu are observed to categorize objects with either *wo* or *ka* in the early stage of their mother tongue acquisition; (2) Both of them can be used to encode shapeless referents. For example, they can modify abstract nouns as shown in Table 1; (3) They can also replace some specific classifiers in discourse, as shown in (8) and (9).⁵

- | | | | | |
|-----|----|-----------------------------|--------------------|---|
| (8) | a. | <i>tɕʰo=yi</i> dog=DIM | <i>si</i> three | <i>ntɕʰa</i> CL:(often lovely) non-adult human beings or livestock ‘three small dogs’ |
| | b. | <i>tɕʰo=yi</i> dog=DIM | <i>si</i> three | <i>wo</i> CL:general, non-sticklike ‘three small dogs’ |
| (9) | a. | <i>diànshì</i> MC:TV set | <i>nə</i> two | <i>ku</i> CL: most new non-sticklike technological devices ‘two TV sets’ |
| | b. | <i>diànshì</i> MC:TV set | <i>na</i> two | <i>ka</i> CL: general, sticklike ‘two TV sets’ |

Table 1 indicates that the two general classifiers *wo* and *ka* can be used to cover a broad range of referents. They can even categorize ‘shapeless’ abstract nouns. Abstract nouns are quite marginal in the indigenous Ersu vocabulary, and are all associated either with *wo* or with *ka*. However, the assignment of the two general classifiers to a specific abstract noun is hard to explain. For example, it is not clear why the abstract noun *əʃa* ‘society’ occurs with *wo* and why the abstract noun *sòmò* ‘strength’ is associated with *ka*.

In addition, *ka* ‘general and elongated’ can denote animate male referents, especially when a speaker wants to highlight the masculinity of a referent. This might be because male genital organs are ‘sticklike’. For example:

⁵ Thanks to an anonymous reviewer for this paper, who states that *ka* is not a general classifier, but clearly a shape classifier. However, I can only agree with him/her on the statement that *ka* operates across different semantic classes because the one-dimensionality that *ka* encodes is stronger than any other criterion of classification. I maintain that *ka* should be considered as a general classifier in Ersu. Besides the reasons given here, I observe that *ka* can also encode obviously non-sticklike referents, as in (10b), (11), and (12) later.

| Referent | | Examples | | | | | |
|-----------|------------|---|-------------------------------|-------------------------------|--|---------------------|---------------------------|
| | | <i>wo</i> | | | <i>ka</i> | | |
| animate | human | <i>yadzə</i> child 'three children' | <i>si</i> three | <i>wo</i> CL:non-sticklike | | | |
| | animal | <i>vɛ</i> pig 'two pigs' | <i>nə</i> two | <i>wo</i> CL:non-sticklike | <i>bɛə'</i> snake 'two snakes' | <i>na</i> two | <i>ka</i> CL:sticklike |
| | body parts | <i>vùliè</i> head 'a head' | <i>tə</i> one | <i>wo</i> CL:non-sticklike | <i>sʔpsʔ</i> tongue 'a tongue' | <i>ta</i> one | <i>ka</i> CL:sticklike |
| | plant | <i>pu</i> potato 'three potatoes' | <i>si</i> three | <i>wo</i> CL:non-sticklike | <i>dzɛ</i> grass 'three blades of grass' | <i>si</i> one | <i>ka</i> CL:sticklike |
| inanimate | concrete | <i>ə'kʰua</i> stone 'seven stones' | <i>sʔŋ</i> seven | <i>wo</i> CL:non-sticklike | <i>prŋ</i> rope 'seven ropes' | <i>sʔŋ</i> seven | <i>ka</i> CL:sticklike |
| | abstract | <i>ə'ʂa</i> society 'society' | <i>wo</i> CL:non-sticklike | | <i>sòmò</i> strength 'strength' | <i>ta</i> one | <i>ka</i> CL:sticklike |

- (10a) suggests that when the general classifier *wə* is used, the meaning of *la* ‘chicken’ is generic, referring to a chicken, or a hen, or a rooster. When the gender of *la* ‘chicken’ is highlighted with a suffix *pʰe* denoting masculinity, as in (10b), the general classifier *ka* is employed for *la-pʰe* ‘chicken-SFX.MAS:rooster’. That is, there is a mild correlation between ‘natural gender’ (Aikhenvald 2012) and classifier choice in Ersu.

(11) a. *tɕʰo-pʰa* *si ka*
dog-SFX.MAS:young and unmarried man three CL:general, sticklike
'three young and unmarried men'

- b. *tʂʰo-pʰa-ma*
 dog-SFX.MAS-SFX.FEM:young and unmarried woman
si ka
 three CL:general, sticklike
 ‘three young and unmarried women’

Actually, the two examples in (11) are figurative expressions, in which *tʂʰo-pʰa* ‘dog-SFX.MAS’ originally refers to ‘a male dog’, considered passionate and energetic by the Ersu speakers. In (11a), *tʂʰo-pʰa* ‘dog-SFX.MAS’ rhetorically denotes a ‘young and unmarried man’. In (11b), the suffix *ma* denoting feminine is added to *tʂʰo-pʰa* ‘dog-SFX.MAS’ to form a new word *tʂʰo-pʰa-ma* ‘dog-SFX.MAS-SFX.FEM’, denoting a ‘young and unmarried woman’. This is so because, according to my language consultants, young people of either gender are often ‘passionate and energetic’, like male dogs. Consequently, when people are talking about a young, unmarried man or woman in a joking way, they often use (11) with the general classifier *ka* without considering the referents’ gender.

There is also one example, seen in (12), that seems to ‘violate’ all the above principles for the uses of the two general classifiers in the data:

- (12) *ʂə-ma ta ka*
 louse-SFX.FEM one CL:general, sticklike
 ‘a louse’

A louse is often small and round and the term *ʂə-ma* ‘louse-SFX.FEM’ takes the suffix *ma* ‘feminine’. However, when the Ersu are talking about a louse, they employ *ka* ‘general and sticklike’. Some of my language consultants explain that because a louse is too small to be seen, when people report the existence of a louse on their head or body, they have to base their judgment on their feelings of the route that a louse crawls. I thus hypothesize that *ka* ‘general and sticklike’ is used to categorize a louse, a ‘small and roundish’ referent, because the ‘route’ that it crawls is ‘sticklike and elongated’.

5.1.2 Shape classifiers

Shape classifiers categorize an Nh in terms of its dimensionality and form. According to Aikhenvald (2000:271–274), the term ‘dimensionality’ refers to three values: one-dimensionality (elongated or sticklike), two-dimensionality (flat or paper-like), and three-dimensionality (spherical or ball/pearl-like). As discussed in §5.1.1, one-dimensionality is expressed through the general classifier *ka* ‘general and sticklike’ and the general classifier *wo* may denote non-sticklike referents including two- and three-dimensional objects. Besides *ka* and *wo* that may be used to denote shape, there are another seven numeral classifiers in Ersu that are closely associated with the shape of an Nh. They often convey additional information about the Nh such as size, thickness, regularity, and so on, in addition to dimensionality (see Table 2).

Table 2 demonstrates that *pʰua* and *tsʰa* are synonymous and can be used interchangeably. Their choice depends on a speaker’s individual style. *ntsʰa* and *pʰua* or *tsʰa* are near-synonyms. When they are used to categorize paper-like things, they can replace each other. Take ‘a piece of

Table 2: List of Ersu numeral classifiers referring to shape

| CL | Semantics | Examples | Origin |
|-------------------------|---|--|---------|
| <i>tsɿ</i> | two-dimensional (irregularly roundish, hollow and/or ring-like) | <i>teaku ngə tsɿ</i> shackle nine CL 'a shackle with many rings' ⁶ | unknown |
| <i>pa</i> ⁷ | three-dimensional (regular or irregular roundish, often no bigger than a fist) | <i>tsu na pa</i> bean two CL 'two beans' | |
| <i>nbu</i> | three-dimensional (irregularly roundish and lump-like, often things considered rubbish) | <i>vɛ tso zò nbu</i> pig shit four CL 'four piles of pig shit' | |
| <i>p^hua</i> | two-dimensional (thin, flat and paper-like) | <i>vula ta p^hua</i> cloth one CL 'a piece of cloth' | |
| <i>ts^ha</i> | | <i>vula ta ts^ha</i> cloth one CL 'a piece of cloth' | noun |
| <i>nts^ha</i> | two-dimensional (flat and paper- or brick-like) | <i>vula ta nts^ha</i> cloth one CL 'a piece of cloth' | verb |
| | | <i>vɛ+ɣɿ ɲua nts^ha</i> pig+meat:pork five CL 'five pieces of pork' | |
| <i>tɛo</i> | three-dimensional (irregular roundish and oval-shaped) | <i>ə^hk^hua nə tɛo</i> stone two CL 'two oval-shaped stones' | |

cloth' in Table 2 as an example. All three classifiers can be used in this context and none of my language consultants can sense any identifiable difference. However, only *nts^ha* can be used for flat and brick-like things. It is thus unacceptable to say **vɛ+ɣɿ ta p^hua* or **vɛ+ɣɿ ta ts^ha*.

In Table 2, the origin of *p^hua*, *tsɿ*, *pa*, and *nbu* remains unknown. *ts^ha* has been grammaticalized from the noun 'leaf' as discussed in §3. Both *nts^ha* and *tɛo* originate from verbs: *na-nts^ha* 'DOWNWARD-mend (something with some pieces of parts)', *k^hə-tɛo* 'INWARD-roll, make something oval-shaped'.

⁶ Literally, *teaku ngə tsɿ* means 'nine ring shackle'. However, numerals may function as quantifiers in Ersu, as is the case in Mandarin Chinese or Vietnamese (Daley 1998:55). Thus *ngə* 'nine' often means 'many'. Consequently, *teaku ngə tsɿ* actually means 'a shackle with many rings'. Also see Table 6.

⁷ *pa* is a polysemous classifier. It can also be used to categorize 'non-adult human beings or livestock' and can also have overtones of intimacy and endearment (see Figure 5).

5.1.3 Consistency classifiers

There are three numeral classifiers denoting the consistency of a referent. They are: *nt^hua*, *ntɕ^ha*, and *nts^hu*. For example:

- (13) *miabo na nt^hua*
 tear two CL:drop(s) of liquid or fluid things
 ‘two tear drops’
- (14) a. *tɕ^ho=yi si ntɕ^ha*
 dog=DIM three CL:(often lovely) livestock
 ‘three small dogs’
 b. *yadzə si ntɕ^ha*
 child three CL:(often lovely) non-adult human beings
 ‘three children’
- (15) *k^hali tə nts^hu*
 walnut one CL:flower(s) or flower-like seeds of all plants
 ‘a walnut’

Note that examples a and b in (14) imply that *ntɕ^ha* is polysemous, denoting both human beings and all other animates.

5.1.4 Family group classifiers

In Ersu, there are some kinship terms whose function is to group or categorize relatives of a clan. They do not occur on their own and they obligatorily follow a numeral. They are here defined as family group classifiers, a subset of numeral classifiers in Ersu. They are given in Table 3.

Family group classifiers are also attested in some adjacent and related languages such as some Yi languages (Bradley 2001), including Lisu (Yu 2007:110–118). There are seven family group classifiers attested in Ersu. They occur more frequently in historical or cultural narratives or in a referential context than in a vocative context. In a vocative context, they are occasionally used only when the speaker is giving orders or assigning tasks at a meeting or a ceremony. This is unlike Yi and Lisu, in which family group classifiers are frequently used both for reference and for address (Bradley 2001). Moreover, the data show that except for *tsa* ‘all members of a family or a family group’ and *mexi* ‘brother(s) and sister(s)’, all the other family group classifiers occur with the numeral *nə/na* ‘two’. This is possibly due to data limits. However, my language consultants can provide examples with the co-occurrence of other numerals and family group classifiers through elicitation. For example:

- (16) *nə=zɿ zò ma-zɿ*
 2sg=GEN four CL:SFX.FEM-SFX.MAS:mother and child(ren)
 ‘you four: mother and children’

Table 3: List of Ersu numeral classifiers ‘grouping’ family members

| CL | Semantics | Examples |
|--|--|---|
| <i>tsa</i> | all members of a family or a family group | <i>su ta tsa</i> people one CL ‘all people of a family’ |
| <i>p^ha-ma</i> SFX.MAS-SFX.FEM | woman and man, often referring to a couple | <i>p^hoza zimo na p^ha-ma</i> husband wife two CL ‘husband and wife, a couple’ |
| <i>veŋo</i> | parallel gender siblings | <i>ŋinua venua nə veŋo</i> younger brother elder brother two CL ‘two brothers: younger one and older one’ ⁸ |
| <i>mexi</i> | cross gender siblings | <i>a⁴ yadzə sŋɲ mexi</i> 1pl.SLF child seven CL ‘we children: seven brothers and sisters’ |
| <i>p^hu-zɿ</i> grandparents-SFX.MAS | grandparent(s) and grandchild(ren) | <i>t^hə=zɿ nə p^hu-zɿ</i> 3sg.PRST=GEN:family two CL ‘they two: grandparent and grandchild’ |
| <i>p^ha-zɿ</i> SFX.MAS-SFX.MAS | father and child(ren) | <i>xitsɿ la yadzə na p^ha-zɿ</i> rabbit CO:and child two CL ‘rabbit and child: father and son (the two persons)’ ⁹ |
| <i>ma-zɿ</i> SFX.FEM-SFX.MAS | mother and child(ren) | <i>nə=zɿ na ma-zɿ</i> 2sg=GEN: family two CL ‘you two: mother and son/daughter’ |

In addition, family group classifiers in Ersu, similar to Yi (Bradley 2001), are disyllabic and formed either through compounding or suffixation, apart from *tsa* ‘all members of a family or a family group’. More specifically, the majority of them take a morpheme that denotes gender class. For example: *p^ha-ma* ‘woman and man; couple’ consists of two general gender suffixes, that is, *p^ha* ‘masculine’ and *ma* ‘feminine’. The classifiers grouping a higher generation and a lower generation are suffixed by the masculine gender class term *zɿ* ‘masculine’, but *zɿ* ‘masculine’ also includes the female of a lower generation in these classifiers.

In some Yi languages, the [NUM+CL]¹⁰ construction is often used without an Nh. If it follows an Nh, the Nh is often a pronoun (Bradley 2001). However, Table 3 indicates that the [NUM+CL] sequence in Ersu always follows an Nh or two juxtaposed Nhs. In the latter case, the [NUM+CL] sequence offers more information about the relationship between the Nhs. For example, *ŋinua venua nə veŋo* ‘two brothers/sisters:younger one and older one’. Moreover, when [NUM+CL] follows a

⁸ This NP may also refer to ‘two sisters: younger one and older one’ since *ŋinua* and *venua* are used to denote parallel siblings in Ersu.

⁹ This example is extracted from a mythological narrative, in which the rabbit, a person-like character with magic power, adopts an orphan. Consequently, the narrator views the relationship between the rabbit and the child as that between father and son.

¹⁰ In §5.1.4, the abbreviation CL especially refers to ‘family group classifier’.

pronoun, it is understood to be possessed by the pronoun taking an overt genitive marker *zɿ*. For example, *nə=zɿ na ma-zɿ* ‘you two:mother and son/daughter’. This possessive construction is never found for other subtypes of numeral classifiers.

Finally, apart from *p^ha-ma* ‘man and woman; couple’ and *tsa* ‘all members of a family or a family group’, the family group classifiers only refer to consanguineous (mainly filial and sibling) relations, not to affinal relations. Therefore, those family group classifiers refer to conventionally or culturally established groups. For example, it is not acceptable to group ‘father-in-law (wife’s father)’ and ‘son-in-law (daughter’s husband)’ together. Accordingly, there is no term for such a ‘group’, as in (17):

- (17) **nə=zɿ* *nə*
 2sg=GEN:family two
 xə-mo+mopa
 mother’s male siblings-SFX.FEM:wife’s father+daughter’s husband
 ‘you two: wife’s father and daughter’s husband’

5.1.5 Specific classifiers

A specific classifier may be used to refer to just one unique referent, or a restricted group of referents, or kinds of actions which are typically performed on the referents. Classifiers of this type are often ‘culture-specific’ (Aikhenvald 2000:273). They are given in Table 4.

Table 4 shows that there are 12 specific classifiers in Ersu and that they categorize some specific head nouns, or those nouns that are prominently culture-dependent. One of them, that is, *ts^ha* ‘a song’, originates from a noun meaning ‘leaf’, as discussed in §3. Five of them have been grammaticalized from verbal roots without any phonological or morphological alternation. They are: *də-tei* ‘UPWARD-take something (often with hands)’; *na-tsa* ‘UPWARD-cut a piece of wood into lengthy pieces’; *t^hə-p^hsɿ* ‘AWAY-throw away’; *ŋə-ndzo* ‘OUTWARD-drink a lot at a time’; *ŋə-bi* ‘OUTWARD-eat a bit at a time’.

5.2 Mensural classifiers

As mentioned in §5.1, a sortal classifier categorizes an Nh with reference to its intrinsic properties. In contrast, a mensural classifier denotes ‘an entity which is employed in, which is an abstract standard of, or which is the result of grouping, division or measurement of some other entity or entities’ (Post 2007:386). Ersu mensural classifiers include arrangement classifiers (§5.2.1) and quanta classifiers (§5.2.2) as discussed below.

5.2.1 Arrangement classifiers

Arrangement classifiers in Ersu are those classifiers that indicate how people are grouped or how inanimate objects or living plants are configured or organized (Aikhenvald 2000:271–274). There are 13 arrangement classifiers attested in the data (see Table 5).

Table 4: List of Ersu numeral classifiers referring to specific referents

| CL | Semantics | Examples | Origin |
|--------------------------|--|--|---------|
| <i>ku</i> | most new non-sticklike technological devices ¹¹ | <i>chēzi</i> <i>tə</i> <i>ku</i> MC:vehicle one CL 'a vehicle' | unknown |
| <i>tsə</i> | a part of a story | <i>xi+nba</i> <i>tə</i> <i>tsə</i> say+root:story one CL 'a part of the story' | |
| <i>dza</i> | a meal | <i>zama</i> <i>ta</i> <i>dza</i> food one CL 'a meal' | |
| <i>tʂʰo</i> | a piece of land | <i>za</i> <i>tə</i> <i>tʂʰo</i> grassy and bushy land one CL 'a piece of land with grass and bushes' | |
| <i>pʰu</i> | a pile of fire | <i>mɛ</i> <i>si</i> <i>pʰu</i> fire three CL 'three piles of fire' | |
| <i>ndzə</i> | a person (in rags or in a costume unsuitable for the occasion) | <i>su</i> <i>tə</i> <i>ndzə</i> people one CL 'a person in rags or dressed unsuitably' | |
| <i>tsʰa</i> | a song | <i>nga</i> <i>na</i> <i>tsʰa</i> song one CL 'two songs' | noun |
| <i>tei</i> | any tool with a handle for farming, cutting, hunting etc. | <i>batʂa</i> <i>nə</i> <i>tei</i> knife two CL 'two knives' | verb |
| <i>tsa</i> ¹² | a stage of an event or a part of a song | <i>teinbaʂua</i> <i>ta</i> <i>tsa</i> PN:a traditional Ersu ode one CL 'a part of Jinbashua' | |
| <i>pʰsɿ</i> | a person who is not welcome or is hated | <i>su</i> <i>tə</i> <i>pʰsɿ</i> people one CL 'an unwelcome person' | |
| <i>ndzo</i> | a bit/mouthful of drink | <i>vu</i> <i>tə</i> <i>ndzo</i> alcohol one CL 'a bit of alcohol' | |

¹¹ *ka* is still used for all new sticklike technological devices. For example:

(i) *bī* *ta* *ka*
MC:pen one CL:general, sticklike
'a pen'

¹² *tsa* is polysemous. It can also denote 'all members of a family or a family group' (see Table 3).

Table 4: *Continued*

| CL | Semantics | Examples | Origin |
|-------------------------|------------------------------|---|--------|
| <i>bi</i> ¹³ | a bit/mouthful of solid food | <i>la+sɿ</i> <i>tə</i> <i>bi</i> chicken+meat:chicken one CL 'a bit of chicken' | |

Table 5: List of Ersu numeral classifiers referring to arrangement

| CL | Semantics | Examples | Origin |
|-------------|---|--|---------|
| <i>po</i> | things bound together like a package or a book | <i>tsʰɿ</i> <i>tə</i> <i>po</i> salt one CL 'a packet of salt' | unknown |
| <i>teʰo</i> | bundle | <i>vula</i> <i>tə</i> <i>teʰo</i> cloth one CL 'a bundle of cloth' | |
| <i>pʰo</i> | a set of things like costumes, furniture, etc. | <i>game</i> <i>tə</i> <i>pʰo</i> clothes one CL 'a suit of clothes' | |
| | people with the same or similar experience, age, profession, etc. | <i>su</i> <i>tə</i> <i>pʰo</i> person one CL 'people of the same/identical group' | |
| <i>pʰe</i> | one part of paired objects | <i>ləpʰo</i> <i>tə</i> <i>pʰe</i> hand one CL 'one hand' | |
| <i>bo</i> | bunch of things (that are put together in a circular form) | <i>kʰutsɿ</i> <i>tə</i> <i>bo</i> key one CL 'a bunch of keys (put together on a ring)' | verb |
| <i>bu</i> | group of people that are interrelated with each other | <i>nə</i> <i>a=dzi</i> <i>nə</i> <i>bu</i> 2sg 1sg.SLF=DL two CL 'the two families: yours and mine' ¹⁴ | |
| <i>pu</i> | group of inanimate things that are interwoven with each other | <i>vu+teo</i> <i>tə</i> <i>pu</i> head-twine:turban one CL 'a turban' | |
| | living plants that grow from underground roots like trees and crops | <i>otea</i> <i>tə</i> <i>pu</i> pear one CL 'a pear tree' | |

¹³ Both *ndzo* and *bi* are translated into Mandarin Chinese as *kǒu* 'mouth' by the local people though they do not mean 'mouth' in Ersu. Consequently, *vu tə ndzo* 'yì kǒu jiǔ (MC)' and *la+sɿ tə bi* 'yìkǒu jīròu (MC)' literally mean 'a mouthful of alcohol' and 'a mouthful of chicken', respectively. In addition, *bi* is polysemous. It can also denote 'a handful of sticklike things' (see Table 6 and §5.2.2).

¹⁴ This example is extracted from an Ersu ode sung at wedding ceremonies. Ersu has a cross-cousin marriage tradition. In this context, the singer uses *bu* to imply that the two families have an intrinsic and complicated relationship since they have been related for generations.

Table 5: *Continued*

| CL | Semantics | Examples | Origin |
|---|--|---|--------|
| <i>ngatsu</i> | pyramid-like stack of harvested crops | <i>ndzɿ</i> <i>ʒɿ</i> <i>ngatsu</i> buckwheat eight CL 'eight pyramid-like stacks of buckwheat' | |
| <i>nts^hɛ</i> | either side of loads on the shoulder | <i>vula</i> <i>tə</i> <i>nts^hɛ</i> cloth one CL 'one shoulder load of cloth' | |
| <i>va</i> | load on the back | <i>ndzɿ</i> <i>na</i> <i>va</i> buckwheat two CL 'two loads of buckwheat carried on the back' | |
| <i>tso</i> | pile | <i>pu</i> <i>tə</i> <i>tso</i> potato one CL 'a pile of potatoes' | |
| <i>ts^hua</i> | space or land divided into parts | <i>yi</i> <i>ta</i> <i>ts^hua</i> house one CL 'a room' | |
| <i>nts^hants^ha</i> | bunch of things (that are put together in a linear form) | <i>minp^hu</i> <i>ta</i> <i>nts^hants^ha</i> pearl one CL 'a bunch of pearls (threaded together)' | |

As shown in Table 5, seven of the 13 arrangement classifiers have been grammaticalized from verbs. They are: *nə-pu* 'DOWNWARD-put something together (by piling one above another)'; *da-ngatsu* 'UPWARD-put harvested crops together (by making pyramid-like stacks)'; *də-nts^hɛ* 'UPWARD-carry loads on the shoulder with a shoulder pole'; *da-va* 'UPWARD-carry loads on the back with ropes, a basket or a sack, etc.'; *nə-tso* 'DOWNWARD-pile something together'; *na-nts^hants^ha* 'DOWNWARD-drag (things that are tied together) or lead aged/blind people hand-in-hand'; and *na-ts^hua* 'DOWNWARD-divide space or land into parts'.

5.2.2 Quanta classifiers

Quanta classifiers mainly come from terms denoting containers rather than from terms encoding length or weight, which are not attested in the data. In daily conversations, the Ersu are observed to use mensural terms from Mandarin Chinese for weight or length, but in indigenous Ersu culture, measurement is often realized through containers that contain liquid or solid objects. Theoretically, every term that denotes a container can be used as a mensural classifier. In the Ersu communities there are hundreds of different containers, and therefore the number of mensural classifiers that originate from container terms is quite large and cannot be exhaustively listed. Here, just some examples are given.

- (18) *nts^hə* *ta* *pua*
rice one CL:bushel
'a bushel of rice'

- (19) *la+ɣ* *tə* *zu*
 chicken+meat:chicken one CL:basin (often used to contain food)
 ‘a basin of chicken’
- (20) *yi* *nə* *ko*
 tobacco two CL:smoking pipe
 ‘two pipes of tobacco’
- (21) *vɛ=yi* *ŋua* *ntɕʰə*
 pig=DIM five CL:nest
 ‘five nests of baby pigs’

In addition, Ersu has several quanta classifiers that categorize an Nh both in terms of its inherent properties and its quantity. There are seven classifiers of this type in the data. They are given in Table 6.

Table 6: List of Ersu numeral classifiers denoting both quantity and inherent properties

| CL | Semantics | | Examples |
|--------------|--|----------------------|--|
| | Inherent Properties | Quantity | |
| <i>kaʰ</i> | one-dimensional (sticklike or elongated in shape) | a few or a little | <i>xao</i> <i>ta</i> <i>kaʰ</i> wormwood one CL ‘a few wormwood plants’ |
| <i>paʰ</i> | three-dimensional (regularly or irregularly roundish in shape, small in size) | | <i>tɕu</i> <i>ta</i> <i>paʰ</i> bean one CL ‘a few beans’ |
| <i>kʰaʰ</i> | powder-like in consistency such as flour, dust or ashes | a little | <i>tsoyi</i> <i>ta</i> <i>kʰaʰ</i> zanba flour one CL ‘a little zanba flour’ |
| <i>mi</i> | liquid or fluid such as wine, soup, blood or water | | <i>vu</i> <i>tə</i> <i>mi</i> alcohol one CL ‘a little alcohol’ |
| <i>ntɕʰo</i> | three-dimensional (regularly or irregularly roundish in shape) | handful | <i>ndzɿ</i> <i>zɿ</i> <i>ntɕʰo</i> buckwheat eight CL ‘eight handfuls of buckwheat (seeds)’ |
| <i>tsʰi</i> | one-dimensional (sticklike or elongated in shape and clearly bounded) | | <i>xa</i> <i>dzu</i> <i>ngə</i> <i>tsʰi</i> needle awl nine CL ‘many handfuls of needles and awls’ ¹⁵ |
| <i>bi</i> | one-dimensional (sticklike or elongated in shape, not necessarily clearly bounded) | | <i>ŋi</i> <i>nə</i> <i>bi</i> grass two CL ‘two handfuls of grass’ |

¹⁵ *ngə* ‘nine’ here also means ‘many’. See fn.6.

In Table 6, the classifiers *ka'*, *pa'*, *k^ha'*, and *mi* that denote ‘a few or a little in quantity’ can only occur with the numeral *tə* ‘one’. However, there are no such limitations for the co-occurrence of numerals and the classifiers *ntɕ^ho*, *ts^hi*, and *bi* that denote ‘handful(s)’, which can occur with any numerals to enumerate the Nh.

5.3 Time classifiers

Time classifiers form a particular subset of Ersu numeral classifiers. They mainly originate from temporal nouns, such as *zu* ‘life span’, *butɕ^hə* ‘year’, *ɬa* ‘month’, *ŋo* ‘day’, *so* ‘morning’, and so on. Since no nouns denoting a week or time less than an hour are found in Ersu, there is no classifier of this kind. As in many other classifier languages, such as Lisu (Yu 2007:162) and Mandarin Chinese (Chao 1968:608–609), Ersu time classifiers do not function as a noun categorization device, but rather as a ‘quasi-measure’ or ‘autonomous measure’ (Chao 1968:608–609). Because the numeral plus time classifier construction in Ersu forms an independent NP without any Nh denoting ‘time’, as in (22) and (23), these classifiers can be thought of as both nouns and classifiers at the same time. Consequently, although they also refer to ‘arrangement’ or ‘quanta’ of time, I view them as a subcategory of numeral classifiers distinct from those mensural classifiers discussed in §5.2.

- (22) *su=yi* [*tə zu*]_{NP}=*nɛ*, *ŋiŋi=tə*
 person=GEN one CL:life span=TOP short.REDP=DES
 ‘A person’s whole life (is) short.’

- (23) [*ta ɬa*]_{NP}=*kə=nɛ*, *sa+ts^hŋ* *ŋo* *dzo=dzɛ*
 one CL:month=RLN:in=TOP three+ten:thirty CL:day EXT=EVID:reported
 ‘(It is said that) a month has 30 days.’

5.4 Repeaters

Like many other languages in mainland Southeast Asia, such as Thai (e.g. Haas 1942; Hundius & Kölver 1983), Burmese (e.g. Becker 1975; Vittrant 2002), Lao (e.g. Enfield 2004), and Yongning Na (e.g. Lidz 2010:220), there are also some nouns that function to ‘classify’ themselves in Ersu, that is, ‘auto-classifiers’ (Matisoff 2003) or ‘repeaters’ (e.g. Aikhenvald 2000:103; Hla Pe 1965). Repeaters in Ersu are either something of great importance to, or are something closely associated with, local people’s life or surroundings, for example, *ŋuà* ‘ox’ and *fɯ* ‘village’, although nouns with human reference cannot be used as repeaters, which is unlike other languages, for example, Thai (Haas 1942; Hundius & Kölver 1983). Some repeaters can be used as classifiers on their own, for example, *dzɿ* ‘a line of a talk’. All nouns that function as repeaters are found to be either monosyllabic or disyllabic. Correspondingly, the realization of a repeater can be divided into two different cases. Firstly, if the noun is monosyllabic, then the repeater is the very noun. Secondly, if the noun is disyllabic, then the repeater is the second syllable.¹⁶

¹⁶ This seems to be a bit different from the ‘semi-repeaters’ described by Bisang (1999) because a semi-repeater has been grammaticalized from a class noun in the head position in a nominal compound.

Table 7: List of Ersu repeaters

| Nouns | Semantics | Examples |
|--------------------------|---------------|--|
| <i>nbò</i> | horse | <i>nbò</i> <i>nə</i> <i>nbò</i> horse two REPT:horse 'two horses' |
| <i>ŋuà</i> | ox | <i>ŋuà</i> <i>ŋua</i> <i>ŋuà</i> ox five REPT:ox 'five oxen' |
| <i>nbi</i> | mountain | <i>nbi</i> <i>si</i> <i>nbi</i> mountain three REPT:mountain 'three mountains' |
| <i>fu</i> | village | <i>fu</i> <i>tə</i> <i>fu</i> village one REPT:village 'a village' |
| <i>nga</i> | door | <i>nga</i> <i>ta</i> <i>nga</i> door one REPT:door 'a door' |
| <i>dʒɿ</i> | line of words | <i>dʒɿ</i> <i>tə</i> <i>dʒɿ</i> line of words one REPT:line of words 'a line of words' |
| <i>ba</i> | urine | <i>ba</i> <i>si</i> <i>ba</i> pee three REPT:pee 'three pees' |
| <i>sipu</i> | tree | <i>sipu</i> <i>si</i> <i>pu</i> tree three REPT:tree 'three trees' |
| <i>ʒɿxua</i> | paddy field | <i>ʒɿxua</i> <i>si</i> <i>xua</i> paddy field three REPT:paddy field 'three paddy fields' |
| <i>sits^ha</i> | tree leaf | <i>si</i> <i>ts^ha</i> <i>ta</i> <i>ts^ha</i> tree leaf one REPT:leaf 'a tree leaf' |

Identical to other numeral classifiers, repeaters also occur with numerals to enumerate the Nh. Furthermore, they share the same functional range with other numeral classifiers. That is, they also involve individualization, classification, referentialization, and emphasis as described in §6 next. There are 10 nouns that can function as repeaters attested in the data, as shown in Table 7.

It should be noted that in repeater constructions, the repeater technique is the only way to classify the Nh. In other words, repeaters are used in contexts where there are no other numeral classifiers available for the Nh. The only exception is *ts^ha* in *si ts^ha* 'tree leaf'. *ts^ha* can be replaced by *p^hua* 'two dimensional and paper-like', a shape classifier (see §5.1.2 and Table 2). For example:

- (24) a. *si ts^ha si ts^ha*
 tree leaf three REPT:leaf
 ‘three tree leaves’
- b. *si ts^ha si p^hua*
 tree leaf three REPT:two-dimensional and paper-like
 ‘three tree leaves’

(24a) and (24b) show no semantic or pragmatic differences in discourse. This is unlike Lao, in which a repeater construction would be odd or unacceptable when a numeral classifier can be optionally used (Enfield 2004).

6. Functional range of Ersu numeral classifiers

In all the classifier languages of East and Southeast Asia, classifiers can function to denote individualization and classification; classifiers in this area are also used for referentialization and/or relationalization (Bisang 1999). Based on his investigation into the classifier systems of Thai, Japanese, Chinese, Cantonese, Hmong, and Weining Miao, Bisang (1999) proposes that classifier languages should be divided into four types, according to the functions they perform:

- I. classification and individualization
- II. classification and individualization and referentialization
- III. classification and individualization and relationalization
- IV. classification and individualization and referentialization and relationalization

My data analysis indicates that the functional range of Ersu classifiers is almost consistent with Type II above. More specifically, Ersu classifiers can encode individualization (§6.1), classification (§6.2) and referentialization (§6.3) with the former two, that is, individualization and classification, as their primary function and the latter one, that is, referentialization, as their secondary function. In addition, the double marking of [NUM+CL] in a clause can perform some sort of emphatic function (§6.4) in discourse.

6.1 Classifiers and individualization

Similar to Thai and many other East and Southeast Asian languages, Ersu nouns are ‘purely conceptual labels’ (Hundius & Kölver 1983:182), or only denote abstract concepts (Bisang 1999). In other words, even a concrete noun in Ersu only encodes the abstract concept of an object rather than the concrete entity of the corresponding object. For example, although *otea* is glossed as ‘pear’, the term may in fact refer to ‘a pear, the pear, pears, the pears, a pear tree, the pear tree, pear trees, the pear trees, a pear tree forest’, etc. if no context is given. Furthermore, an Ersu numeral only denotes a numerical value. For example, the numeral *ta za* ‘one hundred’ can be used for any countable objects in situations in which there is no linguistic context. Consequently, Ersu nouns themselves cannot be counted with a bare numeral since it is impossible for people to count abstract concepts just with a numerical value due to the high indeterminateness of nouns and numerals in

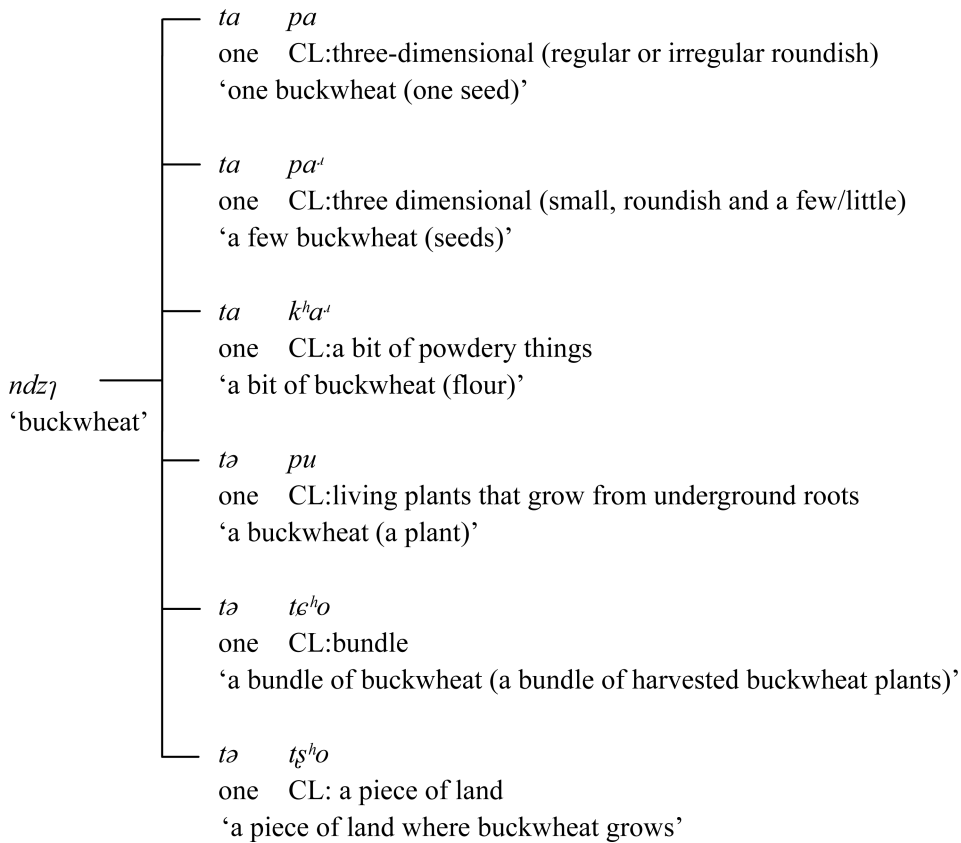


Figure 3: Example of a noun taking different classifiers denoting individualization

Ersu, as discussed above. The nominal terms need to be made countable through reference to certain salient features of the referent concerned. Therefore, a classifier that denotes the intrinsic properties or the quantity of the referent is employed. That is, a classifier serves to associate a conceptual noun with a specific and countable object, and thus individualizes it. The well-known example of 'river' taking eight classifiers in Burmese (Becker 1975:113) exactly depicts this linguistic phenomenon. Figure 3 above illustrates how the use of different numeral classifiers can denote different referential values of the Nh *ndzɿ* 'buckwheat', and make it refer to individual concrete objects.

6.2 Classifiers and classification

Section 5 shows that the basic function of the unit of [NUM+CL] in Ersu, as in all classifier languages, is to classify an Nh in terms of its inherent properties, to enumerate it, and/or to 'measure' its quantity. The classification function of Ersu classifiers often involves two respects, as discussed next.

First of all, one numeral classifier may categorize different referents with the same quantity, or with the same intrinsic features such as shape and consistency, as shown in Figure 4.

| | | |
|---------------------------------|-----------|---|
| <i>a^hkuə</i> | <i>si</i> | <div style="border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black; padding: 5px; display: inline-block;"> <i>teo</i> ‘three-dimensional (irregular roundish and oval-shaped)’ </div> |
| stone | three | |
| ‘three oval-shaped stones’ | | |
| <i>np^{hi}</i> | <i>nə</i> | |
| ice | two | <div style="border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black; padding: 5px; display: inline-block;"> <i>teo</i> ‘three-dimensional (irregular roundish and oval-shaped)’ </div> |
| ‘two pieces of oval-shaped ice’ | | |
| <i>ʂə</i> | <i>tə</i> | |
| iron | one | |
| ‘one oval-shaped piece of iron’ | | <div style="border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black; padding: 5px; display: inline-block;"> <i>teo</i> ‘three-dimensional (irregular roundish and oval-shaped)’ </div> |
| <i>pikua</i> | <i>zə</i> | |
| soil clod | four | |
| ‘four oval-shaped soil clods’ | | |

Figure 4: Example of one classifier used for different referents

Secondly, one referent may take different classifiers to imply the variation of its quantity or its inherent properties. Note that the ‘variation of inherent properties’ here does not mean that the inherent properties really change or vary, but implies that the inherent properties of the same referent may be conceptualized differently, depending on the different viewpoints of a speaker or speakers. Figure 5 demonstrates that numeral classifiers can function to categorize the Nh *yadzə* ‘child’ in different ways, depending on the speaker’s likes or dislikes.

6.3 Classifiers and referentialization¹⁷

As mentioned in §2, classifiers in Ersu, like those in many other languages, can display the function of reference (Bisang 1999; Li & Bisang 2012). More specifically, overt indefiniteness can

¹⁷ The topic is quite intricate and complex. There are a range of questions that deserve another interesting, separate, but lengthy paper. For example, what are the differences between (in)definiteness and neutrality, since the latter also encodes either definiteness or indefiniteness in discourse? In terms of definiteness (§6.3.3), are there any more deeply semantic and pragmatic differences between the different structures listed in §6.3.3 besides those differences described in this paper? Are there any other functions of the double marking of a demonstrative in an NP besides the emphatic function? Since this paper focuses on the description of a numeral classifier system, I shall give only a general description of the referential functions of classifiers rather than a detailed and thorough discussion. In addition, §6.3 only deals with referentialization in the context either of singularity or of an exact number of referents counted through the unit of [NUM+CL]. The approximate number of referents is often conveyed through the indefinite quantifier *bê* ‘some’ in the structure of either [Nh+*bê*] or [Nh+*tə*+*bê*]. The issue of referentialization versus approximation is not described here, although [Nh+*bê*] and [Nh+*tə*+*bê*] do occur with high frequency in the data. Finally, due to space limits, an example of extended discourse cannot be provided in §6.3. However, I shall, of course, introduce the linguistic context whenever necessary in the discussion.

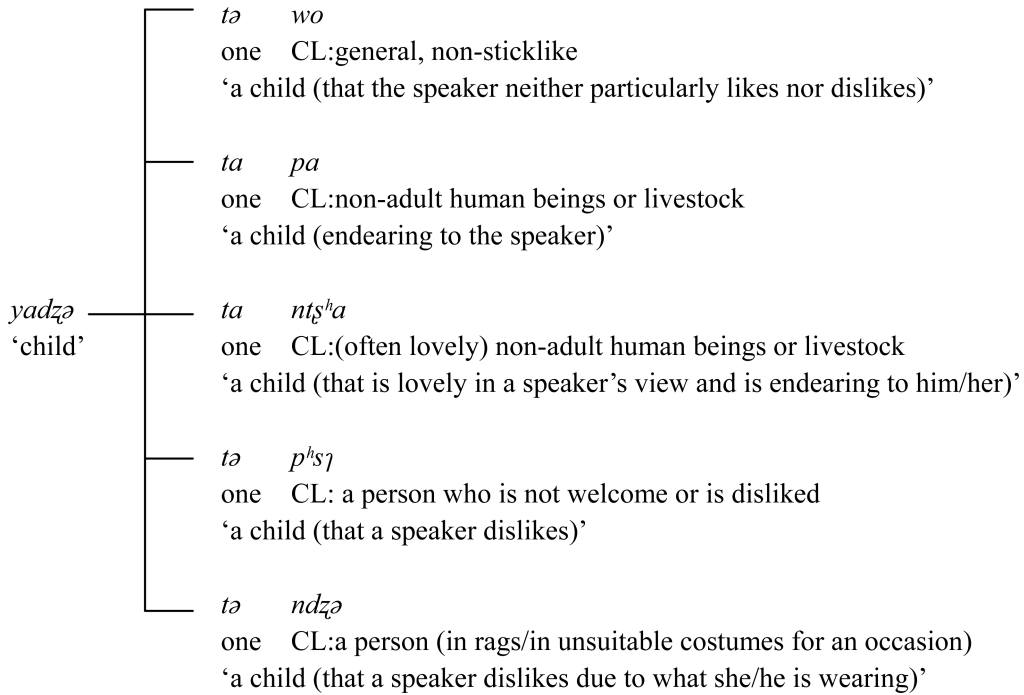


Figure 5: Examples of one Nh 'classified' by different classifiers

be expressed through the unit of [Nh tə] (§6.3.1). A bare noun or a construction of [Nh+NUM+CL] is neutral, displaying either covert definiteness or covert indefiniteness, depending on the context (§6.3.2). The expression of overt definiteness can be attested in [Nh+CL] and several other constructions taking a demonstrative, the interpretation of which appears to be rather complex (§6.3.3).

6.3.1 Indefiniteness

In Ersu, [Nh tə] marks indefiniteness and singularity, with tə used as an indefinite article. When there is more than one referent, a bare noun or the structure [Nh+NUM+CL] functions to denote indefiniteness (see §6.3.2). tə 'one' is originally used as a numeral that obligatorily occurs with a classifier in the context of counting (see §2). However, when it is used as a grammaticalized, indefinite article, it never takes a classifier. [Nh tə] is regarded as referentially indefinite for two reasons: (1) It can never occur with a demonstrative like tʰə 'DEM', as in (25a); (2) it is always used for a newly introduced referent, as in (26).

Similar to Thai, Ersu demonstratives 'always serve the very function of referential identification' (Hundius & Kölver 1983:176). Consequently, they can never occur with the indefinite tə 'IDFT'. However, when tə takes a classifier and encodes 'one', it can be used together with a demonstrative in an NP. This shows that tə 'IDFT' has been grammaticalized from tə 'one' and can be used as an indefinite article. For example:

- (25) a. **tʰə* *su* *tə*
 DEM:this person IDFT
 Lit.: ‘this a person’
 b. *tʰə* *su* *tə* *wo*
 DEM:this person one CL:general, non-sticklike
 ‘this one person’

In addition, whenever there is a new referent introduced to a discourse, the unit of [Nh *tə*] is employed, especially at the beginning of a narrative. For example:

- (26) a [*katʂʰɣ* *tə*]_{NP} *da-kʰatʰo=gə*
 1sg.SLF idiot IDFT UPWARD-tell=PROS
 ‘I will talk about an idiot.’

6.3.2 Neutrality

As described in §2, the core element of an NP can be a lexical noun functioning as an Nh. This means that an Nh without any modifying elements—that is, a bare noun—can occur in certain contexts. The data demonstrate that a bare noun is referentially neutral, denoting either definiteness or indefiniteness in discourse.

For example, in the same narrative from which (26) is extracted, the ‘idiot’ was asked to sow wheat seeds by someone, as described in (27).

- (27) *tə* *ŋo=nɛ* *tʰa=va* [*ʂa*]_{NP} *la* *yi* *xo*
 one day=TOP 3sg.PRST=ACC wheat sow go want
 ‘One day, (someone) asked him to go and sow wheat (seeds).’

In this example, the narrator used a bare lexical noun *ʂa* ‘wheat’ in the initial introduction of this referent and did not give any additional information about whether the referent was known to the speaker and the addressee or not. Consequently, *ʂa* ‘wheat’ is used here for indefinite reference.

(28) below is taken from the same narrative. Prior to (28), the ‘idiot’'s mother-in-law asked him not to pour the pack of salt that she had given him into water until the water was boiling. In this context, the narrator used *dzo wo* [water CL:general, non-sticklike] ‘the water’, that is, a unit of [Nh+CL] that marks definiteness (see §2 and §6.3.3). Subsequently, the narrator only used the lexical noun *dzo* ‘water’ to refer to the same referent, ‘the water’, as in (28). Obviously, the bare noun *dzo* ‘water’ is referentially definite here.

- (28) [*dzo*]_{NP} *ndəndə* *tsu=gə* *xane*, ...
 water really boil=PROG when
 ‘When (the) water was really boiling ...’

The structure [Nh+NUM+CL] used in the context of counting can also denote either definiteness or indefiniteness in discourse. For example:

- (29) *[xuafu na pa]_{NP}*
 crab-apple two CL:three-dimensional, roundish and no bigger than a fist
k^ha-sa=tsà . . . *[xuafu na*
 INWARD-grow=PFT crab-apple two
pa]_{NP} *t^hə-to=yi*
 CL:three-dimensional, roundish and no bigger than a fist AWAY-pick=CSM
 ‘Two crab-apples were growing . . . (She) picked (the) two crab-apples.’

The two clauses in (29) occur sequentially in a narrative. The first mention of ‘two crab-apples’ is indefinite, whereas the second mention of the ‘two crab-apples’ is definite. However, the same NP [*xuafu na pa*] is used in both cases. This shows that the structure of [Nh+NUM+CL] can denote both definiteness and indefiniteness in discourse.

6.3.3 Definiteness

Besides covert definite reference implied through a bare lexical noun or the structure of [Nh+NUM+CL] in discourse (see §6.3.2), [Nh+CL] and several other NPs taking a demonstrative or the double marking of a demonstrative function to encode overt definiteness. Specifically, the following structures are all used for overt definiteness:

- (a) [Nh+CL]
- (b) [Nh+DEM+CL]
- (c) [DEM+Nh+CL]
- (d) [DEM+Nh+DEM+CL]
- (e) [Nh+DEM+NUM+CL]
- (f) [DEM+Nh+NUM+CL]
- (g) [DEM+Nh+DEM+NUM+CL]

Note that the absence of a numeral in the structures from (a) to (d) above customarily refers to ‘one’ in discourse. This kind of bare classifier phrase is not uncommon in many other languages such as Thai (Hundius & Kölver 1983) and Liangshan Yi (Jiang & Hu 2010). Moreover, a demonstrative may either precede an Nh or follow it, with no clear semantic difference. However, as mentioned in fn.14, further investigation is needed to determine whether these two possible positions for a demonstrative show any pragmatic differences. Furthermore, unlike Thai, in which a classifier may occur in an NP several times, as described by Hundius & Kölver (1983), an Ersu NP can contain only one classifier. A demonstrative, on the other hand, may occur twice, as shown in the structures of (d) and (g) above. Finally, a demonstrative alone can only modify a proper noun for which definiteness is already well established. For example, in *t^hə tɛ^holima* [DEM Qolima:a female name], ‘Qolima’ without a modifying classifier is acceptable. In contrast, a demonstrative always occurs with a classifier to modify a common lexical noun of high indeterminateness (see §6.1). For example, it is not acceptable to use **t^hə nbò* [DEM horse] ‘the horse’ in discourse. This shows that in Ersu, a demonstrative is just a demonstrative, not a definite article. That is why a classifier is used to express definite reference, as shown in the structures from (a) to (g) above.

Mini pairs in (30) below which sequentially occur in a narrative show that [Nh+NUM+CL] and [Nh+CL] display indefiniteness and definiteness, respectively.

- (30) $[t\zeta^ho=yi \quad ta \quad pa]_{NP}$ $k\bar{a}-mi$
 dog=DIM one CL:(often lovely) livestock INWARD-catch
də-ʒu=á=dzẽ . . . tʂaŋa [t\zeta^ho=yi pa]_{NP}
 UPWARD-feed=PFV=EVID:reported later dog=DIM CL:(often lovely) livestock
dzi [yadzə]_{NP}=kə vu da-ka tʰə-so=á
 also child=AGT head UPWARD-hit AWAY-die=PFV
 ‘(It is said that the family) caught a dog and fed it . . . Later, (the) dog was also beaten to death by (the) child.’

Based on similar NP structures occurring in other narratives, I asked my language consultants whether it is possible to replace $[t\zeta^ho=yi pa]$ in (30) with the NPs in (31) below. They all stated that these NPs are all acceptable and show no semantic differences from $[t\zeta^ho=yi pa]$.

- (31) a. $t\zeta^ho=yi \quad t^ha \quad pa$
 dog=DIM DEM CL:(often lovely) livestock
 ‘the dog’
 b. $t^hə \quad t\zeta^ho=yi \quad pa$
 DEM dog=DIM CL:(often lovely) livestock
 ‘the dog’
 c. $t^hə \quad t\zeta^ho=yi \quad t^ha \quad pa$
 DEM dog=DIM DEM CL:(often lovely) livestock
 ‘the very dog’

According to my language consultants, however, (31a) and (31b) are somewhat pragmatically different from $[t\zeta^ho=yi pa]$ in (30) above. $[t\zeta^ho=yi pa]$ (i.e. the unit of [Nh+CL]) only encodes definiteness, while (31a) and (31b) (i.e. the units of [Nh+DEM+CL] and [DEM+Nh+CL]) offer some sort of contrastive information. In other words, (31a) and (31b) not only display definiteness, but also imply something of ‘this dog; not that dog’. (31c) (i.e. a structure of [DEM+Nh+DEM+CL]) shows some sort of emphatic function, highlighting ‘the very dog (I am talking about)’. Whether (31a) and (31b) demonstrate similar pragmatic differences or not deserves further study, as mentioned in fn.14.

When there is more than one referent in discourse, a demonstrative is obligatorily used in an NP structure of [Nh+NUM+CL] to denote overt definiteness, although, as discussed in §6.3.2, [Nh+NUM+CL] itself can also encode covert definiteness. Structures (e), (f), and (g) can all be used in this context.¹⁸ For example:

¹⁸ Note that the pragmatic difference between [Nh+NUM+CL] and [Nh+DEM+NUM+CL] in (32a) or [DEM+Nh+NUM+CL] in (32b) is the same as that between [Nh+CL] in (30) and [Nh+DEM+CL] in (31a) or [DEM+Nh+CL] in (31b) as described above. The difference between [Nh+DEM+NUM+CL] in (32a) and [DEM+Nh+NUM+CL] in (32b) also remains unknown at the present stage. The function of [DEM+Nh+DEM+NUM+CL] in (32c) is the same as that of [DEM+Nh+DEM+CL] in (31c).

- (32) a. [su a-tʰə si wo]_{NP}
 person DISTAL-DEM three CL:general, non-sticklike
 a-tʰə=kə toto=gə
 DISTAL-DEM=RLN:there jump.REPT:dance=PROG
 ‘Those three persons are dancing there.’
 b. [a-tʰə su si wo]_{NP}
 DISTAL-DEM person three CL:general, non-sticklike
 a-tʰə=kə toto=gə
 DISTAL-DEM=RLN:there jump.REPT:dance=PROG
 ‘Those three persons are dancing there.’
 c. [a-tʰə su a-tʰə si wo]_{NP}
 DISTAL-DEM person DISTAL-DEM three CL:general, non-sticklike
 a-tʰə=kə toto=gə
 DISTAL-DEM=RLN:there jump.RDUP:dance=PROG
 ‘Those very three persons are dancing there.’

6.4 Classifiers and emphasis

Native speakers of Ersu often end a sentence with a repetition of [NUM+CL], which may seem to be semantically and syntactically redundant in discourse. This occurs not only in affirmative sentences, but also in negative and interrogative sentences. To my knowledge, this kind of ‘double marking’ with [NUM+CL] has not been attested in other Tibeto-Burman languages. For example:

- (33) *t^{hi}* *dzondzɿ* *nə* *pə*
 3sg.PRST.GEN book two CL:things bound together
k^hə=sɪ=zɿ *nə* *pə*
 INWARD=just=buy two CL:things bound together
 'His two books have just been bought.'

This is somewhat similar to Galo ‘afterthought NPs’ (Post 2007:315). In Galo, an ‘afterthought’ NP often ‘closely follows another, coreferential NP’ to provide additional information. However, in Ersu, the second unit of [NUM+CL] is always placed at the end of a sentence and does not offer any extra information to the Nh, as shown in (33). In addition, there is no intonation break between ɿ7 ‘buy’ and the second unit of [NUM+CL]. This could be another sort of an ‘afterthought’, similar to those that occur in other languages, such as English: ‘He has bought two books, two!’ I hypothesize that this construction in Ersu has an emphatic value, namely, to stress the enumeration of the NP being modified. Consequently, despite the SUPERFICIAL SIMILARITIES with afterthought NPs in Galo, the classifier repetition construction is a highly unusual instance of emphatic repetition in Ersu. Nevertheless, this needs further investigation, since it seems to be a novel phenomenon in Tibeto-Burman languages.

7. Summary and conclusion

This paper has presented a synchronic description of the Ersu numeral classifier system. The NP structure is given in §2 with a focus on the enumerative NP structure [Nh+NUM+CL], in which

a numeral–classifier construction is obligatory in the context of counting. Section 3 offers some general remarks on Ersu numeral classifiers. Section 4 discusses the origin of numeral classifiers, showing that numeral classifiers in Ersu can be grammaticalized from either nouns or verbs. Section 5 addresses the rich numeral classifier system of Ersu, which consists of sortal classifiers (§5.1), mensural classifiers (§5.2), time classifiers (§5.3), and repeaters (§5.4). Just as in other numeral classifier languages around the world, sortal classifiers in Ersu categorize an Nh in terms of its intrinsic properties, and can be further subcategorized as general classifiers (§5.1.1), shape classifiers (§5.1.2), consistency classifiers (§5.1.3), family group classifiers (§5.1.4), and specific classifiers (§5.1.5). Mensural classifiers that, according to some scholars, exist in all human languages (e.g. Her & Hsieh 2010) are also found in Ersu. Their function is to ‘measure’ the quantity of an Nh. Arrangement classifiers (§5.2.1) and quanta classifiers (§5.2.2) together constitute mensural classifiers. Time classifiers are those temporal terms that function both as nouns and classifiers at the same time. The 10 repeater-type classifiers found in Ersu are used either with nouns denoting objects of great importance to the Ersu people, or those objects closely associated with their life or surroundings. The functional range of numeral classifiers (§6) involves individualization (§6.1), classification (§6.2), referentialization (§6.3), and emphasis (§6.4).

To conclude, Ersu, a typical classifier language, not only shares common features with other classifier languages around the world, especially its neighboring and related languages, but also has its own typological uniqueness. For example, the ‘double marking’ of [NUM/DEM+CL] (in a clause like (33)) is not really found in other Tibeto-Burman languages, although it has some SUPERFICIAL SIMILARITIES with other languages such as Galo and English (see §6.4). It appears that the double marking emphatic classifier construction in Ersu is cross-linguistically highly unusual. However, this is only the first, preliminary study of numeral classifiers in Ersu. In a language that has such a well-developed classifier system and such a large number of classifiers, there is no doubt that further research will reveal many more points of interest.

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爾蘇語的數量分類詞

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本文旨在分析爾蘇語的數量分類詞。「爾蘇語」是生活在中國四川省一些自稱為「爾蘇人」的少數民族群體所說的藏緬語。有關該語言的文獻記錄非常罕見。在計數語境中，爾蘇語的數量分類詞必須放在數詞之後。該語言有較為豐富的數量分類詞，包括類別分類詞、計量分類詞、時間分類詞和反響詞。其功能範圍涵蓋個性化、分類、指稱和強調。由此，我們得出結論：爾蘇語的數量分類詞不僅具有該區域藏緬語的一些共性特點，也擁有其自身獨具的類型學特徵。

關鍵詞：藏緬語族，爾蘇語，數量分類詞