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Classifier Declinations in an Isolating Language: On a Rarity in Weining Ahmao*

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In this paper, we scrutinize a rare classifier system in an isolating language. Weining Ahmao, a Miao-Yao language spoken in western Guizhou Province in the PRC, inflects each of its noun classifiers in twelve basic forms and stands in stark contrast to other isolating languages of East Asia (including other Miao languages), in which nominal classifiers are unique indeclinable morphemes. This paper focuses on a synchronic analysis of all aspects of the classifier system; i.e. a representation of its phonological, semantic, and pragmatic properties as well as the syntactic constructions in which the classifiers are involved. A data list of cognate classifiers from four Miao languages encapsulates the uniqueness of the Ahmao inflectional classifiers.

Key words: inflectional classifier, size classifier, indexical, Ahmao, Miao, China

1. Introduction

This paper describes the Ahmao classifier system, a linguistic rarity whose historical development was hypothesized upon in a recent paper (Gerner & Bisang 2009). Ahmao is a Miao-Yao language[1] spoken by 300,000 natives in western Guizhou

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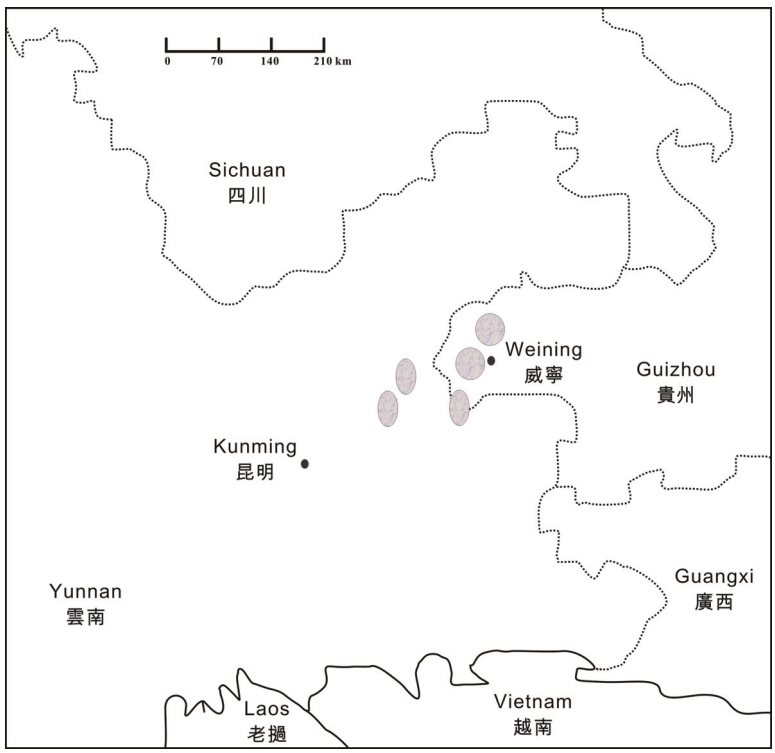
[1] In this paper, we employ the Chinese exonym *Miao-Yao* for the language family that is also called *Hmong-Mien*. Most speakers of languages of this family live within the borders of the PRC. As ca. 75% of the Miao-Yao speakers refer to themselves by names other than *Hmong* or *Mien* (e.g. Qanao, Ahmao, Qoxung), and as these speakers readily accept the Chinese exonym, we also adopt this naming convention.

Province in the PRC. The following map illustrates the residence area of the Ahmao people. Although Ahmao is an isolating language in which parts of speech are realized as indeclinable one-form categories, the system of nominal classifiers is different in having developed a twelve-form paradigm for each item.



Map: The residence area of the Ahmao people in Southwest China

Since Greenberg (1974), scholars have recognized a correlation between the obligatory expression of the singular/plural distinction and the presence of numeral classifiers:

> Numeral classifier languages generally do not have compulsory expression of nominal plurality, but at most facultative expression. (Greenberg 1974:25)

If one assumes that nouns in East Asian languages only express the concept itself without any reference to its number, it is the function of the classifier to individuate that concept to make it receptive to quantification by numerals. Classifiers refer to certain cognitive properties of concepts (e.g. dimensionality, animacy, flexibility, etc.) and thus assign them to different classes. The correlation between classification and individuation seems to hold through all the classifier systems of East Asia and mainland Southeast Asia

where classifiers are always used with numerals. This is because classifiers are used for highlighting the boundaries of concepts (Bisang 1999, 2002). In addition to individuation, we find classifiers in the context of (in)definiteness, relativization, and possession (Bisang 1999, 2002, Aikhenvald 2000, on 'multiple classifier languages').

(1) *Definiteness*: Thailand Hmong (Mottin 1981:200)
t^{h}au^{11} u^{55} mua^{53} o^{55} **tu^{22}** nia^{11} tsi^{34}. **tu^{22}** tsi^{34} tua^{31}
long.ago there have NUM:2 CL wife husband CL husband die
laɯ^{11} tu^{22} nia^{11} qua^{53} qua^{53}.
finish CL wife cry cry
'A long time ago there was a married couple. The husband died and [his] wife cried.'

(2) *Indefiniteness*: Kam/Dong (Gerner 2006:248)
mau^{33} təm^{55} **muŋ^{31}** n̥ən^{11} kɐm^{55}.
3P SG meet CL man Kam
'He met a Kam man.'

(3) *Relativization*: Cantonese (Matthews & Yip 1994:111)
[ŋo^{35}tei hai^{35} fat^{33}kwok^{33} sik] **di^{55}** je^{35} kei^{35} hou^{35}-sik ga.
1P PL in France eat CL food quite good-eat PART
'The food we ate in France was pretty good.'

(4) *Possession*: Thailand Hmong (Mottin 1981)
nø^{11} **tu^{22}** tsi^{34}ntsaɯ^{21} **tu^{22}** nts^{h}ai^{11}
3P SG CL uncle CL daughter
'the daughter of his uncle'

In none of the languages in which the classifier marks functions of individuation is the classifier obligatory. Within this areal framework but also within classifier systems worldwide, the system of Ahmao seems to be unique. Whereas classifiers are morphologically invariable in all the other language families, Ahmao classifiers can take different forms in a paradigm that combines the functions of definiteness (definite vs. indefinite form), number (singular vs. plural form), size (augmentative, medial, diminutive) and social deixis as reflected in the social status defined by male, female, or child.

A few previous papers, mainly in Chinese publications, have provided sketches of the Ahmao classifier system (D. Wang 1987, F. Wang 1957, 1972), although the findings were very elementary. These publications are repeated and commented upon in a typological perspective by Bisang (1993:46-47, 1999:153-155). The data of this article are drawn from various sources. The classifier systems of §3 constitute our own elicited fieldwork data from four Miao languages in southwestern China. This is also the case for some of the Ahmao examples in §2. Other sample sentences were retrieved from published folk stories (D. Wang 1986). All the data were carefully checked by native

speakers in several rounds. The text statistics on Ahmao (§2.3.3) are based on the collection of folk stories available in the archives of the University of Southampton. In §2, we describe the phonological, syntactic, semantic, and pragmatic properties of this idiosyncratic classifier system. Section 3 catalogues the classifier forms of Weining Ahmao and three additional Miao languages.

2. Properties of the Ahmao inflectional classifier system

In this section we provide a synchronic analysis of the Ahmao classifier system, its phonological features (§2.1), its syntactic constructions (§2.2), and its semantic and pragmatic features (§2.3).

2.1 Phonological features

The Ahmao classifier forms are the result of two types of merger: (1) a segmental fusion with the two size prefixes a^{55}ɲie^{53} 'big/female' and ŋa^{11} 'small/child'; (2) a blending with the glottal stop [ʔ] of the numeral iʔ^{55} 'one' resulting in an array of suprasegmental features (Gerner & Bisang 2009).[2]

[2] Superscript numerals ^{55}, ^{13} etc. are tone markers and indicate relative pitch on a scale from 1 (lowest) to 5 (highest). The first number represents the beginning and the second number the end of the tonal contour. The transcription of sounds in this paper follows the International Phonetic Alphabet without shortcuts. For the interlinear glosses of the examples, please refer to the following table of abbreviations:

1P PL	First person plural	INT	Interrogative
2P SG	Second person singular	INT:what	Interrogative with gloss
3P SG	Third person singular	MED	Medial
AUG	Augmentative	N	Noun
C	Consonant	NEG	Negation
CL	Classifier	NOM	Nominalization
COV	Coverb	NUM	Numeral
COV:be at	Coverb with verbal origin	NUM:9	Numeral with its value
COV:take	Coverb with verbal origin	PART	Discourse particle
DEF	Definite	PREF	Prefix
DEM	Demonstrative	PL	Plural
DEM:FAM	Demonstrative: familia to Speaker & Addressee	QUA	Quantifier
DEM:MED	Demonstrative: medial-even distance to Speaker	REFL	Reflexive
DEM:MED-EVEN	Demonstrative: proximal distance to Speaker	REL	Relator
DEM:MED-HIGH	Demonstrative: proximal distance to Speaker	SG	Singular
DEM:PROX	Demonstrative: proximal distance to Speaker	SOL	Particle of solicitation
DIM	Diminutive	T	Tone
DP	Dynamic perfect particle	TOP	Topic
EXCL	Exclamation	V	Vowel
INDEF	Indefinite		

2.1.1 Segmental

All of the 48 Ahmao classifiers have merged with the size prefixes $a^{55}ȵie^{53}$ 'big/female' and $ŋa^{11}$ 'small/child' resulting in three basic forms distinguished by vowel and tone quality. The generic forms are displayed in the following table.

Table 1: The three generic forms of each classifier paradigm

Gender/Age Register of Speaker	*Size*	*Form*	*Comments*
Male	*Augmentative*	CVT	The original unmerged classifier version
Female	*Medial*	Cai^{55}	Resulting from the merger with $a^{55}ȵie^{53}$ 'big/female'
Child	*Diminutive*	Ca^{53}	Resulting from the merger with $ŋa^{11}$ 'small/child'

Remarks: (1) C means 'consonant' (simplex, complex, affricated, etc.)
(2) V means 'vowel' (simple, double)
(3) T means 'tone'

Two kinds of meanings are associated with these forms: (i) an intrinsic size-related quality of the noun which the classifier modifies (augmentative, medial, or diminutive); and (ii) a deictic meaning relating to the gender/age registers of the speaker (male, female, child). The size parameter correlates with the deictic in the following way. Men typically employ augmentative classifiers; medial (and sometimes diminutive) classifiers are reserved for women, and diminutive classifiers in general for children. The base form of this system is not the medial but the augmentative form. This asymmetry is owed to the way these forms have developed historically. As shown in Gerner & Bisang (2009), the base form was semantically reanalysed as augmentative *after* the medial and diminutive forms were fleshed out. Consider first the plural/mass quantifier ti^{55}.

Table 2: The plural and mass classifier

Gender/Age Register of Speaker	*Size*	
Male	*Augmentative*	ti^{55}
Female	*Medial*	$tiai^{55}$
Child	*Diminutive*	tia^{55}

For several classifiers, the merger with the two size prefixes is incomplete. For example, the classifier $ʂey^{55}$ for fields with the meaning 'side' or 'edge' has unmerged medial and diminutive forms.

Table 3: The classifier for partitioned landscape

Gender/Age Register of Speaker	*Size*	*Singular*
Male	*Augmentative*	$ʂey^{55}$
Female	*Medial*	$ʂ(e)yai^{55}$
Child	*Diminutive*	$ʂ(e)ya^{53}$

In the Miao languages, sortal classifiers are generally understood to have singular meaning. In Ahmao, sortal classifiers have generated plural versions by prefixing the plural morpheme ti^{55} together with the optional infix a^{11} (with allotones a^{55}/a^{31}) to the classifier stem.[3] Consider again the following generic table.[4]

Table 4: The generic singular and plural forms

Gender/Age Register of Speaker	*Size*	*Singular*	*Plural*
Male	*Augmentative*	CVT	$ti^{55}a^{11}$CVT'
Female	*Medial*	Cai^{55}	$tiai^{55}a^{11}$CVT'
Child	*Diminutive*	Ca^{53}	$tia^{55}a^{11}$CVT'

The plural classifiers are only employed for expressing a general concept of plurality, but not for specific count constructions involving numerals greater than one. In such contexts, the singular classifier version must be used. As an illustration of this kind of six-form paradigm, consider the inanimate classifier lu^{55}:

Table 5: The general inanimate classifier

Gender/Age Register of Speaker	*Size*	*Singular*	*Plural*
Male	*Augmentative*	lu^{55}	$ti^{55}a^{11}lu^{55}$
Female	*Medial*	lai^{55}	$tiai^{55}a^{11}lu^{55}$
Child	*Diminutive*	la^{53}	$tia^{55}a^{11}lu^{55}$

2.1.2 Suprasegmental

For both sets of singular and plural forms, each classifier has split into definite/indefinite classifier forms as a result of a partial merger with the glottal stop [ʔ] of the numeral $i ʔ^{55}$. The glottal stop was dispersed into an array of suprasegmental phenomena such as voicing, breathy voicing, or tone change. The following generic table represents the full number of distinctions in the Ahmao system.[5] The distinction

[3] This infix must be distinguished from the size prefixes mentioned in the introductory paragraph of §2.1.

[4] We think that it is acceptable to talk of plural forms of classifiers. Although the notion of *plurality* is routinely applied to inflectional languages in which the noun is marked for the singular/plural distinction, it seems sensible to use this term for Ahmao classifiers too. In Ahmao, it is the composite CLASSIFIER+NOUN that is obligatorily marked for the singular/plural distinction.

[5] In Bisang (1993:46-47, 1996:543-545, 1999:153-155), based on F. Wang (1957, 1972) and D. Wang (1986, 1987), only five basic forms are mentioned as omitting the augmentative-indefinite. As shown in detail in §3, there are classifiers for which the augmentative-indefinite form does not exist, but the great majority of classifiers can be declined in six basic (singular) forms.

between the plural-definite and plural-indefinite forms is obtained through voicing of the plural morpheme *ti*^{55}/*di*^{55}. (The asterisk * stands for 'suprasegmental phenomena.')

Table 6: The generic definite and indefinite forms

		Singular		*Plural*	
Gender/Age Register of Speaker	*Size*	*Definite*	*Indefinite*	*Definite*	*Indefinite*
Male	*Augmentative*	CVT	C*VT	ti^{55}a^{11}CVT'	di^{31}a^{11}C*VT'
Female	*Medial*	Cai^{55}	C*ai^{213}	tiai^{55}a^{11}CVT'	diai^{213}a^{11}C*VT'
Child	*Diminutive*	Ca^{53}	C*a^{35}	tia^{55}a^{11}CVT'	dia^{55}a^{11}C*VT'

We shall provide an example of each suprasegmental process. The voicing of the classifier's initial consonant is one possible difference between definite and indefinite classifier forms. For example, the animate classifier distinguishes its forms through voicing. (For more examples see §3.)

Table 7: The animate classifier

Gender/Age Register of Speaker	*Size*	*Sg-def*	*Sg-indef*	*Pl-def*	*Pl-indef*
Male	*Augmentative*	tu^{44}	du^{31}	ti^{55}a^{11}tu^{44}	di^{31}a^{11}tu^{44}
Female	*Medial*	tai^{44}	dai^{213}	tiai^{55}a^{11}tu^{44}	diai^{213}a^{11}tu^{44}
Child	*Diminutive*	ta^{44}	da^{35}	tia^{55}a^{11}tu^{44}	dia^{55}a^{11}tu^{44}

Several classifiers differentiate definite classifiers from indefinite classifiers through breathy voicing. The measure word 'handful' introduces breathy voicing for the indefinite forms. Breathy voicing is also used for all plural forms (definite and indefinite).

Table 8: The mensural classifier 'handful'

Gender/Age Register of Speaker	*Size*	*Sg-def*	*Sg-indef*	*Pl-def*	*Pl-indef*
Male	*Augmentative*	ntsai^{53}	ndzɦai^{11}	ti^{55}a^{31}ndzɦai^{31}	di^{31}a^{55}ndzɦai^{31}
Female	*Medial*	ntsai^{213}	ndzɦai^{213}	tiai^{55}a^{31}ndzɦai^{13}	diai^{213}a^{31}ndzɦai^{31}
Child	*Diminutive*	ntsai^{35}	ndzɦa^{35}	tia^{55}a^{31}ndzɦai^{13}	dia^{55}a^{31}ndzɦai^{31}

Tone changes constitute another suprasegmental process. The two reference forms for which the tone change occurs are the augmentative definite/indefinite forms. For example, the classifier for torches exhibits a high tone for the augmentative-definite and a low tone for the augmentative-indefinite classifier version: [^{55}] → [^{11}]. Furthermore, the medial and diminutive tones always change between the definite and indefinite classifiers: [^{55}] to [^{213}] and [^{55}] to [^{35}].

Table 9: The classifier for torches

Gender/Age Register of Speaker	*Size*	*Sg-def*	*Sg-indef*	*Pl-def*	*Pl-indef*
Male	*Augmentative*	˩aɯ^{55}	˩aɯ^{11}	ti^{55}a^{44}˩aɯ^{55}	di^{31}a^{55}˩aɯ^{55}
Female	*Medial*	˩ai^{55}	˩ai^{213}	tiai^{55}a^{44}˩aɯ^{55}	diai^{213}a^{11}˩aɯ^{55}
Child	*Diminutive*	˩a^{55}	˩a^{35}	tia^{55}a^{44}˩aɯ^{55}	dia^{55}a^{31}˩aɯ^{55}

Several classifiers do not distinguish between the augmentative-definite and augmentative-indefinite forms. Consider the classifier of air, *paɯ*^{11} ‘draught’.

Table 10: The classifier for gases

Gender/Age Register of Speaker	*Size*	*Sg-def*	*Sg-indef*	*Pl-def*	*Pl-indef*
Male	*Augmentative*	paɯ^{11}	paɯ^{11}	ti^{55}a^{11}paɯ^{11}	di^{31}a^{55}paɯ^{11}
Female	*Medial*	pai^{11}	pai^{213}	tiai^{55}a^{11}paɯ^{11}	diai^{213}a^{11}paɯ^{11}
Child	*Diminutive*	pa^{11}	pa^{35}	tia^{55}a^{11}paɯ^{11}	dia^{55}a^{11}paɯ^{11}

A few other classifiers reveal atypical medial forms and to a lesser degree atypical diminutive forms. One of these, the classifier *tey*^{11} ‘clump’, is presented below. It lacks an augmentative indefinite form, similar to the classifier mentioned above.

Table 11: The mensural classifier ‘clump’

Gender/Age Register of Speaker	*Size*	*Sg-def*	*Sg-indef*	*Pl-def*	*Pl-indef*
Male	*Augmentative*	tey^{11}	tey^{11}	ti^{55}a^{11}tey^{11}	di^{31}a^{55}tey^{11}
Female	*Medial*	tui^{11}	tui^{213}	tiai^{55}a^{11}tey^{11}	diai^{213}a^{11}tey^{11}
Child	*Diminutive*	tya^{11}	tya^{35}	tia^{55}a^{11}tey^{11}	dia^{55}a^{31}tey^{11}

2.2 Syntactic constructions

Classifiers in Ahmao may be projected in eight noun phrase constructions which is the pattern also attested in other Miao languages, though with a few distinctive features. The syntax of these nominal constructions is represented in Table 12 by the maximal number of possible slots. Note that the non-alignment of DEM and QUA before or after the head noun points to the possibility of co-occurrence in combined nominal constructions.

Table 12: Classifier constructions in Ahmao

(i)	Numeral construction				NUM	CL.IN/DEF	N			
(ii)	Quantifier construction				QUA	CL.IN/DEF	N			
(iii)	Interrogative construction					CL.IN/DEF	N		QUA	
(iv)	Demonstrative construction					CL.DEF	N			DEM
(v)	Definite construction					CL.DEF	N			
(vi)	Indefinite construction					CL.INDEF	N			
(vii)	Relative clause construction					CL.DEF	N_{Head}	Clause		DEM
(viii)	Possessive construction	CL	$N_{Possessor}$	(DEM)	(NUM/QUA)	CL	$N_{Possessee}$			(DEM)

Miao languages differ from other isolating languages of the area (such as Chinese or Kam-Tai languages) with respect to the use of bare nouns. In Miao languages, bare nouns always have a non-referential reading and cannot be used to refer to an entity in the physical world. Conversely, bare nouns in Chinese and Kam-Tai languages allow both referential and non-referential readings. Moreover, Chinese and Kam-Tai bare nouns with referential interpretations can be either definite or indefinite, depending on the settings of the discourse in which the noun is used. Relevant examples for Mandarin Chinese can be found in Li & Thompson (1981:126-132). In Miao languages, since bare nouns are non-referential, they may convey neither a definite nor an indefinite reading. The distinctive mark of noun phrase referentiality in the Miao group is therefore the presence of the classifier: noun phrases with classifiers are referential; noun phrases without classifiers are non-referential.

In §§2.2.1 to 2.2.6, we present the syntactic constructions of sortal and mensural noun classifiers in Ahmao.[6] In addition, there are two or three noun classifiers that have an additional involvement as verb classifiers. They mainly relate to weather phenomena like 'shower' or 'draught'. These classifiers exhibit morphosyntactic properties different from those presented below. For an analysis of these features see Gerner (forthcoming).

[6] The morphosyntactic constructions are similar across the Miao group. The hallmark of the Miao languages is that the distinction of referring/non-referring (or specific/non-specific) is encoded along the lines of presence/absence of noun classifiers. The sole difference that exists between different Miao languages is whether the presence of the classifier always conveys a definite meaning. In Weining Ahmao, the difference between definite/indefinite is encoded with different forms of a classifier. In Kaili Qanao, the minimal construction CLASSIFIER+ NOUN almost always has a definite interpretation. For other Miao languages, the string CLASSIFIER+NOUN is not always interpreted as a definite noun phrase.

2.2.1 Numeral construction

In the isolating Miao languages, basic numeral constructions (NUM + CL + N) are always interpreted as referential indefinite noun phrases. In Ahmao, which distinguishes between a set of definite and indefinite classifiers, definite versions are banned with numerals for every register: augmentative, medial and diminutive classifiers. Witness the following examples where (a) illustrates an ungrammatical combination with a definite classifier and (b) the use of the corresponding indefinite classifier in lieu of its definite counterpart. It is important to note that only singular classifiers may collocate with numerals, but not plural classifiers, see (8a-b).

(5)	a.	*i^{55}	**tai^{44}**	ɲɦu^{35}	b.	i^{55}	**dai^{213}**	ɲɦu^{35}
		NUM:1	CL.MED.SG.DEF	ox		NUM:1	CL.MED.SG.INDEF	ox
		Numeral	Noun classifier	Noun		Numeral	Noun classifier	Noun
		‘the sole ox’				‘one ox’		
(6)	a.	*tsɨ^{55}	**la^{53}**	tau^{55}	b.	tsɨ^{55}	**la^{35}**	tau^{55}
		NUM:3	CL.DIM.SG.DEF	hill		NUM:3	CL.DIM.SG.INDEF	hill
		Numeral	Noun classifier	Noun		Numeral	Noun classifier	Noun
		‘the three hills’				‘three hills’		

D. Wang (1986:71)

(7)	a.	*a^{55}	**dla^{53}**	ndlɦaɯ^{35}	b.	a^{55}	**dlɦa^{11}**	ndlɦaɯ^{35}
		NUM:2	CL.AUG.SG.DEF	picture		NUM:2	CL.AUG.SG.INDEF	picture
		Numeral	Noun classifier	Noun		Numeral	Noun classifier	Noun
		‘the two pictures’				‘two pictures’		
(8)	a.	*tsɨ^{55}	**ti^{55}a^{11}lu^{55}**	ɕey^{55}	b.	*tsɨ^{55}	**diai^{213}a^{11}lu^{55}**	ɕey^{55}
		NUM:3	CL.AUG.PL.DEF	valley		NUM:3	CL.MED.PL.INDEF	valley
		Numeral	Noun classifier	Noun		Numeral	Noun classifier	Noun
		Intended meaning: ‘the three hills’				‘three hills’		

2.2.2 Quantifier and interrogative constructions

Quantifiers combine with indefinite—not definite—classifiers, as is also the case with numerals. The noun phrase is interpreted as an indefinite noun phrase. This pattern is illustrated for one quantifier and one interrogative pronoun by the following two pairs of examples. Quantifiers are preposed to the head noun as in example (9), whereas interrogative elements are postposed as in (10).

(9) a. * pi^{55}dʐau^{53} **dʐai^{53}** tɕi^{55}
QUA:several CL.MED.SG.DEF road
Quantifier Noun classifier Noun
'the several roads'

b. pi^{55}dʐau^{53} **dʐɦai^{213}** tɕi^{55}
QUA:several CL.MED.SG.INDEF road
Quantifier Noun classifier Noun
'several roads'

D. Wang (1986:76)

(10) a. * **tai^{44}** pi^{55}tl̥aɯ^{55} qa^{33}ʂə^{33}
CL.MED.SG.DEF ghost INT:which
Noun classifier Noun Interrogative
'Which ghost?'

b. **dai^{213}** pi^{55}tl̥aɯ^{55} qa^{33}ʂə^{33}
CL.MED.SG.INDEF ghost INT:which
Noun classifier Noun Interrogative
'Which ghost?'

2.2.3 Demonstrative construction

Ahmao has a set of seven spatial demonstratives and one recognitional demonstrative (see Gerner 2009a, Diessel 1999).[7] Noun phrases incorporating demonstrative pronouns are always referential and definite and therefore require the preposing of a definite classifier. No indefinite classifier may combine with demonstrative pronouns.

(11) **lu^{55}** a^{55}və^{55} vɦai^{35}
CL.AUG.SG.DEF stone DEM:MED
Noun classifier Noun Demonstrative
'that stone (at medial distance from me)'

(12) **dzɦau^{35}** tsɨ^{55}qɯ^{55} i^{55}
CL.AUG.SG.DEF maize DEM:FAM
Noun classifier Noun Demonstrative
'the maize corn (that I told you about or that you know)'

[7] Recognition is a deictic feature (potentially with several values in a language). 'Familiar' vs. 'unfamiliar' are two values for the deictic feature of recognition.

2.2.4 Definite and indefinite constructions

In Mandarin Chinese, classifiers may not co-occur with nouns alone (CL + N), but must involve an additional modifier such as a numeral or demonstrative. In Cantonese, Kam-Tai, and Miao languages, classifiers can combine with nouns alone implying different meanings each time. In Cantonese and Kam-Tai languages, classifier-noun compounds are interpreted as indefinite noun phrases, whereas they generally convey a definite meaning in Miao languages. As there are definite and indefinite classifier versions in Ahmao, both concepts may be alternatively articulated.

(13)	a.	**tu^{44}**	ɲɦu^{35}		b.	**du^{31}**	ɲɦu^{35}
		CL.AUG.SG.DEF	ox			CL.AUG.SG.INDEF	ox
		Noun classifier	Noun			Noun classifier	Noun
		‘the ox’				‘an ox’	
(14)	a.	**ga^{53}**	tɯ^{55}nɯ^{55}		b.	**gua^{35}**	tɯ^{55}nɯ^{55}
		CL.DIM.SG.DEF	person			CL.DIM.SG.INDEF	person
		Noun classifier	Noun			Noun classifier	Noun
		‘the group of people’				‘a group of people’	

2.2.5 Relative clause construction

Like Cantonese and Kam-Tai languages, but unlike Mandarin, Miao languages can involve classifiers for framing relative clauses. The classifier and head noun occur at the leftmost end and a demonstrative pronoun at the rightmost end of the construction. In Ahmao, only definite classifiers can be involved in relative clause constructions, enforced by the use of the demonstrative. A definite classifier is generally paired with a demonstrative to form restrictive relative clauses in which the range of possible referents of the head noun is restricted. Although in principle each of the eight demonstratives may be involved, the proximal, medial, and recognitional are the preferred demonstratives in restrictive relative clauses.

(15)	**lɯ^{55}**	a^{33}bɦo^{35}	dɦa^{35}	dɦi^{35}		daɯ^{11}	vɦai^{35}
	CL.AUG.SG.DEF	woman	come	opposite side		DP	DEM:MED
	Noun classifier	N_{Head}		Clause			Demonstrative
	‘the woman who came from the opposite side (at medial distance from me)’						
(16)	**lai^{55}**	tʂho^{33}	gɦi^{31}	və^{31}	i^{55}		
	CL.MED.SG.DEF	garment	2P SG	admire	DEM:FAM		
	Noun classifier	N_{Head}	Clause		Demonstrative		
	‘the garment that you admire (you know which one I mean)’						

2.2.6 Possessive construction

In possessive noun phrases, the order of components is $N_{Possessor}$-$N_{Possessee}$. A classifier is generally required before the possessee noun. Usually, use of the definite classifier is made, yet in appropriate circumstances indefinite classifiers can be employed too. The main reason for the preference for the definite classifier in Ahmao is that items belonging to a given entity tend to be definite, even if that entity is indefinite or even non-referential in discourse. Thus, the definite classifier in (17a) is the unmarked classifier pointing to the whole range of teeth, whereas the indefinite variant points to an indefinite subset of teeth. Note that the classifier may also be dropped if the relationship between the possessor and possessee is inalienable and close, as in (17a-b). In alienable possessive relationships, such as in (18), the classifier (either definite or indefinite) is required.

(17) a. pi^{55} **ti^{55}** ȵie^{55} hi^{44} zau^{55}.
1P PL CL.AUG.PL.DEF tooth NEG good
Possessor Noun classifier Possessee
'Our teeth are not in a good state.'

b. pi^{55} **di^{31}** ȵie^{55} hi^{44} zau^{55}.
1P PL CL.AUG.PL.INDEF tooth NEG good
Possessor Noun classifier Possessee
'Some of our teeth are not in a good state.'

(18) faɯ^{55} tsɨ^{55} ȵi^{55} **lai^{55}** a^{55}lu^{55}
CL.AUG.SG.DEF tree DEM:S:PROX CL.MED.SG.DEF fruit
Possessor Noun classifier Possessee
'the fruit of this tree'

2.3 Semantic and pragmatic features

The Ahmao classifiers qualify (i) the size of referents (augmentative/medial/diminutive), (ii) specify a value for discourse activation (definite/indefinite), and (iii) mirror gender/age information of the speaker (male/female/child). The previous works of F. Wang (1957, 1972) and D. Wang (1987) only mention (i) and (ii). There is a default correspondence between the size and deictic parameters—at least in conversation when the speaker can be indexed by forms in the language. The augmentative classifier form is typically employed by male speakers. Women create pragmatic effects when they utilize augmentative forms such as echoing male speech or taking the worldview of men (conveying daring, boyish, or angry overtones). Augmentative forms are rarely employed by children and are appropriate only for strong pragmatic effects. Child

speakers are primary users of diminutive forms in conversation. Adult speakers occasionally utilize diminutive forms if they talk to children. In conversation, medial forms are the default classifiers for women, but men and children may also utilize them. By drawing on medial forms, male speakers transmit a humble and sober tone and wish to describe entities reduced in size. When child speakers use medial forms, they generally evaluate physically or conceptually large entities. (Note that largeness cannot be depicted by diminutive classifiers.) Medial forms are indifferently utilized by all speakers, if an independent size adjective is involved for modifying the noun phrase.

2.3.1 In conversation

The first three sentences are based on an example selected from D. Wang (1986:75) and illustrate all possible combinations between size distinctions (augmentative/medial/diminutive) and types of speaker (male/female/child). For each classifier version, if uttered by the speaker canonically associated with it, the classifier phrase is pragmatically unmarked. If it is voiced by an atypical speaker, then a pragmatic effect occurs. In (19a) the augmentative-definite classifier qualifies the head noun 'bird-skin garment' with a big size and appears pragmatically unmarked if uttered by a male speaker. In (19b) the medial-definite classifier conveys medial size and is employed in a pragmatically neutral way by women. The version (19c) describes the referent with a small size and is used by child speakers in a pragmatically neutral way.

(19) a. ku^{55} la^{31} **lu^{55}** tʂ^{h}o^{11} pi^{33}tey^{33} nau^{31} vɦai^{35}.
1P SG like CL.AUG.SG.DEF clothes skin bird DEM:MED
Male speaker: 'I like that large bird-skin garment.' [Pragmatically neutral]
Female speaker: 'I like that large bird-skin garment.' [Audacious, daring or boyish tone]
Child speaker: 'I like that large bird-skin garment.' [Pragmatically odd]

b. ku^{55} la^{31} **lai^{55}** tʂ^{h}o^{11} pi^{33}tey^{33} nau^{31} vɦai^{35}.
1P SG like CL.MED.SG.DEF clothes skin bird DEM:MED
Male speaker: 'I like that bird-skin garment.' [Modest tone]
Female speaker: 'I like that bird-skin garment.' [Pragmatically neutral]
Child speaker: 'I like that (large) bird-skin garment.' [Pragmatically neutral]

c. ku^{55} la^{31} **la^{53}** tʂ^{h}o^{11} pi^{33}tey^{33} nau^{31} vɦai^{35}.
1P SG like CL.DIM.SG.DEF clothes skin bird DEM:MED
Male speaker: 'I like that small bird-skin garment.' [Taking perspective of children]
Female speaker: 'I like that small bird-skin garment.' [Taking perspective of children]
Child speaker: 'I like that (small) bird-skin garment.' [Pragmatically neutral]

The metapragmatic awareness of the Ahmao people provides the main piece of evidence for the existence of speaker roles (male/female/child) in conversation. In (20), the three forms of the human classifiers modify *q^{h}a^{55}ntey^{44}* 'teacher', a respected person in Ahmao society. Employing non-canonical classifier versions for qualifying people worthy of respect may represent a discourteous approach by the speaker. Male adults' reference to teachers with the diminutive classifier version as in (20c) discloses an impolite behavior, unless it is understood that the perspective of children is taken.

(20) a. ku^{55} χə^{21} **di^{31}a^{11}lɯ^{55}** q^{h}a^{55}ntey^{44}.
1P SG lead CL.AUG.PL.INDEF teacher
Male speaker: 'I have come with some teachers.' [Pragmatically neutral]
Female speaker: 'I have come with some teachers.' [Audacious, daring or boyish tone]
Child speaker: 'I have come with some teachers.' [Pragmatically odd]

b. ku^{55} χə^{21} **diai^{213}a^{11}lɯ^{55}** q^{h}a^{55}ntey^{44}.
1P SG lead CL.MED.PL.INDEF teacher
Male speaker: 'I have come with some teachers.' [Modest way of talking]
Female speaker: 'I have come with some teachers.' [Pragmatically neutral]
Child speaker: 'I have come with some teachers.' [Pragmatically almost appropriate]

c. ku^{55} χə^{21} **dia^{55}a^{11}lɯ^{55}** q^{h}a^{55}ntey^{44}.
1P SG lead CL.DIM.PL.INDEF teacher
Male speaker: 'I have come with some teachers.' [Taking perspective of children]
Female speaker: 'I have come with some teachers.' [Taking perspective of children]
Child speaker: 'I have come with some teachers.' [Appropriate tone]

Now, if speakers wish to convey a size value that does not correlate with the gender/age status in the way described above, they may adopt one of the following two strategies: (i) employ a classifier which accords with the relevant size (at the expense of some pragmatic effects), or (ii) use the medial classifier form together with an adjective of size that may convey the intended size value. In examples (21a) and (21b), a child referring to a big dog can apply strategies (i) or (ii).

(21) a. qa^{55} **ʂə^{33} du^{31}** tɬi^{55} ɖaɯ^{11} dɦa^{35}. (Strategy i)
INT:who family CL.AUG.SG.INDEF dog run come
Child speaker: 'Whose family's big dog comes running?' [Strong pragmatic effect]

b. qa^{55} **ʂə^{33} dai^{33}** a^{11}lɦaɯ^{11} tɬi^{55} ɖaɯ^{11} dɦa^{35}. (Strategy ii)
INT:who family CL.MED.SG.INDEF big dog run come
Child speaker: 'Whose family's big dog comes running?' [No pragmatic effect]

One recurrent source for atypical matching of size values and speaker roles relates to the tendency of speakers to take the perspective of addressees. In the following elicited example, suppose that a wife (C) and a husband (B) have tense relations. When a remote male relative of the husband (A) pays a visit to the family, he starts paying compliments about the house they live in. Politeness obliges the husband to make a modest reply, whereupon the wife is persuaded to make a negative comment. In his utterance, the husband involves the medial/female classifier, which corresponds to a tone of modesty. His wife draws on the visitor's use of the augmentative/male form, which is in the augmentative/male form. It sounds slightly provocative.

(22) A: "gɦi^{31} **lu^{55}** ŋgɦa^{55} ɲi^{55} zau^{44} ku^{11}."
2P SG CL.AUG.SG.DEF house DEM:PROX good very
B: "qha^{55} tsau^{55} ku^{55} **lai^{55}** ŋgɦa^{55} ɲi^{55}."
NEG IMP praise 1P SG CL.MED.SG.DEF house DEM:PROX
Male speaker (A): 'Your house is so nice.' *Male speaker* (B): 'Don't praise my house.'

(23) C: **lu^{55}** ŋgɦa^{55} ɲi^{55} ɖʑi^{11} ku^{55} hi^{33} ɖau^{21}.
CL.AUG.SG.DEF house DEM:PROX TOP 1P SG NEG like
Female speaker (C): 'I do not like this house.'

In examples (24) and (25), the indefinite and definite (diminutive) versions of the classifier for inanimacy are contrasted. The formal mark of the definite/indefinite distinction is breathy voice (breathy voicing for definite form, ordinary voicing for indefinite form). Sentence (24) is uttered by the narrator and introduces a section within a larger story. The referent (= the story) is definite and introduced cataphorically. In (25), the same referent is indefinite and would fit with a narrative setting in which the storyteller only mentions the existence of a story without further elaborating upon it. The diminutive classifier form in both examples reflects the narrator's view of the tale as something reduced in significance.

(24) a^{33}lau^{33} mɦa^{35} **dzɦa^{35}** pi^{31}dɦau^{31} li^{33} n̥i^{55}: (...)
old people, ancestor have, exist CL.DIM.SG.DEF story manner DEM:PROX
'The ancestors have a saying (= little story) which goes like this: (…)'

(25) a^{33}lau^{33} mɦa^{35} **dza^{35}** pi^{31}dɦau^{31}
old people, ancestor have, exist CL.DIM.SG.INDEF story
'The ancestors have a saying (= little story).'

This selection of elicited examples and sentences in context has shown that a typical speaker register is attached to each of the twelve-classifier forms. Pragmatic effects may be generated whenever the alignment is atypical.

2.3.2 In recorded folk stories

In narratives, there is a gap between the speaker situation and the linguistic situation. Classifier forms do not reflect the gender/age role of the narrator or of story participants, but only encode size values. Gender/age roles have only evolved for conversation, but not in neutral reports. In this subsection, each of the classifiers could be replaced by another form of the same paradigm entailing a different size value but not producing the kind of pragmatic effects we have described in the previous section.

Examples (26)-(28) below are chosen from different passages of Wang's lengthy folk story 'Ngucha and Daushenau' (D. Wang 1986:69ff). Examples (26) and (27) involve indefinite and definite forms of the animate classifier (tu^{44}/dai^{213}). Although the classifier reflects the gender of the subject of the clause in both cases, it is not the case that in narratives the classifier mirrors the gender/role of the subject or the NP referent they modify. In (26) and (27), both classifiers could be replaced with other size forms, as confirmed by our informant.[8]

(26) ɲɦi^{11} nɦa^{31} ʤʑi^{11} **dai^{213}** a^{11}lɦaɯ^{11} mpa^{33}zau^{55}.
3P SG see perceive CL.MED.SG.INDEF big wild boar
'She saw a big wild boar.'

(27) ʑɦey^{11}ba^{53}li^{11}bɦy^{11} xə^{11} ɲɦi^{11} **tsi^{55}** tu^{55} a^{11}l̥a^{11} ɳɖau^{31}ʂə^{55}naɯ^{55}
name of man bring 3P SG CL.AUG.SG.DEF son young name of man
dzɦo^{35} **tu^{44}** mpa^{33}zau^{55} lɦo^{11}.
COV:follow CL.AUG.SG.DEF wild boar come
'Yuebaliping followed the wild boar with his son Daushenau.'

The following example is uttered by the story narrator to provide a descriptive account of a state of affairs. The augmentative form of the classifier refers to the size of two stones, but it is disconnected from the gender or age of the narrator.

(28) a^{55} **thau^{11}** a^{55}və^{55} gi^{11} hi^{11} ndzɦi^{11} gi^{11} hi^{11} sy^{11}.
NUM:2 CL.AUG.SG.DEF stone and REFL weigh and REFL resemble
'The two stones do match each other.'

Sentence (29) represents the first clause of the folk story it is taken from and exhibits two classifiers. The first classifier is in the augmentative form qualifying the

[8] In (26), the medial classifier collocates with an adjective of size, which is always a possible strategy (see §2.3.1). In (27), an argumentative classifier categorises a noun modified by the adjective 'young'. The person depicted in this way is a young adult and the adjective does not convey any idea of size here.

noun for woman: the second is a diminutive form modifying the noun for child. F. Wang (1957:94, 1972:140) notes that augmentative forms have to be involved at first mention, for example in the opening passages of narratives, but our informant did not confirm this claim and would allow variant forms to occur in lieu of the augmentative form in (29).

(29) a^{33}thau^{33}li^{33} mɦa^{35} i^{55} **lɯ^{44}** a^{33}bɦo^{35} ku^{11} ntsi^{33}
long ago have NUM:1 CL.AUG.SG.INDEF woman NOM name
n̥i^{11}bo^{55}bu^{55}bɦa^{11}, mɦa^{35} tau^{11} i^{55} **la^{35}** ntshai^{11} ku^{11}.
name of woman have get NUM:1 CL.DIM.SG.INDEF girl NOM
'Long ago, there was a woman named Nyibobuha, who bore a girl.'

2.3.3 Text statistics

It is useful to know more about the distribution of the size distinctions in folk stories. The chart below presents figures of diverse Ahmao classifiers and classifier forms found in 63 lengthy folk stories compiled by Kenneth Parsson. These folk stories were recorded in the 1940s and are archived at the University of Southampton. The text material is written in the Pollard Script with interlinear glosses and translation into English.[9] Yet, suprasegmental processes (e.g. voicing, aspiration, tone pitch) do not seem to have been recorded faithfully in this stock of texts. The folk stories thus do not appear to be of any great use for illustrating the contrast between definite and indefinite classifier forms. On the other hand, rhyme differences displaying size nuances appear to have a robust and faithful transcription. We counted the number of classifiers occurring in the text material (see Table 13).

[9] These folk stories are stored electronically in the archives of the University of Southampton and are available for download (cf. http://www.archives.ecs.soton.ac.uk/miao/songs/index.html, [assessed March 2010]). The British missionary Samuel Pollard (1864-1915) devised an alphabetic script for southwestern Chinese minority peoples (the so-called Pollard Script) in which the New Testament of two languages was translated and published: (i) Weining Ahmao (first edition in 1917) and (ii) Nashupho (first edition in 1948), a language of the Yi Nationality spoken in Luquan County of Yunnan Province. After Pollard's death, Harry Parsons was appointed to continue missionary work in western Guizhou Province. His twin sons Keith and Kenneth were born in SW China in 1916 and were bilingual speakers of both Ahmao and English. In the 1940s, Kenneth Parsons started compiling a substantial stock of folk stories tracing the pre-Christian roots of the Ahmao people. In 1949, the Parsons family had to leave China as the Communist Party forced foreigners to quit the country. Consequently, Keith and Kenneth were appointed to Africa and other missionary outposts. After their retirement, they returned to the unfinished task of compiling the Ahmao text material. Their work is now conserved in the archives of the University of Southampton.

The distribution of classifiers is as follows: only 19 of the 48 Ahmao classifiers actually occurred in the stock of the Southampton archives, though the remaining 29 classifiers have been ascertained by our informant to be frequently used in appropriate discourse contexts. In the Ahmao archives, a total of 2,352 mentions of classifiers can be divided up into 1,468 augmentative, 586 medial, and 298 diminutive classifiers. The frequency values seem to mirror the rank in size values encoded in the classifiers. There are, however, a few exceptions. The animate classifier **№ 1** *tu*^{44} exhibits more occurrences of the medial (439) than of the augmentative (242). The classifier **№ 78** *gau*^{53} registers a much higher rate for the diminutive (50) than for the augmentative (3) classifier. The exact reason for these atypical statistical distributions is unknown and may relate to a variety of causes (such as idiolect patterns of a storyteller, etc.).

The statistics in Table 13 appear to articulate the following property: the higher the overall frequency of a classifier the more likely its medial and diminutive forms will be used. The high number of augmentative classifiers supports the idea that they are more underlying and that medial and diminutive forms are derivatives—an idea that we hypothesized upon in the diachronic reconstruction of the Ahmao system (Gerner & Bisang 2009).

Table 13: Text statistics for Ahmao classifier forms based on the Southampton archives

ID	*Classifier*	*Augmentative*	*Medial*	*Diminutive*	*Total:*
№ 1	tu^{44} (animate & tools)	242	439	128	809
№ 3	luɯ^{55} (human)	696		1	697
№ 4	dzɨ^{53} (human male)	2			2
№ 5	tshai^{11} (entities in pairs)	11			11
№ 6	dʑi^{53} (for ‘branch’, ‘leg’)	142	15	54	211
№ 7	faɯ^{55} (entities in pairs)	19			19
№ 9	ʈə^{55} (plant)	3			3
№ 13	baɯ^{53} (1-dim landscape)	4			4
№ 14	tso^{11} (1-dim entities)	2			2
№ 24	lu^{55} (general, 3-dim)	226	124	63	413
№ 25	thau^{11} (‘lump’)	1	2		3
№ 30	dlau^{55} (‘row’, ‘plot’)	39	1	2	42
№ 31	dlɦi^{35} (‘granula’, ‘drop’)	1	2		3
№ 37	qho^{55} (‘place’)	4	1		5
№ 38	ʂey^{55} (‘side’, ‘edge’)	3			3
№ 77	tɕo^{55} (‘piece’ for landscape)	10	2		12
№ 78	gau^{53} (‘block’, ‘group’)	3		50	53
№ 87	ti^{55} (plural and mass)	54			54
№ 101	lo^{11} (‘mouth’ for words)	6			6
	Total:	1468	586	298	2352

3. Data list of noun classifiers in Weining Ahmao and three other Miao languages

In this section, we record the nominal classifier systems of four representative Miao languages, Hekou Hmong, Kaili Qanao, Huayuan Qoxung and Weining Ahmao (see Appendix for geographic information). Nominal classifiers are divided into six groups: sortal animate classifiers (§3.1), sortal inanimate classifiers (§3.2), small-range sortal classifiers (§3.3), mixed nominal/verbal classifiers (§3.4), standard mensural classifiers (§3.5), non-standard mensural classifiers (§3.6).

Although most of the classifiers cannot occur as independent nouns, some contribute independent meanings to the nominal complex. These meanings are indicated with glosses. When no gloss is given, then the semantic input of the classifier is weak. Each classifier is given an identification number for easy cross-reference in the main text of the paper.

3.1 Sortal classifiers: animacy

The Miao languages exhibit one general classifier of animacy and a number of more specialized classifiers for humans, body parts, and plants (cf. §3.1.2 below).

3.1.1 Wide-range classifier

There is one general classifier for animates with similar sound structure throughout the Miao group: **to^{13}** (Hekou)/**tɛ^{11}** (Kaili)/**ʈu^{42}** (Huayuan)/**tu^{44}** (Weining). In Huayuan (Hunan), the atypical cognate form **ʈu^{44}** is restricted to a few inanimate instruments (e.g. 'plough'), whereas the general animate classifier is **ŋoŋ^{11}**. In addition, there is a cognate prefix **ta^{33}** that occurs before most animal nouns, although it is dropped in numeral constructions. It is a former classifier that has been lexicalized as a derivative prefix of animacy and has been replaced by the classifier **ŋoŋ^{11}**.

Huayuan Qoxung

(30)	a.	ta^{33}	ʑu^{11}	a^{35}	ŋoŋ^{11}	ʑu^{11}		b.	ta^{33}	mpɯ^{44}	a^{35}	ŋoŋ^{11}	mpɯ^{44}
		PREF	ox	NUM:1	CL	ox			PREF	pig	NUM:1	CL	pig
		'ox'		'one ox'					'pig'		'one pig'		

In Weining, but not in other Miao languages, the animate classifier also categorizes physical tools.

Table 14: The animate classifier and classifier for tools

	Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
Classifier	**(invariable)**			**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Animate **№ 1**	to^{21}	tɛ^{11}	(ʈu^{42})	**Aug**	tu^{44}	du^{31}	ti^{55}a^{11}tu^{44}	di^{31}a^{11}tu^{44}
(& Tool)				**Med**	tai^{44}	dai^{213}	tiai^{55}a^{11}tu^{44}	diai^{213}a^{11}tu^{44}
				Dim	ta^{44}	da^{35}	tia^{55}a^{11}tu^{44}	dia^{55}a^{11}tu^{44}
Classifieds № 2	---	---	ŋoŋ^{22}		---			
‘person’	tua^{43}nen^{13}: **1**	nɛ^{55}: **1,3**	n**e**^{42}: **3**			tɯ^{55}nɯ^{55}: **3**		
‘man’	ʑeu^{13}: **1**	tɛ^{33}ɬaŋ^{13}: **1,3**	qo^{35}n̥i^{54}: **3**			a^{55}ʑey^{53}: **4**		
‘woman’	po^{31}: **1**	tcu^{33}mɛ^{13}: **1,3**	qo^{35}bha^{44}: **3**			a^{44}bɦo^{35}: **4**		
‘ox’	n̥o^{31}: **1**	lio^{35}: **1**	ʑu^{22}: **2**			n̥ɦu^{35}: **1**		
‘pig’	mpua^{44}: **1**	pa^{44}: **1**	ba^{54}: **2**			mpa^{44}: **1**		
‘sheep’	tʂhi^{33}: **1**	li^{35}: **1**	ʑoŋ^{42}: **2**			ʑɦaɯ^{35}: **1**		
‘duck’	o^{33}: **1**	ka^{13}: **1**	nu^{31}ʂo^{44}: **2**			o^{11}: **1**		
‘tiger’	tʂo^{55}: **1**	ɕəu^{35}: **1**	tɕɔ^{44}: **2**			ʈʂo^{55}: **1**		
‘bear’	tɬai^{33}: **1**	ɬia^{53}: **1**	ʐe^{11}ɕoŋ^{22}: **2**			tlai^{11}: **1**		
‘fish’	ɳtʂe^{21}: **1**	nei^{11}: **1**	mlɯ^{22}: **2**			mbə^{44}: **1**		
‘snake’	naŋ^{43}: **1**	naŋ^{33}: **1**	nən^{35}: **2**			pi^{55}naɯ^{55}: **1**		
‘worm’	gaŋ^{43}: **1**	kaŋ^{33}: **1**	ken^{35}: **2**			pi^{55}kaɯ^{55}: **1**		
‘ghost’	tɬaŋ^{43}: **1**	ɬiaŋ^{33}: **1**	qwen^{35}: **2**			pi^{55}laɯ^{55}: **1**		
‘soul’	pli^{13}: **1**	n̥in^{35}: **23**	pjɤ^{42}kwei^{35}: **2**			a^{55}dli^{55}a^{11}dlɦo^{11}: **1**		
‘tail’	ko^{44}tu^{55}: **1**	qa^{33}da^{35}: **15**	pi^{44}tɤ^{44}: **16**			a^{55}ndzɦaɯ^{11}: **1**		
‘finger’	nti^{55}te^{21}: **1**	qa^{33}da^{35}pi^{11}: **6**	pi^{44}da^{44}təɯ^{22}: **16**			a^{44}ntsi^{55}dɦi^{11}: **17**		
‘tooth’	kou^{21}n̥a^{55}: **1**	m̥i^{35}: **24**	qo^{35}ɕɛ^{44}: **16**			n̥ie^{55}: **1**		
‘tongue’	mplai^{13}: **1**	ni^{31}: **15**	qo^{35}mja^{22}: **16**			a^{55}ndlɦai^{11}: **1**		
‘bone’	pau^{43}tshaŋ^{44}: **1**	po^{35}shoŋ^{35}: **24**	qo^{35}ɕoŋ^{44}: **16**			a^{44}tshaɯ^{44}: **1**		
‘root’	tɕaŋ^{13}: **1**	qa^{33}tɕoŋ^{55}: **15**	tɕoŋ^{42}: **16**			a^{55}dʐaɯ^{55}: **1**		
‘knife’	ʈa^{13}: **20**	tiu^{53}: **20**	dən^{44}: **20**			a^{55}d̥hie^{11}: **1**		
‘plough’	voŋ^{24}: **1**	kha^{33}: **20**	qo^{35}ʎi^{42}: **1**			li^{55}vɦau^{31}: **dzɨ^{53}**: **1**		
‘scissors’	tsa^{43}: **20**	ken^{53}: **20**	dʑi^{35}: **20**			tshə^{11}: **1**		
‘ax’	tou^{33}: **20**	to^{44}: **20**	to^{54}: **20**			a^{55}tau^{11}: **1**		
‘nail’	tin^{43}ntsi^{55}: **1**	ɕaŋ^{44}: **24**	dʑɛ^{54}: **20**			so^{55}l̥au^{44}: **1**		
‘saw’	keu^{44}: **20**	tɕu^{44}: **20**	ɕu^{44}: **20**			shau^{55}: **1**		
‘fortune’	m̥oŋ^{55}: **24**	---	tɕɛ^{54}tsɨ^{54}: **24**			ki^{55}lau^{53}: **1**		
‘matter’	plou^{43}: **46**	---	sɨ^{35}: **71**			ŋu^{53}: **1**		

3.1.2 Specialized classifiers

Besides the general classifier for animacy there are a number of more specialized classifiers, like two human classifiers (§3.1.2.1), two classifiers for dual body parts (§3.1.2.2), and several classifiers for plants (§3.1.2.3).

3.1.2.1 Human classifiers

All four Miao languages surveyed recognize a human classifier which is realized as **lən^{42}** (Hekou)/**lɛ^{55}** (Kaili)/**le^{35}** (Huayuan)/**lɯ^{55}** (Weining). Moreover, Weining

Ahmao involves the classifier **tsi^{55}** solely for ‘man’, which is only declined in singular-definite forms and switches to **lɯ^{55}** for all other forms.

Table 15: Human classifiers

		Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
Classifiers			**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
	№ 3	lən^{42}	lɛ^{55}	le^{35}	**Aug**	lɯ^{55}	lɯ^{44}	ti^{55}a^{11}lɯ^{55}	di^{31}a^{11}lɯ^{55}
Animate					**Med**	lai^{55}	lai^{213}	tiai^{55}a^{11}lɯ^{55}	diai^{213}a^{11}lɯ^{55}
Human					**Dim**	la^{53}	la^{35}	tia^{55}a^{11}lɯ^{55}	dia^{55}a^{11}lɯ^{55}
	№ 4	---	---	---	**Aug**	tsi^{55}	lɯ^{44}	ti^{55}a^{11}lɯ^{55}	di^{31}a^{11}lɯ^{55}
					Med	tsai^{55}	lai^{213}	tiai^{55}a^{11}lɯ^{55}	diai^{213}a^{11}lɯ^{55}
Classifieds					**Dim**	tsa^{53}	la^{35}	tia^{55}a^{11}lɯ^{55}	dia^{55}a^{11}lɯ^{55}
‘person’		tua^{43}nen^{13}: **3**	nɛ^{55}: **1,3**	ne^{42}: **3**	tɯ^{55}nɯ^{55}: **3**				
‘man’		ʑeu^{13}: **3**	tɛ^{33}tɕaŋ^{13}: **1,3**	qo^{35}ȵi^{54}: **3**	a^{55}ʑey^{53}: **4**				
‘woman’		po^{31}: **3**	tɕu^{33}mɛ^{13}: **1,3**	qo^{35}bha^{44}: **3**	a^{44}bɦo^{35}: **3**				
‘friend’		phoŋ^{31}ʑu^{21}: **3**	ɢa^{33}pu^{11}: **3**	kɯ^{35}pu^{22}: **3**	ʑie^{53}la^{31}: **3**				
‘farmer’		to^{43}qoŋ^{43}nen^{43}: **3**	nɛ^{55}ɛ^{44}qəu^{33}: **3**	ne^{42}dza^{54}: **3**	tu^{55}a^{44}qau^{55}: **3**				

3.1.2.2 Classifier for dual body parts

There are two classifiers for dual body parts (e.g. hand, ear), one is **tshai^{11}** and the other **tɕi^{11}**. The latter means ‘branching’ in Weining Ahmao and classifies body parts like ‘leg’ or ‘arm’. Both classifiers are in use to variable extent.

Table 16: The classifiers for dual body parts and clothing items

		Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
Classifiers			**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
	№ 5	tshai^{33}	---	dʑɦa^{44}	**Aug**	tshai^{11}	---	ti^{55}a^{44}tshai^{11}	di^{31}a^{44}tshai^{11}
Animate					**Med**	tshai^{11}	tshai^{213}	tiai^{55}a^{44}tshai^{11}	diai^{213}a^{44}tshai^{11}
for dual					**Dim**	tsha^{11}	tsha^{35}	tia^{55}a^{44}tshai^{11}	dia^{55}a^{44}tshai^{11}
nouns	**№ 6**	---	tɕi^{11}	---	**Aug**	dʑi^{53}	dʑi^{31}	ti^{55}a^{31}dʑɦi^{31}	di^{31}a^{55}dʑɦi^{31}
					Med	dʑai^{53}	dʑai^{213}	tiai^{55}a^{31}dʑɦi^{31}	diai^{213}a^{31}dʑɦi^{31}
Classifieds					**Dim**	dʑa^{53}	dʑa^{35}	tia^{55}a^{31}dʑɦi^{31}	dia^{55}a^{31}dʑɦi^{31}
‘foot’		ko^{44}teu^{44}: **5**	lo^{33}: **6**	qo^{35}ɬo^{35}: **5**	tey^{44}: **5**				
‘leg’		tɕəu^{13}pua^{43}: **5**	qa^{33}pa^{33}: **6**	qo^{35}pa^{35}: **5**	a^{55}dʑi^{53}: **5,6**				
‘hand’		te^{21}: **5**	bi^{11}: **6**	tɯ^{22}: **5**	di^{44}: **5**				
‘ear’		qhau^{55}nʈse^{31}:**5**	qa^{33}nei^{55}: **6**	tuŋ^{42}mlɯ^{42}: **5**	a^{44}mbɦə^{35}: **5**				
‘wing’		kou^{31}ti^{33}: **5**	qa^{33}ta^{53}: **6**	pi^{44}tei^{44}: **16**	a^{55}ti^{11}: **5**				
‘shoe’		khou^{44}: **5**	ha^{33}: **6**	ɕo^{54}: **5**	khau^{11}: **5**				
‘sleeve’		te^{21}ʈshau^{44}: **24**	qa^{33}mu^{11}u^{35}: **6**	tuŋ^{22}ɤ^{44}: **5**	a^{44}di^{44}ʈso^{44}: **5**				
‘branch’		ʇe^{13}ntoŋ^{44}: **1**	qa^{33}tɕi^{11}te^{44}: **6**	kɯ^{22}du^{54}: **16**	a^{55}dʑɦi^{31}ntau^{44}: **6**				
‘meat’		ɴqai^{31}: **29**	ŋi^{55}: **29**	n̥a^{42}: **26, 28, 29**	ɴGɦai^{35}: **6**				
‘water bucket’		thoŋ^{33}: **24**	ti^{31}əu^{33}: **6**	dʑɦa^{44}kɤ^{44}: **5**	thau^{55}: **23**				

3.1.2.3 Classifier for plants

In the Miao languages surveyed, five classifiers are employed for diverse plants. The first two are general plant classifiers with complementary regional distribution.

Table 17: The classifiers for trees and plants

		Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
Classifier			**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Animate	**№ 7**	---	fhu^{35}	---	**Aug**	faɯ^{55}	faɯ^{44}	ti^{55}a^{55}faɯ^{55}	di^{31}a^{55}faɯ^{55}
Plant					**Med**	fai^{55}	fai^{213}	tiai^{55}a^{55}faɯ^{55}	diai^{213}a^{55}faɯ^{55}
					Dim	fa^{53}	fa^{35}	tia^{55}a^{55}faɯ^{55}	dia^{55}a^{55}faɯ^{55}
Classifieds	**№ 8**	tʂau^{43}	---	tʂou^{35}		---			
'tree'		ntoŋ^{44}: **8**	te^{44}: **1**	qo^{35}du^{54}: **8**			ntau^{44}: **7**		
'flower'		paŋ^{31}: **9**	paŋ^{55}: **10**	qo^{35}pən^{42}: **9**			bɦaɯ^{35}: **7**		
'bamboo'		ɕoŋ^{43}: **8**	tə^{44}ɬho^{35}: **1**	ɬo^{35}: **16**			ɖɦey^{31}: **7**		
'riceplant'		mple^{31}: **8**	qa^{33}shɛ^{35}: **7**	nou^{55}: **10**			ndlɦi^{35}: **7**		
'vegetable'		ʐou^{43}: **24**	vo^{33}: **7**	---			zau^{55}: **7**		
'grass'		ŋʃau^{31}: **1, 8**	naŋ^{55}: **15**	ntshou^{35}: **10**			NGɯ^{55}: **7**		
'cloud'		hua^{43}: **9**	te^{33}əu^{33}: **1**	ʈo^{44}tu^{44}: **8**			bɦaɯ^{35}: **9**		

The third classifier **tou^{55}/tə^{55}** is attested in Hekou and Weining and is borrowed from the Chinese classifiers *duǒ* 朵 for clouds and flowers implying that there have been multiple borrowings or a very early borrowing of a proto-language. The other classifier, **kəu^{35}**, appears as a classifier for flowers though its regional distribution is different (in Kaili and Huayuan only). In Kaili, it also has a collective meaning ('a bundle of').

Table 18: The classifiers for plants and flowers

		Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
Classifier			**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Animate	**№ 9**	tou^{55}	---	ʈɯ^{44}	**Aug**	ʈə^{55}	ʈə^{44}	ti^{55}a^{44}ʈə^{55}	di^{31}a^{44}ʈə^{55}
Plant					**Med**	ʈəai^{55}	ʈəai^{213}	tiai^{55}a^{44}ʈə^{55}	diai^{213}a^{44}ʈə^{55}
					Dim	ʈəa^{53}	ʈəa^{35}	tia^{55}a^{44}ʈə^{55}	dia^{55}a^{44}ʈə^{55}
Classifieds	**№ 10**	---	kəu^{35}	ko^{44}		---			
'mushroom'		n̥ʈɕe^{43}: **24**	ʈi^{33}: **24**	gɯ^{35}: **9**			n̥ʈɕi^{55}: **9**		
'flower'		paŋ^{31}: **9**	paŋ^{55}: **10**	qo^{35}pən^{42}: **9**			bɦaɯ^{35}: **9**		
'grass'		ŋʃau^{31}: **1, 8**	naŋ^{55}: **15**	qo^{35}dʑɦɯ^{44}: **10**			NGɯ^{55}: **7**		
'riceplant'		mple^{31}: **8**	qa^{33}shɛ^{35}: **7**	nɯ^{42}: **10**			ndlɦi^{35}: **7**		
'leaf'		mploŋ^{31}: **29**	qa^{33}nə^{55}: **10**	qo^{35}nu^{42}: **21**			a^{44}ndlɦau^{35}: **9**		
'paper'		nteu^{55}: **23**	ɕhi^{44}: **10**	dɤ^{44}: **21**			ntey^{55}tley^{55}: **9**		

The last two classifiers in this series are partitioners implying the more specialized meanings 'ear' or 'spike' of various plants. One of these classifiers comes out in Kaili

as **tso[13]** where it functions as collectivizer with the meanings ‘bunch’ and ‘sheaf’.

Table 19: The classifiers ‘bunch’, ‘ear’ and ‘spike’

		Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
Classifiers			**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Animate	**№ 11**	ɳʈʂa^{44}	tso^{13}	---	**Aug**	dzɦau^{35}	dzau^{44}	ti^{55}a^{44}dzɦau^{35}	di^{31}a^{44}dzɦau^{35}
Plant					**Med**	dzɦai^{213}	dzai^{213}	tiai^{55}a^{44}dzɦau^{35}	diai^{213}a^{44}dzɦau^{35}
‘bunch’					**Dim**	dzɦa^{35}	dza^{35}	tia^{55}a^{44}dzɦau^{35}	dia^{55}a^{44}dzɦau^{35}
‘ear;	**№ 12**	---	---	ŋən^{35}	**Aug**	ŋaɯ^{55}	ŋaɯ^{44}	ti^{55}a^{55}ŋaɯ^{55}	di^{31}a^{55}ŋaɯ^{55}
spike’					**Med**	ŋai^{55}	ŋai^{213}	tiai^{55}a^{55}ŋaɯ^{55}	diai^{213}a^{55}ŋaɯ^{55}
Classifieds					**Dim**	ŋa^{55}	ŋa^{35}	tia^{55}a^{55}ŋaɯ^{55}	dia^{55}a^{55}ŋaɯ^{55}
‘maize’		pau^{43}ku^{33}: **11**	ka^{35}waŋ^{55}: **11**	pɤ^{44}zɣ^{44}: **10**	tsi^{55}qɯ^{55}: **11**				
‘rice’		ɳʈʂa^{43}: **24**	qa^{33}shɛ^{35}: **11**	nɯ^{42}: **10**	ndlɦi^{35}: **11**				
‘wheat’		---	maŋ^{11}lu^{11}: **11**	qo^{35}mu^{22}: **12**	tshu^{55}: **12**				
‘barley’		mau^{13}: **11**	maŋ^{11}tɕaŋ^{35}:**11**	tɕaŋ^{35}me^{22}: **12**	mo^{53}: **12**				
‘oats’		---	---	qo^{35}mu^{22}pən^{55}:**12**	ʂau^{55}: **12**				
‘vegetable’		ʐou^{43}: **8**	ɣo^{33}: **11**	---	zau^{55}: **11**				
‘cucumber’		tɬi^{43}: **24**	fa^{33}qa^{44}: **11**	qwa^{35}: **23**	ki^{55}tli^{55}: **11**				
‘bean’		tou^{24}: **11**	təu^{31}: **11**	nu^{44}: **23**	dau^{53}: **11, 31**				
‘grass’		ɳʅau^{31}: **1, 8**	naŋ^{55}: **11**	qo^{35}dʑɦɯ^{44}: **10**	NGɯ^{55}: **11**				

3.2 Sortal classifiers: inanimacy

For inanimate entities, the SHAPE parameter with its three values of one-dimensionality, two-dimensionality and three-dimensionality is crucial for categorization in the Miao group.

3.2.1 Shape: classifiers for one-dimensional entities

Four wide-range classifiers and a number of more specialized classifiers are available across the Miao group to categorize long entities.

3.2.1.1 Wide-range classifier

Four basic classifiers with different regional distribution categorize long entities in the Miao languages.

Table 20: The classifiers for inanimate one-dimensional entities

		Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
Classifiers			**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
	№ 13	---	---	qɯ^{35}	**Aug**	baɯ^{53}	baɯ^{31}	ti^{55}a^{31}bɦaɯ^{31}	di^{31}a^{55}bɦaɯ^{31}
					Med	bai^{53}	bai^{213}	tiai^{55}a^{31}bɦaɯ^{31}	diai^{213}a^{31}bɦaɯ^{31}
					Dim	ba^{53}	ba^{35}	tia^{55}a^{31}bɦaɯ^{31}	dia^{55}a^{31}bɦaɯ^{31}
Inanimate 1-dim	№ 14	tso^{31}	---	---	**Aug**	tso^{11}	tso^{31}	ti^{55}a^{44}tso^{11}	di^{31}a^{55}tso^{11}
					Med	tsui^{44}	tsui^{53}	tiai^{55}a^{44}tso^{11}	diai^{213}a^{44}tso^{11}
					Dim	tsua^{44}	tsua^{35}	tia^{55}a^{44}tso^{11}	dia^{55}a^{44}tso^{11}
	№ 15	---	tɕo^{55}	---	**Aug**	dʑa^{53}	dʑɦa^{11}	ti^{55}a^{31}dʑɦa^{31}	di^{31}a^{55}dʑɦa^{31}
					Med	dʑai^{53}	dʑɦai^{213}	tiai^{55}a^{31}dʑɦa^{31}	diai^{213}a^{31}dʑɦa^{31}
					Dim	dʑa^{53}	dʑɦa^{35}	tia^{55}a^{31}dʑɦa^{31}	dia^{55}a^{31}dʑɦa^{31}
Classifieds	№ 16	(to^{13})	təu^{44}	te^{22}	---				
‘river’		tɬe^{31}: **16**	əu^{33}: **15**	ŋa^{31}u^{35}: **16**	dlɦi^{35}: **13**				
‘water’		tɬe^{31}: **16**	əu^{33}: **15**	u^{35}: **16**	au^{55}: **13**				
‘road’		ke^{55}: **14, 17**	ki^{35}: **15, 17**	ne^{44}kɯ^{35}: **16, 18**	tɕi^{55}: **15**				
‘bridge’		tɕhau^{31}: **16**	tɕu^{55}: **15**	kjɯ^{55}: **42**	ʝa^{55}:dzə^{55}: **42**				
‘smoke’		paŋ^{44}: **16**	boŋ^{44}: **15**	ʑɛ^{44}: **29**	paɯ^{11}: **80**				
‘beam’		---	lə^{55}tsɛ^{35}: **15**	---	ʑɯ^{44}ŋgɦa^{35}: **1**				
‘hair of head’		plou^{43}hou^{44}:**14**	qa^{33}ɬiu^{33}kho^{33}:**15,16**	pi^{35}plei^{44}: **13**	tlau^{55}fau^{44}: **14**				
‘hair of body’		plou^{43}: **14**	qa^{33}ɬiu^{33}: **15,16**	qo^{35}pi^{35}: **13**	tlau^{55}: **14**				
‘tongue’		mplai^{13}: **16**	ni^{24}: **15,16**	qo^{35}mja^{22}: **16**	a^{55}ndlɦai^{11}: **1**				
‘back’		ŋʃou^{33}qou^{24}:**24**	diu^{33}: **15**	ʈei^{54}ʈu^{35}: **24**	ti^{55}ɢɦau^{11}: **24**				
‘tail’		ko^{44}tu^{55}: **16**	qa^{33}ta^{35}: **15**	pi^{44}tɤ^{44}: **16**	a^{55}ndzɦaɯ^{11}: **1**				
‘grass’		ŋʃau^{31}: **16**	naŋ^{55}: **15,16**	qo^{35}dʑɦɯ^{44}: **13**	ɴGɯ^{55}: **14**				
‘thread’		so^{55}: **14**	fhə^{35}: **15**	qo^{35}tsei^{42}: **13**	so^{55}: **14**				
‘strength’		ʐo^{13}: **24**	ɣəu^{13}: **15**	ʐo^{31}: **8**	dlɦaɯ^{35}ʐɦo^{11}: **1**				
‘principle’		---	li^{11}: **16**	li^{11}: **16**	---				

3.2.1.2 Specialized classifiers

The Miao languages display two types of classifiers: classifiers for entities with sections and classifiers for tools with a handle.

A. Classifier for entities with sections

Three classifiers across Miao languages may categorize sections of lengthy entities or function as time units: **ʑaŋ^{35}**, **toŋ^{33}**, and **qɛ^{35}**.

Table 21: The classifiers for entities with sections

		Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
Classifiers		**(invariable)**			**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
	№ 17	ʑaŋ^{55}	ʑaŋ^{35}	---	**Aug**	ʑaɯ^{55}	ʑaɯ^{44}	ti^{55}a^{44}ʑaɯ^{55}	di^{31}a^{44}ʑaɯ^{55}
					Med	ʑai^{55}	ʑai^{213}	tiai^{55}a^{44}ʑaɯ^{55}	diai^{213}a^{44}ʑaɯ^{55}
Inanimate					**Dim**	ʑa^{55}	ʑa^{35}	tia^{55}a^{44}ʑaɯ^{55}	dia^{55}a^{44}ʑaɯ^{55}
'section'	**№ 18**	tau^{13}	toŋ^{33}	toŋ^{42}	**Aug**	dzɦo^{35}	dzo^{44}	ti^{55}a^{44}dzɦo^{35}	di^{31}a^{44}dzɦo^{35}
					Med	dzɦai^{213}	dzai^{213}	tiai^{55}a^{44}dzɦo^{35}	diai^{213}a^{44}dzɦo^{35}
					Dim	dzɦa^{35}	dza^{35}	tia^{55}a^{44}dzɦo^{35}	dia^{55}a^{44}dzɦo^{35}
Classifieds	**№ 19**	---	qɛ^{35}	---	---				
'field'		te^{43}: **17**	da^{33}: **17**	lu^{54}: **29**	ti^{55}: **17**				
'finger'		nti^{55}te^{21}: **16**	qa^{33}da^{35}bi^{11}: **17**	pi^{44}da^{44}dɯ^{22}:**16**	a^{44}ntsɨ^{55}dɦi^{11}: **17**				
'road'		ke^{55}: **14, 17**	ki^{35}: **15, 17**	ne^{44}kɯ^{44}: **16, 18**	tɕi^{55}: **17**				
'wood'		ntoŋ^{44}: **17, 18**	təu^{44}: **19**	qo^{35}du^{54}: **18**	ntau^{44}: **18**				
'cord'		---	ɬha^{44}: **19**	qo^{35}ɬa^{54}: **67**	l̥a^{44}: **18**				
'story'		lo^{21}ŋʧua^{21}: **95**	qa^{33}tɕəu^{35}qə^{44}: **24**	qo^{54}: **24**	pi^{55}dɦau^{31}: **18**				
'song'		ŋkou^{31}: **95**	ɕha^{53}: **95**	sa^{44}: **95**	ŋgɦau^{35}: **18**				
'time'		tɕai^{55}n̥oŋ^{13}: **24**	qa^{33}ɕhi^{33}: **18**	qo^{35}ŋaŋ^{42}: **18**	dʑɦai^{35}n̥ɦau^{11}: **1**				

B. Function: classifiers for tools with a handle

With the exception of Weining Ahamo (which employs the general classifier for animacy to categorize tools), all other Miao languages seem to exhibit special classifiers for tools.

Table 22: The classifiers for tools

№ 20	*Hekou*	*Kaili*	*Huayuan*	*Weining Ahmao*
Classifier	**(invariable)**			
Tools	ʈaŋ^{43}	tiaŋ^{33}	ʈən^{35}	---
Classifieds				
'knife'	ʈa^{13}: **20**	tiu^{53}: **20**	dən^{44}: **20**	a^{55}ɖhie^{11}: **1**
'scissors'	tsa^{43}: **20**	kən^{53}: **20**	qo^{35}dʑi^{35}: **20**	tshə^{11}: **1**
'saw'	keu^{44}: **20**	tɕu^{44}: **20**	qo^{35}ɕu^{44}: **20**	shau^{55}: **1**
'ax'	tou^{33}: **20**	to^{44}: **20**	qo^{35}tao^{54}: **20**	a^{55}tau^{11}: **1**
'plough'	voŋ^{24}: **20**	kha^{33}: **20**	qo^{35}ʎi^{42}: **1**	li^{55}vɦau^{31}: **42**
'hatchet'	ɬou^{44}: **16,20**	sho^{35}: **20**	qo^{35}kho^{35}: **20**	l̥au^{44}tla^{55}: **1**
'pen'	tɕu^{31}nteu^{55}: **16,20**	tsən^{53}lei^{55}: **20**	pi^{22}: **42**	pi^{31}: **1**

3.2.2 Shape: classifiers for two-dimensional entities

There are three different classifiers for flat and extended (let us say two-dimensional) entities, but each Miao language only involves one or at most two versions of them. In Kaili, **liu^{11}** means 'slice', 'sheet', or 'piece', whereas **laŋ^{11}** classifies flat and thin objects.

Table 23: The classifiers for inanimate two-dimensional entities

		Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
Classifier			**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
	№ 21	---	liu^{11}	nu^{42}	**Aug**	tlau^{55}	tlau^{44}	ti^{55}a^{44}tlau^{55}	di^{31}a^{55}tlau^{55}
Inanimate					**Med**	tlai^{55}	tlai^{213}	tiai^{55}a^{44}tlau^{55}	diai^{213}a^{44}tlau^{55}
2-dim					**Dim**	tla^{55}	tla^{35}	tia^{55}a^{44}tlau^{55}	dia^{55}a^{44}tlau^{55}
	№ 22	---	laŋ^{11}	---		---			
Classifieds	**№ 23**	tʂaŋ^{43}	---	ntʂe^{35}		---			
‘paper’		ndəu^{55}: **23**	ɕhi^{44}: **21,22**	dɤ^{44}: **21**			ntey^{55}tley^{55}: **9**		
‘leaf’		mploŋ^{55}: **29**	qa^{33}nəu^{55}: **21,22**	qo^{35}nu^{42}: **21**			a^{44}ndlɦau^{35}: **9**		
‘cloud’		hua^{43}: **9**	tɛ^{33}əu^{33}: **1**	ʈo^{42}tu^{44}: **8**			hɑɯ^{55}po^{11}: **21**		
‘land’		tɛ^{43}: **30**	ta^{33}: **24**	lu^{54}: **23**			ti^{55}: **21**		

3.2.3 Shape: classifiers for three-dimensional entities

Classifiers of three-dimensional entities which exhibit a number of wide-range (§3.2.3.1) and specialized devices (§3.2.3.2) form the majority of shape classifiers. Some of them are default classifiers for inanimates.

3.2.3.1 Wide-range classifiers

There are seven classifiers for objects with relatively large membership range: one default classifier (subsection A) and various classifiers for massive objects (subsection B).

A. Default classifiers of three-dimensional entities

This classifier is well attested in all languages of the Miao group with divergent realization of the rhyme: **lo^{43}** (Hekou), **lɛ^{33}** (Kaili), **le^{33}** (Huayuan), and **lu^{55}** (Weining).

Table 24: The classifiers for inanimate three-dimensional entities

	Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
№ 24 Classifier		**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Inanimate	lo^{43}	lɛ^{33}	le^{35}	**Aug**	lu^{55}	lu^{33}	ti^{55}a^{11}lu^{55}	di^{31}a^{11}lu^{55}
3-dim				**Med**	lai^{55}	lai^{213}	tiai^{55}a^{11}lu^{55}	diai^{213}a^{11}lu^{55}
Classifieds				**Dim**	la^{53}	la^{35}	tia^{55}a^{11}lu^{55}	dia^{55}a^{11}lu^{55}
‘hill’	ʈoŋ^{43}: **24**	pi^{11}: **24**	pi^{44}qɤ^{22}: **24**			ʈau^{55}: **24**		
‘lake’	paŋ^{21}: **24**	hɛ^{55}: **24**	---			ɕey^{55}: **24**		
‘hole’	qhau^{55}: **24**	khaŋ^{35}: **24**	qo^{35}qhu^{44}: **24**			qho^{55}: **24**		
‘village’	ʐau^{13}: **24**	ɣaŋ^{11}: **24**	qo^{35}ʐaŋ^{22}: **24**			zo^{44}: **24**		
‘head’	tou^{43}hou^{44}: **24**	kho^{33}: **24**	ko^{44}plei^{44}: **24**			li^{44}fau^{44}: **24**		
‘eye’	qhau^{55}mua^{13}: **24**	nioŋ^{13}mɛ^{13}: **6**	le^{35}qe^{35}: **5**			a^{55}ma^{53}: **24**		

'nose'	qhau^{55}ŋʦu^{13}: **24**	po^{35}nei^{13}: **24**	pa^{44}mlɤ^{31}: **16**	a^{55}mpy^{53}: **24**
'belly'	plaŋ^{43}: **24**	qa^{33}ʨhiu^{33}: **24**	qo^{35}ʨhi^{35}: **24**	a^{55}ʨhau^{55}: **24**
'blood'	ŋʦhaŋ^{55}: **33**	ɕhiaŋ^{35}: **24, 32**	ʤhən^{44}: **24**	ŋʦhaɯ^{55}: **24**
'tear'	kua^{44}mua^{13}: **33**	əu^{33}mɛ^{13}: **24**	u^{35}me^{31}: **24**	ka^{44}ma^{31}: **24**
'sweat'	fu^{33}: **33**	əu^{33}ȵiaŋ^{53}: **24**	u^{35}ɬen^{54}: **24**	ŋgɦaɯ^{35}ʅaɯ^{44}: **24**
'peach'	tsi^{55}tɬua^{31}: **24**	tsən^{35}ɬən^{55}: **24**	pi^{44}qwa^{42}: **24**	tsi^{44}dlɦa^{35}: **24**
'cherry'	tsi^{55}hua^{43}poŋ^{43}:**24**	tsən^{35}va^{33}: **24**	pi^{44}wa^{35}: **24**	tsi^{44}paɯ^{55}: **24**
'pear'	tsi^{55}ʐua^{31}: **24**	tsən^{35}ɣa^{55}: **24**	pi^{44}ʐa^{42}: **24**	tsi^{44}zɦa^{35}: **24**
'walnut'	tsi^{55}tɬeu^{44}: **24**	tsən^{35}hai^{31}tho^{31}: **24**	pi^{35}he^{22}do^{22}: **24**	tsi^{44}tley^{44}: **24**
'house'	ʦe^{55}nthaŋ^{43}: **24**	tsɛ^{35}: **24**	plɯ^{44}: **24**	ŋgɦa^{35}va^{53}: **24**
'barn'	tshaŋ^{43}khu^{24}: **24**	noŋ^{11}: **24**	qo^{35}ʐe^{22}: **24**	ŋgɦa^{35}zu^{53}: **24**
'lamp'	ten^{43}: **24**	dən^{33}: **24**	qo^{35}mlen^{13}: **24**	tau^{55}: **24**
'door'	qhau^{55}ʈoŋ^{31}: **24**	tiu^{55}: **24**	pɛ^{42}ʈu^{42}: **24**	a^{44}dlɦau^{35}: **24**
'window'	qhau^{55}ʈai^{44}: **24**	khaŋ^{35}ɬoŋ^{35}: **24**	qhu^{44}plɯ^{44}: **24**	bɦo^{31}ʨi^{55}: **24**
'wall'	tshaŋ^{31}: **95**	ho^{33}: **15**	ʨaŋ^{42}: **16**	a^{55}dɦɯ^{11}: **24**

B. Classifiers for massive objects

The first classifier implies the meaning of 'lump' and is probably borrowed from the Chinese *tuó* 砣 'lump', although in Weining, for example, it has undergone some rhyme transformation. In Kaili, it refers more precisely to something with the shape of a ball.

Table 25: The classifiers for precious materials ('lump')

		Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
Classifier			**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Inanimate	**№ 25**	tho^{31}	tho^{13}	dhoŋ^{35}	**Aug**	thau^{11}	---	ti^{55}a^{44}thau^{11}	di^{31}a^{55}thau^{11}
'lump'					**Med**	thai^{11}	thai^{213}	tiai^{55}a^{44}thau^{11}	diai^{213}a^{11}thau^{11}
					Dim	tha^{11}	tha^{35}	tia^{55}a^{44}thau^{11}	dia^{55}a^{11}thau^{11}
Classifieds	**№ 26**	---	po^{13}	pu^{44}		---			
'soil, clay'		aŋ^{55}: **25**	qa^{33}ta^{33}: **25**	tɯ^{35}: **26**			a^{44}lɦa^{35}: **25, 29, 30**		
'mud'		aŋ^{55}: **25**	qa^{33}ta^{33}: **25**	qa^{44}la^{42}: **26**			aɯ^{55}: **25**		
'stone'		ʐe^{43}: **25**	bo^{35}ɣi^{33}: **25**	qo^{35}ʐɯ^{35}: **26**			a^{55}və^{55}: **25, 29, 30**		
'gold'		ko^{43}: **25**	ʨin^{33}: **25**	gje^{33}: **26**			ku^{55}: **25**		
'silver'		ȵa^{31}: **25**	ni^{55}: **25**	ŋoŋ^{42}: **26**			ȵɦie^{35}: **25**		
'coal'		ŋʦua^{24}: **25**	ta^{33}tu^{11}: **25**	me^{22}: **26**			a^{44}lɦa^{35}tlu^{55}: **25**		
'grass'		ŋʅau^{31}: **1, 8**	qa^{33}naŋ^{55}: **26**	qo^{35}dzɦɯ^{44}: **26**			NGɯ^{55}: **7, 11, 14**		

The Weining classifier **tlo^{55}** (**№ 27**) categorises only clouds and its etymology may be more obscure, but it may be borrowed from the Chinese classifier *duǒ* 朵.

Table 26: The classifier for clouds

		Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
Classifier			**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Inanimate	**№ 27**	---	---	---	**Aug**	tlo^{55}	tlo^{44}	$ti^{55}a^{44}tlo^{44}$	$di^{31}a^{55}tlo^{44}$
'lump'					**Med**	$tluai^{55}$	$tluai^{213}$	$tiai^{55}a^{44}tlo^{44}$	$diai^{213}a^{44}tlo^{44}$
Classifieds					**Dim**	$tlua^{55}$	$tlua^{35}$	$tia^{55}a^{44}tlo^{44}$	$dia^{213}a^{44}tlo^{44}$
'cloud'		hua^{43}: **9**	$tɛ^{33}əu^{33}$: **1**	$ʈo^{44}tu^{44}$: **8**	$haɯ^{55}po^{11}$: **27**				

Another classifier for bulky items is **ki^{44}** implying two closely related meanings: (i) 'pound' (= standard measure for 500 gram), and (ii) 'lump'. Both meanings are attested in Weining, whereas in Hekou and Huayuan only the latter is confirmed. In Kaili a cognate form (**ki^{35}**) exists but with the divergent meaning 'a kind of'.

Table 27: The classifiers for solid materials ('pound')

	Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
№ 28 Classifier		**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Measure Word	ki^{44}	(ki^{35})	$tɕi^{42}$	**Aug**	ki^{44}	ki^{11}	$ti^{55}a^{11}ki^{11}$	$di^{31}a^{44}ki^{44}$
'lump, pound'				**Med**	$kiai^{11}$	$kiai^{213}$	$tiai^{55}a^{11}ki^{11}$	$diai^{213}a^{44}ki^{44}$
Classifieds				**Dim**	kia^{11}	kia^{35}	$tia^{55}a^{11}ki^{11}$	$dia^{55}a^{44}ki^{44}$
'gold'	ko^{43}: **28**	$tɕin^{33}$: **28**	gje^{33}: **28**	ku^{55}: **28**				
'silver'	$n̥a^{31}$: **28**	ni^{55}: **28**	$ŋoŋ^{42}$: **28**	$n̥ɦie^{35}$: **28**				
'salt'	$ŋtʂe^{55}$: **28**	$ɕi^{35}$: **28**	$dzɯ^{44}$: **28**	$ntʂə^{55}$: **28**				
'meat'	$ᴺqai^{31}$: **28**	$ŋi^{55}$: **28**	$n̥a^{42}$: **26, 28, 29**	$ᴺGɦai^{35}$: **28**				
'sugar'	$thaŋ^{31}$: **28**	$taŋ^{31}$: **28**	$daŋ^{22}$: **28**	mu^{55}: **28**				

The last pan-Miao classifier in this series is the classifier 'piece' which is realized as **tɬai^{24}** (Hekou), **ɬei^{31}** (Kaili), **lei^{55}** (Huayuan) and **dla^{53}** (Weining). It categorizes a wide range of objects such as solid materials, land, documents, etc.

Table 28: The classifiers for documents ('piece')

	Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
№ 29 Classifier		**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
for documents	$tɬai^{24}$	$ɬei^{31}$	lei^{42}	**Aug**	dla^{53}	$dlɦa^{11}$	$ti^{55}a^{31}dlɦa^{31}$	$di^{31}a^{55}dlɦa^{31}$
& 'piece'				**Med**	$dlai^{55}$	$dlai^{213}$	$tiai^{55}a^{31}dlɦa^{31}$	$diai^{213}a^{31}dlɦa^{31}$
Classifieds				**Dim**	dla^{53}	dla^{35}	$tia^{55}a^{31}dlɦa^{31}$	$dia^{55}a^{31}dlɦa^{31}$
'land'	te^{43}: **29**	ta^{33}: **29**	lu^{44}: **29**	ti^{55}: **77**				
'crops field'	$qoŋ^{43}loŋ^{44}$: **29**	$qe^{33}la^{13}$: **29**	$san^{33}ndza^{44}$: **58**	qau^{55}: **77**				
'gold'	ko^{43}: **29**	$tɕin^{33}$: **29**	gje^{33}: **26**	ku^{55}: **28**				
'silver'	$n̥a^{31}$: **29**	ni^{55}: **29**	$ŋoŋ^{55}$: **26**	$n̥ɦie^{35}$: **28**				
'iron'	$ɬou^{44}$: **29**	$ɬhe^{44}$: **29**	$ɬao^{44}$: **26**	$l̥au^{44}$: **1**				
'tile'	vua^{21}: **29**	$ŋi^{11}$: **29**	wa^{13}: **24**	va^{44}: **29**				
'bone'	$pau^{43}tshaŋ^{44}$:**1**	$po^{35}shoŋ^{35}$: **29**	$soŋ^{35}$: **16**	$a^{44}tshaɯ^{44}$: **1**				
'meat'	$ᴺqai^{31}$: **29**	$ŋi^{55}$: **29**	$n̥a^{42}$: **26, 28, 29**	$ᴺGɦai^{35}$: **28**				

'letter'	so^{55}: **23**	ɕen^{35}: **29**	sen^{33}: **70**	mau^{44}: **29**
'book'	so^{55}: **23**	tu^{35}: **58**	---	ntey^{55}: **29**
'cloth'	---	to^{33}: **58**	---	ntau^{55}: **29**
'paper'	nteu^{55}: **29**	ɕi^{44}: **58**	dɤ^{44}: **21**	ntey^{55}tley^{55}: **9**
'leaf'	mploŋ^{31}: **29**	qa^{33}nə^{55}: **58**	qo^{35}nu^{42}: **21**	a^{44}ndlfiau^{35}: **9**

3.2.3.2 Specialized classifiers

The majority of three-dimensional shape classifiers are specialized small-range classifiers. They categorize landscapes (subsection A), granular or drop-shaped entities (B), layered entities (C), places (D), clothes and cloth (E), and frames (F). The last two classifiers are classifiers of FUNCTIONALITY, which, besides ANIMACY and SHAPE, is one of the three parameters that organize the system of Miao classifiers.

A. Classifier for landscape

A classifier for landscape meaning 'piece', 'plot', or 'row' categorizes flat land, mountain chains, crops (implying then the connotation 'a plot of crops') and comes out in the Miao languages as **plaŋ^{13}** (Hekou), **tɕaŋ^{35}** (Kaili), **tɕaŋ^{35}** (Huayuan), and **tlau^{55}** (Weining). The sense of **tɕaŋ^{35}** in Huayuan has shifted to categorize solid materials and to imply 'lump, chunk', rather than to be a classifier for landscape.

Table 29: The classifiers for landscape ('row', 'plot', 'piece')

	Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
№ 30 Classifier		**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
'row', 'plot'	plaŋ^{13}	tɕaŋ^{35}	tɕaŋ^{35}	**Aug**	tlau^{55}	tlau^{44}	ti^{55}a^{44}tlau^{55}	di^{31}a^{55}tlau^{55}
'piece'				**Med**	tlai^{55}	tlai^{213}	tiai^{55}a^{44}tlau^{55}	diai^{213}a^{44}tlau^{55}
Classifieds				**Dim**	tla^{55}	tla^{35}	tia^{55}a^{44}tlau^{55}	dia^{55}a^{44}tlau^{55}
'cloud'	hua^{43}: **9**	tɛ^{33}əu^{33}: **1**	ʈo^{42}tu^{44}: **8**	hauɯ^{55}po^{11}: **30**				
'land'	te^{43}: **30**	da^{13}: **30**	lu^{44}: **29**	ti^{55}: **30**				
'mountain'	ʈoŋ^{43}: **30**	pi^{11}: **24**	pi^{44}qɤ^{22}: **25**	ʈau^{55}: **94**				
'crops'	qoŋ^{43}loŋ^{44}: **30**	qəu^{33}la^{13}: **30**	---	qau^{55}: **77**				
'barley'	mau^{13}: **30**	maŋ^{11}: **30**	tɕaŋ^{35}me^{22}: **31**	ʂau^{55}: **77**				
'rice'	ŋʈʂa^{43}: **24**	qa^{33}shɛ^{35}: **30**	ndzo^{54}: **31**	ndlfii^{35}: **77**				
'paper'	nteu^{55}: **23**	ɕi^{44}: **30**	dɤ^{44}: **21**	ntey^{55}tley^{55}: **9**				
'stone'	ʐe^{43}: **25**	bo^{35}ɣi^{33}: **24**	qo^{35}ʐɯ^{35}: **30**	a^{55}və^{55}: **25, 29, 30**				
'clay'	aŋ^{55}: **25**	qa^{35}ta^{33}: **24**	qa^{44}la^{42}: **30**	a^{44}lfia^{35}: **25, 29, 30**				

B. Classifier for granular or drop-shaped entities

Three of the four Miao languages have a classifier for granular or drop-shaped entities. In Huayuan, no such classifier is reported, whereas Hekou Hmong exhibits two

classifiers: **ɳtʂa[44]** (for granular) and **ntɕao[44]** (for drop-like entities). The classifiers **niu[13]** (Kaili) and **dlɦi[35]** (Weining) are restricted to granular only; drop-like entities are categorized by a general broad-range classifier.

Table 30: The classifiers for granular and drop-shaped entities

		Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
Classifier			**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
	№ 31	---	---	---	**Aug**	$dlɦi^{35}$	dli^{44}	$ti^{55}a^{44}dlɦi^{35}$	$di^{31}a^{44}dlɦi^{35}$
‘granula’,					**Med**	$dlɦai^{213}$	$dliai^{213}$	$tiai^{55}a^{44}dlɦi^{35}$	$diai^{213}a^{44}dlɦi^{35}$
‘drop’					**Dim**	$dlɦa^{35}$	$dlia^{35}$	$tia^{55}a^{44}dlɦi^{35}$	$dia^{55}a^{44}dlɦi^{35}$
	№ 32	---	$ȵiu^{13}$	---		---			
	№ 33	$ɳtʂa^{44}$	---	---		---			
Classifieds	**№ 34**	$ntɕao^{44}$	---	---		---			
‘sand’		$ʂua^{43}$: **33**	$qa^{33}sha^{44}ɣi^{33}$: **32**	$qo^{35}tsa^{54}$: **24**			$a^{55}dzɦi^{11}a^{55}və^{55}$: **31**		
‘salt’		$ɳtʂe^{55}$: **33**	$ɕi^{35}$: **32**	$dzɯ^{44}$: **24**			$ɳʧə^{55}$: **31**		
‘seed’		$noŋ^{43}$: **33**	$ȵiu^{33}$: **32**	$qo^{35}ŋu^{35}$: **24**			$tʂaɯ^{55}$: **31**		
‘barley’		mau^{13}: **33**	$maŋ^{11}tɕaŋ^{35}$: **32**	$tɕaŋ^{35}me^{22}$: **24**			mo^{53}: **31**		
‘bean’		tou^{24}: **33**	$tə^{31}$: **24**	nu^{44}: **24**			dau^{53}: **31**		
‘rice’		$ɳtʂa^{43}$: **24**	$qa^{33}shɛ^{35}$: **32**	dzo^{54}: **24**			$ndlɦi^{35}$: **31**		
‘sugar’		$thaŋ^{31}$: **33**	$taŋ^{31}$: **32**	$daŋ^{22}$: **24**			mu^{55}: **31**		
‘money’		tsa^{55}: **24**	$pi^{55}sei^{55}$: **32**	$tɕɛ^{42}$: **24**			$nɦie^{35}$: **31**		
‘tear’		$kua^{44}mua^{13}$:**34**	$əu^{33}mɛ^{13}$: **24**	$u^{35}me^{31}$: **24**			$ka^{44}ma^{31}$: **24**		
‘blood’		$ɳtʂhaŋ^{55}$: **34**	$ɕhiaŋ^{35}$: **24, 32**	$dzɦen^{44}$: **24**			$ntʂhaɯ^{55}$: **24**		
‘sweat’		fu^{33}: **34**	$əu^{33}ȵiaŋ^{53}$: **24**	$u^{33}ɬen^{54}$: **24**			$ŋgɦiaɯ^{35}ʃaɯ^{44}$: **24**		

C. Classifier for layered entities

A classifier for layered or storeyed entities exists in only two Miao languages: in Kali and in Weining. No confirmation on this classifier could be obtained from Xiong & Cohen (2005) for Hekou; no information for Huayuan is available either.

Table 31: The classifiers for layered or storeyed entities

		Kaili	*Weining Ahmao*				
Classifier		**(invariable)**	**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Inanimate	**№ 35**	---	**Male-Aug**	ti^{11}	---	$ti^{55}a^{11}ti^{11}$	$di^{31}a^{55}ti^{11}$
‘layer’			**Fem-Med**	$tiai^{55}$	$tiai^{213}$	$tiai^{55}a^{11}ti^{11}$	$diai^{213}a^{11}ti^{11}$
			Child-Dim	tia^{55}	tia^{35}	$tia^{55}a^{11}ti^{11}$	$dia^{55}a^{31}ti^{11}$
Classifieds	**№ 36**	$lən^{31}$					
‘soil’		$qa^{33}ta^{33}$: **36**			$a^{44}lɦa^{35}$: **35**		
‘dust’		$qa^{33}phən^{33}ta^{33}$: **36**			$hi^{55}tlaɯ^{11}$: **35**		
‘skin’		$qa^{33}liu^{44}$: **36**			$pi^{44}tey^{44}$: **35**		

D. Classifier for places

A classifier for places is reported in two Miao languages as **khau^{55}** (Hekou) and **qho^{55}** (Weining). In Kaili there is an obvious cognate nominal form **qha^{44}**, although it may not be involved as classifier with the sense 'place'. In Huayuan, the cognate form **qho^{35}** functions as nominal prefix attached to a wide range of nouns; it may not be involved as classifier.

Table 32: The classifiers for places

	Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
№ 37 Classifier		**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Inanimate	qhau^{55}	(qha^{44})	(qho^{35})	**Aug**	qho^{55}	qho^{44}	ti^{55}a^{44}qho^{55}	di^{31}a^{44}qho^{55}
'place'				**Med**	qhai^{55}	qhai^{213}	tiai^{55}a^{44}qho^{55}	diai^{213}a^{44}qho^{55}
Classifieds				**Dim**	qha^{55}	qha^{35}	tia^{55}a^{44}qho^{55}	dia^{55}a^{44}qho^{55}
'locality'	te^{33}tɕheu^{44}: **37**	faŋ^{33}: **15**	qo^{35}te^{42}: **24**	ti^{55}tɕhey^{11}: **37**				
'meat'	ɴqai^{31}: **37**	ŋi^{55}: **29**	n̡a^{42}: **26, 28, 29**	ɴGɦai^{35}: **28**				

The Miao languages exhibit two classifiers meaning 'side' or 'edge': (i) **ʂaŋ^{13}** (in Hekou) with the related form **ʂey^{55}** (in Weining), and (ii) **phi^{44}** (in Kaili). In Kaili, the classifier **saŋ^{55}** appears cognate to the forms in (i), but it has shifted its meaning to 'layer, stratum'.

Table 33: The classifiers for entities with sides and edges

		Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
Classifier			**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Inanimate	**№ 38**	ʂaŋ^{13}	(saŋ^{55})	---	**Aug**	ʂey^{55}	ʂey^{44}	ti^{55}a^{44}ʂey^{44}	di^{31}a^{44}ʂey^{44}
'side'					**Med**	ʂ(e)yai^{55}	ʂ(e)yai^{213}	tiai^{55}a^{31}ʂey^{44}	diai^{213}a^{44}ʂey^{44}
'edge'					**Dim**	ʂ(e)ya^{53}	ʂ(e)ya^{35}	tia^{55}a^{31}ʂey^{44}	dia^{55}a^{44}ʂey^{44}
Classifieds	**№ 39**	---	phi^{44}	---					
'field'		te^{43}: **38**	la^{13}: **39**	lu^{54}: **29**	ti^{55}: **38**				
'river'		tɬe^{31}: **38**	əu^{33}: **39**	ŋa^{31}u^{35}: **16**	dlɦi^{35}: **38**				
'meat'		ɴqai^{31}: **38**	ŋi^{55}: **39**	n̡a^{42}: **26, 28, 29**	ɴGɦai^{35}: **38**				

E. Function: classifier for clothes (and cloth)

Two classifiers categorize clothes and cloth: (i) **phau^{33}** (Hekou), **phaŋ^{33}** (Kaili), **phaŋ^{33}** (Huayuan), and **pho^{55}** (Weining); (ii) **tɕhəu^{44}** (Kaili) and **ntan^{33}** (Huayuan). The sound structure of the two latter forms is different, but they share the property of specifically categorizing 'skirts'.

Table 34: The classifiers for cloth and clothes

		Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
Classifier			**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
	№ 40	phau^{43}	phaŋ^{33}	phaŋ^{35}	**Aug**	pho^{55}	pho^{11}	ti^{55}a^{44}pho^{55}	di^{31}a^{55}pho^{55}
Inanimate					**Med**	phai^{55}	phai^{213}	ti^{55}a^{44}pho^{55}	diai^{213}a^{55}pho^{55}
'garment'					**Dim**	pha^{35}	pha^{35}	ti^{55}a^{44}pho^{55}	dia^{55}a^{55}pho^{55}
Classifieds	**№ 41**	---	tɕhəu^{44}	ntan^{33}		---			
'quilt'		le^{55}: **40**	tiu^{11}: **40**	qho^{35}lou^{44}: **40**			a^{55}n̥aɯ^{55}n̥tɕau^{44}: **40**		
'garment'		tʂhau^{44}: **24**	u^{35}: **40**	ɤ^{44}: **41**			tʂho^{44}: **24**		
'skirt'		ta^{43}: **24**	khəu^{53}: **41**	tɛ^{35}: **41**			tie^{55}: **93**		

F. Function: classifier for frames

In Hekou and Weining, two cognate classifiers for framed entities are attested: **tɯ^{22}** (Hekou) and **dzɨ^{53}** (Weining).

Table 35: The classifiers for frames

	Huayuan	*Weining Ahmao*				
№ 42 Classifier	**(invariable)**	**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Inanimate	tɯ^{22}	**Aug**	dzɨ^{53}	dzɨ^{11}	ti^{55}a^{31}dzɦi^{31}	di^{31}a^{55}dzɦi^{31}
for frames		**Med**	dzai^{53}	dzai^{213}	tiai^{55}a^{31}dzɦi^{31}	diai^{213}a^{31}dzɦi^{31}
Classifieds		**Dim**	dza^{53}	dza^{35}	tia^{55}a^{31}dzɦi^{31}	dia^{55}a^{31}dzɦi^{31}
'table'	tɕi^{35}pəu^{55}: **42**			ki^{44}ɖɦau^{35}: **42**		
'bed'	təu^{55}beu^{44}: **42**			dzɦaɯ^{35}: **42**		
'bridge'	kjou^{55}: **42**			l̥a^{55}: **42**		
'plough'	qo^{35}ʎi^{42}: **1**			li^{55}vɦau^{31}: **42**		
'meat'	n̥a^{42}: **26, 28, 29**			NGɦai^{35}: **42**		

3.3 Diverse sortal classifiers attested in one language only

In this section, we group various classifiers that are restricted to one Miao language only. Most of them are of the sortal kind with small ranges of compatible classifieds in each case. Two or three plural/mass classifiers with the broad scope of classifieds also fall into this group.

3.3.1 Hekou Hmong

Among the classifiers that are used only in Hekou Hmong are classifiers for air containers, houses, cloth and garments, etc.

Table 36: Diverse small-range classifiers in Hekou Hmong

Classifier			Classified
№ 43	container for air	tu^{55}	hua^{43} ‘cloud’, paŋ^{44} ‘air’, etc.
№ 44	for houses	tɕhaŋ^{55}	tʂe^{55} ‘house’, tʂe^{55}nthaŋ^{43} ‘multistory building’, tshaŋ^{43}khu^{24} ‘storehouse’, ŋkua^{31}ɳo^{13} ‘cowhouse’, ŋkua^{31}qai^{43} ‘henhouse’, etc.
№ 45	for cloth & garment	phau^{43}	le^{55} ‘mat’, tʂaŋ^{43}ntsi^{55} ‘felt rug’, ta^{43} ‘skirt’, etc.
№ 46	for matter & topic	ntən^{21}	plou^{43} ‘matter, topic’, etc.
№ 47	‘section’	tau^{13}	ntoŋ^{44} ‘wood’, etc.
№ 48	‘noise’	ʈhe^{55}	so^{43} ‘thunder’
№ 49	‘shower’	ʂua^{24}	naŋ^{13} ‘rain’, mpo^{44} ‘snow’, leu^{13} ‘hail’
№ 50	‘ball’, ‘clew’	ɕo^{55}	plou^{43} ‘feather’, ɳʇau^{31} ‘grass’, phaŋ^{44} ‘smoke, exhalation’, etc.
№ 51	‘nest’, ‘clew’	so^{43}	ɳʈʂou^{24} ‘ant’, mo^{55} ‘bee’, etc. [so^{43} other meanings: ‘arrow’, ‘thunder’]
№ 52	‘breed’	ʐaŋ^{13}	mi^{55}mpua^{44} ‘piglet’, mi^{55}tɬe^{55} ‘puppy’, etc
№ 53	‘nest’	ʐe^{21}	noŋ^{13} ‘bird’, qai^{43} ‘chicken’, ɴqua^{43} ‘dove’, tʂua^{13} ‘mouse’, etc.
№ 54	‘armful’	tʂua^{13}	tɕe^{13}ntoŋ^{44} ‘twig’, ɕoŋ^{43} ‘bamboo’, ɳʇau^{31} ‘grass’, teu^{21} ‘firewood’, etc.
№ 55	plural and mass	tɕau^{55}	with almost every count and mass nouns (expressing plural or ‘some’)
№ 56	plural and mass	ua^{33}	idem

3.3.2 Kaili Qanao

The classifiers restricted to Kaili are classifiers for songs, books, places, tobacco, words, etc.

Table 37: Diverse small-range classifiers in Kaili Qanao

Classifier			Classified
№ 57	for songs	pa^{13}	ɕha^{53} ‘song’, ɬiaŋ^{33}ɕaŋ^{13} ‘story’
№ 58	for books	pen^{55}	tu^{35} ‘book’
№ 59	for places	pəu^{44}	qha^{44} ‘place’
№ 60	for cigarettes	tioŋ^{55}	jən^{33} ‘tobacco’
№ 61	for bows and hooks	tiu^{55}	ŋɛ^{35} ‘bow’, nən^{44} ‘hook’
№ 62	for words	kən^{33}	tɕa^{55} ‘word of wisdom’
№ 63	‘mouthful’	ha^{35}	ka^{35} ‘rice’, əu^{33} ‘rice’
№ 64	‘nest’	mi^{11}	qa^{33}tɛ^{33}tɬa^{35} ‘dog’
№ 65	‘kind’	tiə^{11}	nɛ^{55} ‘person’
№ 66	plural and mass	tin^{33}	with almost every count and mass nouns (expressing plural or ‘some’)

3.3.3 Huayuan Qoxung

Classifiers exclusively in use in Huayuan Qoxung include two classifiers for one-dimensional entities, and a classifier for thread, letters, etc.

Table 38: Diverse small-range classifiers in Huayuan Qoxong

Classifier			Classified
№ 67	1-dim	du^{54}	qo^{35}ŋa^{31} ‘big river’
№ 68	1-dim	ɳu^{42}	qo^{35}ɬa^{54} ‘cord’
№ 69	for threads	ɕi^{35}	qo^{35}tsei^{42} ‘thread’
№ 70	for letters	hoŋ^{44}	sən^{35} ‘letter’
№ 71	for matter & topic	kjan^{13}	sɨ^{35} ‘matter, topic’, etc.
№ 72	‘form, body’	tɕɯ^{44}	ɳɤ^{55}ta^{33} ‘carcass’; ʐo^{13} ‘strength’
№ 73	‘knob’	pa^{35}	qa^{35}ki^{35}nu^{35} ‘mucus’
№ 74	‘(cow) pat’	tɕo^{11}	qa^{35}ʑu^{11} ‘dung’
№ 75	‘pill’	hu^{33}	ŋga^{35} ‘medicine’

3.3.4 Weining Ahmao

A number of classifiers are only reported in Ahmao. These are classifiers for torches and classifiers meaning ‘piece’, ‘block’, etc.

Table 39: Diverse small-range classifiers in Weining Ahmao

	Register	Sg-def	Sg-indef	Pl-def	Pl-indef	Classified
№ 76 Classifier	**Male-Aug**	ɻaɯ^{55}	ɻaɯ^{11}	ti^{55}a^{44}ɻaɯ^{55}	di^{31}a^{55}ɻaɯ^{55}	tau^{55} ‘torch’
Functional	**Fem-Med**	ɻai^{55}	ɻai^{213}	tiai^{55}a^{44}ɻaɯ^{55}	diai^{213}a^{11}ɻaɯ^{55}	
for torches	**Child-Dim**	ɻa^{55}	ɻa^{35}	tia^{55}a^{44}ɻaɯ^{55}	dia^{55}a^{31}ɻaɯ^{55}	
№ 77 Classifier	**Male-Aug**	tɕo^{55}	tɕo^{44}	ti^{55}a^{44}tɕo^{55}	di^{31}a^{44}tɕo^{55}	ti^{55} ‘land’
Landscape	**Fem-Med**	tɕai^{55}	tɕuai^{213}	tiai^{55}a^{44}tɕo^{55}	diai^{213}a^{44}tɕo^{55}	
‘piece, plot’	**Child-Dim**	tɕa^{55}	tɕua^{35}	tia^{55}a^{44}tɕo^{55}	dia^{55}a^{44}tɕo^{55}	
№ 78 Classifier	**Male-Aug**	gau^{53}	gɦau^{11}	ti^{55}a^{31}gɦau^{11}	di^{31}a^{55}gɦau^{11}	tɯ^{55}nɯ^{55} ‘people’,
Inanimate	**Fem-Med**	gai^{53}	guai^{213}	tiai^{55}a^{31}gɦau^{31}	diai^{213}a^{31}gɦau^{31}	ŋgɦa^{35}va^{53} ‘house’,
‘block’, ‘group’	**Child-Dim**	ga^{53}	gua^{35}	tia^{55}a^{31}gɦau^{31}	dia^{55}a^{31}gɦau^{31}	ɳtɕi^{55} ‘mushroom’
№ 79 Classifier	**Male-Aug**	tey^{11}	---	ti^{55}a^{11}tey^{11}	di^{31}a^{55}tey^{11}	qa^{55}ɳɦu^{35} ‘dung’
Inanimate	**Fem-Med**	tui^{11}	tui^{213}	tiai^{55}a^{11}tey^{11}	diai^{213}a^{11}tey^{11}	
‘clump’	**Child-Dim**	tya^{11}	tya^{35}	tia^{55}a^{11}tey^{11}	dia^{55}a^{31}tey^{11}	
№ 80 Classifier	**Male-Aug**	qai^{11}	---	ti^{55}a^{11}qai^{11}	di^{31}a^{55}qai^{11}	so^{55} ‘money’,
Inanimate	**Fem-Med**	qai^{11}	qai^{213}	tiai^{55}a^{11}qai^{11}	diai^{213}a^{11}qai^{11}	haɯ^{55}po^{11} ‘cloud’
‘bunch’	**Child-Dim**	qa^{11}	qaia^{35}	tia^{55}a^{11}qai^{11}	dia^{55}a^{11}qai^{11}	
№ 81 Classifier	**Male-Aug**	tsau^{11}	---	ti^{55}a^{11}tsau^{11}	di^{31}a^{55}tsau^{11}	dey^{44} ‘firewood’,
Inanimate	**Fem-Med**	tsuai^{11}	tsuai^{213}	tiai^{55}a^{11}tsau^{11}	diai^{213}a^{55}tsau^{11}	NGɯ^{55} ‘grass’,
‘bundle’	**Child-Dim**	tsua^{11}	tsua^{35}	tia^{55}a^{11}tsau^{11}	dia^{55}a^{55}tsau^{11}	a^{55}ɳaɯ^{55}ʂau^{55} ‘wheat straw’
№ 82 Classifier	**Male-Aug**	ŋʃaɯ^{11}	---	ti^{55}a^{11}ŋʃaɯ^{11}	di^{31}a^{55}ŋʃaɯ^{11}	dey^{44} ‘firewood’
Measure Word	**Fem-Med**	ŋʃai^{11}	ŋʃai^{213}	tiai^{55}a^{11}ŋʃaɯ^{11}	diai^{213}a^{11}ŋʃaɯ^{11}	
‘backload’	**Child-Dim**	ŋʃa^{11}	ŋʃa^{35}	tia^{55}a^{11}ŋʃaɯ^{11}	dia^{55}a^{11}ŋʃaɯ^{11}	

3.4 Mixed nominal and verbal classifiers

A number of nouns may be interpreted as physical entities and as events. Weather phenomena like 'rain' may be viewed as entities with matter and as happenings. A small number of mixed (= nominal and verbal) classifiers such as 'shower' and 'draught' categorize these experiences. For more information on these double-function classifiers, see Gerner (2009b). The classifier 'shower' is realized as **kau^{43}/kaŋ^{55}** in Hekou, Kaili, and Huayuan, although appearing as **zo^{53}** in Weining.

Table 40: The classifiers for precipitation (weather)

		Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
Classifier			**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
	№ 83	---	---	---	**Aug**	zo^{53}	zo^{31}	ti^{55}a^{11}zo^{31}	di^{31}a^{44}zo^{31}
Weather					**Med**	zuai^{55}	zuai^{213}	tiai^{55}a^{11}zo^{31}	diai^{213}a^{44}zo^{31}
'shower'					**Dim**	zua^{53}	zua^{35}	tia^{55}a^{11}zo^{31}	dia^{55}a^{44}zo^{31}
Classifieds	**№ 84**	kau^{43}	kaŋ^{55}	kaŋ^{35}	---				
'rain'		naŋ^{13}: **84**	noŋ^{13}: **84**	noŋ^{31}: **84**	naɯ^{53}: **83**				
'snow'		mpo^{44}: **84**	pɛ^{44}: **84**	mpəu^{54}: **84**	mpu^{44}: **83**				
'hail'		leu^{13}: **84**	ho^{33}liu^{11}: **84**	ʂa^{44}: **84**	naɯ^{53}tley^{55}: **83**				
'ice'		tɬou^{33}: **84**	ɬiu^{53}: **84**	kjɛ^{44}: **84**	tlau^{11}: **83**				

In Hekou and Weining, two genetically unrelated classifiers for 'wind' are reported. They imply the meaning of 'draught': **paɯ^{11}** (Weining) and **ntu^{13}** (Hekou).

Table 41: The classifiers for wind

		Hekou	*Weining Ahmao*				
Classifier		**(invariable)**	**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
	№ 85	---	**Aug**	paɯ^{11}	---	ti^{55}a^{11}paɯ^{11}	di^{31}a^{55}paɯ^{11}
Weather			**Med**	pai^{11}	pai^{213}	tiai^{55}a^{11}paɯ^{11}	diai^{213}a^{11}paɯ^{11}
'draught'			**Dim**	pa^{11}	pa^{35}	tia^{55}a^{11}paɯ^{11}	dia^{55}a^{11}paɯ^{11}
Classifieds	**№ 86**	ntu^{13}	---				
'wind'		tɕua^{44}: **86**	tɕa^{44}: **85**				

3.5 Mensural classifiers: collectivizers and partitioners

A large number of collectivizers and partitioners are attested across Miao languages. To start with, in three of the four languages surveyed a plural quantifier is reported.

Table 42: The plural and mass classifiers

	Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*		
№ 87 Classifier	**(invariable)**			**Register**	**Plural Definite**	**Plural Indefinite**
Collectivizer	te^{31}	to^{11}	---	**Male-Aug**	ti^{55}	di^{31}
plural and mass				**Fem-Med**	tiai^{55}	diai^{213}
Classifieds				**Child-Dim**	tia^{55}	dia^{55}
‘person’	tua^{43}nen^{13}: **87**	nɛ^{55}: **87**	nɐ^{42}: **87**	tɯ^{55}nɯ^{55}: **87**		
‘water’	tɬe^{31}: **87**	əu^{33}: **87**	u^{35}: **24**	au^{55}: **87**		
(…)	(…)	(…)	(…)	(…)		

Three collectivizers corresponding to ‘group’ are attested in the Miao languages: (i) **phu^{43}** (Hekou) and **phi^{35}** (Kaili); (ii) **khu^{33}** (Kaili); (iii) **paŋ^{35}** (Huayuan).

Table 43: The collectivising classifiers (‘group’)

		Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*
Classifier		**(invariable)**			
Collectivizer	**№ 88**	phu^{43}	phi^{35}	---	---
‘group’					
	№ 89	---	khu^{33}	---	---
Classifieds	**№ 90**	---	---	paŋ^{44}	---
‘man’		ʑeu^{13}: **88**	nɛ^{55}: **88**	qo^{35}ȵi^{54}: **90**	a^{55}ʑey^{53}: **78, 87**
‘ox’		ȵo^{31}: **88**	lio^{35}: **89**	ta^{35}ʐu^{22}: **91**	ȵɦu^{35}: **87**
‘ghost’		tɬaŋ^{43}: **88**	ɬiaŋ^{33}: **89**	ta^{35}qwen^{35}: **90**	pi^{55}laɯ^{55}: **87**

Another collectivizer has cognate relatives in three of the surveyed Miao languages, though with slightly divergent meaning: **tsha^{44}** ‘some’ (in Hekou), **ntsha^{44}** ‘group’ (in Huayuan), **ntʂha^{11}** ‘group, bunch’. Each collectivizer is compatible with a large range of nouns.

Table 44: The collectivising classifiers (‘bunch, collection’)

	Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
№ 91 Classifier	**(invariable)**			**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Collectivizer	tsha^{44}	---	ndʐha^{54}	**Aug**	ntʂha^{11}	---	ti^{55}a^{11}ntʂha^{11}	di^{31}a^{55}ntʂha^{11}
‘group, bunch’				**Med**	ntʂhai^{11}	ntʂhai^{213}	tiai^{55}a^{11}ntʂha^{11}	diai^{213}a^{11}ntʂha^{11}
Classifieds				**Dim**	ntʂha^{11}	ntʂha^{35}	tia^{55}a^{44}ntʂha^{11}	dia^{55}a^{11}ntʂha^{11}

Across the Miao group, two classifiers with the meaning ‘pair’ exist. The classifiers **ŋeu^{24}** (Hekou) and **ŋkey^{53}** (Weining), in addition to implying ‘pair’, turn out to be classifiers of skirts. The cognate form **niu^{31}** ‘pair’ in Kaili only categorizes entities that occur in pairs (such as certain body parts like hand, etc.), whereas there is a non-cognate classifier **poŋ^{11}** ‘pair’ that occurs in combination with other non-dual

nouns. The classifier **kou[11]/ho[44]** ‘pair’ in Huayuan compounds with dual and non-dual nouns, though excluding dual clothing items like shoes or sleeves where it projects the classifier **ŋoŋ[11]** ‘pair’. This last classifier is identical in sound to the animate classifier **№ 2 ŋoŋ[22]**.

Table 45: The classifiers for pairs

	Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
Classifier		**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Collectivizer **№ 92**	ŋkeu^{24}	niu^{31}	kou^{11}/ho^{44}	**Aug**	ŋkey^{53}	ŋgey^{31}	ti^{55}a^{31}ŋgey^{31}	di^{31}a^{55}ŋgɦey^{31}
‘pair’				**Med**	ŋkai^{53}	ŋgai^{213}	tiai^{55}a^{31}ŋgey^{31}	diai^{213}a^{31}ŋgɦey^{31}
				Dim	ŋkya^{53}	ŋgeya^{35}	tia^{55}a^{31}ŋgey^{31}	dia^{55}a^{31}ŋgɦey^{31}
Classifieds № 93	---	poŋ^{11}	ŋoŋ^{22}	---				
‘foot’	ko^{44}teu^{44}: **5**	lo^{33}: **92**	ɬao^{33}: **92**	tey^{44}: **92**				
‘hand’	te^{21}: **5**	pi^{11}: **92**	tou^{11}: **92**	di^{44}: **92**				
‘eye’	qhau^{55}mua^{13}: **92**	nioŋ^{13}mɛ^{13}: **92**	le^{33}qəu^{33}: **92**	a^{55}ma^{53}: **92**				
‘ear’	qhau^{55}ɳʈʂe^{31}: **92**	qa^{33}nei^{55}: **92**	tuŋ^{42}mlɯ^{42}: **92**	a^{44}mbɦə^{35}: **92**				
‘wing’	kou^{31}ti^{33}: **92**	qa^{33}ta^{53}: **92**	pi^{35}tei^{35}: **92**	a^{55}ti^{11}: **92**				
‘shoe’	khou^{44}: **92**	ha^{33}: **92**	ɕao^{44}: **93**	khau^{11}: **92**				
‘sleeve’	te^{21}tʂhau^{44}: **5**	qa^{33}mu^{11}u^{35}:**92**	qao^{33}toŋ^{11}: **93**	a^{44}di^{44}tʂo^{44}: **92**				
‘skirt’	ta^{43}:te^{13}: **92**	qhu^{53}: **41**	tan^{33}: **41**	tie^{55}: **92**				
‘person’	tua^{43}nen^{13}: **92**	nɛ^{55}: **93**	nɐ^{55}: **92**	tɯ^{55}nɯ^{55}: **92**				
‘ox’	ɳo^{31}: **92**	lio^{35}: **93**	ʐu^{11}: **92**	ɳɦu^{35}: **92**				
‘table’	ʈoŋ^{31}: **24**	ta^{55}: **93**	tɕi^{35}pəu^{55}: **92**	ki^{44}ɖɦau^{35}: **92**				

Two other classifiers imply the meaning of ‘row, sequence’ and may co-occur with concrete noun entities such as ‘mountain’ or with abstract entities like ‘story’. The first **ŋkhə[11]** is regionally restricted to Weining, whereas the other is attested as **ʐaŋ[31]** in Hekou, **ɣoŋ[33]** in Kaili and **ʐa[11]** in Huayuan.

Table 46: The collectivising classifiers (‘sequence, row’)

	Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
Classifier		**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Collectivizer **№ 94**	---	---	---	**Aug**	ŋkhə^{11}	---	ti^{55}a^{44}ŋkhə^{11}	di^{31}a^{55}ŋkhə^{11}
‘row’,				**Med**	ŋkhai^{11}	ŋkhai^{213}	tiai^{55}a^{44}ŋkhə^{11}	diai^{213}a^{11}ŋkhə^{11}
‘sequence’				**Dim**	ŋkha^{11}	ŋkha^{35}	tia^{55}a^{44}ŋkhə^{11}	dia^{55}a^{11}ŋkhə^{11}
Classifieds № 95	ʐaŋ^{31}	ɣoŋ^{33}	ʐa^{22}	---				
‘table’	ʈoŋ^{43}: **24**	ta^{55}: **95**	tɕi^{44}pe^{42}: **95**	ki^{44}ɖɦau^{35}: **94**				
‘wall’	tshaŋ^{31}: **95**	ho^{33}: **15**	tɕaŋ^{42}: **16**	a^{11}dɦɯ^{11}: **24**				
‘mountain’	ʈoŋ^{43}: **95**	pi^{11}: **95**	pi^{44}qɤ^{22}: **24**	ʈau^{55}: **94**				
‘tooth’	kou^{21}ŋa^{55}: **95**	ɳi^{35}: **95**	qo^{35}ɕɛ^{44}: **97**	ŋie^{55}: **94**				
‘story’	lo^{21}ɳʅua^{21}: **95**	qa^{33}tɕəu^{35}qə^{44}: **95**	qo^{54}: **24**	pi^{55}dɦau^{31}: **18**				
‘proverb’	lo^{21}paŋ^{31}: **101**	---	tu^{54}qo^{54}: **95**	lu^{44}ndʐɦa^{11}: **18**				
‘riddle’	mi^{24}tsi^{55}: **95**	---	---	pi^{55}dɦau^{31}: **1**				
‘song’	ŋou^{31}: **95**	ɕa^{53}: **95**	sa^{44}: **95**	ŋgɦau^{35}: **101**				

One additional classifier implying ‘row’ and ‘cluster’ categorizes different kinds of fruit and is realized in only two Miao languages as **koŋ[53]** (Kaili) and **ɴqhau[11]** (Weining).

Table 47: The collectivising classifiers (‘row, cluster’)

	Kaili	*Weining Ahmao*				
№ 96 Classifier	**(invariable)**	**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Collectivizer	koŋ^{53}	**Aug**	ɴqhau^{11}	---	ti^{55}a^{11}ɴqhau^{11}	di^{31}a^{55}ɴqhau^{11}
‘row, cluster’		**Med**	ɴqhai^{11}	ɴqhai^{213}	tiai^{55}a^{11}ɴqhau^{11}	diai^{213}a^{11}ɴqhau^{11}
Classifieds		**Dim**	ɴqha^{11}	ɴqha^{35}	tia^{55}a^{11}ɴqhau^{11}	dia^{55}a^{11}ɴqhau^{11}
‘grape’	tsən^{35}qei^{35}: **96**	tsi^{55}a^{55}ma^{53}n̥ɦu^{35}tsi^{55}a^{55}ma^{53}nɦɯ^{11}: **96**				
‘fruit’	tsən^{35}: **96**	tsi^{55}: **96**				
‘tooth’	m̥i^{35}: **96**	n̥ie^{55}: **96**				

The last mensural classifiers in this section are the collectivising classifiers **peu[13]** (Hekou), **pə[44]** (Kaili), **plɯ[55]** (Huayuan) and **bey[53]** (Weining). For the inflections of the Weining classifier **bey[53]**, it is important to note that only for the augmentative are the definite and indefinite forms distinguished through breathy voice.

Table 48: The collectivising classifiers (‘heap, row’)

	Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
№ 97 Classifier		**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Partitioner	peu^{13}	pə^{44}	plɯ^{55}	**Aug**	bey^{53}	bɦey^{11}	ti^{55}a^{31}bɦey^{31}	di^{31}a^{55}bɦey^{31}
‘heap’, ‘row’				**Med**	bai^{53}	bai^{213}	tiai^{55}a^{31}bɦey^{31}	diai^{213}a^{31}bɦey^{31}
Classifieds				**Dim**	ba^{53}	ba^{35}	tia^{55}a^{31}bɦey^{31}	dia^{55}a^{31}bɦey^{31}
‘dung’	---	qa^{33}: **97**	qa^{33}ʐu^{11}: **74**	tɕhi^{55}: **97**				
‘mud’	aŋ^{55}: **97**	qa^{33}ta^{33}: **97**	---	a^{44}lɦa^{35}: **97**				
‘sand’	ʂua^{43}: **97**	qa^{33}sha^{44}ɣi^{33}:**97**	qo^{35}tsha^{54}: **97**	a^{55}dz̥ɦi^{11}a^{55}və^{55}: **97**				
‘coal’	ɳtʂua^{24}: **97**	ta^{33}tu^{53}: **97**	---	a^{44}lɦa^{35}tlu^{55}: **97**				
‘wood’	ntoŋ^{44}: **97**	tə^{44}: **97**	---	ntau^{44}: **97**				
‘chaff’	sua^{44}: **97**	qa^{33}ɦa^{44}: **97**	---	hi^{55}bɦaɯ^{11}: **97**				
‘grape’	tsi^{55}qa^{55}: **97**	tsən^{35}qei^{35}: **97**	---	tsi^{55}a^{55}ma^{53}n̥ɦu^{35}tsi^{55}a^{55}ma^{53}nɦɯ^{11}: **96**				
‘fruit’	tsi^{55}: **97**	tsən^{35}: **97**	qo^{35}pi^{35}	tsi^{55}: **96**				
			qo^{35}kɯ^{54}: **97**					
‘tooth’	kou^{21}n̥a^{55}: **97**	m̥i^{35}: **97**	qo^{35}ɕɛ^{44}: **97**	n̥ie^{55}: **96**				
‘leaf’	mploŋ^{31}: **97**	qa^{33}nə^{55}: **97**	---	a^{44}ndlɦau^{35}: **97**				
‘maggot’	kaŋ^{55}mau^{13}: **97**	kaŋ^{44}: **97**	---	kaɯ^{55}kaɯ^{11}: **97**				

3.6 Mensural classifiers: standard measures

Standard measures are measures that are socially recognized and have a precise value. They are measures of length, time, weight, volume, etc. In the Miao languages measure words are borrowed from Chinese in a long history of social interaction. It is interesting to note that the measure words have been integrated into the Miao sound

systems. Below is the example of ‘litre’, which originates from Chinese *shēng* 升.

Table 49: The measure word ‘litre’

	Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
№ 98 Classifier		**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Measure Word	ʂən^{44}	ɕhən^{33}	ɕan^{44}	**Male-Aug**	ʂə^{55}	ʂə^{44}	ti^{55}a^{55}ʂə^{55}	di^{31}a^{55}ʂə^{55}
‘litre’				**Fem-Med**	ʂiai^{11}	ʂiai^{213}	tiai^{55}a^{55}ʂə^{55}	diai^{213}a^{11}ʂə^{55}
Classifieds				**Child-Dim**	ʂia^{11}	ʂia^{35}	tia^{55}a^{55}ʂə^{55}	dia^{55}a^{11}ʂə^{55}
‘seed’	noŋ^{43}: **98**	ŋiu^{33}: **98**	qo^{35}ŋu^{33}: **98**				tʂaɯ^{55}: **98**	
‘water’	tɬe^{31}: **98**	əu^{33}: **98**	---				au^{55}: **98**	

3.7 Mensural classifiers: non-standard measures

The set of non-standard measures is open, since many entities can be transformed into containers of some other object. Non-standard measures share the property of being vague and not socially recognized. Below, a small number of frequently used non-standard measure words are listed. To start with, the measure words ‘bowl’ and ‘cup’ have two exponents in the Miao languages: (i) **khau^{43}** (Hekou) or **kho^{55}** (Weining), (ii) the other cognate root is **nti^{24}** (Hekou), **ti^{35}** (Kaili), and **te^{53}** (Huayuan). In Hekou, only the classifier **khau^{43}** means ‘cup’, whereas **nti^{24}** implies ‘bowl’—two senses that are conflated in the measure words of other Miao languages. In Weining, the measure word **kho^{55}** may be declined in twelve forms, which is a property not shared by most other non-standard measures.

Table 50: The measure words ‘cup’, ‘bowl’

		Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
Classifier			**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Measure	**№ 99**	khau^{43}	---	---	**Aug**	kho^{55}	kho^{44}	ti^{55}a^{11}kho^{55}	di^{31}a^{55}kho^{55}
Word					**Med**	khuai^{55}	khuai^{213}	tiai^{55}a^{31}kho^{55}	diai^{213}a^{31}kho^{55}
‘cup, bowl’					**Dim**	khua^{55}	khua^{55}	tia^{55}a^{31}kho^{55}	dia^{55}a^{31}kho^{55}
Classifieds	**№ 100**	nti^{24}	ti^{35}	ʈe^{54}		---			
‘food’		mau^{55}: **100**	ka^{35}: **100**	ʎɦe^{53}: **100**			va^{11}: **100**		
‘water’		tɬe^{31}: **99**	əu^{33}: **100**	u^{35}: **100**			au^{55}: **100**		
‘soup’		kua^{44}: **99**	əu^{33}tsa^{13}: **100**	u^{35}kja^{44}: **100**			ka^{44}ka^{44}: **100**		
‘tea’		tʂhua^{31}: **99**	tɕi^{11}: **100**	ki^{22}: **100**			ka^{44}tɕi^{55}dɦu^{11}: **100**		

The noun **lo^{44}/lo^{11}** ‘mouth’ appears as non-standard measure word for speech in three of the four Miao languages surveyed. In Huayuan, the corresponding (non-cognate) form for ‘mouth’ is **ndao^{44}**.

Table 51: The measure word ‘mouth’ (for spoken words)

		Hekou	*Kaili*	*Huayuan*	*Weining Ahmao*				
Classifier			**(invariable)**		**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Measure	**№ 101**	lo^{44}	lo^{44}	---	**Aug**	lo^{11}	---	ti^{55}a^{44}lo^{44}	di^{31}a^{44}lo^{44}
Word					**Med**	lai^{11}	lai^{213}	tiai^{55}a^{44}lo^{44}	diai^{213}a^{44}lo^{44}
‘mouth’					**Dim**	la^{11}	la^{35}	ʈia^{55}a^{44}lo^{44}	dia^{55}a^{44}lo^{44}
Classifieds	**№ 102**	---	---	do^{54}		---			
‘word, language’		lo^{21}:**101**	shei^{35}:**101**	tu^{54}:**102**			lu^{44}: **101**		
‘proverb’		lo^{21}paŋ^{31}:**101**	---	tu^{54}qo^{54}tu^{54}ʐo^{31}:**102**			lu^{44}ndzʃia^{11}: **101**		
‘song’		ŋou^{31}:**95**	ɕa^{53}:**95**	sa^{44}:**95**			ŋgʃiau^{35}: **101**		

The last classifier in this series implies the meaning ‘handful of’ and has cognate exponents in two Miao languages: **thia^{33}** (Kaili) and **ntsai^{53}** (Weining).

Table 52: The measure word ‘handful’

	Kaili	*Weining Ahmao*				
№ 103 Classifier	**(invariable)**	**Register**	**Sg-def**	**Sg-indef**	**Pl-def**	**Pl-indef**
Measure Word	thia^{33}	**Male-Aug**	ntsai^{53}	ndzʃiai^{11}	ti^{55}a^{31}ndzʃiai^{31}	di^{31}a^{55}ndzʃiai^{31}
‘handful’		**Fem-Med**	ntsai^{213}	ndzʃiai^{213}	tiai^{55}a^{31}ndzʃiai^{13}	diai^{213}a^{31}ndzʃiai^{31}
Classifieds		**Child-Dim**	ntsa^{35}	ndzʃia^{35}	tia^{55}a^{31}ndzʃiai^{13}	dia^{55}a^{31}ndzʃiai^{31}
‘oats’	maŋ^{11}qa^{33}dli^{35}: **24**				ʂə^{44}ʂə^{55}: **103**	
‘vegetable’	ɣo^{33}: **103**				zau^{55}: **103**	

4. Conclusion

In this paper we have described the system of inflectional classifiers in Weining Ahmao, a Miao language spoken in western Guizhou Province of the PRC. Ahmao distinguishes for most classifiers a paradigm of twelve forms encoding size values (augmentative/medial/diminutive) and the gender or age of the speaker in terms of male/female/child. This complex system can be best understood as a product of grammaticalization resulting from the merger of two size/gender prefixes with various classifiers of the system.

Appendix: The four Miao languages surveyed

Internationally, the better known appellation for the Miao group is Hmong or Hmongic. Westerners' acquaintance with this Southeast Asian people derives primarily from the Indo-Chinese wars, in the aftermath of which more than 100,000 Hmong fled to the United States, France, and Australia. The homeland of this group is southwestern China, from which migration started in the eighteenth century to neighbouring Thailand, Laos, Vietnam, and Burma. In the 2000 census, more than 8 million Miao were reckoned to be scattered over southwestern China. In the Chinese linguistic tradition, three 'dialects' (方言) of the Miao 'language' (苗語) have been distinguished: Western, Central, and Eastern (F. Wang 1985, Niederer 1998). These dialects would correspond to the concept of language in the Western tradition if the vague notion of intelligibility was taken as a criterion. Using available sources, Niederer retrieved phonological material from 71 Miao varieties (Niederer 1998:298). Taking intelligibility as the base we would estimate that there are perhaps as many as 100 Miao languages in Southeast Asia. In fact, taking intelligibility alone as the criterion we would estimate that there are perhaps 100 Miao languages in southwestern China.

Table 53: Background information on the Miao languages cited

Language	*Branch*	*Location*	*Number of speakers*
① Hekou Hmong	Western	China/Yunnan/Honghe (Hekou…)	ca. 500,000
② Kaili Hmu-Qanao	Central	China/Guizhou/Kaili (Kaili…)	total ca. 1,800,000
③ Huayuan Qoxung	Eastern	China/Hunan/Xiangxi (Huayuan…)	ca. 50,000
④ Weining Ahmao	Between Central/Western	China/Guizhou/Bijie (Weining…)	ca. 350,000

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在孤立型語言中的屈折量詞：威寧苗語的稀有現象

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本文分析了在孤立型語言中少見的量詞系統。威寧苗語是中國貴州西部苗瑤語系中的一種語言，每個量詞可有十二種屈折變化的形式，在亞洲其他的孤立型語言中沒有這種現象，包括其他苗語也不存在這種現象，除威寧苗語外，其他語言的每個量詞只是一個單獨的詞，不能有屈折變化。本文著重從共時語音、語義、語用及句法結構的角度分析了威寧苗語的量詞系統。並在文章附錄列出了三種苗語和威寧苗語對應關係的量詞。

關鍵詞：屈折量詞，大小量詞，索引，威寧苗語