PUZZLING OVER PHULA:
Toward the Synthesis and Statement of a Sub-branch[1]

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The ethnonym 'Phula' has long been used to refer to the speakers of a series of Ngwi (Loloish) languages in SE Yunnan Province, China, and North Vietnam. Until recently, however, very little had been done to describe, document, and compare these varieties. In recent years Wang (2004), Pelkey (2004), Edmondson (2003), HHYC (2002), Fried (2000), Edmondson and Ziwo (1999), and Wu (1996) have offered preliminary descriptions of several Phula varieties, but the greater contextual panorama to which these lects belong has remained puzzling and undefined. In addition, much about Phula interrelationships, distribution, population, history, and genetic affiliation has remained fragmented and unclear. In response, this article seeks to present a summarized but holistic overview of the reported Phula varieties. Drawing on personal field research and insights gleaned from Chinese and English sources, the article presents a history of Phula languages and linguistics, sifts through the current complexities of Phula classification, and reports on a newly described Phula language, Phowa. The article also furthers the work of situating Phula genetically within the Ngwi branch, offering evidence in support of Bradley's (2002) proposal that Phula be assigned to a fourth sub-branch of Ngwi. While only a summary introduction to (as opposed to a conclusive definition of) what remains a largely unresearched array of language varieties, this article can be a substantial foundation for future definitions and research on the languages called Phula.

Keywords: Tibeto-Burman, Yi, Phula, Yunnan, endangered languages

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1. INTRODUCTION

For hundreds of years, local residents and historians on both sides of the Sino-Vietnam border have used the ethnonym 'Phula' in reference to a series of ethnic groups with ostensible, but largely unexamined, socio-historical and linguistic affiliation. Recent years have seen a minor surge of interest in a handful of these varieties— each thought to belong to the Ngwi (Loloish)[2] branch of SE Tibeto-Burman (Bradley 1997:43, 2002:106); nevertheless, Phula languages on the whole have gone overlooked and undefined in Tibeto-Burman linguistics—a situation this article seeks to examine and counteract.

In Vietnam the ethnonym 'Phula' now denotes an official nationality; yet in China—home to over 95% of the Phula population—ethnic groups referred to as 'Phula' are subsumed under the Yi nationality. Nevertheless, across three prefectures of southeast Yunnan Province, the Phula title consistently surfaces as an ethnolinguistic distinction in local exonyms, vernacular autonyms, and regional ethnohistorical records alike. Phula speakers, furthermore, validate their affiliation with other reported Phula varieties. Although these groups have received increasing attention in recent years (Pelkey 2004, 2005; Pelkey, Wang & Johnson 2005; Wang 2003, 2004; Edmondson 2003; HHYC 2002; Fried 2000; Edmondson and Ziwo 1999; Wu 1996a-b, 1997), both Chinese and English sources have been fairly fragmentary in their respective approaches to Phula. English sources have focused almost exclusively on the Phula varieties of Vietnam, and most Chinese sources introducing new Phula dialects in Yunnan have described such varieties as relative isolates. Facts and figures on Phula often conflict from source to source; categories and nomenclature are frequently confused as well. As a result, in spite of

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[2]   Ngwi is now recommended by Bradley (2004) as a diachronically favored replacement for 'Loloish' ('Lolo' being a derogatory title in China) and alternate titles such as 'Yi group', 'Ni', and 'Yipho.'

a slowly growing notoriety, Phula has remained virtually undefined as an ethnolinguistic entity. In response, this article seeks to present a summarized, yet holistic, panorama of the 'puzzling' Phula situation in SW China and N Vietnam. This will be done by examining the history of Phula languages and linguistics, by sorting through the current complexities of Phula classification, and by reporting on a newly described Phula language, *Phowa*. In the process, the article endeavors to synthesize recent scholarship on Phula varieties, begin defining Phula as an ethnolinguistic entity, work toward situating Phula genetically within the Ngwi branch, and propose appropriate pathways for approaching the Phula varieties in future research and analysis.

The remaining unresearched Yi languages are both manifold in numbers and ramified in subdivisions. Bradley and Bradley (2002:95) predict that 50 more languages wait to be identified from among the Yi Nationality in Yunnan alone. Gerner (2002:11) predicts that the total count of (mutually unintelligible) Yi languages will eventually stand between 100 and 150. Clearly, much work remains to be done simply in order to document these languages. Multiple fresh Yi languages await identification from within the Phula group alone; yet, as has been illustrated best by Heijdra (1998), trying to untangle the status of even óne of the hidden Yi varieties can be a tedious task. Many riddles must first be unraveled.

2. PHULA HISTORY

With the exception of Abo (WSXZ 1999:184), none of the Phula languages are known to have had a written form prior to 1987. Because of this, an overview of Phula history must be gained through a combination of oral tradition and Chinese historical records.

2.1 Patterns of Migration

Facts gleaned from various Chinese historians indicate that most Phula emigrated from present-day Dali and Lijiang Prefectures in three major waves during the Nanzhao and Dali Kingdom periods—between 718-1253 AD (HHYC 2002:43-83, WSZZ 2000:388-91, WSXZ 1999:184). Accordingly, today, there are three principal Phula population centers—each roughly corresponding with a major historical migration terminus (See Map: Figure 1). One major wave of migration departed from the Diancang Mountains (点苍山) of Dali and followed the Honghe River into present-day Yuxi and Honghe Prefectures where the Phula still live today along the banks of the Honghe River. Owing to this wave of migration, the middle waters of the Honghe River came to be called 濮水(Pú Shuǐ) or 'Phu River' historically (HHYC 2002, WSZZ 2000). A second wave of Phula migrated to the shores of Dianchi Lake before finally moving further south to settle in the broad basin of what is now northwestern Mengzi and southeastern Kaiyuan Counties. Later, during the Yuan and Ming Dynasties (1271-1644 AD), however, this population pocket dispersed into the mountains of these and several surrounding counties (HHYC 2002:83). A third Phula population center was established in the western parts of present-day Wenshan Prefecture. Most of the Phula in this pocket are reported to have arrived before the end of the Tang Dynasty in 907 AD (WSXZ 1999:184).

Later, during the 15th and 18th centuries, according to Edmondson (2003), some Phula also migrated into Vietnam in order to escape political turmoil and/or other difficulties.

2.2 Current Distribution

Today the Phula population is distributed through 19 counties of southeastern Yunnan Province, China and crosses the border into four provinces of N Vietnam, (Figure 1). The mountainous expanse of terrain which the Phula inhabit spans some 350km from east to

west and 300km from north to south. Note their current distribution in Figure 1 (see footnote 6, below Table 1, p. 73, for abbreviations).
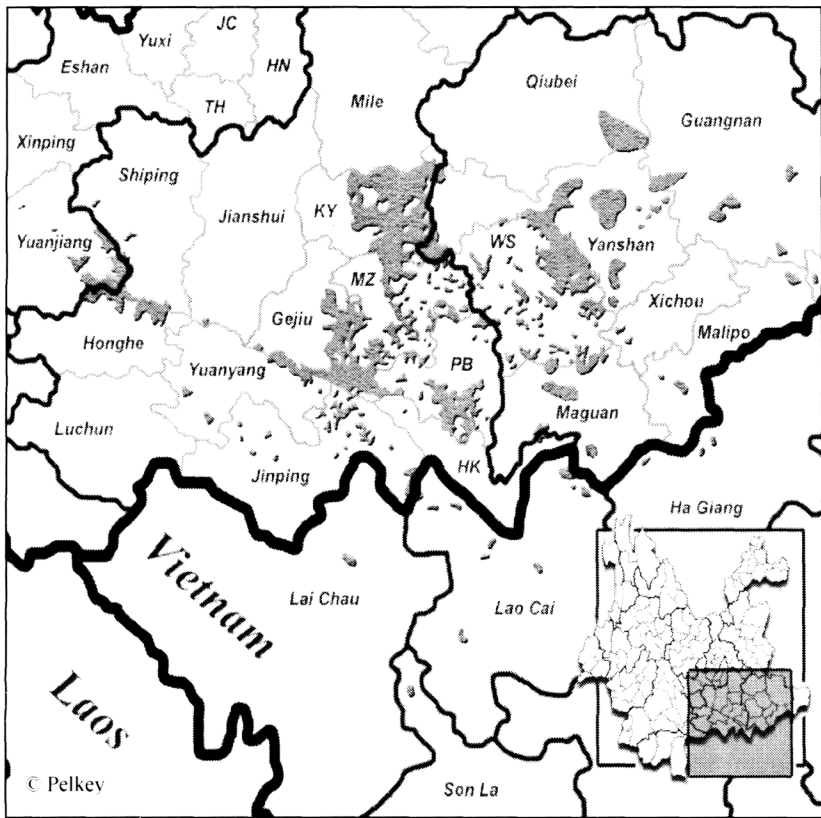

Figure 1. Preliminary distribution map of Phula varieties

3. CURRENT ETHNOLINGUISTIC CLASSIFICATIONS

Officially speaking, Phula varieties are granted nationality status in Vietnam, where their ethnonym is rendered, 'Phù Lá.' In China, however, Phula varieties are subsumed under the agglomerate Yi Nationality (彝族) and are referred to as branches of Yi. In Chinese sources, the Phula ethnonym is generally written 仆拉 *púlā*, 濮拉

pǔlā or 朴喇 *pǔlǎ*. These two official classifications contrast simply because they are motivated by differing criteria and demographics. This article does not aim to contend with either of these classifications; it aims, rather, to assert that Phula's ethnolinguistic situation is more complex than either of these two official classifications **intend** to signify. Sun (1992:9), acting as a spokesperson for China's policy on language recognition, stresses, "we admit that nationality and language are related, but we definitely do not equate the two." Sun explains several important ways in which China looks favorably on the recognition of newly discovered languages spoken within pre-defined official nationalities. He then states, "Our country has many nationalities and many languages, but exactly how many is still not clear . . . This is a question of our national demographic situation, and linguists have a responsibility to clarify the facts" (1992:7).

In order to begin clarifying the facts of the Phula ethnolinguistic situation, it will be helpful to examine the current status of Phula subclassifications in both China and Vietnam.

3.1 The Phula of Vietnam

Although the overwhelming bulk of the Phula population and the majority of the Phula speech varieties are located in China, the Vietnam Phula have received much more attention in the Western linguistic literature. This is due largely to the groundbreaking work of Jerold Edmondson who has, in recent years, focused on documenting endangered languages in the region.

The Vietnam Phula population stands around 6,500 (Fried 2000) and is distributed in scattered pockets in Lai Chau, Lao Cai, Son La, and Ha Giang provinces. As has been noted by Schliesinger (1998), Edmondson (2003), and others, folk subclassifications of Phula in Vietnam are numerous. Such descriptive designations as 'Flowery Phula,' 'White Phula,' 'Black Phula' and 'Han Phula' provide

useful clues, but are ultimately unreliable for positing linguistic distinctions.

Using more formal measures, Edmondson (2003), Edmondson and Ziwo (1999) and Fried (2000) have identified two distinct languages subsumed under the Vietnam Phula Nationality: *Phukhla* and *Xá Phó*. Edmondson notes that while the two have undergone a historical split in their velar/alveolar-lateral cluster initials, the two varieties share a close genetic relationship.

3.2 The Phula of China

With the exception of a brief treatment by Pelkey (2004), no known attempt has been made to describe the Phula varieties as a distinct ethnolinguistic entity in China. This is certainly due to the overshadowing nature of their official classification as Yi since 1957, which has made any further ethnolinguistic definition a sensitive venture. Due to their official classification as Yi, the Phula of China are not immediately accessible as a cohesive unit in terms of population, sub-grouping, linguistic data, or history. Nevertheless, much evidence in Chinese sources indicates the Phula have been locally recognized as a coherent ethnolinguistic designation in Yunnan for hundreds of years. These clues are scattered among regional Chinese ethno-historical and linguistic sources that span the breadth of three contiguous prefectures: Yuxi (玉溪市), Honghe (红河州) and Wenshan (文山州). Local Chinese residents in Phula areas of these three prefectures further confirm this grouping through their own ethnic folk-taxonomies.

3.2.1 Official Phula subclassifications

Regional Yunnan sources formally subclassify the Phula groups of a given area according to the official Chinese ethnolinguistic taxonomy of the Yi nationality—a taxonomy which divides the Yi into six sub-varieties based both on ethnolinguistic similarity and geographic location: Northern, Southern, Eastern, Western, Central,

and Southeastern (Chen, Bian, and Li 1985, ZSKY 1994). See Bradley (1996) for a visual illustration of the well-bounded six Yi 'dialect' areas. Basically, each of the six sub-divisions are represented by one or two key languages. These representatives, Nuosu (Northern), Nasu (Eastern), Nisu (Southern), Lolopho (Central), Lalo (Western) and Sani (Southeastern) have come to be known as the six major Yi languages. Other diversity is allowed for by assigning county names to unique speech varieties located within one of the six geographic regions. The relatively well-known Axi language, for example, is officially subclassified as the *Mǐlè tǔyǔ* (弥勒土语), literally, the '*Mile* vernacular' (ZSKY 1994:775).

Interestingly, however, the Phula varieties are geographically distributed in such a way that they straddle two macro-regions of this official schematic. The Phula varieties spoken in Honghe County, for example, are classified as 'Southern Yi' (HHXZ 1991:100) while the Phula varieties spoken in Wenshan Prefecture are referred to as 'Southeastern Yi' (WSZZ 2000:394). A Phula variety that happens to be spoken in a geographically marginal area between these two regions, however, confuses even Chinese linguists: "Some consider the Muji vernacular to be a Southeastern Yi variety; others hold that it is a Southern Yi variety" (HHYC 2003:214). As will be detailed in Section 7.1.2 below, such geo-ethnolinguistic subclassifications can sometimes be confusing to linguists outside of China as well. Two important principles should be emphasized here for clarity.

First, it must be stressed that the Chinese subclassification system for Yi languages is not intended to be purely linguistic. Bradley (1979, 1997, 2002) working from a diachronic linguistic analysis, has concluded, for example, that the Nisu, Nasu, and Nuosu varieties are constituents of one branch of Ngwi (Northern) while Lolopho, Lalo, and Sani are constituents of a separate branch of Ngwi (Central)—the latter branch sharing more similarities with

other Ngwi languages such as Lisu, Lahu and Jinuo than it shares with the Nisu, Nasu, or Nuosu languages.

A second point should also be made explicit: the current usages of the term 'Yi' in both Chinese and Western linguistics vary widely in range of meaning. The three most commonly intended meanings are the following:

1. 'Yi' can function as a metonymic reference to the most vital and prototypical member of the Yi nationality—namely, **Nuosu**.
2. 'Yi' can be used to refer to the **Ngwi** (or Loloish) branch of Tibeto-Burman's Burmese-Ngwi group. Thus 'Yi' in this sense includes such diverse languages as Akha, Bisu, Lahu, and Nasu.
3. 'Yi' can be used to refer to the '**Yi nationality**' itself and/or constituent speech varieties included in the nationality.

At times the meaning of the term 'Yi' is difficult to establish even in context. Thus, it must be borne in mind that the Phula varieties are 'Yi' languages in at least two distinct senses—linguistically (Ngwi) and officially (Yi nationality).

3.2.2   *Local ethno-historical classification*

Moving beyond Phula's official subclassifications, Chinese sources also refer to an ethno-historical distinction between Phula varieties and non-Phula varieties classified as Yi in southeastern Yunnan—a distinction that holds great influence into the present day. Ethno-historical Chinese sources from both county and prefectural levels of Yunnan Province consistently report a fundamental distinction between the Phula 'branch' (支系) of Yi and the Lolo and/or Nisu 'branch' of Yi in a given region (see, for example, WSXZ 1999, WSZZ 2000, MZXZ 1995, HHXZ 1991). This major division is

defined according to historic, linguistic, and ethnographic differences. Interestingly, this distinction also mirrors the official ethnic division between the Lolo nationality and the Phula nationality in Vietnam.

Local Han Chinese living in Honghe and Wenshan Prefectures of southeastern Yunnan further confirm this fundamental distinction between the Phula and Lolo/Nisu groups. Consistently, local Han Chinese in a given county of this region refer to the Lolo/Nisu groups in their county as *Yizu* (彝族) but refer to the Phula groups living in their county as *Puzu* (仆族) or 'Phu nationality.' A local tourist map recently produced in Mengzi County even inadvertently published the title 仆族 *púzú* in one of its captions before being recalled for more circumspect editing. While policy and pragmatic considerations cannot allow for such a title in formal spheres, the widespread colloquial usage of this ethnonym adds further proof of a long-standing ethnic distinction.

3.2.3   *Nomenclature and intelligibility*

While the Phula vs. Lolo/Nisu distinction is, in itself, a significant one, recently published Chinese sources also report numerous ethnolinguistic subgroups within the Phula 'branch' itself. A collection of 21 such Phula subgroups reported in Chinese sources is listed in Table 1 (which begins on p. 70) along with autonyms, exonyms, estimated populations, counties of distribution and the respective sources which make reference to them.

Of course, autonyms are not reliable guides for determining linguistic varieties or historical relationships. Variations of the syllable *Pu*, for example, are used by numerous ethnic groups in Southeast Asia to mean 'people'—ethnic groups hailing from three major language families (Tibeto-Burman, Mon-Khmer, and Tai-Kadai) in the region. Furthermore, autonyms often develop from

village names—as is the case with the Ani listed in Table 1.[3] On the other hand, some Phula varieties listed in Table 1 are very likely to contain more than one unintelligible dialect. Gerner (2002:14-15), for example, considers the Phola of Gejiu and the Phola of Yuanjiang to be mutually unintelligible varieties even though they share the same autonym.

Naturally, then, nomenclature can only be taken as a starting point for further linguistic inquiry among the Phula sub-groups listed in Table 1. In the case of the Phula groups, however, autonym distinctions should prove to be particularly helpful. ZSKY (1994:776) reports that language differences between Yi varieties in Southeastern Yunnan are especially diverse and then goes on to say, "There is a definite relationship between the differences among the varieties of Yi and the many branches and autonyms of each; except for a few with different autonyms that are mutually intelligible, the majority of people with different autonyms cannot understand each other's speech." As Sun (1992:10) notes, "the differences between Yi dialects are much greater than those between the different languages within the Mongolic and Manchu-Tungusic families." As will be detailed in Section 5.2 below, a few sources have published statistics regarding the lexical similarity of Phula 'dialects' in both China and Vietnam. In every case these statistics indicate significant lexical diversity—diversity that, by all accounts (cf. Casad 1987:57), is wide enough in itself to posit the presence of unintelligible speech varieties.

4. PHULA POPULATION

Since no official Phula population counts are available in China, numbers must be gleaned, subtracted, projected, and combined from

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[3] Although the autonym 'Ani' originates from a village name. Pho speakers who refer to themselves as 'Ani' exhibit distinct dialectal sound shifts compared to a (reportedly intelligible) Pho dialect spoken directly to the South of them—a few hours walk away.

numerous Chinese geographic, demographic, cartographic, and ethnographic reports which make reference to the Yi nationality. Having undertaken this process and updated the numbers to reflect 2000 census statistics detailing Yi populations per-county (CSP 2002), I estimate the total Phula population in China to stand around 400,000. Table 1 includes an estimated population breakdown by reported ethnolinguistic sub-variety.

Combining the calculated Phula population in Yunnan with the Vietnam Phula population, I estimate the total, cross-border Phula population to be just over 400,000. Although these figures do not claim to report the number of Phula **speakers**—a number which reportedly stands at only a fraction of the ethnic Phula population in Vietnam—language usage among the Phula groups of Yunnan is more vital (see WSXZ 1999, Ziwo 2003, Wang 2003). Naturally, this vitality is most apparent in remote regions.

The Phula varieties with which I have had personal contact all include significantly mixed villages in peripheral areas and/or isolated population pockets surrounded by Han Chinese and/or other minorities. In many such villages children have ceased to speak Phula and the middle aged and/or elderly are the only remaining speakers. Nevertheless, most Phula villages are relatively remote. In such villages the children do not learn to speak Chinese until they begin elementary school. Thus, an estimated 75% language retention is still quite probable for Phula varieties as a whole. If this proves true, the total Phula speaking population might still be around 300,000.

5.   PREVIOUS LINGUISTIC RESEARCH ON PHULA

Known previous research on Phula languages can be broken down into three eras: (1) Pre-1950, (2) 1950's-1970's, and (3) 1990's-present. As will be made clear below, most Phula linguistic research has been limited to lexical comparisons. Very little language data and very few linguistic descriptions have been published.

5.1 Pre-1950 Phula research

According to Fu (1950), the Phula varieties of China were first documented in Western literature by F.S.A. Bourne as early as 1888 in the form of two 38-item word lists. Linguistic work was begun on Phula dialects in Vietnam as early as 1906 through the comparative work of Etienne Edmond Lunet de Lajonquière. This research was followed up by Claudius Madrolle in 1908 and Alfred Liétard in 1909 (the latter giving it the name "Phupha"). None of these brief treatments focuses attention on Phula in particular; most simply include data from a Phula dialect as part of the content of brief lexical comparisons between various Tibeto-Burman languages.

5.2 Phula research: 1950's-1970's

Robert Shafer considered a sampling of Phula data in his 1952 paper. Research on Chinese Phula varieties was also carried out in the 1950's as part of the nationwide ethnolinguistic survey of the People's Republic of China. No Phula data from this survey is known to have been published, however (with the possible exception of Wu 1997).

In 1975, according to Edmondson and Ziwo (1999), research on the Phula varieties of Vietnam was undertaken by Vietnamese linguist Nguyễn Văn Huy. In his 13 page article, Nguyễn claims that out of three major dialects classified as Phula in Vietnam none share greater than 65% lexical similarity—most sharing 50% or less.

5.3 Phula research: 1990's-present

Most research on the Phula languages has been published since 1990. This new epoch for Phula studies is especially notable in Chinese sources. First of all, many references have recently been made to the Phula languages of southeast Yunnan in local ethno-historical Chinese sources. Most of the Chinese sources listed in Table 1 are such sources.

Although very little linguistic data is ever offered in these sources, many clues are given regarding the status and ethnic identity of Phula varieties in China. Furthermore, statistics reporting lexical similarity are sometimes published in such sources. In reference to the autonyms listed in Table 1, WSZZ (2000:394) reports that Tula shares 54% lexical similarity with Pholuo and 58% lexical similarity with Phowa. MZXZ (1995:131) reports that Muji and Phowa share 50% lexical similarity, GJMZ (1990) reports 70% lexical similarity between Phola and Muji, ZSKY (1994:636) reports that the Yi varieties of Pingbian County (including at least five Phula varieties) show 40% lexical similarity on average. In most cases, however, the criteria used for determining such lexical similarity is left unreported, and, in at least one case lexical similarity facts even appear to conflict source-internally: Zuoke and Azha lexical similarity is listed in WSZZ (2000:394) at both 60% and 30%.

In 1991 Wu Zili presented selective but rich data from six Chinese Phula varieties in a paper delivered to the Yi-Burmese Linguistics Conference in Xichang, Sichuan (Wu 1997). The paper discusses lateral clusters in minority languages of southwest China. Five years later Wu (1996a-b) went on to publish the first known description of a Phula language's phonology and grammar: His two articles on Azha (13 pp.) offer very concentrated insight into one of the major Phula languages. In 1999 Edmondson and Ziwo introduced one of Nguyễn's Vietnam varieties, Xá Phó, or Laghuu to the Western linguistic literature. The article gives a phonological sketch of the language and a brief word list. In 2000 Fried introduced another new Vietnam Phula variety which uses the autonym Phukha or Phukhla. In his work, Fried presents a phonological sketch of Phukhla and a 573 item wordlist comparing Phukha and Xá Phó. He finds that the two languages have only 42% lexical similarity. In 2002 the editorial committee of

the Honghe Yi encyclopedic dictionary, HHYC (2002), published historical facts and demographic figures related to several Phula varieties along with phonological inventories of two previously undescribed Phula languages. The next year, Edmondson (2003) presented relationships between two Vietnam Phula varieties and compared lateral clusters between these and a number of other Phula languages in Yunnan. Around the same time, Wang Chengyou published a brief but detailed description (32 pp.) of a Phula language spoken in central Kaiyuan county (Wang 2003). Wang reports that this variety of Phula uses the autonym $p^ho^{21}a^{33}$. The location he details in his introduction corresponds with the Phula variety listed in Table 1 as Asahei. His work includes a grammatical and phonological sketch of the language which he later reworked and republished (Wang 2004) with the addition of a 685-item wordlist. In early 2004, Pelkey (2004) attempted a preliminary consolidation of the China Phula varieties as an introduction to a larger work dedicated to a description and analysis of Ani Phowa— a Phula variety spoken in Mengzi County. This work includes preliminary phonology and grammar sketches, an analysis of Phowa verbal semantics, a 927-item wordlist, and an interlinearized Phowa narrative. Finally, in 2005 Pelkey (2005) provided further analysis of Anipho Phowa, and Pelkey,Wang and Johnson (2005) presented a phonological analysis of a new variety of Azha.

6. PHULA LINGUISTIC FEATURES

In addition to being distinct ethnically and historically, the Phula are also distinct linguistically. Typologically, Phula languages exhibit a wide variety of consonant initials and clustered initials. Furthermore, most known Phula languages have developed a series of alveolar-lateral and/or velar-lateral clusters that are not found elsewhere in Tibeto-Burman languages and are rarely found in other Ngwi languages. Phula languages make use of numerous syllabic consonants—including syllabic fricatives—and frequently utilize

back-vowel and/or central vowel rounding contrasts. Most known Phula languages have a tense-lax phonation contrast, and some retain consonant finals. Phula languages usually have five tonemes and utilize contour tonal contrasts. In spite of such systemic similarities, Phula varieties are often reported to exhibit wide lexical diversity. More Phula phonological features will be discussed in Section 7.1.1

The Phula languages are also likely to have distinguishing morphological, lexical, syntactic, pragmatic, and textual features. Very little documentation has been done on Phula languages in these regards, however, and no comparative work is known to have been undertaken.

6.1 *Ani Phowa: a newly described Phula variety*

In order to illustrate some of the distinguishing features of Phula phonology, the Ani Phowa sound system will be given a brief introduction below. Ani Phowa (hereafter simply "Phowa") is a newly described Phula variety spoken in Xibeile district of Mengzi county, Honghe prefecture, Yunnan province, China. The data below is adapted from Pelkey (2004).

p	t				k
pʰ	tʰ				kʰ
b	d				ɡ
	ts	tɬ	tɕ	tʂ	
	tsʰ	tɬʰ	tɕʰ	tʂʰ	
	dz	dʒ	dʑ	dʐ	
f	s	ɬ	ɕ	ʂ	χ
v	z	ɮ	ʑ	ʐ	ʁ
ʔv	ʔz		ʔʑ		
m	n			ŋ	
w	ɹ		j		

Table 2. Phowa consonants

As can be noted in Table 2, Phowa exhibits 42 contrastive consonant initials.

Although some Phula languages retain syllable-final consonant distinctions, Phowa does not. With initials at seven places of articulation, however, Phowa exhibits a diversity of consonant initials typical of Phula languages as a whole. Besides acting as initials, the approximates, /w, ɹ, j/ may also occur as glides in numerous consonant-glide combinations.

While four manners of articulation of stop-initials (voiced, voiceless, aspirated, and prenasalized) are evident in slow Phowa speech, prenasalization is an allophonic quality of plain voicing and is neither a phonemic nor a phonetic feature in normal speech.

The alveolar-lateral cluster series /tɬ, tɬʰ, dʑ/ represents an especially characteristic feature of Phula languages. Note the following examples:

(1)	/tɬ /	ni^{33}tɬa^{22}	'mud'	tɬi^{33}	'load(v)'
(2)	/tɬʰ /	i^{33}tɬʰa^{22}	'hair'	tɬʰŋ^{22}də^{21}	'bladder'
(3)	/dʑ /	dʑa^{21}ma^{21}	'honeybee'	dʑ^{24}	'plait(v)'

Interestingly, a corresponding velar-lateral series [kɬ, kɬʰ, gʑ] is in free- variation with this series of clusters. Wu (1997) and Edmondson (2003) consider the development and relationships of such lateral clusters in more detail.

The eleven contrastive Phowa vowel-finals are listed in Table 3:

i		ɨ	ɯ	u
	e			o
		ə		
	ɛ		ʌ	ɔ
		a		

Table 3. Phowa vowels

The ±round back-vowel contrasts illustrate another characteristic feature of Phula languages. In some Phula varieties, central vowels also exhibit rounding contrasts. Diphthongs in Phowa occur almost exclusively in loan words.

Phowa utilizes five tonal contrasts: high /⁵⁵/, mid /³³/, low /²²/, low-rising /²⁴/, and low-falling /²¹/. Note the following examples:

(4)   na⁵⁵   na³³   na²²   na²⁴   na²¹
        'smell'   'touch' 'many'   'tiger'   'be sick'

(5)   kɨ⁵⁵   kɨ³³   kɨ²²   kɨ²⁴   gɨ²¹
        'CMPV'⁴   'enter' 'all'   'speak'   'marry a husband'

Phowa also incorporates a tense-lax phonation contrast which usually occurs on the low-falling tone but has also been noted to co-occur with all five tonemes. Depending on environment, tense voice is phonetically realized in several voice alterations including laryngealization, nasalization, and a constricted breathy quality. No consistent diachronic correspondences have yet been established for Phowa tense voice; although Proto-Ngwi stop-final syllables sometimes have tense-voice reflexes in Phowa (e.g., *(ʃ)-pap^L → /tsʰɯ³³pʰʌ²¹/, 'lungs'; *C-nak^H → /ni̤³³/, 'black'), this is often not the case (e.g., *s-mut^H → /mu²¹/, 'blow'; C-pak^L → /kə³³pʰe²²/, 'leaf'). More research is needed.

7. THE STATUS OF PHULA

The horizon for Phula research is bright from several vantage points, but the research questions are as numerous as the prospects. First of all, the genetic relationships between Phula varieties and other Ngwi languages are unclear and in need of careful investigation. Furthermore, most Phula languages are undocumented linguistically

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⁴   Completive Aspect

and none have received thorough linguistic treatment. Lastly, as Section 4 has already alluded to, virtually all Phula languages should qualify as endangered.

7.1 *Phula's place in the Ngwi group*

The Phula languages for which data is available all show evidence of a two-way tonal contrast in syllables that were originally stop-final. Although this shared innovation qualifies them as Ngwi languages, one of the most puzzling dilemmas facing Phula linguistics is the place of the Phula languages within the Ngwi group. Two principal classification schemas vie for credence in the region—the Chinese based geography oriented ethnolinguistic schema explained in Section 3.2.1 and the phonological systems comparison model developed by Bradley (1979, 1997, 2002). The explanatory power of Bradley's model has aided Ngwi subclassification for over two decades, and the Chinese geo-ethnolinguistic schema has been helpful in identifying the presence of distinct speech varieties at the county level. Both systems, along with the problems they pose for Phula linguistic classification, will be considered in turn below.

7.1.1 *Genetic linguistic affiliation*

Using the comparative method, Bradley (1979, 1997, 2002), building on Matisoff (1972), has established three sub-branches of Ngwi: Northern, Southern, and Central. Bradley (2002) also introduces a fourth branch, 'Southeastern Loloish,' but—in the absence of adequate data—lists no shared innovations or linguistic similarities to define it. He has defined each of the three established sub-branches by identifying unique systems of shared innovations that have developed in different languages as reflexes of Proto-Ngwi phonological features—features such as tone class, initial consonant clusters, prefixes, and consonant codas. The most salient innovations of each of the Ngwi sub-branches are listed below:

♦ <u>Northern Ngwi</u>: Reversal of tonal values ('tonal flip-flop') for the *high (*H) and *low (*L) tones of checked syllables. Merger of *tones 1 and 2 in *non-checked syllables. Low-falling reflex of *tone 3 (in *non-checked syllables). Voiceless nasal reflexes of *ʔn & *Sm. Preservation of prenasalized stop initials.

♦ <u>Central Ngwi</u>: Splitting of *tones 1 and 2 (*non-checked syllables). Glottal stop finals occur as reflexes of *stop finals. Aspirated reflexes of *ʔ- prefixed voiceless stop initials. Complex tonal innovations resulting in 5 or more tones (often including rising tones).

♦ <u>Southern Ngwi</u>: More conservative preservation of consonant finals. Unaspirated reflexes of *ʔ- prefixed voiceless stop initials. Innovative reflexes of *initials.

While the known Phula varieties have many Ngwi characteristics, the nature of their genetic affiliation with the three established branches of Ngwi is far from clear. Referencing Bradley's model, Edmondson (2003) holds that the Phula languages of Vietnam are Northern Ngwi and implies that the Yunnan Phula varieties are also of the same stock. Fried (2000) finds evidence for a Northern Ngwi interpretation for Phukhla and Xá Phó, but indicates that the data are inconclusive. While many Phula varieties have phonological features in common with Northern Ngwi languages, they also share similarities with Central and Southern Ngwi languages. Bradley (1997) classifies two different Phula languages—Azha and an unspecified variety of Phula—in Central and Northern Ngwi, respectively. Later, in Bradley (2002), however, he re-lists Phula as Southeastern Loloish but leaves Azha in the Central Loloish sub-branch. It will be helpful to take a closer look at the phonological system features of the four Phula languages that have been most thoroughly documented to date: two spoken in

China—Phowa and Azha (personal data) and two spoken in Vietnam—Phukhla and Xá Phó (data from Fried (2000)).

Note how these four Phula languages rate when subjected to Northern [**N**], Central [**C**], and Southern [**S**] Ngwi testing criteria in Table 4. Also note the characteristics unique [**U**] to these Phula varieties.

		Phowa	Azha	Phukhla	Xá Phó
	Proto-checked tonal flip-flop	Sparse	Sparse	Sparse	Sparse
	Merger of *tones 1 and 2	No	No	No	No
N	*Tone 3 becomes low-falling	No	No	No	No
	*ʔn & *Sm become voiceless nasals	No	No	No	No
	Preservation of prenasalized stop initials	No	No	Yes	Yes
	Tone splitting of *1 and *2	Yes	Yes	No	Yes
	*Final stops → glottal stops	No	No	Some	No
C	Aspirated reflexes of *ʔ+vl. stop	Some	Some	Some	Some
	Complex tonal innovations with 5+ tones	Yes	Yes	Maybe[5]	Yes
	Preservation of final consonants	No	No	Some	Nasals
S	Innovative with *initials	Some	Some	Some	Some
	Unaspirated reflexes of *ʔ+vl. stop	Some	Some	Some	Some
	Lateral cluster reflexes[6]	Yes	Yes	Yes	Yes
U	Merger of *L & *H; partially preserved *L	Most	Most	Most	Most
	Partial 'bleaching' of *tones 1-3	Yes	Yes	Yes	Yes

Table 4. Genetic testing results for four Phula varieties

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[5] Fried (2000:27) lists a fifth glottalized tone for Phukhla, but Edmondson (2003:308) evidently gives this feature a different interpretation.

[6] Edmondson (2003:311) considers these lateral clusters to be reflexes of Proto-Ngwi labial clusters or the prefixes *rn- or *ʔ-.

The results indicate that none of the documented Phula varieties are clear cases for genetic classification within Bradley's current model. Although Phukhla and Xá Phó rank higher than Phowa and Azha in Northern Ngwi characteristics, a Northern Ngwi interpretation is not a compelling choice for any of the four languages in light of their simultaneous Southern and Central qualifications.

With these results in mind, a brief discussion is in order regarding the proto-checked tonal flip-flop criterion—usually considered to be the key characteristic of Northern Ngwi varieties. While all four of the Phula varieties listed in Table 4 show some signs of the classic tonal flip-flop in *checked syllables, they show just as many signs of preserving the original distinction. The most dominant pattern regarding *checked tonal reflexes in these four Phula languages, however is a general merger of both *L and *H to mid-level tone /33/ (though more *L syllables changed to /33/ than *H syllables). Note the *checked tone reflex patterns for these four languages compiled in Table 5. An average of 40 correspondences were compared for each language:

	Phowa	Azha	Phukhla	Xá Phó
Confirmed *tonal flip-flop	28%	22%	26%	10%
Merger to mid-level tone	**50%**	**44%**	**26%**	**54%**
Preservation of *L or *H	19%	33%	24%	31%
Rising contour reflex of *L and/or *H	03%	0%	24%	04%

Table 5. Phula reflexes of proto-checked tones

Although Phukhla shows the least evidence of an *L/*H merger into a mid-level tone, it evidences a different type of *checked-tone merger through the development of its mid-rising /35/ tone, which has reflexes from both *H and *L tones—once again, largely as a reflex of *L (70%) but also as a reflex of *H (30%). Thus, in regard

to *checked tones, the Phula languages show greater evidence of mergers and preservations of the Proto-Ngwi values than they do of tonal flip-flop. Nevertheless, reverse values also occur in each of the analyzed varieties.

Naturally, such results call into question whether or not Phula tone is cognate with Proto-Ngwi at all. Since much other morphological and lexical evidence is still in favor of the Phula varieties being classified as Ngwi languages, however, explanations for tonal developments should be forthcoming. Fried (2000:72) suggests that *tonal non-correspondences in Phukhla and Xá Phó may be due to a merger of tones in history past which later re-split. An analogous set of changes is widely accepted as a valid account of Mandarin tonal developments (cf. Norman 2003:77-8). Further research will likely demonstrate some such similar series of mergers and re-splits for the Phula varieties.

Each of the Phula varieties considered in Table 4 is a somewhat stronger candidate for a Central Ngwi interpretation, but all fail to qualify strongly in one of the chief categories distinguishing Southern and Central Ngwi from each other—namely, aspirated reflexes of *?-prefixed voiceless stop initials. Phowa and Azha both have an equal number of aspirated and unaspirated reflexes while Phukhla and Xá Phó share, roughly, a 30-70% split—both having more unaspirated than aspirated reflexes. While this adds evidence in favor of a Southern Ngwi interpretation, evidence in favor of the other two established sub-branches of Ngwi nullifies such an interpretation.

All things considered, none of the documented varieties of Phula—including Azha—clearly qualifies for any one of the established branches of Ngwi. Ironically, this is as much due to their partial qualification in each of the three current categories (Northern, Central, and Southern) as it is due to their lacking qualifications for each category. Coupling this ambivalence with the proposed, preliminary sub-set of characteristics uniquely shared by the best

documented Phula varieties to date (listed in part at the bottom of Table 4 under [U]), a new possibility shimmers into view. Indeed, Bradley (2002:106) himself introduces this possibility—referring to it as 'Southeastern Loloish'; nevertheless, he leaves the sub-branch undefined linguistically. Now, however, the Southeastern Ngwi sub-branch can begin to begin to take on sharper focus and a set of preliminary criteria for the classification of individual constituents. As more data and analysis becomes available on more varieties, the inter- and intra-relationships of Southeastern Ngwi can be tested and refined. Whatever reanalysis future findings require, one fact is certain: the Ngwi branch will need to stretch significantly in order to accommodate the freshly-emerging Phula varieties.

7.1.2   *Geo-ethnolinguistic affiliation*

While Chinese linguists rarely incorporate Bradley's phonological systems comparison model into their subgrouping of Yi languages, Western linguists sometimes incorporate the Chinese model explained in 3.2.1.

Recently, Edmondson (2003) applied the Chinese model to the subclassification of two Chinese Phula languages based on comparisons with data from Wu (1997). Unfortunately, the ramifications and background of these subclassifications are somewhat misleading. In his article, Edmondson argues that Phu Kha (Phukhla)—and, by association, six of the Phula varieties of Yunnan—are all constituents of the "Eastern Yi Yiliang sub-group." He makes this distinction based on similarities between Phukhla's initial lateral clusters and Wu's (1997) presentation of a similar series of clusters spoken by a small Nisu (Yi) variety in Lunan county (now renamed 'Shilin' county). In the Chinese geo-ethnolinguistic schematic this variety of Nisu is classified as 'Eastern Yi.'

Wu's perspective basically holds that the Phula varieties originated from this Shilin Nisu variety (1997:172). He claims that

the Nisu from this region later migrated to Southern Yunnan where they came to be called 'Phula'—taking their name from the river banks to which they had migrated. The data and comparisons Wu presents in his article are invaluable and fascinating. The historical and ethnolinguistic situation he sketches out, on the other hand, does not seem plausible for four principal reasons:

1. Apart from this small Nisu variety in Shilin County, no other Nisu/Nasu/Nesu/Nuosu variety (whether classified as 'Southern Yi,' 'Eastern Yi, ' or 'Southeastern Yi' in China) is known to have developed a series of lateral clusters.

2. Interestingly, this small Nisu variety in Shilin has a very conservative collection of lateral clusters (with stops at four manners of articulation), but certain Phula languages, such as a variety reported by Wu (1997) to be spoken in Mengzi County, are just as conservative.

3. Since most Phula varieties (seven out of ten) for which data are available are reported to retain this lateral cluster series innovation, it seems much more plausible to claim that this small variety of Nisu—**along with** the Sani of Shilin County—were, instead, influenced by contact with Phula varieties in history past.

4. All other historical reports regarding the Phula maintain that the river in southern Yunnan (the present-day Honghe) took its ancient name from the people who migrated to its banks and not vice/versa (see Section 2.1 above). Furthermore, the Nisu who migrated from northeastern Yunnan to the banks of the Honghe River are ethnolinguistically and historically distinct from the Phula who migrated to the same region from present-day Dali and Lijiang Prefectures (HHYC 2002:50-51).

In a few cases, Bradley's classification system marginally corresponds with the geo-ethnolinguistic schema used by Chinese linguists for categorizing the languages of the Yi Nationality, but since the two systems use different criteria and seek to define different entities, mapping one onto the other usually leads to a confusion of categories and/or the establishment of false taxonomies.

On these grounds, Edmondson's (2003:311-14) dual claim, 1) that Phukhla and the Yunnan Phula groups are to be classified as 'Eastern Yi' (Yiliang sub-type), and 2) that Zuoke and Xá Phó are to be classified as 'Southeastern Yi' (Wenxi sub-type), should be reconsidered. Naturally, genetic intra-relationships between different Phula varieties must be established, and Edmondson offers an excellent beginning, but the terminology and taxonomy chosen for the task should be less ambiguous.

7.2 Survey of the undocumented and endangered Phula languages

With relatively small populations, no written scripts, improving transportation, and constant contact with rapidly advancing Chinese technology and an increasingly standardized Chinese language, the Phula varieties presented in Table 1 can each be defined as 'endangered.' As was noted in Section 4, Phula children living in some peripheral areas of distribution and in certain isolated population pockets are shifting toward the use of Southwest Mandarin even in their homes. Although the total speaker population of all Phula varieties in China is still estimated to be over 300,000, this number includes numerous distinct languages and/or dialects most of which are comprised of fewer than 10,000 speakers. Even more endangered are the varieties of Phula spoken in Vietnam. In-depth research, comparison, and documentation of these languages is an urgent matter—both for preservation and posterity. Edmondson has led the way and has underscored the urgency.

In cooperation with Yuxi Normal University, the Honghe Prefecture Institute for Ethnic Research, and the Ethnic Research

Institute of the Wenshan Prefectural Ethnic Affairs Commission, a research project is currently underway seeking to carry out an in-depth, formal survey and language documentation project among the Phula varieties of Yunnan. The project is slated to last from 2005-2008; as such, much more information related to the synchronic and diachronic relationships of the Phula varieties should soon be available.

8. CONCLUSIONS

Thus, the Phula puzzle has been presented—albeit with little more than the border in place. Having fitted these pieces together, however, several conclusions can be drawn. First of all, the title 'Phula' should be treated as a superordinate ethnonym subsuming multiple related languages and dialects in both China and Vietnam. As such, any further research on Phula varieties or any inclusion of Phula data in a comparative work should clearly indicate the specific location and variety of Phula being referred to so that ambiguity may be avoided as much as possible. Secondly, Phula's place in the Ngwi branch of Burmese-Ngwi should continue to be examined. While the documented Phula varieties all share some features in common with Central, Northern, and Southern Ngwi, no clear matches emerge. Since Phula languages also have their own set of distinct characteristics, a linguistic validation and definition of Bradley's 'Southeastern Ngwi' is in order. Lastly, the Phula varieties have only begun to be documented and compared. Much research remains to be carried out on this cluster of languages before Phula's unique diversity is relinquished to the swelling winds of assimilation and contact-induced change.

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Variety	Autonyms[4]	Exonyms and Ethnonyms[5]	Counties[6]	Est. pop.	Sources[7]
Abo	阿僰 *ābó*	仆拉、僰子、民家、花仆拉 *pūlā, bózi, mínjiā, 'Flowery Phula'*	WS, YS	4,000	WSZZ (2000), WSXZ (1999)
Ani	阿尼波 *ānipō, pʰo⁻²wa³³*	濮拉颇, 仆族, 阿扎, 朴喇, *pūlāpō, pūzú, āzhā, pūlǎ,*	KY	5,000	P, KYSZ (1996), HHYC (2002), P. Pelkey (2004)
Aphu	阿普 *āpǔ*	濮拉颇 *pūlāpō*	JP, Vietnam	2,000	JPXZ (1994), HHYC (2002)
Asahei	阿洒黑波 *āsàhēipō, pʰo⁻²A³³*	濮拉颇, 阿扎, 朴喇 *pūlāpō, āzhā, pūlǎ*	KY	10,000	KYSZ (1996), HHYC (2002), Wang (2003)
Azha	阿扎, 阿扎普 *a⁵⁵tʂa²¹, a³³tca²¹, a²¹tʂa²¹pʰu⁵⁵*	仆拉、仆族、黑仆拉、管箕仆拉、平头普 *pūlā, pūzú, 'Black Phula,' 'Bamboo Tub Phula,' 'Flathead Phu'*	WS, YS, QB, MG, MP, XC, GN	95,000	P, HHYC (2002), WSZZ (2000), Wu (1996a, 1996b, 1997)
Boka	博卡波, 拔卡波 *Bókāpō, Bákāpō*	濮拉 *pūlā, Bò Khó Pa*	PB, Vietnam	19,000	PBMZ (1990), HHYC (2002), Fried (2000)

Puzzling Over Phula

Variety	Autonyms[4]	Exonyms and Ethnonyms[5]	Counties[6]	Est. pop.	Sources[7]
Daizhan	宋占波 *dāizhānpō*	朴喇, 阿扎, 濮拉颇 *pūlǎ, āzhā, pūlǎpō*	KY, YS	13,000	KYSZ (1996), HHYC (2002)
Digao	底高波 *dīgāopō*	濮拉颇, 朴扎, 阿扎, *pūlǎpō, pūlǎ, āzhā,*	KY, YS	25,000	KYSZ (1996), HHYC (2002)
Labo	腊剥颇, 腊拨波 *làbōpō, làbāpō*	朴喇, 阿扎, 濮拉颇, 白仆 *pūlǎ, āzhā, pūlǎpō,* 'White Phu'	KY	8,000	P, KYSZ (1996), HHYC (2002)
Muji	母基, 姆基波 *mūjī, mo³³ndzi³³,* *mu³³ndzi³,* *pʰœ²¹, mu³³tɕi⁵⁵pʰo²¹*	濮拉颇, 仆族, 母基仆 *pūlǎpō, pùzú, mújīpú,*	GJ, MZ, JP, HK, PB, YY	67,000	P, HHYC (2002), PBMZ (1990), MZXZ (1995)
Muzi	母资 *mūzī*	南母基, 腊欧语系姆基人 *nánmǔjī, lǎōuyǔxìmǔjīrén*	MZ, HK	2,000	MZXZ (1995)
Phala	*pʰɡ⁵⁵la⁵⁵, pʰa³³la⁵⁵*	仆拉, 仆族 *pùlǎ, pùzú*	MZ, KY, YS, WS	7,000	HHYC (2002), Wang (in press)
Pholuo	颇罗 颇倮 泼罗 *pōluó, pōluó, pōluó*	仆拉, 泼拉, 濮, 阿细 *pùlǎ, pōlǎ, pú, āxì*	GN	30,000	GNXZ (2001), ZSKY (1994)

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Variety	Autonyms[4]	Exonyms and Ethnonyms[5]	Counties[5]	Est. pop.	Sources[7]
Phowa	颇, 波哇, 朴 瓦, 朴瓦, p^ho^{21}, $p^ho^{22}wa^{44}$, $p^hu^{21}uA^{33}$ 晋网 $p^hu^{33}vA^{33}$	朴拉, 朴族, 朴波, 图拉波 pūlā, pūzú, pūpō, tūlāpō 花朴, 尖头朴拉 'Flowery Phu, Conehead Phula'	MZ, PB, KY, YS, WS	44,000	P, WSZZ (2001), WSXZ (1999), PBMZ (1990), Pelkey (2004), MZXZ (1995), Wu (1997)
Phola	卜拉, 濮拉颇 bùlā, $p^hu^{31}la^{55}$, phola	濮拉, 濮族, 普拉波, 朴喇, 朴腊 pūlā, pūzú, pūlā,	YJ, HH, YY, SP, JS, GJ	24,000	HHXZ (1991), YJXZ (1993), HHYC (2002), Gerner (2002)
Phulapha	朴喇葩, 普拉拔 pūlapā, $t^hu^{21}lA^{21}bA^{21}$	朴拉, 黑朴拉 pūlā, 'Black Phula'	WS, PB?	10,000	WSXZ (1999), Wu (1997)
Phulawa	朴喇哇 pūlawā	朴拉, 平头朴拉 pūlā, 'Flathead Phula'	WS, MG, XC	6,000	WSXZ (1999), Wu (1997)
Phuba	朴拔波 pūbāpō	朴波 pūpō	PB	6,000	PBMZ (1990)

Puzzling Over Phula

Variety	Autonyms¹	Exonyms and Ethnonyms²	Counties³	Est. pop.	Sources⁴
Tula	图拉帕, 托拉葩, 阿 拉葩 *tùlāpà*, *tuōlāpā, ālāpā*	濮, 图拉 *pú, túlā*	MG	10,000	WSZZ (2001), Ziwo (2003), Gerner (2002)
Xiuba	羞拔, 羞波 *xiūbá, xiūpō*	朴瓦 *pǐwà*	PB	1,000	PBMZ (1990)
Zuoke	作利, 坐柯, 昨柯 *dzɔʔkʰɔa⁵⁵, zuōke*	牛尾巴仆拉, 白仆拉, 长仆 'Cow tail Phula, White Phula, Long Phu`	WS, YS, XC	20,000	HHYC (2002), WSZZ (2000), Wu (1997)

Table 1. Reported Phula varieties of Yunna

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[1] Entries using tone numbers represent known phonetic transcriptions of autonyms. while entries using diacritics are pinyin romanizations of autonym transliterations.

[2] These titles range from historical names to contemporary folk terms. Naturally. since 1957. all groups listed also have 彝族 (*yízú*) as an exonym.

[3] County abbreviations are as follows: YJ-Yuanjiang (元江). SP-Shiping (石屏). HH-Honghe (红河). JS-Jianshui (建水). YY-Yuanyang (元阳). GJ-Gejiu (金平). KY-Kaiyuan (开远). MZ-Mengzi (蒙自). PB-Pingbian (屏边). HK-Hekou (河口). QB-Qiubei (邱北). YS-Yanshan (砚山). WS-Wenshan (文山). MG-Maguan (马关). XC-Xichou (西畴). MP-Malipo (麻栗坡). and GN-Guangnan (广南).

[4] The letter. 'P'. in this column indicates personal. onsite research by the author which supports the data.

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