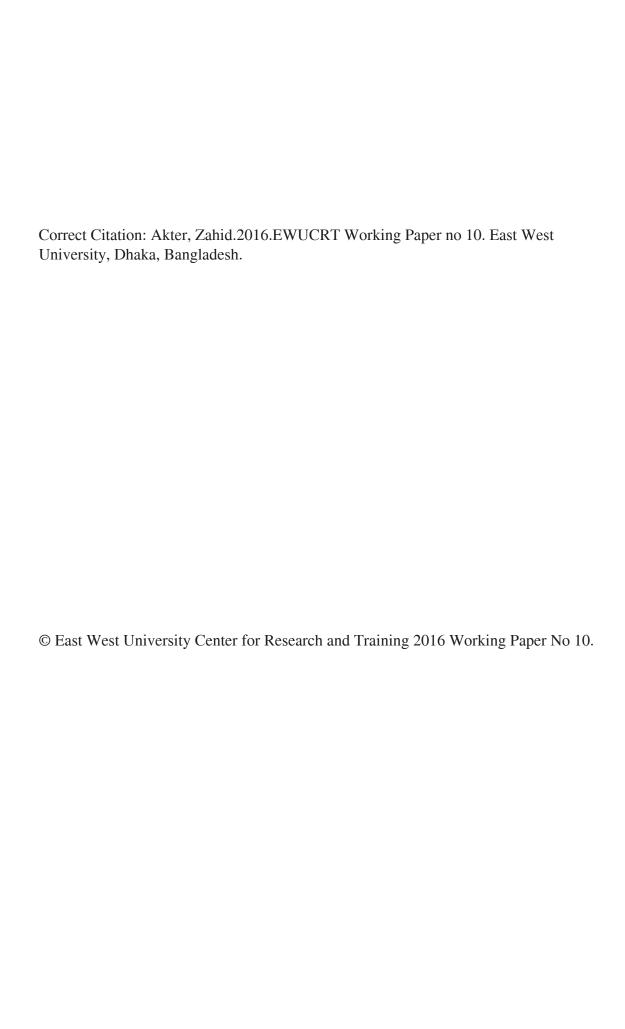
The Endangerment and Documentation of the Pangkhua Language in Bangladesh

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ABSTRACT

Global language endangerment and the need for language revitalization are now widely known and accepted. This general trend of language loss is also reflected in South Asia, where, according to Ethnologue (Grimes 1992), out of about 650 languages, 29 are 'dying' and 138 are in 'trouble'. Narrowing down our focus to one of South Asia's small countries, namely, Bangladesh, we find that some of its minority languages are clearly under threat of extinction. For example, Ethnologue lists 3 Tibeto-Burman languages namely, Atong [aot] (number of speakers-5400), Mizo [lus] (number of speakers 250), and Riang [ria] (number of speakers 500) as 'shifting'. Furthermore, many of the Kuki-Chin languages of Bangladesh and India including Bawm, Tidim Chin, Falam Chin, Hakka Lai, etc. are fast losing their grounds due to assimilation of their speakers into bigger language groups such as Bengali, Mizo, etc. Against this backdrop, I take into account a relatively small Tibeto-Burman language of Bangladesh called Pangkhua to assess its level of endangerment and to suggest some revitalization measures that might be appropriate in its sociopolitical context. In doing so, I review some of the successful language revitalization efforts implemented in a number of countries such as Sweden, New Zealand, Canada, Hawaii and a few other US states. I conclude the paper by providing a phonological description of Pangkhua and a fragmentary description of verbal morphology in terms of argument indexation.

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ABBREVIATIONS

1 first person 2 second person 3 third person

A agent-like argument of canonical transitive verb

CAUS causative CIS cislocative DU dual number emphatic **EMP ERG** ergative case future tense **FUT** NEG negation OBJ object

P patient-like argument of canonical transitive verb

PERM permissive PL plural number Q question particle

REFL reflexive

S singular argument of canonical intransitive verb

SG singular number

SUB subject

TAM tense, aspect, or mood

TOP topic V verb

1. Introduction

Tuhan, jangankurangi
Sedikit pun adat kami.
Oh God, do not trim
a single custom from us.
(Indonesian proverb, cited in Evans 2010)

Un viellard qui meurtestunebibliotheque qui brule.

An old person dying is a library burning.

(AmadouHapate Ba, address to UNESCO, 1960, cited in Evans 2010)

Language endangerment across the world and the need for language revitalization and maintenance as underscored by Krauss (1992) Hinton (2001), Tsunoda (2005) and numerous others have been widely known and appreciated 1. This general trend of language loss is also reflected in South Asia, where, according to Ethnologue (Grimes 1992), out of about 650 languages, 29 are 'dying' and 138 are in 'trouble'. In line with this, van Driem (2007) notes that even though South Asia was once home to the highest linguistic diversity in the Old World, it no longer has that distinction since many of its languages have gone into extinction. Narrowing our focus to one of South Asia's small countries, namely, Bangladesh, we find that a few of its minority languages are facing extinction. For example, Grimes (1992) lists 3 Tibeto-Burman languages namely, Atong [aot] (number of speakers-5400), Mizo [lus] (number of speakers 250), and Riang [ria] (number of speakers 500) as 'shifting'. Furthermore, according to van Driem (2007), many of the Kuki-Chin languages of Bangladesh and India including Bawm, Tidim Chin, Falam Chin, Hakka Lai, etc. are fast declining due to assimilation of their speakers into bigger languages such as Bangla, Mizo², etc. Against this backdrop, I will take into account a relatively small Tibeto-Burman language of Bangladesh called Pangkhua to assess its level of endangerment and to suggest some revitalization measures that might be appropriate in its socio-cultural context.

1.1 Linguistic Profile and the Sociolinguistic Context of Pangkhua

Pangkhua is a Tibeto-Burman, a 'Central' Kuki-Chin language spoken in the Southeastern part of Bangladesh. It is spoken by an ethnic group called Pangkhua who live in the Rangamati district of Chittagong division in Bangladesh. In the region, they are spread across 6 non-contiguous upazillas (i.e. sub-districts) namely, Rangamati, Baghachari, Borkol, Bilachari, Jurachari, and Longdu.

The number of Pangkhua speakers, historically speaking, seems to have grown over time. Toward the end of 18th century, whereas Grierson (1903) estimated their number to be only 500, the 2001 census of Bangladesh (cited in Grimes 1992) estimated the number to be 3200.

A Pangkhua speaker named RamngaiPangkua claimed that Pangkhua population would be somewhere around 2400 (p.c.). This points to the fact that Pangkhua is one of the smallest languages in Bangladesh as the average number of speakers of a language other than Bangla now stands at around 994,300 (according to my calculation based on 2001 Census cited in Grimes 1992).

Besides, most of the languages (e.g. Bangla, Chakma, Marma, Bawm, Tripura, Mro, and Khiang) that surround Pangkhua in the Chittagong Hill-Tracts are much larger (Farid2006), each with an average

^{1.} Half the world languages (7,102) are projected to disappear in a century or so (Kraus 1992). With this will disappear the culture, heritage and the knowledge system of the peoples who spoke those languages.

^{2.} Even though the endangerment of Mizo and Pangkhua's possible assimilation into Mizo in Bangladesh appear to be conflicting, it is true. This is so as, on the one hand, Mizo experiences loss of its F1 speakers and on the other Pangkhua speakers tend to switch to Mizo (shown below) due probably to trade and media influence from the neighboring Indian state of Mizoram.

number of speakers of 209,365 (based on 1991 census cited in Farid (2006). Also noticeable is the tendency of continuous Bangali 'migrations' to the area (i.e. Chittagong Hill-Tracts). Based on the 1991 census as cited in Farid (2006), for example, whereas Bangalees accounted for only 2% of the population in the Hill-Tracts in 1872, they accounted for 49% of the population in the region in 1991. The relative numerical weakness of Pangkhuas is further aggravated by the fact that Pangkhua villages are not contiguous. When I visited Pangkhu Para in 2013, I came to learn about an old Pangkhua village located over the mountains that, according to some Pangkhua villagers, would take at least a two-hour walk to reach. Notably, while most of the indigenous languages that have speakers in Bangladesh also have speakers in a neighboring country (e.g. Garo and Khasi in India, Khumi in Myanmar, etc.), Pangkhua speakers seem to be concentrated solely in Bangladesh (Grimes 1992).

Pangkhua, like the rest of the minority languages in Bangladesh, does not enjoy any constitutional recognition in the country². The recently drafted Education Policy (2010) of the country, however, lists as one of its objectives that 'Adivasi' (indigenous) children must be taught through their mother tongues. But there is hardly any sign of translating the principle into reality. Surrounded by bigger languages such as Bawm, Tanchangya, etc.locally, by Chakma, Marma, etc., regionally (Grimes 1992) and by the state language Bangla nationally and by English globally, Pangkhua seems to be situated at the bottom of the existing linguistic power structure.



Map: Tibeto-Burman languages (Gutman & Avanzati 2013).

^{2.} Article 3 of Bangladesh Constitution declares Bangla as the only national language. References are made to no other languages in the constitution.

1.2. Research Questions

In light of the background as delineated above, I will explore the following research questions in this paper:

- a) Whether and to what extent Pangkhua is endangered?
- b) What would be some appropriate measures for Pangkhua's maintenance given the specific sociopolitical context in which it is located?

2. Review of Literature

2.1 Pangkhua

In the linguistics literature, Pangkhua is mentioned as early as the beginning of the 20th century when Grierson (1903) recognized the language group while putting its number of speakers at 500.

Later, Loffler (1985) briefly compared the language to a few closely related Kuki-Chin languages, namely, Bawm and Mizo (Lushai) in terms of phonology. Recently, Farid (2006) has provided a description of the 'language and literature of Pangkhua'. Since it was written by an amateur writer, this could hardly be considered as providing a systematic treatment of Pangkhua. In Ethnologue, the language is categorized as 'vigorous' and is reported to have writing system in Devanagari and Latin. However, from my conversations with Pangkhua speakers as well as from my research, I did not find much ethnographic literature related to the group. Linguistically, on the other hand, it is definitely undocumented and under-researched.

2.2 Language Revitalization Efforts

Language revitalization efforts have gained a great deal of momentum in the past fifty years or so (Grenoble and Whaley 2006) and many of them were claimed to be successful. Here, I refer to a few that I recently came across and that I think might have some relevance to Pangkhua's preservation and maintenance efforts.

I would like to begin with the example of Miami-Illinois language revitalization (Daryl, Karen, Jessie, and Jarrid Baldwin 2013) that started sometime in the early 1990s because of the initiative taken by a Myaamia named Daryl. He started his work at a time when the language did not have any native speakers. However, through concerted efforts of the Myaamia community, he was successful in reversing the fate of his language. What played an instrumental role in Daryl's efforts was, among others, his long collaborative work with a linguist named David Costa. It was from Costa that he acquired a well-written grammatical description of Miami-Illinois. The success of Miami-Illinois language revitalization and the crucial role that the Myaamia community plays in it is well reflected in the following comments by Daryl, "Over forty tribal students have attended Miami University since 1991, and today we have eighteen currently on campus. All of our tribal students today are engaged in language and cultural education on campus". It is clear that documentation, a point often underscored by UNESCO (2003) played a vital role in reversing the fate of Miami-Illinois language.

Another example of language revitalization comes from Wampanaoag, an Algonquian language from Massachusett, that 'ceased to be spoken in the 1860s'. In this case it was Jessie (2013) who built on the Wampanaoag Language Reclamation Project (WLRP) formed in 1994. Her contributions included reconstructing Wampanaoag through studying Algonquian linguistics and a Wampanaoag grammar. It was written for the use of broader public. The success of Wampanaoag revitalization is reflected in Jessie's (2013) statement: "Today we have speakers from the levels of complete novice to proficient speakers able to have conversation. We have one first-language speaker, who is five years old." What the success stories of both Miami-Illinois and Wampanaoag language revitalization projects reflect is that it is never late to work for an endangered language.

If Miami-Illinois and Wampanaoag language revitalization efforts reflect community efforts in reviving unspoken languages, the following cases of Mohawk, Maori, and Hawaiian underscorethe importance of how language revitalization efforts are inextricably linked to identity and culture at the same time. As for Mohawk, a language spoken in Ontario, Margaret and Theodore (2013) report how its revitalization process was part of their everyday conscious efforts where even children took leadership roles at times. Margaret (2013) notes, "When the kids started to speak more Mohawk and we, their parents, would slip into English they would tell us, "Kanien'kehasata:ti" (speak Mohawk). The success of Mohawk language revitalization is clearly reflected in Margaret's son Nihahsenna:a's picking up of the language as his mother tongue: "As Nihahsenna:a grew older and began to speak, he was speaking in Kanien'keha. It was amazing to hear him begin to speak Kanien'keha, and although I can't seem to remember his first words, I fully recall that any words he spoke were all in the language."

Regarding Maori (spoken in New Zealand) revitalization, Hana O' Regan (2013) begins with a poignant account of the identity crisis that she suffered from and the way their reclamation of land (Ngai Tahu Claims Settlement Act in 1998) and language helped remedy the situation. O'Regan recounts how she overcame her lack of proficiency in Maori by attending a boarding school where it was taught and then how she played a vital role in revitalizing the language by working for Kai Tahu Strategic vision and by lecturing, writing and composing poetry in Maori. Even though Maori language revitalization has been largely successful, it is not yet complete. O'Regain (2013) notes, "In terms of my people, my tribe-our language continues to die and the majority choose to let it do so. My lament and those of peers who are raising their children speaking te reo in the home are real, but faint against the dominant political issues that occupy our tribal discourse." She further notes, "I continue to hope that our people will once again be a people who want to celebrate and embrace our language as a core part of our culture and our heritage." Both Maori and Mohawk cases illustrate how language revitalization can start with the family while being rooted in the immediate environments before it can start to spread to the level of community at large.

Hawaii is another successful language revitalization example that is often cited around the world. In this case, as Wilson and Kamana (2013) described how'home' played an instrumental role both symbolically and practically in bringing back the language. The resolution of parents, in general, to speak only Hawaiian to their children with the result of their speaking the language as the mother tongue(that did not happen in the last two generations) were quite inspiring. Wilson and Kamaha (2013) note, "There were no elders in the Wilson family who knew Hawaiian, and so communication was a challenge at first, when the children were small and knew no English. Their continued effort later saw the language being taught at the University of Hawaii at Manoa (as Hilo Hawaiian studies major) and indigenous medium schooling through the 'Aha Punana Leo-the Hawaiian Language Nest organization.'

The next example comes from Sweden where Olthuis et al (2013) led an extensive language-revitalization program involving Anaar Saami. Their story illustrates what they assert in the very first paragraph of their book (Olthuis et al:1): "---it is possible to revitalize a seriously endangered language! Instead of people just stating that a language is extremely endangered and feeling sad about it, or merely working to describe and archive it, the language can be given new life!" Their collective efforts culminated in the project called CASLE (Complementary Anaar Saami Language Education) and implemented in 2009-2010 while illustrating numerous lessons concerning language revitalization. Of them, what I found most important include how to tackle a situation when there are not enough trained teachers in the language, how to involve community in the revitalization work and how to carry on with revitalization work with limited resources.

Next, I would like to refer to the Inuit language preservation efforts that spanned a relatively broader geographical area including Alaska, Nunavut (Canada), Greenland, and part of Russia. What makes the Inuit case special is the way it brings youth to the forefront of the effort though organizations such as

Inuit Circumpolar Youth Council (ICYC) where, as Tulloch (2014) reports, Inuit young people had their choices, voices and could play a'deliberate' role as agents of change. Through ICYC, as Tulloch (2014:149) observes, Inuit youths hosted youth symposia, participated in international forums, and "advocated to local, regional, national, and international bodies for language policies and programs which reflected their needs and priorities."

Related to language revitalization initiatives in general and the youth involvements in particular, Galla (2010) underscores the use of technology. She notes that younger generations tend to use technologies of all sorts, and communicate in ways that were unavailable to the world ten or so years ago. Such technologies include texting, blogging, chatting, tweeting, and so forth. However, at the opposite end of the spectrum, she notes that it is common to see little or no use of the latest technologies by elders. What was also encouraging about technology use was that she found a correlation between revitalization efforts and the linguistic and cultural, social, economic, environmental, and technological factors.

3. Methodology & Theoretical Framework

I used structured interviews (see Appendix-1) and participant observations in eliciting the data for my research. The interview questionnaires were designed based on the model developed by Brenzinger et al. (2003) and were theoretically informed by the work of such sociolinguists as Fishman (1991), and Edwards (1992), Sasse (1992), and Tsunoda (2005).

The questionnaire contained 27 questions written in both English and Bangla. Questions were divided into four major sections. The first section elicited the respondent's demographic and language proficiency information. The second section dealt with the language use of the respondent in a variety of domains such as home, school, work place, etc. The third section concerned the respondent's attitudes to his/her language and language use. The final section asked questions regarding the respondent's level of awareness about the endangerment of his/her language.

I selected 45 respondents from the largest Pangkhua village called Dinthar (with a population of about 500 people) located in the Bilaichariupazilla of Rangamati district. In selecting the respondents, I made sure that they represented sex, educational levels, and marital status well. However, where age was concerned, I prioritized younger respondents since they are usually thought to reflect the vitality of a language.

In administering the questionnaires, the author received a great deal of help from a Pangkhua speaker named Ramngai Pangkhua. Ramngai was the first Pangkhua to have attending a university. As a student of Anthropology himself, he showed a strong motivation and commitment in helping me to carry out this research project. In addition to speaking Pangkhua as his first language, Ramngai had native-like proficiency in Bangla and communicative proficiency in English. We administered the questionnaires in June 2013. During this month, I stayed in the Pangkhua village (Dinthar) and was able to interact closely with the Pangkhua people and learn about their language and culture.

The model (Brenzinger et al. 2003), as mentioned above, used the following nine factors to measure Pangkhua's endangerment:

- 1. Intergenerational language transmission
- 2. Absolute numbers of speakers
- 3. Proportion of speakers within the total population
- 4. Loss of existing language domains
- 5. Response to new domains and media
- 6. Materials for language education and literacy
- 7. Governmental and institutional language attitudes and policies
- 8. Community members' attitudes towards their own language, and
- 9. Amount and quality of documentation.

As per the framework (see Appendx-2 for details), a score (from 0 to 5) was assigned to each of the factors. The combined scores then provided a measure of the level of endangerment. It should be noted that no single factor was considered in isolation since a language that is relatively safe in terms of one factor may require attention due to other factors. In order to complement the quantitative nature of the study, I also used qualitative a data using my observations.

The present model (Brenzinger et al. 2003), like most others, is not exhaustive and could be informed and complemented by an 'amplified elaborated evaluative scale of 13 levels, the E(xpanded) GIDS (Graded Intergenerational Disruption Scale as developed by Simons & Lewis (2010) that quantifies 'language endangerment' from '0' to '10' while labeling them from 'international' to 'extinct'.

4. Limitations of the Research Project

The research project, despite my effort and assistance coming from a whole host of people, suffers from certain limitations. For example, even though it claims to evaluate the vitality of Pangkhua language, it does so by taking into account only a limited number of samples. Moreover, the questionnaires to assess language endangerment were perhaps too simplistic to capture such a complex sociolinguistic phenomenon. It also does not provide specific details of the Pangkhua sociopolitical contexts that are crucial in strategizing the language's preservation efforts. On the linguistic side, both of its phonological and morphological analyses represent merely a primary description and require much more rigor and details. Most of these drawbacks could be attributed to a limited amount of time dedicated to the study. Nevertheless, it is expected that the research project will be considered as a starting point for further studies.

5. Presentation of Data

5.1 Age Group of Pangkhua Respondents

I collected interview questionnaires from various age groups ranging from 15 to 60. Most speakers came, as Table-1 shows, from the age group 15-30 representing 56% of the speakers. This was followed by age group 31-60 representing 29% of the speakers. The least number of speakers came from below the age 15 group representing only one speaker while 6 speakers (6%) came from the age above 60. The relatively higher number of young speakers (85%) in the study is likely to be a good indicator of Pangkhua's current situation of vitality.

Age groups (n=45)	Number of people	%
<15	01	02
15-30	25	56
31-60	13	29
>60	06	13
Total	45	100

5.2 Marital Status of Pangkhua Respondents

Table-2 below shows, an almost equal number of married (48.89%) and unmarried (51.11%) people. Though I did not elicit information regarding the languages that the respondents' spouses spoke, I found from my conversations that some of them spoke a first language other than Pangkhua. In most cases, the language that was involved was Bawm (a closely connected Tibeto-Burman language).

Table-2: Marital status of Pangkhua respondents

Marital Status	Married	Single
n=45	22	23
%	48.89	51.11

5.3 Education of Pangkhua Respondents

Most speakers (about 85%) of my survey had some kind of formal education. While most of them (42.22%), as Table-3 shows, had post-secondary degrees, a few (15.56%) were not educated. As we will see later, Pangkhua is not taught in formal educational settings. Therefore, education may not directly correlate with proficiency in Pangkhua.

Table-3: Education of Pangkhua respondents

Education	Primary	Secondary	Post-secondary	Illiterate
Number, n=45	5	14	19	7
%	11.11	31.11	42.22	15.56

5.4 Language Proficiency of Pangkhua Respondents

Most Pangkhua respondents, as Table-4 shows, were multilingual. The languages that they claimed to have varying levels of proficiency in included Pangkhua (Pang), Bawm (Baw), Lushai (Lus), Bangla (Bang), Marma (Mar), Chakma (Chak), Khiang (Khia), Khumi (Khum), Tanchangya (Tan), Tripura (Tri), Mru (Mru), and Hindi (Hind). What is notable from the table-4 below is the fact that not all respondents (about 24%) spoke Pangkhua and that an overwhelming number (about 87%) of them spoke Bangla. Secondly, whereas all Pangkhua speakers of the age above 60 spoke Pangkhua, only 40% of the age group 15-30 spoke the language. The languages listed reflect their importance at local (Tanchangya, Lushai, etc.), regional (Chakma) and national (Bangla) and international (English) levels.

Table-4: Language proficiency of Pangkhua respondents

Languages	Pang	Baw	Lus	Bang	Eng	Mar	Chak	Khia	Khum	Tan	Tri	Mru	Hind
All age groups n=45	30	37	15	39	11	13	28	3	3	4	1	5	1
%	66.67	82.22	33.33	86.67	24.44	28.89	62.22	6.67	6.67	8.89	2.22	11.11	2.22
Age (<15) n=1	1	0	0	1	0	0	0	0	0	0	0	0	0
%	100	0	0	100	0	0	0	0	0	0	0	0	0
Age (15 -30) n=25	10	22	5	25	10	12	14	3	3	2	1	5	1
%	40	88	20	100	40	48	56	12	12	8	4	20	4
Age (31 -60) n=13	13	11	9	10	1	1	9	0	0	2	0	0	0
%	100	84.62	69.23	76.92	7.69	7.69	69.23	0	0	15.38	0	0	0
Age (>60) n=6	6	4	1	3	0	0	5	0	0	0	0	0	0
%	100	66.67	16.67	50	0	0	83.33	0	0	0	0	0	0

Note: Percentages may exceed 100 because most Pangkhua respondents speak more than one language

5.5 The Languages the Respondents were Most Proficient in

Though a considerable number of respondents (60%), as Table-5 shows, listed Pangkhua as the language they were most proficient in, it was Bangla that most of them (86.67%) claimed to have the highest level of proficiency in. Secondly, it was the relatively younger Pangkhuas of the age group 15-30 who numbered most (84%) in their claims of having the highest level of proficiency in Bangla. On the other hand, from their older counterparts of the age group 31-60 and above 60, only 46.15% and 0% made claims of having the highest level of proficiency in Bangla. Other languages that figured prominently in the Pangkhua speaker's list of proficiency were Bawm (37.78%) and Chamka (22.22%).

Table 5: The Languages respondents were most proficient in

Languages	Pang	Baw	Bang	Eng	Mru	Chak	Tri	Mar	Khum	Lus	Khia
All age groups (n=45)	27	17	28	4	2	10	1	3	2	2	1
%	60	37.78	62.22	8.89	4.44	22.22	2.22	6.67	4.44	4.44	2.22
Age (<15) n=1	1	0	1	0	0	0	0	0	0	0	0
%	100	0	100	0	0	0	0	0	0	0	0
Age (15-30) n=25	8	12	21	4	2	6	1	3	2	0	1
%	32	48	84	16	8	24	4	12	8	0	4
Age (31-60) n=13	12	4	6	0	0	3	0	0	0	2	0
%	92.31	30.77	46.15	0	0	23.08	0	0	0	15.38	0
Age (>60) n=6	6	1	0	0	0	1	0	0	0	0	0
%	100	16.67	0	0	0	16.67	0	0	0	0	0

Note: Percentages may exceed 100 because most Pangkhua respondents reported to be proficient in more than one language

5.6 Code Mixing Phenomena among Respondents

Most respondents (53.33%) claimed to not code mix in their everyday communications. However, where younger speakers of the age group 15-30 were concerned, the picture greatly altered as most (68%) claimed to code mix in their everyday communications. This percentage significantly declined with the older Pangkhuas. For example, where the age groups of 31-60 and above 60 were concerned, only 23.08% and 0% respectively admitted to doing code mixing. What languages were primarily used when Pangkhuas code mixed? They were mostly Bangla (19%) and English (11%) as the Table-6 shows.

Table 6: Code mixing phenomena among respondents

Code		you e mix	Main Language					Other Languages					
Mixing	Yes	No	Pang	Baw	Khum	Mru	Khia	Pang	Bang	Lus	Eng	Mar	Chak
All age n=45	21	24	5	11	2	2	1	2	19	1	11	1	2
%	46.67	53.33	23.81	52.38	9.52	9.52	4.76	9.52	90.48	4.76	52.38	4.76	9.52
Age (<15) n=1	1	0	1	0	0	0	0	0	1	0	0	0	0
%	100	0	100	0	0	0	0	0	100	0	0	0	0
Age (15-30) n=25)	17	8	3	9	2	2	0	1	17	0	10	1	2
%	68	32	17.65	52.94	11.76	11.76	0	5.88	100	0	58.82	5.88	11.76
Age (31-60) n=13	3	10	1	2	0	0	0	1	1	1	1	0	0
%	23.08	76.92	33.33	66.67	0	0	0	33.33	33.33	33.33	33.33	0	0
Age (>60) n=6	0	6	0	0	0	0	0	0	0	0	0	0	0
%	0	100	0	0	0	0	0	0	0	0	0	0	0

Note: The number and percentages may exceed 45 and 100 respectively because many of the Pangkhuas reported to doing code mix.

5.7 Language Use in Home Domain

As Table-7 shows, Pangkhua was predominantly used in the home domain. However, when communication involved siblings, Bawm (28.89%) and Bangla (26.67%) were also significantly used. Notably, Pangkhu people seemed to have spoken their own language mostly with their children (46.67%).

Table 7: Language use in home domain

Languages		Pang	Baw	Bang	Khum	Mru	Khia	Eng
Spouse	Number (n)	21	2	0	0	0	0	0
Spouse	%	46.67	4.44	0	0	0	0	0
Children	Number (n)	21	2	0	0	0	0	0
Cilidicii	%	46.67	4.44	0	0	0	0	0
Siblings	Number (n)	26	13	12	3	2	1	0
Stollings	%	57.78	28.89	26.67	6.67	4.44	2.22	0
Parents	Number (n)	26	11	4	3	2	1	1
Parents	%	57.78	24.44	8.89	6.67	4.44	2.22	2.22
Grand Parents	Number (n)	26	13	2	3	2	1	0
Grand Larents	%	57.78	28.89	4.44	6.67	4.44	2.22	0

Note: Percentage in each cell is calculated based on 45 cases.

5.8 Language Use in Non-home Domain

In non-home domains, use of Pangkhua figured prominently when communications involved friends (60%) and took place in settingssuch as the workplace (48.89%). But at other places, use of the language declined significantly. For example, at school it was only 2.22% and at market it was 0% of the respondents that used the language. In contrast, the language that gained its use significantly at those places was Bangla as 77.78% and 91.11% of the respondents claimed to have used the languages at school and market respectively. Other languages that were used in the non-home domain were English, Chakma, and Lushai.

Table 8: Language use in non-home domain

Languages		Pang	Baw	Bang	Eng	Khum	Chak	Mru	Mar	Tan	Khu	Lus	INTR
Friends	Number (n)	27	13	21	3	3	2	1	1	0	1	0	0
	%	60	28.89	46.67	6.67	6.67	4.44	2.22	2.22	0	2.22	0	0
Workplace	Number (n)	22	1	19	2	0	1	0	0	1	0	0	0
1	%	48.89	2.22	42.22	4.44	0	2.22	0	0	2.22	0	0	0
School	Number (n)	1	0	35	9	0	0	0	0	0	0	2	0
	%	2.22	0	77.78	20	0	0	0	0	0	0	4.44	0
Market	Number (n)	0	1	41	0	0	2	0	0	0	0	0	4
	%	0	2.22	91.11	0	0	4.44	0	0	0	0	0	8.89

Note: The percentage in each cell is calculated based on 45 respondents

5.9 Languages Most Important for Livelihood

Most Pangkhuas (75:56%), as Table-9 indicates, considered Bangla to be most important for their livelihood. This was followed by English, which was considered most important by a considerable number of speakers (46.67%).

Table 9: Languages most important for livelihood

Languages	Lus	Bang	Eng
n=45	1	34	21
%	2.22	75.56	46.67

Note: The percentages may exceed 100 because a respondent has replied to more than one language as the most important for livelihood.

5.10 Languages Children Should be Taught at School

Table 10: Languages children should be taught in school

Languages	Pang	Baw	Lus	Mru	Bang	Eng	Khum	Khia
n=45	4	6	2	2	33	15	1	1
%	8.88	13.33	4.44	4.44	73.33	33.33	2.22	2.22

Most Pangkhua respondents, as the Table-10 shows, wanted Bangla (73.33%) and English (33.33%) to be taught at school. In comparison, only a relatively few (8.88%) said that they would like their mother tongue to be taught at school. This was also reflected in the opinion of some Pangkhua elementary teachers. During an informal conversation, they told me that so much is at stake for their children's proficiency in Bangla and English that they could not think of replacing them with Pangkhua which they thought that their children would learn anyway.

5.11 Perception of Language Endangerment

In response to my question as to whether the next generation would speak Pangkhua, most respondents (77.78%) believed that they would. What is notable was that it was equally reflected in the belief of the young Pangkhuas (88%) of the age group 15-30.

Table 11: Perception of endangerment in the communities

	Do you think your next generation will speak your native language?						
	Yes	No	Mixed				
All age groups, n=45	35	7	3				
%	77.78	15.56	6.67				
Age (<15), n=1	1	0	0				
%	100	0	0				
Age (15 -30), n=25	22	1	2				
%	88	4	8				
Age (31 -60), n=13	7	5	1				
%	53.85	38.46	7.69				
Age (>60), n=6	5	1	0				
%	83.33	16.67	0				

Similarly, in response to the question as to whether they considered their language to be under threat, most Pangkhuas (73.33%), as Table-12 indicates, replied that they did not think so. Overall, young speakers (age group 15-30) (88%) seemed to be more assured than their older counterparts (46.15% and 66.67%).

Table 12: Perception of endangerment in the communities

	Do you think your nat	Do you think your native language is under threat?					
	Yes	No	Mixed				
All age groups, n=45	8	33	4				
%	17.78	73.33	8.89				
Age (<15), n=1	0	1	0				
%	0	100	0				
Age (15-30), n=25	1	22	2				
%	4	88	8				
Age (31-60), n=13	5	6	2				
%	38.46	46.15	15.38				
Age (>60), n=6	2	4	0				
%	33.33	66.67	0				

6. Determining the Level of Pangkhua's Endangerment

In Table-13 below, I attribute scores to Pangkhua in terms of the factors that I presented above. The number for each factor, as mentioned above, ranged from 0 to 5 and is related to different levels of language endangerment. Admittedly, this is, to a large extent, dependent on my judgment and thereby subjective in nature even though the end results are quantitative and look objective.

As Table-14 shows, Pangkhua falls between the categories of 'definitely endangered' and 'severely endangered':

Table-13: Overall level of endangerment of Pangkhua

Factor	Grade	Median Grade
Factor-1	4	
Factor-3	4	
Fadtor-4	3	
Factor-5	3	2.6
Factor-6	0	
Factor-7	1	
Factor-8	5	
Factor-9	1	

Table-14: Overall measurement of language endangerment

Degree of Endangerment	Grade
Safe	5
Unsafe	4
Definitely Endangered	3
Severely Endangered	2
Critically Endangered	1
Extinct	0

Based on Factor # 1 that is itself based on intergenerational transmission, I give Pangkhua'4' (corresponding to 'unsafe') since as I show in Table-4 above, the language falls most closely to the situation where it "is used by some children in all domains; it is used by all children in limited domains".

Based on Factor # 2 that concerns the 'absolute number of speakers', I do not give Pangkhua a score since even though 'absolute' number of speakers could be a crucial indicator of language vitality/endangerment (e.g. other factors being equal, ten thousand speakers is safer for a language than one hundred speakers), it is by no means reflective of the condition of a language as the relative number plays a more crucial in the world. However, based on the 'absolute number' of speakers, Pangkhua would fall in a very disadvantageous position. This is so as it has only 2400 speakers against the average number of speakers of per language being 1000,685 in the current world (7,102 world languages against world population 7,106,865, 254) (Ethnologue 2015).

Based on Factor # 3 that concerns 'Proportion of Speakers Within the Total Reference Group' I give Pangkhua '4' corresponding to "nearly all speak the language" as indicated in table-4 above.

Based on Factor # 4 that concerns 'Loss of Existing Language Domains', I give Pangkhua '3' (indicated in Table-8) that is categorized as 'Dwindling Domains' corresponding to "The language is in home domains and for many functions, but the dominant language begins to penetrate even home domains".

Based on Factor # 5 concerning "Response to New Domains and Media", I give Pangkhua '3' that is categorized as 'Receptive' corresponding to "The language is used in many domains".

Based on Factor # 6 regarding "Materials for Language Education and Literacy", I give Pangkhua '0', since "No orthography is available to the community".

Based on Factor # 7, regarding "Governmental and Institutional Language Attitudes and Policies", I give Pangkhua '1' that is categorized as "Forced Assimilation" corresponding to "The dominant language is the sole official language, while non-dominant languages are neither recognized or protected". This is clearly the case in Bangladesh where Bangla is the only 'national' language and no other languages are recognized in the constitution.

Based on Factor # 8 concerning "Community Members' Attitudes toward Their Own Language", I give Pangkhua'3' corresponding to "Many members support language maintenance; others are indifferent or may even support language loss".

Based on Factor # 9 concerning "Amount and Quality of Documentation", I give Pangkhua '1' categorized as 'Inadequate' that corresponds to "Only a few grammatical sketches, short wordlists, and fragmentary texts. Audio and video recordings do not exist, are of unusable quality, or are completely un-annotated." This is so as Ethnologue (Grimes 1992) suggests that it has a writing system in Devanagari and Latin. Secondly, during my conversations with my consultants and Pangkhua villagers, I came to learn that the language had some texts (bible translation) in Roman scripts.

Based on all the factors, the median score of Pangkhuastands at 2.6. This means that the situation of the language would fall, as the Table-14 below shows, somewhere between the categories of 'Definitely Endangered' and 'Severely Endangered'. Ethnologue's (Grimes 1992) terming of the language's condition as 'Vigorous' as well as the satisfactory condition of it present intergenerational transmission (as shown in Table-4 above) may contradict is in this finding. However, what this may reflect is not what precisely its current condition but perhaps how precariously it is now being maintained in the broader sociopolitical situation.

7. Analyzing Pangkhua's Endangerment Situation

Pangkhua's endangerment situation as somewhere between 'definitely' and 'severely' endangered) as presented above, does not match with Ethnologue's (Grimes 1992) categorization of it as 'Vigorous'. This may reflect declining of Pangkhua over the last decade since I found migrations of Pangkhua people to big cities played a significant role in Pangkhua's current vitality status. Notably, Ethnologue's (Grimes 1992) categorizations of language vitality, in many cases, is contingent upon inspectional observations and not systematic language endangerment research.

The situation of the language, as I have pointed out above, can perhaps be captured best by the term 'precarious'. This precariousness comes from a number of interrelated factors. To begin with, the absolute number of its speakers (2400) is quite low. Such a number is easily vulnerable to epidemic, migration or mass genocide (e.g. the Tutsi slaughter by the Hutu majority in Rwanda in 1994 killing an estimated 1000,000 people.). Moreover, the language is also vulnerable where the number of its relative speakers are small. Every single language that it is surrounded by (e.g. Chakma, Marma, Tanchangya, Bangla, etc.) is both demographically bigger and politically more powerful. Worse yet, the language faces an increased level of Bangalee settlements in the areas where it is spoken. As I have shown above, whereas Bangalees accounted for only 2% of the population in Hill-Tracts in 1872, they accounted for 49% of the population of the region in 1991.

The socio political factors, in turn, have created the basis for other unfavorable conditions for Pangkhua. For example, it was shown that not all young Pangkhuas (age 15-30) speak the language while most of them (84%) listed Bangla as the language they were most proficient in. This must have been triggered by, among others, Bangla's importance at school (where Pangkhua was not taught). Bangla's importance was also reflected in code-switching in that more than 90% Pangkhua respondents used it as the main other language to code-switch. Further evidence comes from Pangkhua's loss of domains (0% at market place, 2.22% in school, etc.), its lack of importance for livelihood, perception of its endangerment and the attitude shown toward maintaining it. As for livelihood, no Pangkhua respondents thought that the language bore any importance to them.

Regarding perception of threat, it was notable that younger Pangkhuas (age 15-30) did not know (only about 4% admitted though) that they were aware of the impending loss of their language whereas many of their older counterparts (age 30-60) (more than 32%) recognized this situation. Similarly, the attitude shown towards Pangkhua's maintenance was not encouraging, as no Pangkhuas wanted their languageto be taught at school.

8. Maintenance of Pangkhua

For Pangkhua, the term 'maintenance' or 'preservation' seems to be more suitable than 'revitalization' since the language, by the most crucial standards of 'intergenerational transmission', has a satisfactory level of vitality as of now (though my findings above suggest that this may not reflect its future). In support of this, we find that the language has adequate native speakers while a large number of them are young, the language is well in use in a number of domains with the home being the most crucial one, and lastly the language has some amount of documentations. However, these factors may not guarantee Pangkua a secure future for reasons that we have noted above. A few such factors include the 'absolute number' of its speakers (only 2400), its relatively weak sociopolitical power at the local, regional, and national levels, its absence in school, its lack of prestige among the Pangkhuas (e.g. not important for livelihood), perception of its future condition and an absence of urge for its preservation initiatives, etc.

Given the situations, I would propose a number of factors for Pangkhua preservation efforts. Since the scanty number of Pangkhua speakers is vulnerable to epidemics, natural calamity, political genocide, ethnic invasion (especially from mainstream Bangalees), etc., it is very important that Pangkhuas live in contiguous areas (which they don't do now). This, in addition to giving them a better edge to withstand invasions from outside, will help to retain and expand the domains of language use. For example, this may help them to reclaim some of the domains they are currently losing, such as market, workplace, etc. In this regard, the Hawaiian case of 'Aha Punana Leo-the Hawaiian Language Nest organization' as reported by Wilson and Kamana (2013) may be mentioned as a special case in point.

Secondly, the reasons for disruptions in intergenerational transmission of Pangkhua and its lack of 'prestige' may have something to do with the fact that the language is not taught at school. This makes at least two of the above language revitalization efforts relevant here. One of them is the need for a systematic grammatical description of Pangkhua, something in line of what David Costa did for Miami-Illinois language (Daryl, Karen, Jessie, and Jarrid Baldwin 2013). This should make it easier (though not enough) for Pangkhua to be introduced in school. Furthermore, such an initiative will require training teachers from the start (and not later) as underscored in the CASLE project for Anaar Saami (Olthuis et al (2013). It is likely that the introduction of Pangkhua in school will have a positive effect in creating prestige for the language.

All these initiatives can be critically informed by the example of Inuit revitalization (Tulloch 2014) where youth were at the forefront of initiatives and activities. The findings above suggest that most Pankhua youth are not aware that their language is losing ground. This could be remedied only when the issues of language rights, heritage and identity, which sparked the Maori language revitalization (O' Regan 2013), are brought to their sensibilities and they are given agency to take charge. Unless Pangkhua youth are truly involved, no maintenance effort will be effective and meaningful. For example, it will not help to merely introduce Pangkhua in schools if Pangkhua youth are not motivated enough to learn the language. However, since the youth may not have a full command of their language (as was the case with Inuit), elders must provide the necessary linguistic and cultural input at all phases (much like that of Wampanaoag). Besides, there must be efforts to tap into the local and regional resources to make preservations efforts sustainable (like Anaar Saami).

Further, even though Pangkhua enjoys a relatively better situation than many endangered languages around the world (e.g. Wampanaoag that was brought back after more than one hundred of its disappearance), there is no room for complacency as a language may disappear as quickly asin a generation. Taking this into account, Pangkhua preservation efforts much start sooner than later. Such efforts could take off with Pangkhua's grammatical description, teaching the language in school, reclaiming the old domains, etc. while putting the youth at the forefront of initiatives.

Lastly, this research project involving only Pangkhua serves as a test case for other small languages spoken in Bangladesh. Most languages spoken in the Chittagong Hill-Tracts (e.g. Bawm, Mro, Khumi, etc.) and other parts of the country (e.g. Orao, Koch, Koda, etc.) are likely to undergo similar situations. This means that most of these languages are likely to experience interruptions in intergenerational transmissions, loss of domains, and a lack of political and institutional supports requiring similar kinds of revitalization measures that apply to Pangkhua. A critical step toward that end would be continuous collaborations among community members, linguists, and the administration. Only a bottom-up approach like this can realize community members' desire to documenttheir languages, which is a crucial step for language revival as underscored by UNESCO 2003). But, of course, this does not exhaust the necessity of undertaking similar research on those languages where the present project on Pangkhua may serve as a model to turn to.

9. Pangkhua Phonemes *

Vowels: We have so far found Pangkhua to have seven monophthongs (i.e. pure vowels) and four diphthongs. I show them below:

	Front	Central	Back
Close	i		u
Close-mid	e	Э	O
Open-mid			Э
Open	a		
Diphthongs:			
/ou/, /ai/, /ui/, /a	əi/		

Consonants: Pangkhua has twenty consonant phonemes. They are presented below:

Table-15: Pangkhua consonant phonemes

	Bilabial/Labio		Dental		Alveol	ar	Palat	tal	Vela	ır	Glott	tal		
	Dental													
Stops	b	p	p^{h}	d□	t□	$t\Box^{h}$					k	\mathbf{k}^{h}		
Fricatives			v				Z	S						h
Nasals	m						n				ŗ			
Lateral							1							
Rhotic							r							
Glide														

10. Argument Indexation on Verbs in Pangkhua

In this section, first I will briefly explain position classes in Pangkhua verb. This will show the slots where Pangkhua argument indexation occurs. Subsequently, I will illustrate argument indexation of the language in greater detail. In my description, I will use the terms 'proclitics' and 'enclitics' loosely. As Table 16 shows below, Pangkhua argument indexations occur in both preverbal and postverbal positions. Strictly speaking, Pangkhua preverbal argument indexation shows some phonological reduction (shown below) in which case use of the term 'prefix' could be relevant. Post-verbal indexation of argument, on the other hand, does not show such reduction (shown below) where the term 'enclitic' rather than 'suffix' would be appropriate. This conforms to DeLancey's (1993b:01) observations of the tendency in other Kuki-Chin languages. The fact that Kuki-Chin argument indexations have, as DeLancey (2013a: 14) observes, divergent historical origins may provide insights into the distinction of their formal and distributional properties.

10.1 Position Classes in Pangkhua Verb

In Pangkhua verb, there are 5 pre-root slots and 6 post-root slots. The elements that occur in pre-root slots include 3 proclitics cross-referencing subject arguments for all three persons and the reciprocal and the reflexive markers. The 1st person deictic marker that I will call cislocative (explained below) and the reciprocal/reflexive never occur in the same construction and both occupy a pre-root slot. The structure of post-root slots is more complex than that of pre-root slots. This is obvious from the fact that the number of enclitics is greater than that of proclitics. As can be expected, enclitics code much larger

^{*} I am indebted to Dr. David Peterson for much of the phonological analysis presented here. It represents the results of the workshop that he conducted at East West University in Dhaka in 2012.

number of grammatical information that include tense, aspect, mood, permissive, number, negative and polar interrogative. I present the approximate position classes of a possible Pangkua verbal structure in table 16 below:

Table 16: Position classes in Pangkhua verb

1	2	3	4	5	6	7	8	9	10	11	12
FMP	REFL	SUB	CIS	CAUS	ROOT	TAM	PFRM	PL OBJ	20 ORI	NFG	Q
Procli		БОВ	CID	CHOS	ROOT	171111	LICIVI	TE OBJ	20 OB3	TILO	V
	P: <i>ma-</i>										
2. KE	FL: haw	un-									
3. SU	B: <i>kə-,ka</i>	an-/ na-	-, naŋ-/	a-, an-							
4. CIS	S:h v ŋ-										
5. CA	US: ma-	-									
6. RO	OT/STE	EM									
Enclit	ics:										
7. TA	M: -at, 6	etc.									
8. PE	RM: -tir										
9. PL	ОВJ: <i>-е</i>	i									
10. 20	OBJ: 1	<i>ie</i>									
11. N	EG: <i>l</i> ε h										
12. Q	: -ma										

Since one of the main goals of this paper is to explain Pangkhua argument indexation on verbs, I will now describe the phenomenon with reference to Figure 1 in detail below. Our attention will thereby be focused especially on slots 2, 3, 4, 9 and 10 where argument indexation occurs in Pangkhua.

10.2 Pangkhua Pronouns

As we will see below, Pangkhua argument indexation, at least those that occur in pre-verbal position, is regularly a reduced form of the independent pronoun. I provide a list of Pangkhua pronouns in Table 17 below, as this will help us recognize the forms that are indexed on Pangkhua verbs. As Table 1 shows below, Pangkhua pronouns distinguish between singular, dual (e.g. with -ni), and plural (e.g. with -nihou) numbers for all persons:

Table 17: Pangkhua pronouns

	SG	DU	PL
1	kəi	kəi-ni	kəi-nihou
2	паŋ	naŋ-ni	naŋ-nihou
3	anih	ani	ani-hou

10.3 Pangkhua Argument Indexation on Verbs in Intransitive and Transitive Clauses

In what follows, I first illustrate Pangkhua argument indexation with reference to intransitive and transitive clauses in perfective aspect, as this is an unmarked aspect in the language. I will then illustrate Pangkhua argument indexation by taking into account clause types such as reflexives, causatives, interrogative-causative-negative, etc. Throughout my description, I will use examples of Pangkhua clauses with the independent pronoun or the full NP in them, as this will allow us to see how

it bears on Pangkhua argument indexation on verbs. As we noted above, Pangkhua speakers would not use the independent pronoun in their clauses of everyday discourse unless it is in contrastive focus. Accordingly, example (1) below would mean something like 'I and not someone else saw.'

10.3.1 Pangkhua Argument Indexation in Intransitive Clauses

In Pangkhua intransitive clause, the subject proclitics (Position class 3) index S arguments for all persons as illustrated in examples from (1) to (11). The person marking is regularly a reduced form of the independent pronoun (e.g. from k itoke; fromnantona; from anihto an). When the S-argument is plural, the element –n is added to the reduced forms. This means that argument indexation on Pangkhua verbs distinguish only between singular and plural subjects, and duality of S-arguments is not indexed on verbs:

- (1) *kəi ke-muh* 1 1.SG-saw 'I saw.'
- (2) kəi-ni ken-muh 1-DU 1.PL-saw 'We (2 persons) saw.'
- (3) kəi-nihau ken-muh
 1-PL 1.PL-saw
 'We (many people) saw.'
- (4) nan na-muh
 2 2.SG-saw
 'You (1 person) saw.'
- (5) naŋ-ni nan-muh
 2-DU 2.PL-saw
 'You (2 persons) saw.'
- (6) naŋ-nihau nan-mu
 2-PL 2.PL-saw
 'You (many people) saw.'
- (7) anih an-muh
 3 3-saw
 'S/he (1 person) saw.'
- (8) an-ni an-muh
 3-DU 3-saw
 'They (2 persons) saw.'
- (9) ani-hau an-muh3-PL 3-saw'They (many people) saw.'
- (10) mi a-muh man 3.SG-see 'The man saw.'
- (11) Ramŋai a-muh
 Ramngai 3.SG-see
 'Ramngai saw.'

I summarize my findings of Pangkhua argument indexation on verbs in intransitive clauses in Table 18 below:

TO 11 10 D 11	4 •	1 4.		• 4 • 4 •	
Table 18: Pangkhua	argument in	ndevation o	n verhe in	i intrancitive	CISHER
Table 10. Langinua	ar guillent in	iucaanon o	11 101 103 111		Clauses

	SG	PL
1SG	ka - Σ	kan- Σ
2SG	na- Σ	nan- Σ
3SG	an- Σ	an- Σ

10.3.2 Pangkhua Argument Indexation on Verbs in Transitive Clauses

In transitive clauses, the 1st person A-argument is indexed with a subject proclitic (Position class 3). Like intransitive clauses above, argument indexation on Pangkhua verbs distinguishes only between singular and plural subjects and duality of subjects is not indexed on verbs. The 2nd person P-argument is indexed with an object enclitic

(Position class 10). The plurality of P-argument is indexed with the enclitic -ei(Position class 9). This is illustrated in examples from (12) to (16) where the 1st person A-argument is indexed with the proclitics ka- (for singular subject) and kan- (for plural subject). On the other hand, the 2nd person P-argument is indexed with the enclitic -ne. The enclitic -ei for plural P-argument precedes the 2nd person P-argument-ne:

- (12) kəinaŋka-mu-ne 1SG 2SG 1.SG-saw-2 'I saw you (1 person).'
- (13) kəi-ni naŋ kan-mu-ne 1-DU 2SG 1.PL-saw-2 'We (2 persons) saw you (2 persons)'.
- (14) kəi-nihau naŋ kan-mu-ei-ne 1-PL 2SG 1.PL-saw-2 'We (more than 2 persons) saw you (1 person)'.
- (15) kəi naŋ-ni ka-mu-ei-ne 1SG 2-DU 1.SG-saw-PL-2 'I saw you (2 persons)'.
- (16) kəi naŋ-nihau ka-mu-ei-ne 1SG 2-PL 1.SG-saw-PL-2 'I saw you all'.

On the other hand, the 2nd person A-argument is indexed with a subject proclitic (Position class 3) and the presence of a 1st person P-argument is obligatorily indicated by the cislocative hon- (Position class 4) indicating the deictic centrality of the SAP (Speech Act Participant) 1st person P-argument. The plurality of 1st person P-argument is indicated by the enclitic –ei (Position class 9). These are illustrated in examples from (17) to (23) where the 2nd person A-argument is marked by the proclitics na- (for singular subject) and nan-(for plural subject) and the 1st person P-argument is indicated by the cislocative hon-. The 1st person plural P-argument, on the other hand, is indicated by the enclitic –ei:

- (17) naŋ kəi na-h v ŋ-muh
 2SG 1SG
 'You (1 person) saw me.'
- (18) naŋ-ni/nang-ni-ha kəi na-hɔ ŋ-muh
 2-DU/2-DU-TOP 1SG 2.SG-CIS-saw
 'You (2 persons) saw me.'

(19) naŋ-nihau/nang-nihou-ha kəi nan-həŋ-muh
2-PL/2-PL 1SG 2.PL-CIS-saw
'You all saw me.'

(20) naŋ kəi-ni na-hvŋ-mu-ei
2SG 1-DU 2.SG-CIS-saw-PL
'You (1 person) saw us (2 persons).'

(21) naŋ kəi-nihau na-hvŋ-mu-ei
2SG 1-PL 2.SG-CIS-saw-PL
'You (1 person) saw us (more than 2 persons/many people).'

(22) naŋ-ni kəi-ni nan-hɒ ŋ-mu-ei
2-DU 1-DU 2.PL-CIS-saw-PL
'You (2 persons) saw us (2 persons).'

(23) naŋ-nihau kəi-nihau nan-hə ŋ-mu-ei
2-PL 1-PL 2.PL-CIS-saw-PL
'You all saw us (more than 2 persons/many persons).'

The 1st person A-argument is indexed with a subject proclite (Position class 3) and the 3rd person P-argument is zero-coded. Unlike the singular 2nd person object above, the singular 3rd person P-argument is not indexed on verbs. However, the plurality of 3rd person P-argument is indicated by the enclitic -ei (Position class 9). They are illustrated in examples from (24) to (34) where the 1st person A-arguments are indexed with the proclitics ka- (for singular subject) and kan- (for plural subject) and the 3rd plural object is indexed with the enclitic -ei:

(24) kəi anih ka-muh 1SG 3SG 1.SG-saw 'I saw him.'

(25) kəi-ni anih kan-muh 1-DU 3SG 1.PL-saw 'We (2 persons) saw him.'

(26) kəi-nihau anih kan-muh
1-PL 3SG 1.PL-saw
'We (more than 2 persons/many people) saw him.'

(27) kəi anih ka-mu-ei 1SG 3SG 1.SG-saw-PL 'I saw them (2 persons).'

(28) kəi ani-hau ka-mu-ei 1SG 3-PL 1.SG-saw-PL 'I saw them (more than 2 persons/many people).'

(29) kəi-ni/kəi-ni-ha ani kan-mu-ei 1-DU/1-DU-TOP 3 1.PL-saw-PL 'We (two persons) saw them (2 persons).'

(30) kəi -nihau ani-hau kan-mu-ei 1-PL 3-PL 1.PL-saw-PL 'We (more than 2 persons) saw them (more than 2 persons).'

(31) kəi –ni ani kan-mu-ei 1-DU 3 1.PL-saw-PL 'We (2 persons) saw them (2 persons).'

- (32) kəi -nihau ani-hau kan-mu-ei 1-PL 3-PL 1.PL-saw-PL 'We (more than 2 persons) saw them (more than 2 persons).'
- (33) kəi mi-hakka ka-muh 1SG man-one 1.SG-see 'I saw the man.'
- (34) kəi Ramŋai ka-muh 1SG Ramngai 1.SG-see 'I saw Ramngai.'

On the other hand, the 3rd person A-argument is indexed with a subject proclitic (Position class 3) and the presence of a 1st person P-argument is obligatorily indicated by the cislocative hon- (Position class 4) indicating the deictic centrality of the SAP (Speech Act Participant) 1st person P-argument. The plurality of 1st person P-argument is indicated by the enclitic –ei (Position class 9). These are shown in examples from (35) to (43) where 3rd person A-argument is indexed by –an (for both singular and plural subjects) and the 1st person P-argument by the cislocative hon-:

- (35) anih kəi həŋ-muh
 3 1SG CIS-saw
 'He saw me.'
- (36) anih kəi an-hvŋ-muh.
 3 1SG 3-CIS-saw
 'They (2 persons) saw me.'
- (37) ani-hau kəi an-hə ŋ-muh
 3-PL 1SG 3-CIS-saw
 'They (more than 2 persons) saw me.'
- (38) anih kəi-ni an- $h p \eta$ -mu-ei
- 3 1-DU 3-CIS-saw-PL 'He saws us (2 persons).'
- (39) anih kəi -nihau an-həŋ-mu-ei 3 1-PL 3-CIS-saw-PL 'He saws us (more than 2 persons).'
- (40) ani kəi-ni an-h v ŋ-mu-ei
 3 1-DU 3-CIS-saw-PL
 'They (2 persons) saw us (2 persons).'
- (41) ani-hau kəi-nihau an-həŋ-mu-ei
 3-PL 1-PL 3-CIS-saw-PL
 'They (more than 2 persons) saw us (more than 2 persons).'
- (42) mi-hakka kəi a-hvŋ-muh man-one 1SG 3.SG-CIS-see 'The man saw me.'
- (43) Ramŋai kəi a-h v ŋ-muh
 Ramngai 1SG 3.SG-CIS-see
 'Ramngai saw me.'

The 2nd person A-argument is indexed with a subject proclitic (Position class 3) and the 3rd person P-argument is zero-marked. However, the plural 3rd person P-argument is indexed by the enclitic -ei (Position class 9). These are shown in examples from (45) to (52) where the 2nd person A-argument is marked by the procliticsna- (for singular subject) and nan- (for plural subject) while the plural 3rd person P-argument by the enclitic -ei:

- (44) nay anih na-muh
 2SG 3 2.SG-saw
 'You (1 person) saw him.'
- (45) naŋ-ni anih nan-muh
 2-DU 3 2.PL-saw
 'You (2 persons) saw him.'
- (46) naŋ-nihau anih nan-muh
 2-PL 3 2.PL-saw
 'You (more than 2 persons) saw him.'
- (47) nay ani na-mu-ei
 2SG 3 2.SG-saw-PL
 'You (1 person) saw them (2 persons).'
- (48) nan ani-hau na-mu-ei
 2SG 3-PL 2.SG-saw-PL
 'You (1 person) saw them (more than 2 persons).'
- (49) naŋ-ni ani nan-mu-ei
 2-DU 3 2.PL-saw-PL
 'You (2 persons) saw them (2 persons).'
- (50) naŋ-nihau ani-hau nan-mu-ei
 2-PL 3-PL 2.PL-saw-PL
 'You (more than 2 persons) saw them (more than 2 persons).'
- (51) nay mi-hakka na-muh
 2SG man-one 2.SG-see.
 'You saw the man.'
- (52) nan Ramnai na-muh
 2SG Ramngai 2.SG-see
 'You saw Ramngai.'

The 3rd person A-argument is indexed by a subject proclitic (Position class 3) and the singular 2nd person P-argument by the enclitic –ne(Position class 10). The plural 2nd person P-argument is indexed by the enclitic -ei that precedes the 2nd person P-argument -ne. These are shown in examples from (53) to (61) where the 3rd person A-argument is indexed by the proclitics a- (for singular subject) and an-(for plural subject) and the 2nd person P-argument by the enclitic –ne:

- (53) anih nang a-mu ne 3 2SG 3-saw 2 'He saw you (1 person).'
- (54) anih nang-ni a-mu-ei ne.
 3 2-DU 3-saw-PL 2
 'He saw you.'

- (55)ani nang an-mu ne. 2SG 3 3-saw 2 'They (2 persons) saw you (1person).'
- ani-hou nang an-mu (56)ne 3-PL 2SG 3-saw 2 'They (more than 2 persons) saw you (1 person).'
- (57)ani/ani-ha naŋ-ni an-mu-ei ne. 3/3-TOP 2-DU 2 3-saw-PL

'They (2 persons) saw you (2 persons).'

- ani-hou naŋ-nihau (58)an-mu-ei 3-PL 2-PL 3-saw-PL 2 'They (more than 2 persons) saw you (more than 2 persons).'
- (59)mi-hakka nan а-ти man-one 2SG 3.SG-see 'The man saw you.'
- (60)Ramnai nan а-ти Ramngai 2SG 3.SG-see 'Ramngai saw you.'

I present my findings of Pangkhua argument indexation on verbs in transitive clauses in Table 19 and Table 20 below. In Table 19, I show argument indexation for singular A and singular P-arguments. In Table 20, I show argument indexation for plural A and plural P-arguments:

Table 19: Argument indexation on verbs for singular A and singular P-arguments

	О	1SG	2SG	3SG
A				
1SG			$ka-\Sigma$ -ne	$ka-\Sigma$
2SG		na - h D η - Σ		$na-\Sigma$
3SG		an-h v η-Σ	$a n - \Sigma - ne$	a - Σ

Table 20: Argument indexation on verbs for plural A and plural P-arguments

	О	1PL	2PL	3PL
A				
1PL			k an - Σ - ei - ne	$kan - \Sigma - ei$
2PL		nan - h v η - Σ - ei		n an -Σ - ei
3PL		an-h v η-Σ-ei	an-Σ-ei-ne	an -Σ - ei

10.4 Pangkhua Argument Indexation in complex Clause Types

I will now show how Pangkhua indexes argument in more complex clause types such as reflexive and causatives while taking into account reflexive, causative, and interrogative-negative-causative constructions.

10.4.1 Reflexive Clauses

In reflexive clauses, Pangkhua indexes the A-argument with a subject proclitic (Position class 3) and a reflexive (Position class 2). Pangkhua also frequently uses emphatic marker ma- (Position class 1) that precedes the reflexive marker. They are shown in examples from (62) to (67) where the 1st person subject is indexed with

kan- (for singular subject) and kanna- (for plural subject) and the reflexive marker with hawin-. The emphatic marker ma- precedes the reflexive marker hawin-:

- (62) kəi kəi-ma-hawin kan en. 1SG 1SG-EMP-REFL 1.SG.SUB see 'I saw myself.'
- (63) kəi -nihou kəi-nihou-hawinkanna en.
 1-PL 1-PL-REFL 1.PL.SUB see
 'We (PL) saw ourselves.'
- (64) nay nay-ma-hawin nan en
 2SG 2-EMP-REFL 2.SG.SUB see
 'You (SG) saw yourself.'
- (65) naŋ-nihou nang-ma-houhawin nanna en
 2-PL 2-EMP-PL.REFL 2.PL.SUB see
 'You (PL) saw yourselves.'
- (66) anih a-ma-hawin an en.
 3 3-EMP-REFL 3.SG.SUB see 'He saw himself.'
- (67) ani-hou ani-hawin anna en.
 3-PL 3-REFL3.PL.SUB see
 'They saw themselves.'

10.4.2 Causatives

In causative constructions, the 'causer' argument is indexed with a subject proclitic (Position class 3) that is followed by the causative ma- (Position class 5). Both 'causee' and the P-argument (object) precede the verb. This is shown in example (68) below where the 3rd person 'causer' argument is indexed with a- which is followed by the causative ma- in preverbal position:

(68) *nu nau tlapah a-ma-mu* mother child moon 3-CAUS-see 'The mother showed the moon to the child.'

However, as example (69) shows below, -ma also occurs in a permissive construction that is indexed with the enclitic –tir (Position class 8). In this case, the causative ma- seems to function as a valency-increasing morpheme. This analysis is evidenced in constructions (70) and (71) where the 'causee' Lalhim is let (or allowed) to break the house by the 'causer' Ramngai. Note that in such cases, both the proclitic causative ma- and enclitic permissive –tir occur on the verb -si-'break':

- (69) *nu nau tlapah a-ma-en-tir* mother child moon 3-CAUS-see-PERM 'The mother let the child see the moon.'
- (70) Ramngai-men Lalhim in a-ma-si-at-tir
 Ramngai-ERG Lalhim house 3-CAUS-break-FUT-PERM
 'Ramngai will make Lalhim break the house.'
- (71) Ramngai-men Lalhim in a-ma-si-at-tir-lɛ h-ma
 Ramngai-ERG Lalhim house 3-CAUS-break-FUT-PERM-NEG-Q
 'Won't Ramngai make Lalhim break the house?'

When 'causee' is the 1st person, it is indexed with the cislocative hpp- on the verb. This is consistent with the findings above where the 1st person P-argument (or object) is always indexed with the cislocative hpp-(Position class 4). This is shown in example (72) below where the cislocative hpp- precedes the causative ma-:

(72) ani-men kei rua an-hvŋ-ma-tuk-tir.

3-ERG 1.SG bamboo3.PL-CIS-CAUS-cut-PERM

'They made me cut the bamboo.'

On the other hand, when the "causee" is 2nd person object, it is indexed post-verbally with the enclitic -ne (Position class 10). This is shown in example (73) below where the enclitic -ne occur on the verb -si-. Again, this is consistent with the findings above where the 2nd person P-argument (or object) is always indexed in post-verbal position.

(73) Ramngai-men naŋ in a-ma-si-at-tir-ei-ne-lɛ h-ma?
Ramngai-ERG 2.SG house 3-CAUS-V-FUT-PERM-PL OBJ-NEG-Q
'Won't Ramngai make you all break the house?"

11. Summary of argument indexation on verbs in Pangkhua

To summarize, Pangkhua verb indexes all subjects, and the 1st and 2nd person objects. The 1st person object is indexed with the procliticislocative h η -(Position class 4) whereas the 2nd person object is indexed postverbally with the clitic—ne (Position class 10). Both singular and plural subjects are indexed in the subject proclitics for all persons (Position class 3) and plural object with the enclitic—ei(Position class 10). Duality of subjects and objects is not indexed on the verb. The procliticma- (in Position class 1 and 5) seems to be homophonous and have multiple functions. In reflexives, it is an emphatic marker (Position class 1) whereas in causative or permissive constructions, it seems to function as a valency increasing morpheme (Position class 5). A permissive construction, on the other hand, is indexed withboth the proclitic ma- and the enclitic—tir.

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Appendix-1: Questionnaire

1.	Name:
2.	Age:
3.	Place of Birth:
4.	Place you are now living at:
5.	Employment Status: Employed [] Unemployed []
5.	Sex: Male []Female []
6.	Marital Status: Married [] Single []
7.	Name of your native language:
5.	The ethnic community you are married into:
10.	What language do you use to communicate with your spouse?
11.	What language do your children mostly use?
12.	Number of Years in School:
13.	Which language(s) can you speak:
14.	Which language are you most proficient in:
15.	Which language(s) were you taught in school:
16.	What language(s) do you speak-
	a) at home:
	b) To your parents:
	c) To your children:
	d) To your brothers and sisters:
	e) To your friends:
	f) To your grandparents:
16.	Which language do you mostly use at your workplace:
17.	Do you mix up two or more languages in your speech?
	Yes [] No []
18.	If you mix up then what is the main language you use and what are the other languages?
	Main language: Other language(s):
19.	Which language do you think is most important for your livelihood?:
20.	Which language(s) do you think should children be taught:
21.	Do you think your next generation will speak your native language?
	Yes [] No []
22.	Do you think your native language is under threat?
	Yes [] No []
22.	What factors do you think are responsible for this threat?
23.	What do you think your community can do to save your language?
24.	What do you think your government should do to save your native language?
	Do you think your Pangkhua language is different from the younger/older generation? How is it
diff	Give some Examples.

Thank you for your cooperation.

Appendix-2: Evaluation Framework

Factor 1: Intergenerational Language Transmission Scale

Degree of Endangerment	Grade Speaker Population		
Safe	5	The language is used by all ages, from children up.	
Unsafe	4	The language is used by some children in all domains; it is used by all children in limited domains.	
Definitively endangered	3	The language is used mostly by the parental generation and up.	
Severely endangered	2	The language is used mostly by the grandparental generation and up.	
Critically endangered	1	The language is used mostly by very few speakers, of great-grandparental generation.	
Extinct	0	There exists no speaker.	

Factor 2: Absolute Number of Speakers

It is impossible to establish a hard and fast rule for interpreting absolute numbers, but a small speech community is always at risk. A small population is much more vulnerable to decimation (e.g. by disease, warfare or natural disaster) than a larger one. A small language group may also merge with a neighboring group, losing its own language and culture.

Factor 3: Proportion of Speakers within the Total Reference Group

Degree of Endangerment	Grade	Proportion of Speakers Within the Total Reference Population		
Safe	5	All speak the language		
Unsafe	4	Nearly all speak the language		
Definitively endangered	3	A majority speak the language		
Severely endangered	2	A minority speak the language		
Critically endangered	1	Very few speak the language		
Extinct	0	None speak the language		

Factor 4: Loss of Existing Language Domains

Degree of Endangerment Grade		Domains and Functions		
Universal use	5	The language is used in all domains and for all functions.		
Multilingual parity	4	Two or more languages may be used in most social domains and for most functions.		
Dwindling domains		The language is in home domains and for many functions, but the dominant language begins to penetrate even home domains.		
Limited or formal domains	2	The language is used in limited social domains and for several functions.		
Highly limited domains	1	The language is used only in a very restricted domains and for a very few functions.		
Extinct	0	The language is not used in any domain and for any function.		
Extinct	0	None speak the language		

Factor 5: Response to New Domains and Media

Degree of Endangerment Grade		New Domains and Media Accepted by the Endangered Language
Dynamic	The language is used in all new domains.	
Robust/active	4	The language is used in most new domains.
Receptive	3	The language is used in many domains.
Coping	2	The language is used in some new domains.
Minimal	1	The language is used only in a few new domains.
Inactive	0	The language is not used in any new domains.

Factor 6: Materials for Language Education and Literacy

Grade	Accessibility of Written Materials
5	There is an established orthography, literacy tradition with grammars, dictionaries, texts, literature, and everyday media. Writing in the language is used in administration and education.
4	Written materials exist, and at school, children are developing literacy in the language. Writing in the language is not used in administration.
3	Written materials exist and children may be exposed to the written form at school. Literacy is not promoted through print media.
2	Written materials exist, but they may only be useful for some members of the community; and for others, they may have a symbolic significance. Literacy education in the language is not a part of the school curriculum.
1	A practical orthography is known to the community and some material is being written.
0	No orthography is available to the community.

Factor 7: Governmental and Institutional Language Attitudes and Policies

Grade	Community Members' Attitudes toward Language
5	All members value their language and wish to see it promoted.
4	Most members support language maintenance.
3	Many members support language maintenance; others are indifferent or may even support language loss.
2	Some members support language maintenance; others are indifferent or may even support language loss.
1	Only <i>a few</i> members support language maintenance; others are indifferent or may even support language loss.
0	No one cares if the language is lost; all prefer to use a dominant language.

Factor 8: Community Members' Attitudes toward Their Own Language

Degree of Support Grade		Official Attitudes Toward Language		
Equal support	5	All languages are protected.		
Differentiated Support	4	Minority languages are protected primarily as the language of the private domains. The use of the language is prestigious.		
Passive Assimilation 3 No explicit policy exists for minority languages; the dominant languages in the public domain.		No explicit policy exists for minority languages; the dominant language prevails in the public domain.		
Active Assimilation	2	Government encourages assimilation to the dominant language. There is no protection for minority languages.		
Forced Assimilation 1 The dominant language is the sole official language, while non-languages are neither recognized or protected.		The dominant language is the sole official language, while non-dominant languages are neither recognized or protected.		
Prohibition	0	Minority languages are prohibited.		

Factor 9: Amount and Quality of Documentation

Nature of Documentation	Grade	Language Documentation
Superlative	5	There are comprehensive grammars and dictionaries, extensive texts; constant flow of language materials. Abundant annotated highquality audio and video recordings exist.
Good	4	There is one good grammar and a number of adequate grammars, dictionaries, texts, literature, and occasionally-updated everyday media; adequate annotated high-quality audio and video recordings.
Fair	3	There may be an adequate grammar or sufficient amount of grammars, dictionaries, and texts, but no everyday media; audio and video recordings may exist in varying quality or degree of annotation.
Fragmentary	2	There are some grammatical sketches, word-lists, and texts useful for limited linguistic research but with inadequate coverage. Audio and video recordings may exist in varying quality, with or without any annotation.
Inadequate	1	Only a few grammatical sketches, short wordlists, and fragmentary texts. Audio and video recordings do not exist, are of unusable quality, or are completely un-annotated.
Undocumented	0	No material exists.



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