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Gipan means 'language' in *Kusunda*, a seriously endangered language of Nepal. This journal is dedicated to the study of language in general and lesser known/endangered languages in particular. It presents a forum for information and reporting of studies as well as discussions on languages of Nepal and other countries.

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EDITORIAL NOTE

We are happy to bring in your hands Volume 5 of *Gipan*, a peer reviewed indexed journal published by the Central Department of Linguistics, Tribhuvan University. During the Covid-19 period, we couldn't bring the regular issue in time, though the editorial team was constantly working on it.

In this particular volume we have stressed on the quality rather than quantity. In order to raise the standard of the submissions, we have tried our best not to compromise on the academic and research rigor of the submissions. We wish to continue with this tradition in our future issues as well.

There are three articles and a report in this volume. All the articles have sociolinguistic flavor rather than typological, reflecting mostly the effect of language contact on the native speakers. **Bhim Lal Gautam and Prem Prasad Poudel** examine the language contact situation among Maithili speakers in Kathmandu valley and show that their migration to the valley and contact with Nepali and English has reshaped the usage in formal situation, reflecting ideological orientations towards globalization while willingly attending to emerging diverse contexts. **Krishna Prasad Chalise** shows that modernization and globalization has affected once stable bilingualism in Majhi community and there is a language switch towards Nepali and urges for the ways to strengthen language maintenance. **Dubi Nanda Dhakal** looks at the case of Raji speakers, a linguistic minority group living among the Nepali dominant language, who are borrowing lexicon from Nepali and in turn is not just reconfiguring their lexicon but the grammatical borrowings are also affecting its morphology and clause combining. **Lekhnath Sharma Pathak** presents the growth and development of an emerging discipline of cognitive science and psycholinguistics in Nepal and the acceleration of research in the field after the establishment of Cognitive Science and Psycholinguistics Lab in the Central Department of Linguistics in a report.

We hope readers will find the articles in this volume interesting as they reflect the dynamic nature of language and the need to explore new dimensions of conducting research from various perspectives.

Balaram Prasain
Lekhnath Sharma Pathak
Bhim Narayan Regmi

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MULTILINGUALISM AND LANGUAGE CONTACT IN MAITHILI: TRENDS, TRAITS AND IMPACT IN SOCIOLINGUISTIC SPACES

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This paper presents various trends, traits and impact of language contact in Maithili language spoken in the Kathmandu valley. The data were gathered through survey and key informant interviews with Maithili speakers and focused-language contact observations in the communities in various parts of the Kathmandu valley. Drawing on such data, this paper reports the expanding instances of language contact among the speakers of Maithili. It also illustrates causes and impacts of language contact in the rapidly emerging multilingual sociolinguistic spaces, especially in the Kathmandu valley. The findings showed that the Maithili native speakers living in Kathmandu had higher instances of language contact with Nepali and English, especially in the formal situations. Such practices were influenced and shaped by their ideological orientations towards globalization and willingness to attend to the emerging diverse contexts caused by the growing migration.

Keywords: Maithili, intergenerational shift, language use and attitude, language politics, multilingualism

1. Introduction

Maithili is one of the major Indo-Aryan languages spoken in Nepal and India by nearly 35 million people, comprising 3.09 million people in Nepal (11.7 % of Nepal's population (Central Bureau of Statistics [CBS], 2012) and 31.90 million people in India (Epele et al. 2012). In Nepal's case, Maithili is the major language in Madhes province followed by Bhojpuri and Bajjika, among several other languages. In Mithila¹ several dialects of Maithili are in practice, which relates to (though indirectly) the social class/caste indicators. Looking back to the history, not only in the Mithila region, but this language has also been used in the Kathmandu valley, and was used as one of the languages of the court during Malla period² (Malla 2015:14). Maithili language is equally rich in its literature, as several literary works (especially dramas and songs) and inscriptions in Maithili are still preserved at the National Archives in Kathmandu.

¹ Mithila is a geographical and cultural space that is dwelled by majority Maithili speaking population. It is traditionally understood as a territory ruled by King Janak.

² Malla period is the time (1201-1779) during which Kathmandu was ruled by the Malla dynasty.

2 / Multilingualism and language contact in Maithili

Due to the expansion of migration of the Maithili-speaking people to the Kathmandu valley, there has been significant changes in language use, which shows rapidly emerging multilingual language contact spaces. After the establishment of multiparty democratic system in 1990, a huge number of Maithili-speaking population increased in the Kathmandu valley (hereafter Valley) as the capital city has become the center for internal migration. Although this study centers around language contact in Maithili, such scenario is equally observable in other languages as well caused by rapid migration. This migration is instigated by socioeconomic, political, educational and geographical reasons. Table 1 shows the increment of Maithili-speaking population in the Valley.

Table 1: Maithili population in Kathmandu valley in two censuses

	Districts	2001			2011			Increment Percentage
		Total	Male	Female	Total	Male	Female	
1.	Kathmandu	5927	4351	1576	36929	24966	11963	72.04%
2.	Lalitpur	2290	1627	663	11905	7976	3929	67.70%
3.	Bhaktapur	569	401	168	3340	2214	1126	70%
Grand Total		8786	6379	2407	52176	35156	17018	71.11%

Source: CBS (2002) & CBS (2012)

The data in Table 1 shows the massive migration of Maithili people in the Valley in recent years. From 2001 to 2011 we can see a large number of people migrating to the Valley. For instance, Kathmandu had 72.04%, Lalitpur had 67.70% and Bhaktapur had 71.11% increase in Maithili speaking population. The average increment rate is 71.11% in the Valley between the two censuses (2001 & 2011). As language is an important part of people's life and identity, migration of Maithili-speaking population means migration of linguistic capital and resources that has significant impact in the linguistic and cultural situation of the Valley. Such migration of people speaking other languages such as Tamang, Tharu, Rai, Limbu and so on has made the Valley a truly multilingual space, making it a place that is cosmopolitan and complex sociolinguistic context. In such a context, contact among several languages is natural, and there is a likely chance that the languages influence each other in several respects, such as speakers' use and attitudes. Although there are a handful studies available reporting attitudes to native language use and attitudes (e.g., Gautam 2020; Gautam 2022; Poudel & Choi 2021), research on the impact of language contact among Maithili-speaking population has not been available yet. This research addresses this gap, reporting the trends, traits and impact of language contact in Maithili in the Valley.

2. Research methods

This research draws mainly on the quantitative and qualitative data collected through a survey questionnaire³, qualitative interviews and observation. The questionnaire was initially in English, which was translated into Nepali and administered to the informants in

³ Developed in 2014 by the first author in DDL (Dynamique du Langage), France.

the Kathmandu valley. The data were collected in 2016 and 2017 and were a part of the data collected for Faculty Research Grants supported by University Grants Commission, Nepal.

The questionnaire included 45 questions, including questions collecting metadata information and questions about language use and attitude. The informants were asked the languages they use except their mother tongue in different activities and situations such as cultural activities, casual communication. The data were analyzed and interpreted considering recent developments in language contact, pertinent ideologies and sociolinguistic studies. Following the survey in four community contexts, four key informant interviews (Henceforth, KII) were carried out covering at least one KII from each of the communities where the survey was conducted. They were asked their language use in several of their functions, and their attitudes regarding their mother tongue as well as other language use in their community.

The data were collected from the Maithili native speakers, who belonged to the different status of their familial and professional roles such as housewives, teachers/academicians, politicians/language activists, businessmen/shopkeepers, workers/vendors, and students. All the informants were categorized into three age groups: A1 (15-30), A2 (31-55), and A3 (56 and above) in order to find out the impact of language contact and shift between the various generations. The gender and the marital status of the participant was also taken into account while making a purposive selection. The names of the informants in KII have been anonymized for privacy, and pseudonyms are used. Table 3 briefly presents the demographic details of the informants. Among the 45 informants, there were 16 males, 29 females, of which 28 were married and 17 were unmarried. Similarly, 21 were of A1 age group, 18 were A2, and 6 were A3 age groups.

Table 2: Selection of informants

Particulars	Number of informants	Places they lived in
Kathmandu	22	Balkhu, Gaushala, Maitidevi, Kalimati
Lalitpur	12	Pulchok, Kupondol, Balkumari
Bhaktapur	11	Thimi, Suryabinayak

3. Results and Discussion

The findings of the study are presented in thematic terms and are supplemented with the quantitative data in tables and figures which illustrate the key traits, trends and impacts of language contact in Maithili in the Kathmandu valley. These thematic findings were developed while coding the data iteratively by both authors.

3.1 Traits of language contact

By traits of language contact, we are referring to several features of the evolving nature of language use in the language contact situations. It also represents emerging patterns of language contact among the speakers of Maithili living in the Valley. The sub-sections below illustrate these concerns.

4 / Multilingualism and language contact in Maithili

3.1.1 Language use in informal situations and activities

Maithili speakers living in the Valley use various languages in various formal and informal situations which comprises several behavioural and personal activities. Behavioural activities in this research mean the activities which show the different behavior of the informants. These activities include the activities like making friends, different reading and writing activities, making telephone calls, talking with different people, shopping, attending exams and so on. Table 3 illustrates the patterns of language use in different behavioural activities.

Table 3: Patterns of language use in behavioural activities

Domains		Languages				
		Maithili	Nepali	English	Hindi	Others
1.	Making friends	77.77%	71.11%	24.44%	35.55%	2.22%
2.	Reading/ writing	17.77%	84.44%	57.77%	2.22%	
3.	Getting job	17.77%	73.33%	51.11%	4.44%	2.22%
4.	Making telephone calls	77.77%	75.55%	22.22%	28.88%	
5.	Shopping	60%	86.66%	6.66%	42.22%	2.22%
6.	Attending exams	2.44%	71.11%	44.44%	6.66%	
7.	Communicating with workers	66.66%	64.44%	1.11%	40%	
8.	Communicating with teachers/ professors	15.55%	82.22%	51.11%	4.44%	2.22%
9.	Communicating with academicians	26.66%	86.66%	44.44%	17.77%	2.22%

Source: Field study (2017)

Table 3 shows that Nepali language is used in most of the domains in comparison to Maithili, English and Hindi. The influence of English is much higher than that of Hindi because of education, globalization and tourism among the Maithili people living in the Valley. In contrast, Maithili is used widely for making friends, telephone calls and talking with workers rather than other activities. The use of English is very high for academic uses such as reading/writing, attempting exams, seeking/getting jobs and talking with teachers and academicians. These diverse uses of languages are linked with the status of these languages. For instance, English as a language of education has been expanding, followed by Nepali so the speakers used these two languages in such purposes more than their mother tongue Maithili. The data also shows that English is rarely used for informal activities such as joking, singing, praying, and telling stories, to name a few. This reflects the role of English as a foreign language situation. It is also to be noted that the language use choices are related to individual informants' personal and interpersonal activities. They include activities like joking, singing, praying, bargaining, abusing, telling stories and so on.

Figure 1 below illustrates further elaboration of some of the patterns of language use in various personal activities among the Maithili speaking community in the Valley.

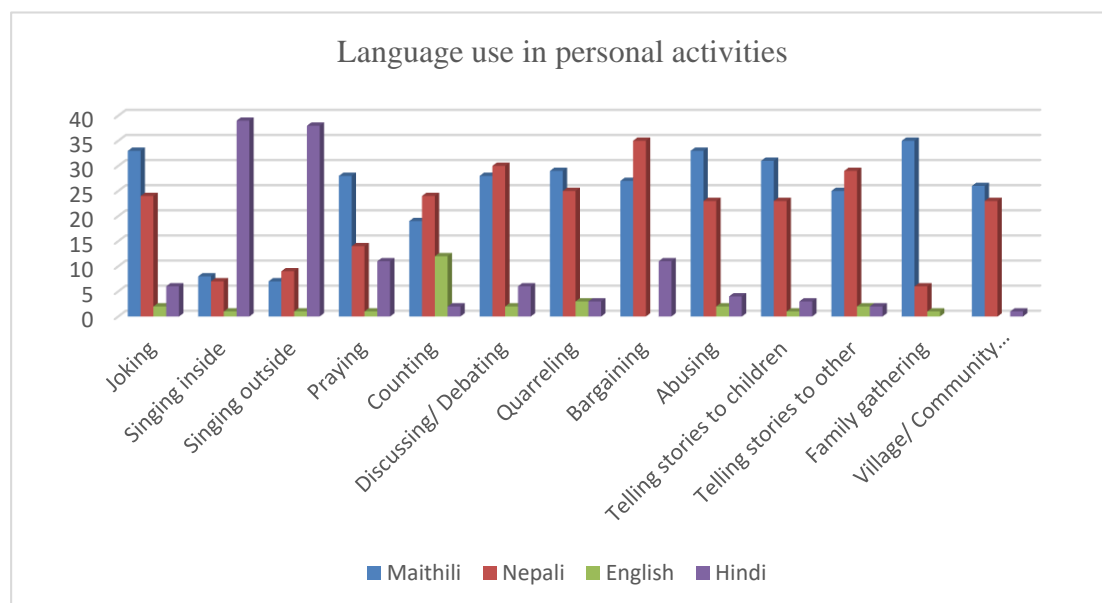


Figure 1: Language use in personal activities

Figure 1 shows that the use of Maithili, Nepali and Hindi languages are simultaneously used in most of the personal activities like singing, praying, telling stories, village gatherings and meetings which are similar to other studies in Kathmandu valley (Gautam 2017; Gautam 2021a; Gautam 2022).

3.1.2 Formal situations and activities

Language choice and use in formal spaces such as offices, educational institutions, business centers and so on differ from those of home and other informal situations and activities. Table 4 below shows Maithili native speakers' use of language(s) in the domain of formal situations/activities.

Table 4: Patterns of language use in formal activities

Activities		Languages			
		Maithili	Nepali	English	Hindi
1.	Office/ workplace	17.77%	77.77%	28.88%	4.44%
2.	Political/ social gathering	31.11%	73.33%	8.88%	15.55%
3.	Public activities/ fun fair	40%	75.55%	4.44%	11.11%
3.	Administration	4.44%	88.88%	6.66%	4.44%
5.	Dealing with strangers	37.77%	82.22%	6.66%	24.44%

Source: Field study (2017)

6 / Multilingualism and language contact in Maithili

As presented in Table 4, the use of the Nepali language dominated others in all the situations and activities. However, Maithili was also used minimally in the activities related to office/workplace, political/social gatherings and many public activities working places. Maithili is strong in public activities (40%) and social gatherings (31.11%), yet it occupies very little space in the activity of administrative works (4.44%). English is found more influential compared to Hindi in formal situations/activities (i.e., 28.88%), whereas Hindi was used more in communicating with strangers (i.e., 24.44%). These trends of language use indicate language shift pattern towards Nepali and other languages from Maithili in the city areas. We could see the highest level of the use of Nepali language in almost all the situations and expanding use of Hindi and English among the speakers, rather than Maithili.

3.1.3 Religious and cultural activities

Religious and cultural activities are those which are observed and performed by the Maithili people in order to demonstrate and preserve their religious and cultural values. These activities include birth ceremonies, marriage ceremonies, and religious and cultural festivals. Table 5 shows the language use among the Maithili native speakers in various religious and cultural activities.

Table 5: Patterns of language use in religious/cultural activities

Activities		Languages			
		Maithili	Nepali	Hindi	English
1.	Religious festival	84.44%	22.22%	2.22%	
2.	Cultural programs	66.66%	60%	11.11%	
3.	Death ceremonies	86.66%	22.22%	13.33%	2.22%
4.	Marriage ceremonies	86.66%	28.88%	11.11%	
5.	Birth ceremonies	86.66%	24.44%	8.88%	
6.	Cultural festivals	80%	44.44%	17.77%	

Source: Field study (2017)

Table 5 indicates that Maithili was dominantly used in religious and cultural activities. The highest use of Maithili was found in the birth, death and marriage ceremonies. Its use was relatively lower in the religious and cultural activities (i.e., 84.44% and 66.66% respectively). The Nepali language also occupies significant position in the activities related to the religious festivals, cultural programs, death rites and rituals, marriage, birth ceremonies and cultural festivals among the Maithili native speaking population. The data showed that highest use of the Nepali language was observed in cultural programs (60%) followed by its use in cultural festivals (44.44%). Although the influence of Hindi can be observed in their language use, it is minimum (less than 20%).

3.2 Language contact and intergenerational shift

Multilingualism, language contact and language shift are the inherent phenomena in every multilingual community context such as Kathmandu. Language shift is the process by which a speech community in a contact situation (i.e., consisting of bi/multilingual speakers) gradually stops using one of its two languages in favor of the other (Fishman 1991). The causal factors of language shift are generally considered to be social, cultural and geographical (Gautam 2019). In the Maithili speaking community living in the Valley, different patterns of language use were observed. Table 6 demonstrates the use of various languages among the Maithili mother tongue speakers while communicating with family and friends.

Table 6: Patterns of language use in family and friends

Family and friends		Languages					
		Maithili	Nepali	More Nepali than Maithili	More Maithili than Nepali	Maithili and English	Maithili and Hindi
1.	Father	82.22%	2.22%	2.22%	2.22%		2.22%
2.	Mother	84.44%	2.22%	2.22%			2.22%
3.	Brothers	68.88%	2.22%	8.88%	8.88%		2.22%
4.	Spouse	46.66%	2.22%	8.88%	6.66%		
5.	Friends at home	33.33%	13.33%	6.66%	24.44%	2.22%	2.22%
6.	Friends outside	8.88%	26.66%	8.88%	26.66%	2.22%	2.22%
7.	Neighbours at home	33.33%	15.55%	13.33%	17.77%	4.44%	2.22%
8.	Neighbours outside	20%	26.66%	4.44%	24.44%	4.44%	2.22%

Source: Field study (2017)

Table 6 indicates that the Maithili speakers used this language with family members, especially while communicating with parents, siblings and spouse. However, Nepali and Maithili are found in parallel use among the people of this language group while communicating with friends at home as well as outside home. This shows that Maithili and Nepali sidelined other languages such as Hindi and English in their family communication. The Nepali language is dominantly used among friends at home and outside as compared to other domains. This shows that there is language shift from Maithili to Nepali among the Maithili native speakers of the Valley.

Language shift, sometimes referred to as language transfer or language replacement or assimilation, is the process whereby a speech community of a language shifts to speak another language, usually over an extended period of time. The language shift may have different effects on language community, such as turning the community a highly multilingual. There may be cultural shift along with language shift; and some different

8 / Multilingualism and language contact in Maithili

language(s)/codes can emerge. Language shift is one of the effects of globalization that also enabled rapid labour migration inside and outside of the country, thereby generating complex multilingual sociolinguistic spaces. In such emerging contexts, one significant concern in the study of language contact is related to how people are transmitting languages from one generation to the next. In this regard, it would be relevant to see whether (and how far) the speakers of new generation are adopting their mother tongue or using another/additional language/s. The data from KIIs and informal observations in this study revealed that in Maithili speaking community, the members of older generation often use the Maithili language whereas it is less used by the members of younger generations. For example, a Maithili speaker (70) of Saptari living in Gaushala, while talking about intergenerational language shift said, '*ke chha ki sar, haami ta bolinchha ni tara aailekaa keṭakeṭiharu bolnai mandainan; ajjha borḍing paḍhneharu ta Englishma bolchha*' [The reason, we speak Maithili, but our children do not want to speak this language, even those who go to boarding school speak English instead of Maithili] (Interview, July 2017). This is evident in the quantitative analysis as well. For example, in the activities of telling stories to children as well as others, use of Maithili was found absent in the age group of 15-25 years – even though the old generations are still using these languages for the same purpose. However, we do not argue that this data erases the mother tongue use among young generation, rather we see a trend of sidelining the mother tongue by younger generation. In some cases, the younger generation (15-25 years youths) were found using the mother tongue in all the personal activities. Despite such use of Maithili, it was found that the mother tongue use among the new generation is gradually diminishing, and they are more inclined towards using the dominant languages such as Nepali and English in their daily and familial activities and events. Among many, some of the reasons for such trends are impact of globalization, business and communication as well as widespread use of English and Nepali in technology and the media.

3.3 Language attitudes and multilingualism

A set of open questions were asked in the survey to understand the informants' most favourite language. Figure 2 shows the responses of the informants in which about 69% of them replied that Maithili is the most favourite language. About 27% responded that Nepali is the most preferred language and only 4% responded that Hindi as their favourite language. This shows that Maithili is still popular language among the migrated Maithili speaking community in Kathmandu valley.

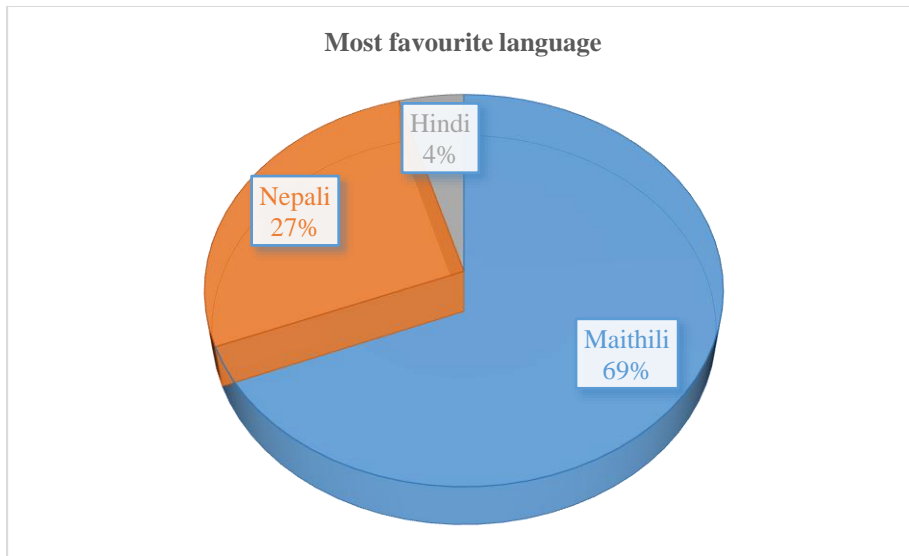


Figure 2: Language preferred the most

At the same time, the informants were asked the reasons for using Maithili. There are various responses from the different informants which are presented in Figure 3 below.

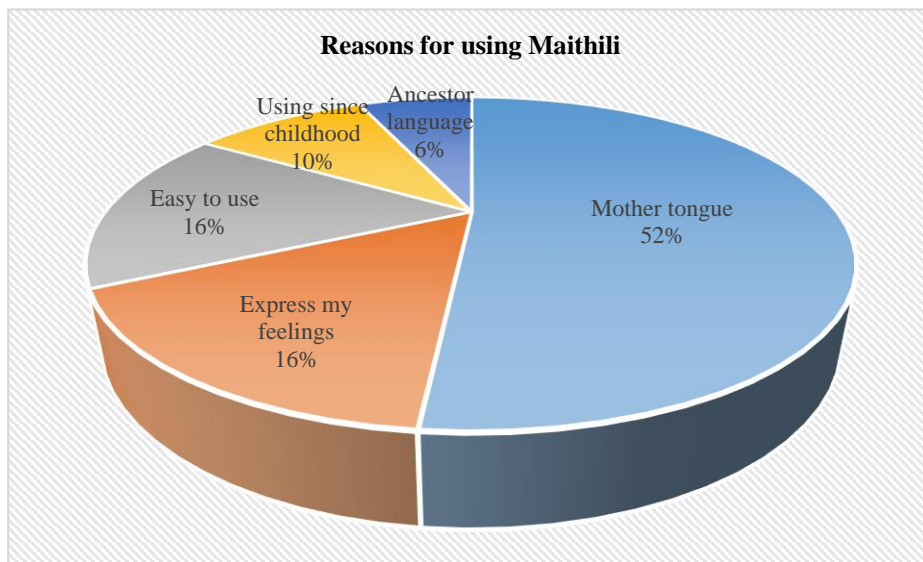


Figure 3: Reasons for preferring Maithili

Similarly, the informants were asked about their reasons for using Nepali, the official and contact language of Nepal. They responded differently. Figure 4 presents the responses to the question "Why do you like to use Nepali?"

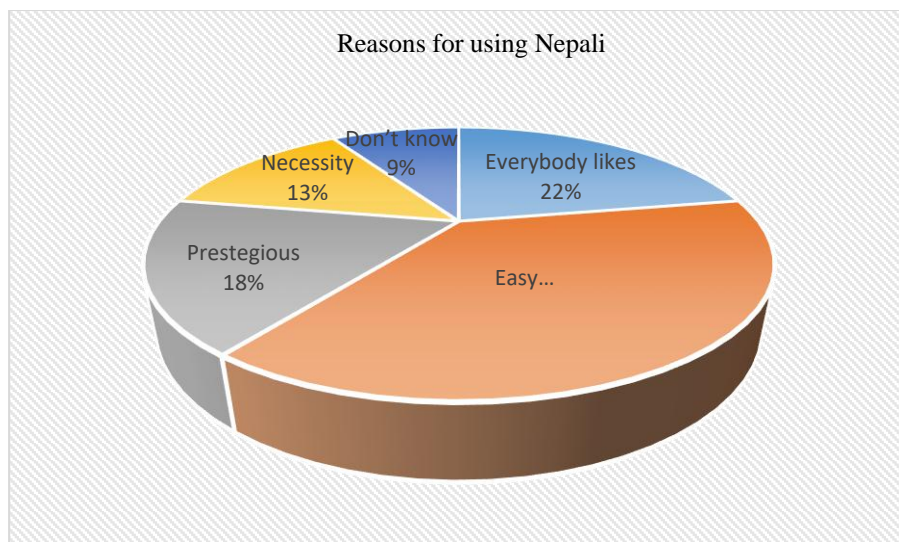


Figure 4: Reasons for using Nepali

Figure 4 indicates different orientations for using the Nepali language among the Maithili speakers. A total of 38% of the informants responded that Nepali language was very easy to use and understand while 18% of them responded that the prestigious position of Nepali, especially being an official language, was the reason for their motivation. Some (22%) replied that they choose Nepali because everybody uses it around them and its use in the official purposes such as writing applications for jobs.

3.4 Motivation

A set of questions were administered to the informants in order to understand the motivation towards Maithili and Nepali language. One of such questions was, "If there are two people coming to work at your place having same skills and experiences, one speaks Maithili and another speaks Nepali, whom would you choose?" More than half of the informants responded that they choose the one with the mother tongue whereas slightly more than one-third of the informants preferred either (Nepali or mother tongue). Regarding other reasons for language choice, the people who chose Maithili said that it is very easy for them to communicate and handle because of cultural and ethnic similarity. They also said that their mother tongue works as a tool to maintain social and cultural solidarity among the language users.

Besides, people are more motivated to learn the languages of wider communication (in terms of population and space) instead of the home language, especially in the workplaces. While using the mother tongue at home and family, the Maithili people have the feeling that their language is for regulating their own cultural and religious activities. Despite this, they raise question over the practical relevance of their mother tongue in formal, official and administrative situations as well. As the use of local language is found less in the case

of formal situations and activities, people have the tendency of thinking that Nepali occupies the higher position than their mother tongue. This sort of feeling can be found even though they use mother tongue at home and within the limited social surroundings. As it is observed in the interviews and KIIs, the growing shift to Nepali, Hindi and English language is because of their widespread use and applicability in the formal situations, media, education and other formal fields in the nation. The narratives of the respondents belonging to diverse socio-economic backgrounds demonstrate that their shifts to Nepali and English language are mostly related to fulfilling the pragmatic purposes.

3.5 Media, migration and marriage (M3)

Among the various impacts and causes of language contact in multilingual urban communities media, migration and marriage are the most influential in Nepalese context (Gautam, 2018).

3.5.1 Media

Media and entertainment activities are related to the activities used in listening to radio and music, reading newspapers and watching different programs in the television. Table 7 shows the use of language by the Maithili mother tongue speakers in the activities under the domain of media and entertainment.

Table 7: Patterns of language use in media and entertainment

Activities		Languages			
		Maithili	Nepali	English	Hindi
1.	Watching movie/ serial	15.55%	40%	22.22%	82.22%
2.	Watching news	17.77%	80%	15.55%	71.11%
3.	Listening to music	37.77%	40%	15.55%	84.44%
4.	Listening to news	44.44%	75.55%	4.44%	40%
5.	Listening to interviews	37.77%	77.77%	8.88%	37.77%
6.	Reading newspapers	19.99%	80%	22.22%	8.88%
7.	Reading horoscope	13.33%	71.11%	11.11%	19.99%

Source: Field study (2017)

In the activities under media and entertainment, Maithili, Nepali and Hindi have occupied space among the Maithili mother tongue speakers. Maithili is found to have occupied a notable space in listening to music, listening to news, and listening and watching interviews. However, in these domains as well, Nepali is found more dominant compared to Maithili. Table 7 also shows that Hindi occupies highest influential space in the activities of watching television serials and listening to music. Nepali is more influential in all the activities including reading newspapers and horoscopes. It is also important to note that the presence of English is noticeable to some extent among the Maithili speakers in the activities of watching television and reading newspapers among the Maithili informants in the Kathmandu valley. Figure 5 further elaborates this data.

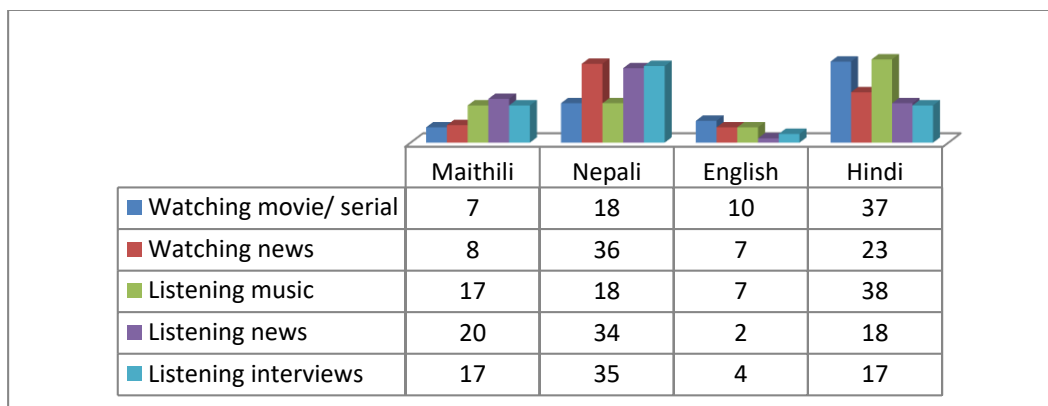


Figure 5: Patterns of language use in media and entertainment activities

Figure 5 indicates the massive use and shift towards Nepali and Hindi language among the Maithili speakers living in the Kathmandu valley in media and entertainment activities. The dominant influence of these two languages in Nepali and regional media is high among the people. If this trend continues, the Maithili speakers will lose many important domains within few decades. The survey data, KII and individual interviews showed that media, migration and marriage (M3) were the major factors impacting language contact (Gautam 2020). It is also found that growing number of media and its consumption among the people of different genres, no matter whether that be electronic or print, makes the local mother tongue speakers get exposed to the regional and global languages (Poudel & Baral 2021). As it is observed in the linguistic landscape of the Kathmandu valley, the seminal influence of Nepali, Hindi and English medium channels in televisions are contributory to such trends of language shift. Our understanding of multilingual spaces in the valley lies in this evidence showing multiple languages used for multiple purposes in everyday life. Such influence could be observed in people's growing consumption of the Nepali channels especially for news, entertainment and information of the various social, cultural and political aspects of the state; the Hindi channels especially for entertainment; and the English channels in order to get entertainment, sports and international/global exposure. Binita, a Maithili girl pursuing her university education at Tribhuvan University, Kathmandu expressed her experience as:

You know, in this era of media and technology, I spend more time on watching news in Nepali channels, teleserials in Hindi Channels and when I want to know about the outer world, I watch BBC, CNN, the National Geography and Animal Planet...so I automatically learn English, Hindi and Nepali instead of Maithili... I like Maithili but does my language has such channels?

Binita's comment here indicates that how people speaking diverse mother tongues shift to other dominant languages not because they dislike their mother tongues, but because of the limited opportunities they have had in using and exposing themselves with their mother tongues. This also resonates the claims made by Gautam & Poudel (2022) that the linguistic diversity might not have been preserved by democratic social and political process that

allow freedom to individuals to make decisions regarding their language use (including their mother tongue). For the speakers of minority language backgrounds, shifts to dominant languages have been essential due to the changing social and linguistic contexts that provide stronger rationale to dominant languages and their use.

3.5.2 Migration

The migration for employment is one of such causes for people to learn a different language (may it be national or foreign language) (see, Poudel & Baral 2021; Poudel & Choi 2022). For such purposes, migration has been a reality. Therefore, the migration rate, the number of emigrants (out movers) per thousand population stands at 10.77, whereas the immigration rate is estimated to be 0.46 per thousand populations (CBS 2012). Some of the informants' personal narratives provide further illustrations in this regard. For example, a 26-year-old Maithili speaking girl said that she wished to learn Japanese and English languages in order to find her future career in Japan. She said, *my relatives especially those in Japan use English and Japanese, I also communicate with them in these languages. Since I am planning to go to Japan in my future, I am learning Japanese and using it with my relatives in Japan* (Interview, Deepa,). Such a situation could be observed in the narratives of Rajesh (42 years old), a Maithili speaking man who had been living in Qatar for the last eight years. He said, *"We don't find good jobs here, we have to leave for other countries for labor works, so I think we have to learn the languages, so we could adjust there"* (Interview, Rajesh). Here, Deepa and Rajesh's narratives as such are just some examples among the large-scale evidence from the respondents involved in this study. These stories, in one or another way, suggest how language shifts especially from local languages to regional or global languages deeply underpin migration, and how that affects individuals' choice of language use.

3.5.3 Marriage

Marriage is another important cause of migration that often encourages language shift. Marriage that occurs between the members of inter-lingual background is quite authoritative to understand how it promotes language shift. Kanchan Jha, a 33-year-old Maithili speaking woman's story is meaningful to reference here. Kanchan, a typical Maithili girl of Siraha district, married to a Newar speaking boy in Kathmandu some 7 years back. The early days of her married life remained quite inharmonious due to her unfamiliarity with the Newar language. The conflicts increased with her Newar monolingual mother-in-law and also with the other members of her family made her serious in the matter. Gradually, she started to learn Newar language by carefully observing how the Newar mother tongue users use Newar terms for the objects they point to. Now she understands the Newar language and culture. She speaks Nepali with her husband and other family members and sometimes Newar with older Newars. The story of Kanchan is one among many evidences that the researchers encountered in the field. Yet, Kanchan's case is important in the sense that language shift locates here from one local language (Maithili) to another local language (Newar) (Interview, Kanchan Jha, March 2017). Unlike Kanchan, Sony, a Maithili speaking woman's experience often demonstrates that how her marriage

to the Hindi native speaking man ultimately pushed her to shift from Maithili to Hindi. Thus, the data and the stories indicate that marriage has become an important cause of language shift mostly in the case of the female Maithili speakers in the context of Nepal, and this is likely to expand further as the inter-ethnic marriages which largely relate to inter-linguistic relations, are encouraged in the contemporary social contexts.

3.6 Ideological shift

The findings reported above reveal that individuals' and communities' prioritization of language use is largely influenced by the ideologies they form towards certain languages. Language ideology has played a significant role in individuals' language attitudes and choices, as they are the politically and morally loaded structures influencing linguistic processes on the ground (Woolard 2020). Language ideology is the linking element between individuals' knowledge of the world and their social practices and linguistic orientations, since it mediates individual thought and behavior (Simpson 2003). The data in this study reveals how the Maithili native speaking people in the Valley negotiate with multiple languages at an ideological level and continue to use one or the other languages through their ideological guidance. In other words, this study found that the informants used their language ideology as a means for their language control. Despite their higher motivation to use Maithili in the educational and social spaces, they could not do so because the other dominant languages had formed the dominant spaces that marginalized many of the minority languages including Maithili. However, it is not only the Maithili speakers as illustrated in this case, but this kind of domination has also been a global phenomenon and a point to be worried from the sociolinguistic perspective (Blommaert 2010; Gautam & Poudel 2022). As the data demonstrate, the use of mother tongues is more concentrated to household and the immediate surrounding in religious and cultural activities, these are the consequences of the language ideologies in the Nepali society. For example, the influence of such ideological structures can be well understood from the cases of the younger generation using Nepali, Hindi and English language more than their native language. Although there are some pragmatically justified reasons for their choice as they relate their shift to Hindi, Nepali and English language in order to attain more pragmatic/instrumental values including intercultural contacts, they are the results of broader ideological forces formed out of Nepal's historical practices of language use (Poudel & Choi 2022; Gautam 2021a).

4. Conclusion

We conclude that the use of Maithili is found more dominant in the family, cultural or religious activities, and has a reduced use for outside contact in the marketplace and business. It signifies that Maithili is used less in formal activities including education and administration, and the educational and formal spaces in the Valley were highly dominated by Nepali and English. This shows that although multilingual sociolinguistic spaces enable many languages to exist, in practice the tendency of embracing the dominant languages continues over time. In the case of immediate community or surroundings, tendency of using Maithili as well as the second language i.e., Nepali is found in the field – applicable

to the languages. Considering the trend across generations, however, indications of the reduced use of mother tongue is noticed among the new generation youths. Nonetheless, older generations are maintaining the use of mother tongue in several ways. This shows the various ideological impacts of language contact in Maithili language community in terms of language shift. There are some of the important implications arising from such contact situations. Some of such implications are threatening Nepal's linguistic diversity, with the creation of new linguistic ecologies (Gautam 2021a; Poudel 2019). Three important factors contributed to the increasing language contact among several linguistic groups including the Maithili community in the valley are media, migration, and marriage. As Nepali and English play the dominant roles in all these spaces, the use of mother tongues, e.g., Maithili in this study, is diminishing, and therefore language shift is emerging.

It is also to be noted that a shift in a language often brings about a shift in identity and there may be resistance to adopting a new language. The Maithili people who have migrated and living in the capital city have been influenced directly and indirectly by the national and international trends such as globalization, migration and interlingual contacts (Gautam 2012). Therefore, this study points towards the connection of language contact with the changing socio-political conditions (Gautam 2021b) and factors/variables that have affected every individual's motivation to choose one or the other language. All these processes have created diverse social spaces that languages meet, and therefore create language contacts and shifts. It is therefore important to identify the processes, traits and trends of language contacts and changes to promote and protect the ethnic/indigenous languages in the multilingual contexts so that one can contribute to the maintenance of Nepal's linguistic diversity.

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LANGUAGE MAINTENANCE AND SHIFT IN THE MAJHI COMMUNITY

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This paper evaluates the knowledge of languages and domains of language use to investigate the factors and forces responsible for language shift (LS) in the Majhi community. The data used are solely based on Chalise (2014). The community became bilingual in Majhi and Nepali several generations ago. A small number of people have knowledge of English, Hindi, etc., but they do not use them in daily life conversations. The patterns of Majhi language competence and its use in different domains in different generations indicate that there was a stable bilingualism in the past, but a notable degree of language shift began around four decades before, and it has been accelerating since then. We do not find any vital changes in the essences of personal factors. But the essences of group factors have been changed because of modernization and globalization. In the last three decades, the nation has adopted a favorable policy for minority languages, but LS has accelerated in this community. It suggests that language policy was unable to withstand the forces of modernization and globalization. We cannot deny modernization and globalization therefore it is our challenge to find out the ways to strengthen language maintenance (LM) in the context of modernization and globalization.

Keywords: bilingualism, language contact, language maintenance, language shift, domains of language use

1. Introduction

The study of language maintenance and shift began in the mid-twentieth century as a response to the context of language contact as a result of migration into North America, Australia and New Zealand (Pauwels, 2016:9). Fishman (1964) points out that the situation of language contact brings changes in the linguistic, psychological, social, and cultural behavior of the people. This change is the main concern of the study of language maintenance (hereafter LM) and language shift (hereafter LS). The situation of language contact results into the situation of multilingualism, which is the major reason for LS (Grenoble, 2011). In the process of LS, the speakers of a language gradually give up speaking their ancestral language and shift into another language of majority culture, population and having economic or social power. In the multilingual situation, the tendency of retention of one's ancestral language is LM. Thus, in a multilingual society, the tendencies of LS and LM oppose to each other. Language is political in nature and according to Joseph (2006), when two languages come in contact, they try to replace each other and obviously the more powerful one marginalizes the less powerful one.

There are available a handful of works that contribute to the knowledge of sociolinguistic situation of the Majhi language. The first detailed sociolinguistic study of Majhi was

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Chalise (2014) which includes the different sociolinguistic aspects of the language like dialectal variations, languages used in the community, domains of language use, language vitality, language attitude, and language resources. Dhakal (2014) presents the dialectal variations of the Majhi language as a part in his grammatical description. Regmi (2021) presents a brief sociolinguistic situation of the Majhi language but this is a reworking of Chalise (2014). Both Chalise (2014) and Regmi (2021) reveal that there is a trend of LS in the Majhi community. In this context, this paper tries to evaluate the knowledge of languages and domains of language use in the community to find out the factors and forces influencing the process of LS in the community.

2. Majhi language and people

Majhi is one of the minority languages spoken in Nepal by the Majhi people. The people call themselves Majhi and their language Majhi Bhasa or Majhi Kura. Although, some scholars point out that the term Kushwaar used in the writings of Hodgson (1840) refers to Majhi (Dhakal 2014:2), we did not find the use of the term Kushwaar in the Majhi communities to refer neither to the people nor to their language. Similarly, the other communities also use the term Majhi to refer to the Majhi people and their language. van Driem (2007) states that it is an “endangered language at the throes of death” which presents the devastating state of its endangerment. But according to Epele et al. (2012), it is a threatened language. It is an Indo-Aryan language under the Indo-Iranian branch of Indio-European language family. It belongs to the Eastern branch of Indo-Aryan. Epele et al. (2012) has grouped it in the Bihari group of Eastern Zone branch of Indo-Aryan. Majhi have their unique language and culture. Bista (1997) says that Majhi, Darai, and Danuwar have physical similarities.

According to Central Bureau of Statistics, Government of Nepal (2014), the Majhi settlements are found on the banks of the Tamakoshi, Sunkoshi, and Dudhkoshi rivers and their tributaries in the Central and Eastern Development Region of Nepal. Their total population is 83,227 and the number of Majhi speakers is 24,422. During the fieldwork we found the Majhi settlements on the belts of Indrawati, Bhotekoshi, Sunkoshi, Tamakoshi, Dudhkoshi, and Likhu in the Central and Eastern Development Region of Nepal. Out of them, the major settlements are found in the areas along Tamakoshi, Sunkoshi, and Likhu rivers in Ramechhap district.

Epele et al. (2012) finds that it is spoken in Bhatauli, Chisapani, Pakarbas, Bhaluwajor, and Rakathum VDCs in the Ramechhap district and has three dialects: Manthali, Rajagaun, and Sitkha. Chalise (2014) revealed that it is mainly spoken in the places along Tamakoshi and Sunkoshi rivers and there are two major dialects viz. Tamakoshi dialect and Sunkoshi dialect with 65% of lexical similarity. There are subdialects under the major dialects. Apart from the lexical items, the major dialects are different in terms agreement system, too. In some cases, there is difficulty in mutual intelligibility between the speakers of two major dialects. Manthali and Rajagaun dialects, mentioned in Epele et al. (2012), belong to the Tamakoshi dialect and the Sitkha dialect belongs to the Sunkoshi dialect. It is reported that there are some Majhi speaking areas apart from Ramechhap.

3. Methodology

This study is based on the data from Chalise (2014). In that study, there were collected different types of data using different research tools. The data used in this study were collected using ‘Sociolinguistic Questionnaire A’ developed and used by the Linguistic Survey of Nepal (LinSuN). The questionnaire was administered to 60 Majhi speakers who were willingly ready to take part in the survey. An oral consent was taken from each of the respondents before the questionnaire was administered. Five major Majhi speaking areas were selected as the study points. Equal number of respondents were selected from each of the study points including equal number by gender and age. But varied number of respondents were included by the level of education at different study points. Table 1 presents the overview of the study points and sample population.

Table 1: Sample structure of the study

Study points	Gender		Age groups			Education		
	Male	Female	15-35	35-55	55+	Illiterate	Literate	Educated
Manthali	6	6	4	4	4	2	6	4
Kunauri	6	6	4	4	4	5	4	3
Rajagaun	6	6	4	4	4	6	4	2
Seleghat	6	6	4	4	4	6	4	2
Sitkha	6	6	4	4	4	8	4	0

The questions were administered in Nepali. For data analysis, the answers, along with the metadata, were entered into a Microsoft Excel database and analyzed for general patterns and trends that would contribute to fulfill the research goals. The study is based on the sociolinguistic approach to the study of LM and LS. The dynamics of LM and shift, viz. knowledge of languages (languages they speak), use of the languages in different domains, use of languages in interpersonal communication, and the languages used by the children have been used to access the patterns of LM and shift in the community.

4. The findings

4.1 Knowledge of languages

All of the respondents are bilingual in Majhi and Nepali. In the Majhi areas where Majhi is not spoken, all the people speak Nepali. A few of them learnt Hindi during their stay in India and some learnt English from their formal education but these languages are not used in daily life conversations. Some of the females married from the Majhi non-speaking areas, some of the young generation (15-35) respondents, and several of the latest generation (below 15) children cannot speak Majhi at all in the Majhi speaking settlements. Nearly 87% of the Majhi speakers have higher degree of command in Majhi than in Nepali. The parents and spouses of all the respondents are/were bilingual in Majhi and Nepali. The children of nearly 80% of the respondents are bilingual in Majhi and Nepali and 20% are Nepali monolinguals. It shows that there was a stable bilingualism in the eldest (55+) generation, and LS was not remarkable in the 35-55 age generation. Remarkable degree of

LS began with the young generation (15-35), and it has accelerated with the latest generation (below 15). The intergenerational language transmission is less in the children living in the market or bazar areas. The intergenerational language transfer is also less in the children of the educated parents. In the market areas, there is an intensive contact with the other language speakers which hinders the language transfer. The educated parents want their children be more proficient in the languages of wider communication than in Majhi.

In total, almost one-third of the children are proficient in Nepali at home, and they do not have any problem with Nepali in their early school classes. But nearly two-third of the children get full proficiency in Nepali within 2-3 years after they have gone to the schools. But, the children of educated parents are likely to be more competent in Nepali at home than the children of other parents. So, the formal education has played an important role in making the Majhi children bilingual.

4.2 Use of languages

4.2.1 Domestic domains

Using ten domestic domains of language use, we assessed the use of the languages (Majhi, Nepali, and both) in the domestic domains. The result shows that Majhi is dominantly used in the domestic domains so it is the major vehicle of communication in the domestic domains of language use as presented in Figure 1. The use of Majhi is higher in the spontaneous use of language like quarreling, abusing, joking and family gathering which justifies that more than 80% of the community members have the highest proficiency in their mother tongue. Counting and storytelling are conscious jobs so the use of Majhi is relatively lower. There are a few Majhi native songs which are mainly used in the cultural occasions, so the use of Majhi in singing is lower than the use of Nepali. Nepali folk songs are much popular in all the Majhi settlements because of the mass media.

The use of Majhi in domestic domains is not equal in all the study locations. In average, it is higher, about more than 80%, in Kunaury, Rajagaun, and Sitkha which are relatively isolated Majhi settlements; and it is lower, around 65%, in Manthali and Selegat which are the mixed settlements of Majhi with other language communities.

The use of Majhi is not even in male and female members of the community. In average almost 80% of the males and 70% of females use Majhi in the domestic domains of language use. Generally, it is believed that the females retain or preserve their mother tongue more than the males, but it is just opposite in the Majhi community. But Labov (1990, 2001) pointed out that women are both sometimes conservative and sometimes innovative in terms of linguistic variation and change. Similarly, Kim and Min (2010) found that marital patterns are important to determine whether the females use the mother tongue at home or not. According to them, if a woman is married within the ethnicity, she is more likely to use the mother tongue at home than the one who is married out of the ethnicity. The case of Majhi is quite different because the females married within the ethnicity are also unlikely to use Majhi at home. A Majhi male in one settlement is likely to marry a woman from another Majhi settlements. Majhi language is not spoken (equally)

in all the settlements and in this situation, the newly married woman may not have good command in the Majhi language or she may not speak it at all. In this context, she acquires Majhi after her marriage as the second language. Similarly, intercommunity marriage is very high in this community as nearly 80% of the respondents assert it. Intercommunity marriage is higher in the urban (like Manthali) or market (like Seleghat) areas and it is more common among the educated members of the community. This is the reason why less number of female respondents use Majhi in the domestic domains in comparison with the male respondents.

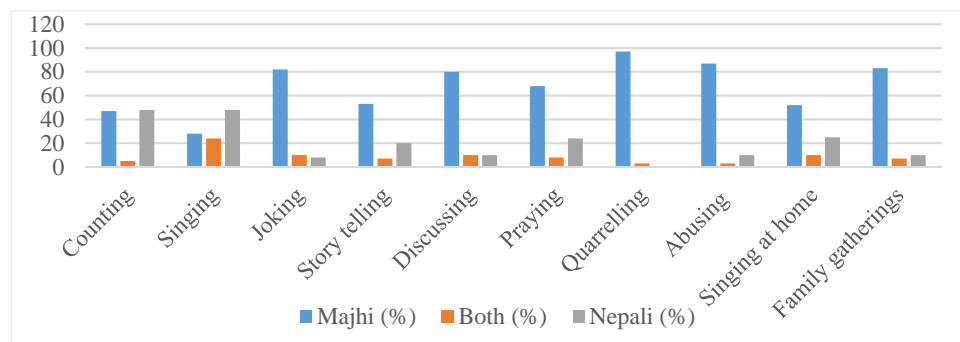


Figure 1: Use of languages in the domestic domains

Fairly smaller number (about 50%) of educated respondents use Majhi than the preliterate and literate ones (70%) in the domestic domains of language use.

4.2.2 Outer domains

We assessed the use of the languages (Majhi, Nepali, and both) in the outer domains using three domains of language use. The result shows that Nepali is dominantly used in the outer domains as presented in Figure 2.

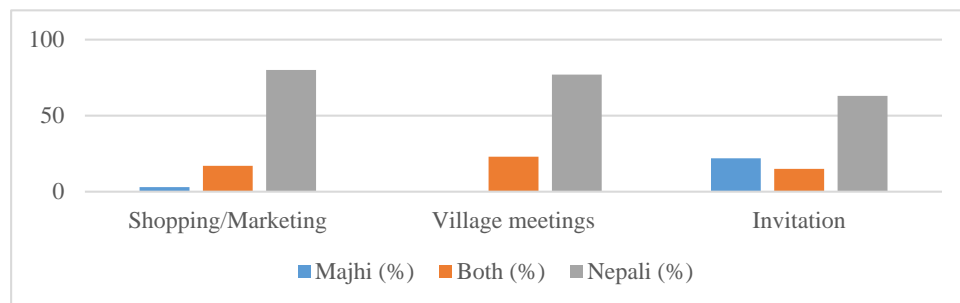


Figure 2: Use of languages in the outer domains

The use of Majhi in the outer domains is negligible. In shopping/marketing, they use Majhi if the shopkeeper speaks it, and in invitation, they use Majhi if the person to be invited is a Majhi speaker.

4.3 Languages in interpersonal communication

The questions were asked to the respondents about the use of languages with their different family members viz., grandparents, parents, spouse, and children. Some of the respondents didn't have grandparents and/or parents so we could not get answer from all the respondents. All the respondents who responded the questions use Majhi with their family members. But the use of Majhi with upper generations is higher than its use with the lower generations. It indicates the gradual LS in the Majhi language community from generation to generation.

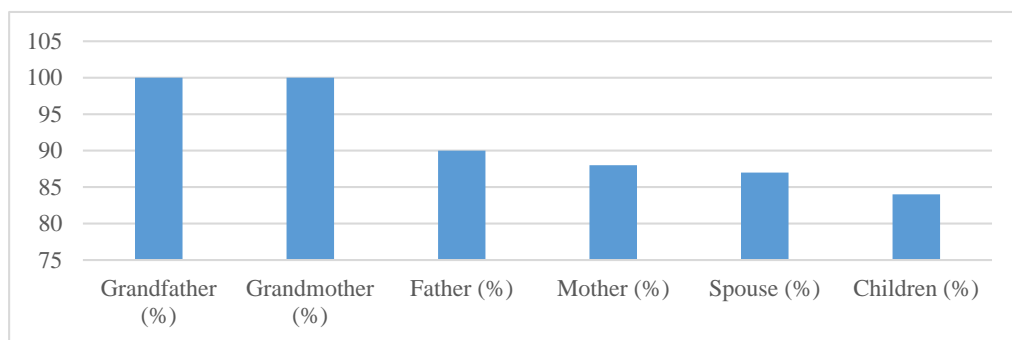


Figure 3: Use of languages in interpersonal communication

4.4 Language used by the children

The pattern of language use of the children is similar to that of their parents. They dominantly use Majhi in almost all of home domains and use Nepali in external domains like with the outsiders, with the teachers in the school, in the classroom, etc.

4.4.1 Language used by children while playing with their friends

While playing with their friends within the community a vast majority of the children use Majhi in all the survey locations except Manthali, as presented in Figure 4.

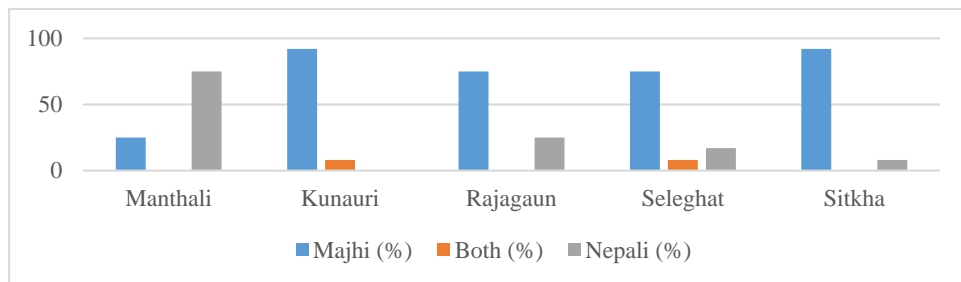


Figure 4: Use of languages by children with their friends while playing

In Manthali, two-thirds of the children use Nepali. The case indicates that gradually Nepali is going to replace Majhi in the common situations of conversation. It can be justified by the fact that the use of Nepali in the parents' generation is almost nil, but in the other survey

locations, also the number of children using Nepali with the friends while playing is increasing.

4.4.2 Language used with the neighbours

The use of language with the neighbours depends on the situation. With the Majhi speaking neighbours, they usually use Majhi but with non-speaker of Majhi they have to use Nepali. In the areas of homogeneous Majhi settlement use of Majhi is automatically high, but in heterogeneous settlements, it is low. Nowadays, because of the expansion of transportation facilities and different types of businesses, people speaking other languages have migrated into in the traditional Majhi settlements and heterogeneous settlements are increasing day by day.

The use of Nepali is remarkably higher in Manthali and Seleghat, but it is lower in Kunauri and Sitkha. In Manthali, nearly two-third of them speak Nepali. It signals that the use of Nepali is increasing. The trend is higher in the market areas where there is availability of modern facilities of transportation, communication, entertainment, etc.

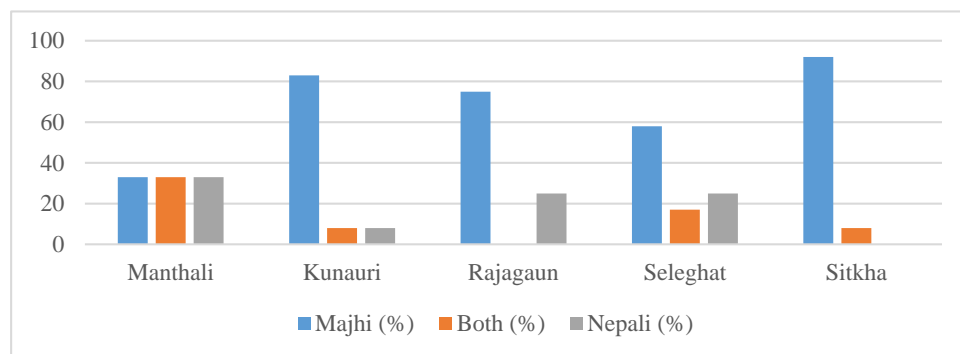


Figure 5: Use of languages with the neighbours

4.4.3 Language used at school with friends and teachers

In the schools the children are completely bilingual and use both Majhi and Nepali according to the situations as presented in Figure 6.

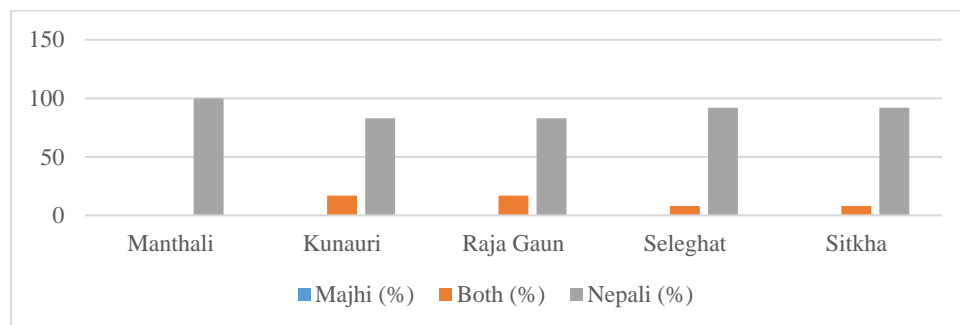


Figure 6: Use of languages with friends and teachers at school

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Nepali is the medium of instruction in the schools so the classroom language is automatically Nepali. Generally, the teachers and their friends are Nepali speakers so they have to speak Nepali. Even the Majhi teachers do not speak Majhi at school. So Nepali is the main language the children use at schools. In the lower classes, they use Majhi for some extent with their friends, but in the higher classes, the use decreases gradually. Most of the teachers in the schools are from other parts of the country and don't speak Majhi and the students should speak Nepali with them. Similarly, while talking with the Majhi speaking friends mostly they use Majhi. Sometimes they use Nepali based on the situation and the topic of discourse.

5. Discussion of the findings

Basically, Majhi is a bilingual community as all of the people, except some Nepali monolinguals, are bilingual in Majhi and Nepali. A negligible number of people have knowledge of English, Hindi, etc. but they do not use them in their daily life conversations. Pauwels (2016) points out that migrant setting and territorial minority setting are the key settings of the bi/multilingual societies. In this context, the setting of Majhi community is the territorial minority setting. The fact that the parents of the oldest generation people were bilingual suggests that the Majhi community have been bilingual since some or several generations. It points out that the Majhi community came in contact with Nepali language community long ago as Nepali had been a dominant language as well as lingua franca before or immediately after the unification movement of Nepal (Hamilton, 1819; Hodgson, 1828; Turnbull, 1887; Noonan, 2003; and Gautam 2021).

Since all of the oldest generation people are more proficient in Majhi and use Majhi in all domestic domains suggests that there was stable and additive bilingualism in the community for a long period of time (for several generations). There was a situation of stable bilingualism and O'Shannessy (2011:79) refers this situation as the state of LM. The gradual LS seems to have begun from the 35-55 age group of the people. According to Grenoble (2011:33) "gradual language shift is characterized by transitional bilingualism." In this situation, certain groups of speakers slowly develop higher proficiency in the language of wider communication (LWC) than in the mother tongue and the use of LWC enters into the domestic domains of language use. The rate of LS was rapid with the 15-35 age group of people and with the latest generation it has accelerated. In the latest generation, we find the situation of rapid LS and the language is going to be endangered.

Pauwels (2016) says that there are individual factors and forces and group factors and forces that influence LM and LS. The individual factors and forces include age, gender, educational background, social class, race/ethnicity, religious affiliation and marital status. In the Majhi community, age, educational background and marital status seem to play important role for LS. A smaller number of younger generation people speak the mother tongue and/or have lower degree of proficiency in mother tongue in comparison with the elder generation people. Likewise, a smaller number of educated people speak the mother tongue or have lower degree of mother tongue proficiency in comparison with the preliterate or only literate people. As Majhi is not spoken in all the Majhi settlements, the

women married from the Majhi non-speaking settlements do not speak Majhi or have lower proficiency in Majhi. This interlingual marriage has affected the smooth intergenerational transmission of the language.

The group factors and forces include numerical strength, settlement pattern, linguistic and cultural similarity and the perspective of majority group towards the minority group and language policy of the country. Greenble (2011:34-35) points out that urbanization, globalization, social dislocation and cultural dislocation are the major factors for LS. In fact, the factors weaken the numerical strength, disturb the settlement pattern, linguistic ecology and increase the cultural similarity. The numerical strength and settlement pattern seem to be important factors/forces for LS in the Majhi community. The areas like Manthali have been converted into urban areas and several of the Majhi settlements have been connected with the roads and converted into market places. Language vitality has decreased in such places. Higher level of LM is found in the homogeneous settlements like Rajagaun, Bhaluwajor, and Sitkha than in Manthali and Seleghat where the settlements are heterogeneous. Similarly, higher level of LM is found in the settlements like Bhaluwajor and Rajagaun which are distant from the other language speaking communities. The lexical and structural similarities between Majhi and Nepali can be a minor factor for LS.

We do not find any remarkable changes in the individual factors in the past and present but modernization and globalization have brought remarkable changes in the group factors. So they are the major factors for rapid LS in the community. It is believed that the favorable language policy of the nation towards the minority languages helps for their maintenance. The language policy of Nepal has been changed in favor of minority languages in the period of last three decades but it is a matter of surprise that LS has accelerated in the last three decades in the Majhi community. It means the favorable language policy for the minority languages could not resist the force of modernization and globalization. We cannot deny modernization and globalization therefore it is our challenge to find out the ways to strengthen LM in the context of these forces.

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LEXICAL AND GRAMMATICAL BORROWINGS IN RAJI

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When languages have a relatively small number of speakers and live along with the speakers of dominant languages, there is a gradual shrinkage in their vocabulary, and grammatical patterns. This study is mainly based on the wordlist and texts initially gathered for the preliminary documentation of Raji in 2018. Raji presents a typical case in which 46.2 percent lexical items are borrowed from Indic languages (and mainly from Nepali). The verbs borrowed from Indic sources exhibit systematic behaviour as all of them index the suffix -e to the verb roots as a technique of accomodation before other suffixes are added to them. Some lexical items end in -au, -ŋ, -ja, -l when they are borrowed to Raji. The grammatical borrowings are largely evidenced in the areas of morphology, and clause combining.

Keywords: Tibeto-Burman, lexical borrowing, grammatical borrowing, Raji

1. Introduction

Raji is an endangered TB language (ISO rji, glotolog: Raji 1240) spoken in Nepal, and also in India (Rastogi 2002). It is primarily spoken in Surkhet, Bardiya, Kailali and Kanchanpur districts of western Nepal. While the ethnic population of Rajis in Nepal is 4235, only 3758 speak this as their mother tongue (Yadava 2014). *Ethnologue* (Epele et al. 2012) enumerates three distinct dialects of Raji, viz. Naukule, Purbiya, and Barabandale, without referring precisely to the Raji variety spoken in Kumaun (India). The language is described as ‘threatened’ (Epele et al. 2012). In Grierson and Konow's classification (1909), Raji belongs to Jungali group within Western Subgroup of Complex Pronominalized languages within Himalayan section of TB languages.¹ The classification of Raji as mentioned in Bradley (1997) is given in Figure 1.

Tibeto-Burman
 Western Tibeto-Burman
 Himalayan
 Central
 RAJI, Raute, Magar

Figure 1. Genetic classification of Raji (Bradley 1997)

¹ Grierson and Konow (1909: 530) mentions that he obtained the data from Asakot, India. Grierson also provides some word lists and phrases from Almora, India. Similar view is expressed in Kansakar (1993).

There are some studies in Raji in India (Fortier and Rastogi 2004; Krishan 2001; Rastogi 2012; Rastogi 2002), and the studies in Nepal are concentrated in the Barabandale dialect (Khatri & Sah 2008; Khatri 2008; Bandhu et al. 2011). The speakers of Purbiya Raji live in a number of villages in Bardiya district including Sanoshri village. Some factors are responsible for the endangerment of the language. There was a shift from semi-nomadic lifestyle to the sedentary existence (van Driem 2007: 310). Secondly, there is widespread bilingualism and multilingualism among Raji speakers that triggers loss of the language (Khatri 2008; Khatiwada & Prasain 2013). Because of the sociolinguistic situation explained earlier, Raji speakers are in contact with the speakers of non-Raji speakers in their daily lives. Raji is gradually losing its domains because of the predominant use of the Nepali language outside their homes. As a result, Raji borrows not only the lexical items from Nepali (and Indic languages), but also the grammatical structures. This paper tries to examine the kinds and patterns of borrowings of lexical items, and grammatical features in Raji.

The study is structured as follows: Section 2 outlines the sociolinguistic situation of the Raji language. Basic information about Raji dialects is presented in section 3. Section 4 outlines the methodology and limitations of this study. The cases of code-switching and borrowing in the cases of Raji is discussed in section 5. Section 6 presents the lexical borrowing in Raji taking different sets of lexical items from different sources. The lexical borrowings have been analyzed from various perspectives. Section 7 presents a number of cases of IA influence in Raji, viz. classifiers (7.1), noun derivation (7.2), gender (7.3), comitative postposition (7.4), ablative postposition (7.5), causative construction (7.6), and conjunct verbs (7.7). A number of clause combining strategies have been borrowed from Nepali to Raji, and they are discussed in (7.9) and finally the use of the discourse marker *tə* from Nepali. Section 8 summarizes the main findings of the study.

2. Sociolinguistic situation

A few things may be noted to show the sociolinguistic situation of Raji. To begin with, the varieties of Raji spoken in Nepal and Indian sides are linguistically different in lexicon, and grammar despite the fact that they are referred to by a single name. Secondly, Raji is distributed sporadically in some districts leading to the divergence in lexicon and grammar. Most of the areas where Rajis inhabit these days are surrounded by non-Raji speakers leading to the pervasive bilingual and multilingual (Epele et al. 2012). Khatiwada and Prasain (2013) note that there are hardly any monolingual Raji speakers, but Epele et al (2012: 78) noted that "In one village in Kailali District in the Khailad village, speakers under 6 years of age and over 60 years old are monolingual." In fact, the Raji language spoken in Sanosri may be regarded as a 'migrant language' because Rajis were settled by the government of Nepal from the areas near Bardiya national park about 30 years back.

3. Dialect variations

A systematic study of variations in Raji varieties is not available for some reasons. Leaving aside the Raji spoken in India, three dialects, viz. Barabandale, Naukule, and Purbiya Raji have been accepted (Epele et al. 2012; Bandhu et al. 2011). A short description of

Barabandale (Bandhu et al. 2011), and Purbiya Raji (Dhakal 2021) are available. Neither the detailed wordlist, nor the grammatical description of Naukule variety exist till the date.

Khatri (2008) demonstrates that the lexical correspondences between Barabandale and Pubiya is higher compared to other relations. On the other hand, Purbiya and Naukule share only 52 lexical items. It is interesting when Swadesh 100 words of Kumaun Raji are compared with Purbiya Raji. Only 78 words are comparable when the Indic words are not counted between them. Out of 78 words, they shared only 38 lexical items (resulting only in 48.7% lexical correspondences).² This also indicates the grammatical variations these varieties may further reveal.

To begin with, there are some dialectal differences in Raji varieties. The central unrounded vowel /i/ of Barabandale dialect is not found in Purbiya Raji. Conversely, the glottal stop /ʔ/ reported in the Purbiya Raji is not present in Barabandale variety. The dual number is attested in nouns, and they also trigger verb agreement in Barabandale variety, which is gradually disappearing in Purbiya Raji.³

- (1) *tsaŋ-ragin bəʃa dzaʔ-ki-tsi*
 son-DU rice eat-PRES-DU
 'My two sons eat rice. (Bandhu et al: 2011: 58)

While the variety in Barabandale makes three-way distinction of demonstrative pronouns (viz. proximal, distal, and farther away), Purbiya Raji simply makes a two-way distinction (viz. proximal and distal). Interestingly, the copula used in identificational clause also differs in these two varieties. For example, the copula *lʌ* 'COP.PRES' is used in identificational clause in Barabandale variety in locative clause, and with attributive clause in Barabandale variety (2).

- (2) *in trontja lʌ*
 this boy COP.NPST
 'This is a boy.' (Bandhu et al: 2011: 88)

By contrast, the copula *hũ* is used in identical clause (3), and *heŋ* in locational clause in Purbiya Raji.

- (3) *naŋ gurəu hũ*
 2SG priest COP.NPST.SG
 'You are a priest.' (Dhakal 2021)

The similarities counted and presented above indicate that a more systematic comparison of grammars of these varieties is needed to explain them in detail. No sociolectal variations in Raji have been observed so far.

² The words for Kumaun Raji is taken from Rastogi and Fortier (2008), and Dhakal (2021) for Purbiya Raji.

³ The following are the symbols used in the transcription of the data in Raji consonants: Stops: p, p^h, b, b^h, t, t^h, d, d^h, k, k^h, g, g^h, ʔ; Affricates: ts, ts^h, dz, dz^h; Fricatives: s, h; Nasals: m, m^h, n, n^h, ŋ; Laterals and trills: l, l^h, r, r^h; Glides: w, j.

4. Methodology and limitations

The cases of lexical and morpho-syntactic borrowings presented in this article are based on the data obtained mainly from three sources. To begin with, the lexical borrowings calculated here are based on the lexical items included in Dhakal (2019), in addition to the lexical items obtained from 'documentation corpus' interlinearized and included in Dhakal (2018). The lexical items from three varieties are drawn from the data gathered during the sociolinguistic survey of Raji.⁴ The morphosyntactic borrowings discussed in this article are based on the gathered corpus, and grammatical description (Dhakal 2021).⁵ The texts used for grammatical information and borrowing in Purbiya Raji comprise narratives, procedural texts, instructions, and personal experience. In addition to directly elicited examples, a total of 1200 sentences are obtained from the corpus. The insights from Thomason and Kaufman (1988), Aikhenvald (2006) and Haspelmath Tadmor (2009) were used for the theoretical orientation of this study.

5. Code-switching and borrowing

It is relevant to mention that code-switching and borrowings are often placed in a continuum. There are cases when the speakers use both the native and borrowed lexical items and native and borrowed grammatical patterns in various discourse contexts. The lexical items were regarded as 'borrowing' if no words are found for any lexical items' parallel.

When the texts were gathered, the speakers made use of a number of lexical items from other languages (mainly from Nepali) although the same terms are available in Raji. The borrowings from English are restricted. The lexical items borrowed from English are presented in (4).

- | | | |
|-----|-----------------|---------------|
| (4) | <i>ed</i> | 'cooperation' |
| | <i>əmrɪkə</i> | 'America' |
| | <i>saikeɪl</i> | 'bicycle' |
| | <i>ɪskʊl</i> | 'school' |
| | <i>ɾɪdzəlʈə</i> | 'result' |
| | <i>ʃaksən</i> | 'action' |

The lexical items other than nouns are not borrowed from English to Raji. The speakers switched to Nepali and made use of the Nepali words in conversation despite the fact that the native Raji words are also used in some other contexts. These words are more like 'insertional switches' rather than actual borrowings (see Matras & Sakel 2007: 9) in the conversations. The speakers have choices between the alternatives in this case, either native lexical items or borrowed ones as alternatives as presented in (5).

- | | | | |
|-----|----------------|---------|--------------|
| | Raji | | Nepali |
| (5) | <i>breunaŋ</i> | 'Tharu' | <i>tʰaru</i> |

⁴ A total of 210 basic words were considered basic during the survey of Raji.

⁵ The computer software program ELAN was used in the transcription of the Raji texts.

<i>mikrja</i>	'tear'	<i>āsu</i>
<i>pāira</i>	'straw'	<i>kʰərə</i>
<i>ghra</i>	'head'	<i>kəpləu</i>
<i>pətʰai</i>	'for'	<i>lagəi</i>
<i>kurhja</i>	'god'	<i>deuṭa</i>
<i>səinjəŋ</i>	'to stand'	<i>ʃekenjaŋ</i>
<i>gʰrəu</i>	'hand (length from elbow to tip of middle finger)'	<i>haṭ</i>

A list of such words are limited, however. It is to be noted that the Nepali borrowings have slightly different phonological shapes when they are borrowed into Raji. The word *khər* 'straw' as *khərə*, *kəpal* 'kəpləu' as *kəpləu*, *lagi* 'for' as *lagəi*, *deuta* 'god' as *deuṭa*, and *hat* 'hand' as *haṭ* (also see section 6.4).

6. Lexical borrowing

This section discusses the loanwords in Raji taking different sets of basic words and perspectives. The term 'borrowing' is used in a broad sense, such as “the incorporation of foreign features into a group’s native language by speakers of that language” (Thomason & Kaufman 1988: 37). For the purpose of counting the borrowing, the root of the word has been considered. For example, *mədza* 'good' is a Nepali word, and *ma-mədza* 'bad' is derived by appending the native prefix *ma-* to the Nepali word. This is therefore counted as a single borrowed lexical item. Similarly, the word *səbkəl* 'common' consists of the root and two suffixes, *səb* 'all' -*kə* 'GEN', and -*l* 'EMPH'. Since the root is borrowed from Indic source (viz. Nepali), this is counted as a borrowed word in Raji. When some words are borrowed from Nepali to Raji, they remain the same in form and in semantic contents. For example, *mədza* in Raji is borrowed from Nepali *mədza* 'happiness'. There is slight semantic change in the words when the word is borrowed to Raji. On the other hand, an overwhelming majority of words show resemblance in form and meaning with Raji, such as English loanwords given in (4). It is to be noted that a small percentage of lexical items have different forms when they are borrowed to Raji.⁶

6.1 Borrowed lexical items

This section discusses the loan words in Raji taking different perspectives. The data for this discussion mainly came from lexicon (Dhakal 2019). A total of 2230 words have been counted for this purpose. The word-categories as it is mentioned in the lexicon and the state of borrowing have been given in Table 1. A total of 46% words are borrowed in Raji.⁷

Table 1: Lexical items and borrowed words

	All words	Borrowed	Loanwords percentage
Numeral	29	23	79.4%
Adjectives	226	127	56.2%

⁶ There are other calculations regarding the lexical borrowings in Raji. For example, Khatri (2008:16) shows that 67 lexical items (21.2% borrowings) have been borrowed when he calculated 316 words in Barabundle variety.

⁷ Raji falls in 'high borrowers' among languages in typological context (cf. Tadmor 2009: 56).

Nouns	1346	684	50.9%
Conjunctions	16	8	50.%
Postpositions	9	4	44.4%
Adverbs	114	44	38.6%
Verb	446	134	30.1%
Particles	19	5	26.3%
Pronouns	25	2	8.%
All words	2230	1031	46.2%

Table 1 presents the highest percentage of borrowing is found in numerals. Raji retains the native lexical items upto 'six', and the rest of the numerals are borrowed from Nepali. It seems that the more numerals are included in the list, the higher percentage of borrowing is calculated. By contrast, pronouns are the least borrowed lexical items. Only two pronouns are borrowed in this list. On the basis of the information obtained from Table 1, the borrowing hierarchy in Raji is shown in (6).

(6) Numerals > adjectives > nouns > conjunctions > postpositions > adverbs > verbs > particles > pronouns

The data presented in hierarchy (6) mostly confirm with typological findings of Tadmor, Haspelmath and Taylor (2010). To begin with, a higher number of nouns are borrowed than verbs in Raji. Similarly, more than a half of the nouns are borrowed in Raji, and this number is slightly higher than verbs. Less than one-third verbs are borrowed verbs in Raji. By stark contrast to Tadmor, Haspelmath and Taylor's claim (2010), more adjectives are borrowed in Raji (56%) compared to nouns and verbs. The borrowing scale (6) is slightly different from typologically proposed 'borrowing hierarchy' in Tadmor, Haspelmath and Taylor (2010). The precise percentage of borrowing of each of the major lexical items is given in Table 2.

Table 2: Lexical items, and borrowed words

	All words	Borrowed	Loanwords percentage
Adjectives, and adverbs	369	194	52.5
Nouns	1346	684	50.8
Verbs	446	134	30.0
All content words	2161	1012	46.8
All words	2230	1031	46.2

Table 2 demonstrates that higher percentage of adjectives and adverbs are borrowed in Raji than nouns and verbs. The adjectives counted for this purpose also include the quantifiers, and numerals of all kinds. The adjectives that occur in the corpus have been included in this study. Since all numerals have been included in the glossary (Dhakal 2019), the percentage of borrowed adjective is slightly higher than nouns and verbs. This is followed by nouns and verbs in that order.

6.2 Content vs. function words

There are claims that function words are difficult to borrow compared to lexical words (Tadmor, Haspelmath & Taylor 2010: 231). This holds true in Raji as well. As Tadmor,

Haspelmath and Taylor noted, about 25% lexical words are borrowed whereas nearly about half of that number (about 12%) function words are borrowed in typological context. Raji relatively shows higher percentage of borrowings both in lexical and function words.

Table 3: Content words vs. function words

Category	All words	Borrowed words	Loanwords percentage
All content words	2161	1012	46.8%
All function words	69	19	27.5%
All words	2230	1031	46.2%

As seen in Table 3, 46% lexical words are borrowed whereas the percent of borrowing of grammatical words amounts to 27%. The borrowing is slightly higher than one quarter. It is usual that more content words are borrowed than function words typologically (Tadmor 2009: 59).

6.3 Borrowings in terms of semantic fields

The lexical items in Raji are presented in this section classifying them in terms of semantic fields. Firstly, the complete lexical items (the more elaborate list) have been classified in terms of semantic fields. Each of the lexical items was assigned the semantic fields following Haspelmath and Tadmor (2009). If the lexical items are not found in the above list, the lexical items were grouped in the closest classes. The lexical items belonging to some semantic fields, such as law (5), modern world (24), and warfare and hunting (20), etc. are small in number. The borrowings in terms of semantic fields are given in Table 4.

Table 4: Semantic fields, ranked by loanword percentage

	Semantic fields	Total	Borrowed	Percentage
1	Law	5	4	80%
2	Basic actions and technology	147	6	72.9%
3	Social and political relations	60	46	76.6%
4	Modern world	24	17	70.8%
5	Warfare and hunting	20	13	65%
6	Quantity	84	51	60.7%
7	Speech and language	37	22	59.4%
8	The physical world	106	62	58.4%
9	Religion and belief	60	35	58.3%
10	Emotions and values	57	33	57.8%
11	Possession	56	32	57.1%
12	Time	127	68	53.5%
13	Cognition	55	29	52.7%
14	Spatial relations	131	60	45.8 %
15	Sense perception	80	36	45 %
16	Clothing and grooming	84	41	48.8%
17	Food and drink	129	56	43.4%
18	Kinship	161	64	39.7%
19	The body	242	96	39.6%
20	The house	54	21	38.8%

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21	Agriculture and vegetation	155	58	37.4 %
22	Miscellaneous function words	69	24	34.7%
23	Motion	92	32	34.7%
24	Animals	195	60	30.7%

The three highest percentages of borrowings are seen in Law, Basic actions and technology, and Social and political relations. By contrast, the least percentages of borrowings are found in Miscellaneous function words, Motion, and Animals. This does not strictly follow the typological findings because 'the semantic fields most affected by borrowing are Religion and belief, Clothing and grooming, and The House' (Tadmor 2009: 64). All the words included for this analysis is strictly the same as in the above list. A large number of lexical items in the above list were absent, whereas some others were added. This is one of the reasons for slightly different results obtained in terms of semantic fields.

6.4 Accomodation of lexical items

Some adjectives (including nouns) are borrowed to Raji and they end in *-l*. It functions as an emphatic clitic that can appear with most if not all word categories in Raji. Some lexical items that terminate in *-l* are given in (7-8), most of which are bisyllabic.

	Nepali		Raji
(7)	<i>ritto</i>	'empty'	<i>rittal</i>
	<i>səsto</i>	'cheap'	<i>səstal</i>
	<i>rəsilə</i>	'juicy'	<i>rəsiləl</i>
	<i>sak^hk^əəi</i>	'real'	<i>sak^hk^əəl</i>
	<i>sātso</i>	'true'	<i>sātsəl</i>
	<i>t^hik</i>	'right (thing)'	<i>t^hikəl</i>
(8)	<i>səd^həi</i>	'always'	<i>səd^həil</i>
	<i>tsāqo</i>	'quick'	<i>tsārol</i>
	<i>ədz^hə</i>	'till now'	<i>ədz^həl</i>
	<i>nədzik</i>	'near'	<i>nədziklə</i>

The lexical items mentioned in (7-8) are adjectives, and adverbs. I found only a noun borrowed from Nepali, and that ends in *-l*, viz. *təuwal* 'pile of straw for storage' from *təuwa*. The borrowed adjectives and adverbs ending in *-l* (7-8). The suffix *-ja* that appears with these borrowed adjectives is not very productive, and does not serve any other functions in Raji grammatical structure except appearing in the borrowed lexical items.

	Nepali		Raji
(9)	<i>debre</i>	'left'	<i>dəbrja</i>
	<i>ul^ho</i>	'inside out'	<i>ul^hai</i>
	<i>daine</i>	'left'	<i>dainja</i>
	<i>ts^ho^ho</i>	'short'	<i>ts^ho^hja</i>
	<i>dəro</i>	'squint-eyed'	<i>dərja</i>
	<i>basi</i>	'stale'	<i>bəsja</i>
	<i>tapke</i>	'frying pan'	<i>tapkja</i>
	<i>b^hanse</i>	'cook (N.)'	<i>b^hansja</i>

Some borrowed adjectives from Nepali terminate in *-əu* as shown in (10a), and nouns terminating in *-iu/-əu/-au* are given in (10b). The list also contains the postposition, such as *pətti* 'towards', *pəttiu*.

	Nepali		Raji
(10)	a.	<i>baklo</i> 'thick'	<i>bakləu</i>
		<i>əglo</i> 'tall'	<i>əlgəu</i>
	b.	<i>dʰik</i> 'edge'	<i>dʰikəu</i>
		<i>kəmməl</i> 'blanket'	<i>kəmliu</i>
		<i>tsolo</i> 'blouse'	<i>tsolau</i>
		<i>gəhəna</i> 'ornament'	<i>gəhənau</i>
		<i>gubo</i> 'inner part of plant'	<i>gubau</i>
		<i>tsura</i> 'bangle'	<i>tsurau</i>

Only two adverbs borrowed from Nepali end in *-əu*, viz. *pari* 'across' (Nep.) to *parəu* and *bʰitrə* 'inside' to *bʰitrəu*. Similarly, when some adjectives (including nouns) are borrowed from Nepali, these adjectives end in *-jaŋ* as shown in (11a) and some nouns in (11b). The last word *talū* 'palate' in example (11) also pronounced as *ʧəlju* 'palate'.

	Nepali		Raji
(11)	a.	<i>kʰula</i> 'open, spacious'	<i>kʰolejaŋ</i>
		<i>kātso</i> 'unripe'	<i>kətsuŋ</i>
	b.	<i>gali</i> 'abusive word'	<i>galiŋ</i>
		<i>nəsa</i> 'vein'	<i>nəsjaŋ</i>
		<i>dʒat</i> 'caste'	<i>dʒatəŋ</i>
		<i>tərə</i> 'but'	<i>tərəŋ</i>
		<i>tama</i> 'copper'	<i>təmbəŋ</i>
		<i>sədʒilo</i> 'easy'	<i>sədʒiləu</i>
		<i>talū</i> 'palate'	<i>ʧaliŋ</i>

When the nouns and adjectives are borrowed from Nepali (or Indic source) into Raji, the suffix *-au*, or *-əu* is added to the nouns after the roots. Here are some nouns that end in these sequences of sounds.

	Nepali		Raji
(12)	<i>muntə</i> 'head'		<i>məntəu</i>
	<i>khuffa</i> 'leg'		<i>khufftau</i>
	<i>səmundrə</i> 'sea'		<i>səmundrəu</i>
	<i>sir</i> 'top of something'		<i>sirəu</i>
	<i>tsʰala</i> 'skin'		<i>tsʰaləu</i>
	<i>təno</i> 'lace of shoes'		<i>tənəu</i>
	<i>təlo</i> 'storey'		<i>tələu</i>
	<i>sūdʰ</i> 'beginning'		<i>sūdʰəu</i>
	<i>siŋ</i> 'horn'		<i>siŋhəu</i>
	<i>tsutso</i> 'peak'		<i>tsutsəu</i>

We obtained only one example *sədʒilo* 'easy' (adj.) *sədʒiləu* which follow this pattern. Only some lexical items (except verbs) take these suffixes (*-əu*, *-ŋ*, *-jaŋ*, *-ja*, *-l*). There are no

apparent reasons why this is the case, and how these suffixes are distributed across these lexical items. Kanashi, a TB language spoken in the Uttarakhanda in India, also take the suffix $-(V)\eta$ (Saxena, Borin & Comrie 2022a: 175) in loanword accomodation.

6.5 Phonological adaptation

When some with dental stops are borrowed to Raji, the speakers most of the times pronounce them as corresponding retroflex sounds. The dental stops are pronounced as retroflex stops as free variations (13).

- (13)
- | | | |
|------|---|------|
| /t/ | > | /ʈ/ |
| /tʰ/ | > | /ʈʰ/ |
| /d/ | > | /ɖ/ |
| /dʰ/ | > | /ɖʰ/ |

It is interesting to note that the other way round is not possible, viz. the retroflex stops are never pronounced as dental stops. The Tharu languages, viz. Rana Tharu, Kathriya Tharu, and Dangaura Tharu (Boehm 1998; Dhakal 2015), and Nepali (Khatiwada 2009), spoken in the closest geographical proximity, make a distinction between dental and retroflex stops. Here are some words the speakers use either retroflex, or dental noted during fieldwork (cf. Dhakal 2018).

- | Nepali | | Raji |
|-------------------|---|----------------|
| (14) <i>duna</i> | 'leaf-plate' | <i>ɖona</i> |
| <i>daine</i> | 'right' | <i>ɖaina</i> |
| <i>kodo</i> | 'millet' | <i>koɖi</i> |
| <i>dudʰ</i> | 'breast' | <i>ɖuɖa</i> |
| <i>dulaha</i> | 'bridegroom' | <i>ɖulaha</i> |
| <i>duləhi</i> | 'bride' | <i>ɖulhini</i> |
| <i>debre</i> | 'left' | <i>ɖebrja</i> |
| <i>din</i> | 'day' | <i>ɖin</i> |
| (15) <i>dzuta</i> | 'shoes' | <i>ɖzuɖa</i> |
| <i>uttər</i> | 'north' | <i>uʈtər</i> |
| <i>tsʰati</i> | 'chest' | <i>tsʰaʈi</i> |
| <i>nimto</i> | 'invitation' | <i>niuʈo</i> |
| <i>tori</i> | 'mustard' | <i>ʈori</i> |
| <i>bitta</i> | 'span between tip of middle finger and thumb' | <i>bitta</i> |
| <i>bʰədəi</i> | 'shoe' | <i>bʰəɖəi</i> |
| <i>moti</i> | 'pearl' | <i>moʈiɲ</i> |
| <i>maiti</i> | 'woman's birth home, relative' | <i>maiʈi</i> |
| <i>tʰan</i> | 'place to worship' | <i>ʈʰan</i> |

The functional load to contrast the dental and retroflex is weak in Raji as they use both of the sounds as free variations. This is obvious when we transcribe the texts with dental stops (16). The speakers use either dental or their retroflex counterparts when they utter the following lexical items (16).

Raji words			
(16)	<i>dasinjaŋ</i>	'to wake up'	<i>ɖasinjaŋ</i>
	<i>den</i>	'crab'	<i>ɖen</i>
	<i>d^hela</i>	'door'	<i>ɖ^hela</i>
	<i>putu</i>	'naval'	<i>puʈu</i>
	<i>b^həɖəini</i>	'brother's daughter'	<i>b^həɖəini</i>

This is merely the 'adjustment in articulation', or the sounds are 'allophonic variations' (Matras 2007: 37).

6.6 Loan verb accomodation

When the verbs are borrowed, the suffix *-e* is attached to the verbs before it takes other inflectional suffixes. A list of verbs from the glossary, and the texts have been included in (17) in which the suffix *-e* is used to adapt the borrowed verb stems, and *-njaŋ* is used in various syntactic constructions.

	Nepali		Root	Raji verb
(17)	<i>uɖnu</i>	'to fly'	<i>uɖ</i>	<i>uɖ-e-njaŋ</i>
	<i>ts^hirnu</i>	'to enter'	<i>ts^hir</i>	<i>ts^hir-e-njaŋ</i>
	<i>səprinu</i>	'to flourish'	<i>səpr</i>	<i>səpr-e-njaŋ</i>
	<i>səmdzhinu</i>	'to remember'	<i>səmdzh</i>	<i>səmdzh-e-njaŋ</i>
	<i>p^hernu</i>	'to change'	<i>p^her</i>	<i>p^her-e-njaŋ</i>
	<i>madzh</i>	'to wash'	<i>madzh</i>	<i>madzh-e-njaŋ</i>
	<i>kaɕ</i>	'to cut'	<i>kaɕ</i>	<i>kaɕ-e-njaŋ</i>

The verbs terminate in *-njaŋ* among the verbs given in (17). The suffix functions as a nominalizer, and also as an infinitive in Raji. It is to be noted that the suffix *-e* that follows the borrowed Indic roots functions as a nativizing suffix. The loanword adaptation is common across the region among Tibeto-Burman languages. For example, Baram makes use of the suffix *-di* when the Indic verbs are used in Baram (Dhakal 2014).

The examples given in (14-16) show that there are two classes of borrowed lexical items in Raji, viz. borrowed words without any phonological adaptation (and changes) with slight phonological adaptation. Why do some words have these new forms whereas others do not? Is this because some borrowed words are 'older' compared to the more recent borrowings? Further investigation is needed here.

7. Grammatical borrowing

On examining the grammatical borrowings in Raji, two kinds of patterns are attested. Firstly, there are cases in which the native Raji grammatical structure has been replaced by the borrowed structure. These are 'true' grammatical borrowings. Secondly, the speakers use both the native and borrowed structures in different discourse contexts. When we examine the frequency between the native and borrowed patterns, the native structures are most commonly used along with the borrowed structures.

7.1 Classifiers

Although there are native classifiers in Raji, Raji speakers also make use of the borrowed classifiers from Nepali. Raji makes use of the classifiers *-tʰõ*, *-gʰil*, and *-lʰa*. The classifier *-tʰõ* is mainly used with non-human nouns (18).

- (18) *q̄a-tʰõ keʈa kui*
 one-CLF boy dog
 'A boy (and) a dog. (Frog story.2)

The classifier *-gʰi* occurs only with the numeral *ni* 'two' and has the form *nimgʰi* 'two.CLF'. This classifier has very restricted distribution. On the other hand, the classifier *-lʰai* does not occur with the numeral 'one' and 'two', but occurs with the rest of the numerals. The classifier *-lʰai* is rarely used with non-human nouns (20).

- (19) *nim-gʰi swa-t ui s̄amundr̄ə bʰitr̄əu waŋ-t̄əna*
 two-CLF go-SEQ that sea inside go-SEQ
 'Having walked, and gone into the sea. (Sunkesri queen.286-287)
- (20) *ŋ̄əi pl̄ā-lʰai t̄eʈkuri bjaha kʰəi-h̄ẽ*
 1PL five-CLF sibling marriage do-FUT.1PL
 'We five brothers will marry (them).' (Five brothers.12)

Despite the presence of the native classifiers (18-20), Raji speakers also use the borrowed classifiers from Nepali. The Nepali language makes use of the native classifiers *-ʈa* and *dz̄əna* to refer to human and non-human nouns respectively (Acharya 1991: 99; Riccardi 2003: 611; Pokharel 2054 [2056]: 92-94). Examples (21-22) are taken from the corpus where these two classifiers have been borrowed. Since Raji native numerals are upto numeral six, the classifiers are borrowed mainly when the borrowed numerals from Nepali are used. However, sometimes, the native numerals also take the borrowed classifiers. The borrowing seems to be like parallel system borrowing (PSB) (Kossmann 2010: 459).

- (21) *bar̄ə goʈa r̄āgo-k̄ə h̄əq̄di p̄əni h̄əimani*
 twelve CLF male.buffalo-GEN bone also COP.PST.HAB.NEG
 'There were not bones of twelve male buffaloes. (Five brothers.426-27)
- (22) *nʰəu haiʈna som dz̄əna keʈa-r̄əu waŋ-t̄əna*
 and_then from_that_side three CLF boy-PL come-SEQ
 'Having three boys come from the other side,' (Pear story.33)

When we examine the occurrences of the classifiers in the texts, the speakers more often use the native classifiers (18-20) compared to the borrowed classifiers (21-22) from Nepali.

7.2 Noun derivation

The suffix *-njan/-hjan* has a number of functions in the Raji grammar. It functions as an infinitive marker, and also appears as nominalizer in relative clauses, and in attributive clauses. The non-finite forms that occur in (23-24) have the construction in which the participial suffix *-njan* is used as a nominalizer. The verb is changed into 'action nouns' in

these examples. For example, the verb *kʰəi-* 'do' changes into *kʰəi-jaŋ* 'action of doing' in (23), and *swa* 'walk' is changed into action noun *swa-hjaŋ* 'walking' in (24).

(23) *ŋə-kə kam kʰəi-jaŋ gosa gla-ka*
 1SG-GEN work do-NMLZ nice feel-PST.SG
 'Is the way I work nice?'

(24) *məttsa-kə swa-hjaŋ mədza heŋ*
 girl-GEN walk-NMLZ nice COP.PRES.SG
 'The way the girl walks is nice.'

Raji also borrows the nominalizing suffix *-ai* from Nepali. The nominalizing suffix *-ai* from Nepali also occurs in the Raji texts. The suffix *-ai* in (25-26) changes the verbs into nouns in Nepali. These examples contain the words with the borrowed nominalizing suffix. It is to be noted that the copular verb *həimani* is the negative of the copula *heni*. It is used for locative clauses in Raji.

(25) *ŋəi-kə pər-ai həimani ba*
 we-GEN read-NMLZ COP.PST.HAB.NEG dear_one
 'There would be no schools (lit. reading), dear one' (Gopi.bio.5)

(26) *nʰəu ŋəikə pər-ai kən pura o-m rʰo-ma*
 later 1PL-GEN read-NMLZ also complete become-PURP be.able-NEG
 'Later, our study could not be complete.' (Bhim experience.43)

(27) *əbə khas-lə sots-e-jaŋ saŋ pəisa kən kəma-ai o-a-ma*
 now in_fact-EMP think-NTVZ-NMLZ like money also earn-NMLZ become-2PST-NEG
 'I could not earn money as I had desired.' (Bhim experience2.75)

The nominalizing suffix *-ai* has been borrowed to Raji in a few cases, but this appears as an alternative way of deriving syntactic nouns. These are the nouns that occur with *-ai* in the corpus in addition to the lexical item *sərsəpʰai* 'cleaning'. Interestingly, the speaker switches between the native and borrowed nominalizing suffixes in (27).

7.3 Gender

Many Tibeto-Burman languages do not show the contrast of grammatical gender. The masculine nouns contain the sound *-p* whereas the feminine nouns contain *m-* in a number of TB languages (Matisoff 2003: 105; Benedict 1972: 96). Raji does not present this contrast of grammatical gender in terms of affix marking in kinship terms.

In a number of IA languages spoken in this region, there are a few lexical items in which the feminine nouns are derived from masculine nouns, or shows 'differentiation of sex' (Masica 1991: 218). Masica further notes that the suffixes *-inĩ*, *-ani* are common in New IA languages to derive feminine nouns from their masculine counterparts. Raji makes use of the borrowed suffixes, such as *-inĩ* and *-ani* to derive the feminine nouns from masculine nouns like in Indo-Aryan languages. A small closed set of nouns are derived by these suffixes to show the gender differentiation in the 'occupational groups' as well as 'female kin' in Raji (28).

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- | | | | | |
|------|-------------------------|--------------|---------------------------|-----------------------------|
| (28) | <i>bag^ha</i> | 'tiger' | <i>bag^hani</i> | 'female.tiger' |
| | <i>ḍulaha</i> | 'bridegroom' | <i>ḍulhāini</i> | 'bride' |
| | <i>t^haru</i> | 'Tharu' | <i>t^haruni</i> | 'female Tharu' |
| | <i>ḍulaha</i> | 'bridegroom' | <i>ḍulhini</i> | 'niece, brother's daughter' |

The suffixes *-ni* are used to derive feminine nouns productively in Nepali (Acharya 1991: 99; Ricardi 2003: 606). A couple of nouns follow this pattern. Only the feminine nouns occur in the texts that end in *-ini*, *b^həḍāini* 'niece, brother's daughter'.

Despite the fact that the sex differentiation is found in Raji calquing like IA languages, the grammatical gender is not shown. Nepali makes an opposition between masculine and feminine gender system not only in deriving lexical nouns, but also in agreement of verbs, and adjectives (Acharya 1991: 99, Ricardi 2003: 606). The grammatical gender is present in Nepali as shown in (29-30).

- (29) Nepali
keḷi g^hər-ma bəs-i
 girl house-LOC sit-PST.3SG.NH.F
 'The girl sat at home.'
- (30) Nepali
keḷo g^hər-ma bəs-jo
 girl house-LOC sit-PST.3SG.NH.M
 'The boy sat at home.'

The suffix *-o* is a portmanteau suffix agreeing with the third person, non-honorific, singular masculine subject in the past tense, whereas the suffix *-i* agrees with the third person, non-honorific, singular feminine subject. For example, the gender of the subject never triggers the agreement in Raji.

7.4 Comitative postposition

The two case clitics *-na* or *-ḍai* are appended to nouns and pronouns to encode accompaniment in Raji. Example (31) reveals that Sunkesri queen dancing with a person. Both of these case clitics have identical functions (31-32). The second one is glossed as alternative past tense for now glossed as '2PST'.

- (31) *hon sunkesri rani-na sja-m bəḡ-a*
 3SG Sunkesri queen-with dance-PURP begin-2PST
 'He began to dance with Sunkesri queen.' (Sunkesri queen.364)
- (32) *hon ts^hoḥasiḡ-na gome-m baḡ-a*
 3SG Chotasingh-with fight-PURP begin-2PST
 'He began to fight with Chhotasingh.' (Five brothers.289)

Raji makes use of two past tenses, the past tense that begins with *-ka*, and *-a* alone as illustrated in (31) and (32). Here are a couple of examples that show accompaniment with *-ḍai* 'with' (33-34).

- (33) *hon η̄ai-d̄ai oη-ka*
 3SG 1PL-with come-PST.SG
 ‘He came with me.’
- (34) *b̄abau groom-d̄ai swa-ka*
 daughter_in_law daughter-with go-PST.SG
 ‘The daughter-in-law went with the daughter.’

It is interesting to note that *d̄ai* also functions as a coordinator. Syntactically, however, the position of this coordinator is different when it occurs as a comitative marker and as a coordinator. Regarding the comitative and coordinating conjunction, Haspelmath (2004: 15) notes, "...the identity of their shape is due to a very common semantic-syntactic change from comitative marker to conjunctive coordinator." They are syntactically different because the noun phrases (NPs) conjoined with *d̄ei* 'and' trigger the plural agreement whereas the noun with comitative does not (33-34). If the coordinator joined the NPs in the structure (33-34), such as *hon d̄ei η̄a* 'he and I', the verb form would be *hoη-ka-si* 'come-PST-PL'. In addition, the coordinating conjunction occurs between the noun phrases whereas the comitative case occurs with the second NP (33-34).

Due to the intense contact with Nepali, the accompaniment is expressed by using the postpositions borrowed from Nepali (35-36). The postpositions, such as *s̄əŋgə*, *s̄əhit* 'with' are used to show accompaniment in Nepali (Riccardi 2003: 608; Matthews 1984: 24).

- (35) *η̄a naη-k̄ana s̄əŋgə o-k̄-η*
 1SG 2sg-ACC with become-PRES.SG
 ‘I also go (lit. become) with you.’ (Sunkesri queen.45)
- (36) *naη-k̄ s̄əŋḡai η̄ai k̄an da goṭa*
 2SG-GEN with 1PL also one CLF (N)
 ‘We are also one with you.’ (Sunkesri queen.63)

In addition, there are cases where the postpositions borrowed from Nepali are used for identical functions in Raji (37-38).

- (37) *hon-k̄ nasp̄ati d̄ali s̄əhit s̄əb mai-k̄-η*
 3SG-GEN pear basket with all spill-PRES-SG
 ‘His basket with pears is spilled.’ (Pear story.32)
- (38) *dzaη nasp̄ati khun-jaη keṭa saik̄al d̄or-e-ṭna d̄ali s̄əhit swa-k̄əŋ*
 who pear steal-NMLZ boy bicycle ride-NTVZ-SEQ basket with go-NPST
 ‘The boy who was stealing the pears, and having ridden him, goes.’ (Pear story.40)

Between these two structures (viz. native and borrowed structures), native structures are more often used in the corpus.

7.5 Ablative postposition *b̄ənda* 'than'

There are a couple of main uses of the postposition *h̄aiṭə* 'than' in Raji. Firstly, it is used in the comparative constructions with adjectives (Dhakal 2021) to express unequal comparison. The ablative postposition is used in the NPs, such as *ruk̄h̄ā h̄aiṭə* 'from tree',

gaḍa hāiṭna 'cart from', *ḍuṅo hāiṭna* 'hole from' and also with adverbs, such as *n^həu hāiṭna* 'after that, after from', *n^hi hāiṭə* 'after that, after from'. Typologically, the ablative postpositions are used in comparative construction in many languages (Heine & Kuteva 2004: 31), and this holds true in Raji as well. This is the borrowing of comparative word, and conceptual schemas, which is easy to borrow (Aikhenvald & Dixon 2001: 2). The ablative postposition *hāiṭə* 'than' appears between two noun phrases (comparee and standard of comparison), and functions as 'mark' of the comparison.

- (39) *ŋa hāiṭə naŋ bəljo heŋ*
 1SG than 2SG strong COP.PRES.SG
 'You are stronger than me.'
- (40) *ŋa-kə ts^hela hāiṭə naŋ-kə ts^hela bəreŋ heŋ*
 1SG-GEN goat than 2SG-GEN goat big COP.PRES.SG
 'Your goat is bigger than mine.'

In the adverbial clause, the postposition *hāiṭə* 'than' is used to show that an action occurs earlier to another action as shown in (41). In this example, reaching home takes place earlier to raining.

- (41) *ḍeu rwa-m hāiṭə dhrəu ŋa nəm-ha ʈoŋ-a*
 rain fall-PURP than before 1SG house-LOC reach-2PST
 'I reached home before it rained.'
 (Dhakal 2021)

In addition to the native postpositions, the speakers also make use of the postposition *b^hənda* 'than' borrowed from Nepali in adverbial clauses. The fact that the word *b^hənda* 'than' used in comparative construction is mentioned in various sources (see Acharya 1991: 121; Riccardi 2003: 607). The borrowed postposition *b^hənda* 'than' is also used in the natural discourse.

- (42) *nam b^hənda āitsi ʈaro swa-ʈna boŋa-kə ts^heu hāi ʈoŋ-ka-si*
 house than little far go-SEQ forest-GEN edge towards reach-PST-PL
 'Having gone a little far from home, (they) reached to the edge of the forest.'
 (Frog story.14-15)
- (43) *bjaŋ ʈa-m b^hənda pəila tsaĩ gosā ʈhənkə ghwa ʈa-njaŋ*
 seed sow-PURP than before in_particular where place where sow-NMLZ
ḍira ts^hənoʈ k^həi-njaŋ
 field.plot selection do-NMLZ
 'Before sowing (keeping) the seeds, what sort of land (it is), and where to sow (lit. keep seeds), select the land.'
 (Sow.seed.1-3)

All of the examples (42-43) are from a single speaker. He tends to use the borrowed ablative postposition more frequently compared to other speakers. The native construction is more frequently compared to the borrowed construction.

7.6 Causative construction

Raji employs different strategies to change a simple verb into a causative one, such as isomorphism *tok* 'open, INTR.', *tok* 'open, TR.', *ghan* 'burn, INTR.', *ghan* 'burn, TR.', lexical causative, such as *nai* 'sit' *slo* 'make.one.sit', *qasi* 'wake.up', *səu* 'make.one.wake', devoicing, such as *goi* 'break.intr', *koi* 'break.TR.', *gun* 'be.finished', *kun* 'finish.TR', and by suffixing, such as *dzaʔ* 'eat', *dzaʔt* 'feed', *si* 'die', *saʔ* 'kill' etc. In addition to these strategies, Raji also makes use of the borrowed constructions borrowed from Indic languages (viz. Nepali). The suffix *-a* or *-au* are appended to the verbs to derive the causative verbs in Nepali (Masica 1991: 316; Riccardi 2003: 611). All verbs given in (44) are borrowed from Nepali.

(44)	<i>dzəmenjaŋ</i>	'to freeze'	<i>dzəmanjaŋ</i>	'to freeze (TR.)'
	<i>kʰəsenjaŋ</i>	'to fall'	<i>kʰəsanjaŋ</i>	'to fall (TR.)'
	<i>buɖanjaŋ</i>	'to sink'	<i>buɖanjaŋ</i>	'to sink (TR.)'
	<i>rokenjaŋ</i>	'to stop'	<i>rokanjaŋ</i>	'to stop (TR.)'
	<i>urenjaŋ</i>	'to fly'	<i>uranjaŋ</i>	'to fly (TR.)'
	<i>bhərenjaŋ</i>	'to fill'	<i>bhəranjaŋ</i>	'to fill (TR.)'
	<i>həʔenjaŋ</i>	'to be removed'	<i>həʔanjaŋ</i>	'to remove (TR.)'

As shown in (44), the nativizer *-e* is absent when the causative suffix *-a* is appended to the verbs.

(45) *gira dzəm-e-ka*
ghee freeze-NTVZ-PST.SG
'The ghee froze.'

(46) *ŋa-i gira dzəm-a-kā*
I-ERG ghee freez-NTVZ-PST.1SG
'I froze the ghee.'

Here is an example from corpus:

(47) in həi riŋgəl ghum-a-ʈna pəila pa-ka
that towards around go.round-CAUS-SEQ in.the.beginning weave-PST.SG
'To weave it around here (lit. it is woven like this around it).' (Trap basket.23)

The borrowing seems to be like parallel system borrowing (PSB) (Kossmann 2010: 459) in which the borrowed causative suffix appears only with the borrowed verbs. This is like a sub-system within the native causative construction, 'without affecting the core' (Aikhenvald 2006: 21). The borrowed causative marker can't be used with the native Raji verbs. The restrictions on the paradigm are also attested in other languages as well (Curnow 2007: 429).

7.7 Conjunct verbs

South Asian languages have compound verbs with VV sequence. In addition, there are some verbs which are formed with noun or adjective plus verb. They are considered 'conjunct verbs' following Burton-Page (1957), and Fatma (2018). The first part of the verb carries the semantic content. Raji has a number of verbs which are formed with nominal

head, followed by a fixed set of verbs. The verbs that take part mostly in this construction are *k^həinjəŋ* 'do', *ojaŋ* 'become' among others. There are some native verbs, such as *os k^həinjəŋ* 'medicine do' to mean 'to treat, cure' among others. By contrast, in most of the cases, the nominal part is often borrowed and the later part is with native verbs. Examples given in (49) are the borrowed nouns plus the native verb *k^həi* 'do'.

	<u>Borrowed nouns</u>	<u>verbs</u>	<u>meaning</u>
(48)	<i>suru</i> 'beginning'	<i>k^həi</i> 'do'	to begin
	<i>unmulən</i> 'eradication'	<i>k^həi</i> 'do'	to eradicate
	<i>bjaha</i> 'marriage'	<i>k^həi</i> 'do'	to marry
	<i>niuŋo</i> 'invitation'	<i>k^həi</i> 'do'	to invite
	<i>bas</i> 'stay'	<i>k^həi</i> 'do'	to take a shelter (for some nights)
	<i>b^hansa</i> 'kitchen'	<i>k^həi</i> 'do'	to eat food
	<i>sədzəē</i> 'punishment'	<i>k^həi</i> 'do'	to punish
	<i>ts^hənoŋ</i> 'selection'	<i>k^həi</i> 'do'	to select
	<i>sərap</i> 'curse'	<i>k^həi</i> 'do'	to curse
	<i>dzordzam</i> 'combining'	<i>k^həi</i> 'do'	to join

Some other verbs that take part in this construction are *ojaŋ* 'become', *bəi* 'give', *brin* 'make pay', *ɖar* 'find' given in (49).

	<u>Borrowed noun</u>	<u>verb</u>	<u>meaning</u>
(49)	<i>upələbdi</i> 'achievement'	<i>ojaŋ</i> 'become'	to achieve
	<i>bidabadi</i> 'farewell'	<i>ojaŋ</i> 'become'	to bid farewell
	<i>bənbəs</i> 'exile'	<i>ojaŋ</i> 'become'	to be exiled
	<i>pəriks^hja</i> 'examination'	<i>bəi</i> 'give'	to take exam
	<i>sərap</i> 'curse'	<i>bəi</i> 'give'	to curse
	<i>dəndə</i> 'fine'	<i>bri</i> 'make pay'	to make pay fine
	<i>ɖuk^hə</i> 'hardship'	<i>ɖar</i> 'find'	to face hardship

Here are some sentential examples to illustrate conjunct verbs (50-53).

- (50) *ʃhjakkəl dzəi hon-lə belə arkho-ɖəi bjaha k^həi-ja*
 same.time mother that-EMPH time next-with marriage do-GEN
 'And then, mother married with the next person.' (Bhim.experience.41)
- (51) *kuʈuni buɖhi-i saʃ-njaŋ suru k^hə-ja*
 Kutuni old_woman-ERG kill-NMLZ beginning do-2PST
 'Kutuni Budhi began to kill.' (Sunkesri queen.296)
- (52) *sərap bəe-m r^ho-wa-ma*
 curse give-PURP be.able-2PST-NEG
 '(They) could not curse it (Namdabhamara elephant).' (Five brothers.113)
- (53) *ŋa si-ja dzhəi isəl ɖuk^hə ɖar-həu*
 1SG die-PERF later like_this hardship get-FUT.SG
 'You will experience (lit. get) the hardship like this.' (Sunkesri queen.8)

This is a kind of blending in compounding in which the borrowed semantic head is followed by the native verbs. They are similar to 'calques', in which the base is the borrowed lexical

items whereas the verb is the loan verb. These are like 'bilingual compound verbs' (Wohlgemuth 2009). The borrowings of verbs are also common in other contact-situation in this region, such as Punjabi (Romaine 1986), Burushaski spoken in Srinagar region in India (Munshi 2014).

7.8 Borrowings in clause combining techniques

There are some suggestives of clause level convergence in Raji with Nepali. We don't have evidence the parallel native structures for these cases. They include adversative disjunction *na...na* 'neither nor', *əni* 'and then', complementizer *ki* 'that', and disjunctive coordinator *ətʰəwa* 'or'.

7.8.1 Adversative disjunction

The adversative disjunction in Raji is borrowed from IA source. The negation in Raji is formed either with the prefix *ma-* or the suffix *-ma*, such as *oŋ-ka-si* 'come-PST-PL' vs. *oŋ-si-ma* 'come-PL-NEG.PL'. The negative suffix *-ma* also appears in the copular verbs in Raji, such as *heŋ* 'COP.PRES.SG' vs. *həi-ma* 'come.PRES.SG.NEG'. The negative marking *ma-* is common in many TB languages (LaPolla 2003: 27). By contrast, the negative *nə-* is found in a number of IA languages (Masica 1991: 289), such as Nepali (Acharya 1991: 84), and Hindi (Kachru 2006: 242). In this case, the adversative disjunction is directly borrowed from Nepali to Raji. The neither...nor construction is *na...na* in IA languages (Masica 1991: 394). Both of the alternatives are not fulfilled in this case. Examples (57-58) are from Dhakal (2021).

(54) *nə* *tsaŋ* *oŋ-ka* *nə* *gromu* *oŋ-ka*
 neither son come-PST.SG nor daughter come-PST.SG
 'Neither son, nor daughter came.'

(55) *nə* *deu* *rwa-ka* *nə* *gʰəmak* *gla-ka*
 neither rain come-PST.SG nor son befall-PST.SG
 'Neither it rained, nor the sun shone.'

Despite the fact that the examples (54-55) are obtained in elicitation, the speakers say that these sentences are natural, and grammatically accepted.

7.8.2 Uses of *ki*

The conjunction *ki* has a couple of key functions in the Nepali grammar. Firstly, it functions as a complementizer in Nepali (Matthews 1984: 118; Acharya 1991: 84; Riccardi 2003: 611). The complementizer *ki* 'that' links the embedded clause (nominal clause) to the higher clause (main clause) in Nepali. It is one of the ways of forming the complement clauses. The use of the complementizer *ki* 'that' is borrowed from Nepali to Raji (56). This is also used in Hindi (Masica 1991: 403; Subbarao 2012: 194).

(56) *tsofasij-i* *gar-a* *ki* *oŋ* *bəi*
 Chhotasing-ERG say-2PST that leave give.IMP
 'Chotasing said to him 'leave it (for others.' (Five brothers.341)

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The complementizer *ki* 'that' is also used to show the disjunction in Nepali (Acharya 1991:135). This is used between two phrases or clauses in the templates, such as 'X or Y?'.

- (57) *terə kan nəi-njaŋ ho ki gjarə kan nəi-njaŋ*
 thirteen day sit-NMLZ COP.PRES.SG or eleven day sit-NMLZ
 'Does (one) sit for thirteen day or eleven day (for mourning)?' (Death ritual.22)
- (58) *bau nəi-njaŋ ho ki goŋjau nəi-njaŋ*
 father sit-NMLZ COP.PRES.SG or son sit-NMLZ
 'Does the father sit (for mourning), or the son?' (Death ritual.18)

As shown in the example from the Nepali language (57) *ki* 'or' is used in Raji to show that one of the alternatives is possible.

7.8.3 Disjunctive coordinator *ətʰəwa* 'or'

Raji does not have a native disjunctive coordinator *ətʰəwa* 'or' in its vocabulary. It borrows the disjunctive coordinator *ətʰəwa* 'or' from Nepali (see Acharya 1991: 84). It is used in a template like 'X or Y'.

- (59) *əni pəisa bəi-njaŋ ətʰəwa tʰekdari pəisa bəi-njaŋ*
 and.then money give-NMLZ or contract money give-NMLZ
 '(He) would give money, or the money based on contract.' (Bhim experience.61-62)
- (60) *mik mo-njaŋ ətʰəwa em sar-njŋ kam kʰəi-kā*
 eye open-NMLZ or road show-NMLZ work do-PST.1SG.3SG
 '(I) made you literate (lit. opened your eyes), and guided you (lit. showed you the way).' (Bhim experience.48-49)
- (61) *bʰaudzu ətʰəwa deurau nəi-njaŋ*
 sister_in_law or brother_in_law sit-NMLZ
 'Do the sister-in-law or the brother-in-law sit for mourning?' (Death ritual.20-21)

The examples (59-61) show that the coordinator *ətʰəwa* 'or' is placed between the clauses whereas two noun phrases are mediated by the coordinator in (61).

7.8.4 *əni* 'and then'

Raji makes use of both the native and borrowed clause coordinators in discourses. Raji has the adverbial *nʰəu* 'and then' that appears between the finite clauses to demonstrate temporal sequence. At the same time, it also borrows the adverb *əni* 'and then' from Nepali that is equal to this one to mean the same thing (Acharya 1991: 84). First of all, let's consider the examples from Nepali.

- (62) Nepali
mə a-ẽ əni u bəs-jo
 1SG come-PST.1SG and.then 3SG sit-PST.3SG.M.NH
 'I came and then he sat'
- (63) *isi kʰa dzhəi man-e-ka gar-k-i*
 like this do.PERF if agree-NTVZ-PERF say-PRES-1PL
 'If this (shakes head like this), it seems to agree.'

n^{həu} *həiʈna* *ʈ^han-ha* *kaʈ-kaso* *k^həi-njaŋ*
 and_then from worshipping_place-LOC take-PST.PL do-NMLZ
 'And then (they) take it to the worshipping place (for worshipping).' (Ancestor worship.18-19)

Because of intense contact with Nepali, Raji also borrows *əni* 'and then' from Nepali as illustrated in (62). The speakers sometimes make use of this structure rather than the native structure that begins with *n^{həu}* 'and then'.

(64) *in-lə* *surdze-kə* *muk^hə* *ma-mu-jəŋ* *keʈi* *əni* *p^hula-ha*
 this-EMPH sun-GEN mouth NEG-look-NMLZ girl and.then flower-LOC

dzok^h-e-ʈna *bəʈa* *dzaʔ-neŋ* *keʈi*
 weigh-NTVZ-SEQ rice eat-NMLZ girl
 'The girl who had not seen the face of the sun, and then the girl who eats riceweighing (it)
 in the flower leaf.' (Five brothers.455-456)

As can be seen in (64), the coordinator *əni* 'and then' combines the finite clauses. It is a matter borrowing from Nepali (also see Hildebrandt 2007: 294).

7.9 Discourse marker *ʈə*

A number of discourse markers are borrowed from Nepali to Raji. Borrowings of discourse markers are typologically common (Aikhenvald 2006: 27). Among the particles borrowed in the Raji discourses, the particle *ʈə* 'as for' is more frequent.⁸ Schmidt (1993: 273) mentions that this particle in Nepali "emphasizes the word it follows and excludes other subjects or predicates" (also see Riccardi 2003: 611). This discourse maker is used exactly for the same function in Raji.

(64) *g^həija* *g^hra* *l^ha* *hiini* *hon-lə* *ʈa* *hō*
 Ghaiya_rice rice plant COP.PST.HAB that-EMPH PART COP.NPST
 'They would plant the Ghaiya rice, that's all.' (About village.Gopisa.31)

(65) *ŋa-kəna* *ʈa* *aŋ* *ʈ^ha*
 1SG-DAT PART what knowledge
 'What do I know (about this)?' (Sunkesri queen.308)

Matthews (1984: 47) gives an assertion to the noun that precedes the discourse. In (66) for example, the discourse particle emphasizes the pronoun that precedes the discourse particle, and the same is true in (65).

8. Summary and conclusion

Due to intense contact with Indic languages, there have been massive contact-induced changes in Raji lexicon and morphosyntax. Although there are clear cases of lexical borrowings in Raji, the precise percentage varies in terms of the kinds and number of lexical items included to measure the borrowing. While the loanword percentage is merely 21% in Swadesh hundred list, this amounts to 36.6% when 210 words are considered. When the

⁸ A number of discourse markers are borrowed in some texts, such as *tsāi*, *lə*, *ni*, *nei*, *ləu*, *khəi*. Since other discourse particles other than *ʈə* occur in a few places, their details have not been discussed.

largest available wordlist of Raji is considered, the lexical borrowing amounts to 46.2%. There is a systematic way of accomodating verbs, nouns, and some other lexical items in Raji. The grammatical borrowing is summed up in Table 5.

Table 5: Kinds of grammatical borrowings

		Replaced by borrowed structures	Native and borrowed structures in parallel
1	Classifiers	-	Raji > Nepali
2	Noun derivation	-	Raji > Nepali
3	Postposition 'with'	-	Raji > Nepali
4	Postposition 'than'	-	Raji > Nepali
5	Causative	-	Raji > Nepali
6	Conjunction <i>əni</i> 'and then'	-	Raji > Nepali
7	Conjunct verb	√	-
8	Adversative disjunction	√	-
9	Complementizer <i>ki</i>	√	-
10	Conjunction <i>ətʰəwa</i> 'or'	√	-
11	Discourse marker <i>ʈə</i>	√	-
12	/d/,/t/ , /t/,/d/	-	/t/, /d/ > /d/, /t/

The first category of the grammatical features includes the grammatical structures which have entirely substituted the native Raji structures, viz. conjunct verb, adversative disjunction, complementizer *ki*, conjunction *ətʰəwa* 'or' and discourse marker *ʈə*. Secondly, there are some grammatical structures in which the speakers switch to borrowed structures in addition to the native structures which they still retain. This includes the features discussed from number 1 to 6 in Table 5. Which of these two structures are predominantly used in the actual discourses when these parallel structures (native vs. borrowed structures) are in use? In all of these cases, the speakers more often use the native structures and this is shown by the symbol '>' in Table 5. In other words, Raji structures are more often used when Raji speakers use either of the structures in Raji. There are very few cases when the speakers code-switch to the borrowed lexical items despite the fact that the native words are still in use. This can be counted less than two dozen of lexical items. Moving to the phonological adaptation, the alveolar stops, such as /t/ and /d/ are more often used as /t/ and /d/ respectively as free variations.

Abbreviations

CAUS causative	CLF classifier	COP copula
DAT dative	DU dual	EMPH emphasis
ERG ergative	F feminine	FUT future
GEN genitive	IMP imperative	LOC locative
NEG negative	NH non-honorific	NMLZ nominalizer
NPST non-past	NTVZ nativizer	PART particle
PERF perfect	PL plural	PRES present
PST past	PURP purposive	SEQ sequential converb

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INITIATING AND INSTITUTIONALIZING COGNITIVE SCIENCE AND PSYCHOLINGUISTICS IN NEPAL: A REPORT

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1. Introduction

Cognitive Science, even though it's a well-established discipline in the western countries and emerging economies like our close neighbours China and India, is still an uninitiated discipline of study in Nepal. Psycholinguistics is slowly taking roots. There is absolute lack of human resource and technical expertise to lead and further this field in the country. Despite its massive potentials for future in terms of what it can unravel in understanding human cognitive mechanisms and contribute in the field of education, linguistics, anthropology, psychology, computer science, mathematics, mental and neurological health, science and technology, business and management, the discipline remains rather unknown to the leaders in academia in Nepal. This report provides a peep into the efforts being undertaken to advance this field in Nepal, its potentials and what needs to be done.

2. Cognitive Science and Psycholinguistics initiatives in Nepali academia

Currently, Cognitive Science and Psycholinguistics is not yet introduced in Nepali academia except for some components of Psycholinguistics being taught at the Central Department of Linguistics and Department of English Education in Tribhuvan University. An initiative is being taken at the Central Department of Linguistics by this researcher to establish Cognitive Science and Psycholinguistics Lab to train the students with the methods, tools and techniques of doing research in this field and to explore more possibilities in this field.

In the past, there have been some sporadic works in this field, although on individual basis rather than in organized and institutional manner. A longitudinal case study on Nepali Child Language Acquisition with qualitative data spanning the age of 6 months to four and half years has been conducted by Pathak (2004; 2005; 2007). Prof. Jubin Abutalebi, a leading researcher and scientist in bilingualism and multilingualism and its impact on the human brain visited Nepal and gave a talk in the Central Department of Linguistics in October 2016.

3. Establishment of Cognitive Science and Psycholinguistics Lab in Nepal at Tribhuvan University and its output

Lekhnath Sharma Pathak, a faculty member in the Central Department of Linguistics took the initiative of pursuing PhD in Cognitive Science at the Center for Neural and Cognitive Sciences, School of Medical Sciences in Central University Hyderabad, India. This was the

first such initiative from Nepal (who was also partially supported by University Grants Commission, Nepal). During the course of his PhD work he worked and presented on Gurung-Nepali parallel language activation (Pathak & Mishra 2016) and Nepali- English immersion bilingual study (Pathak & Mishra 2016), and presented his work using mouse tracking in an international scientific conference (Freeman & Ambady 2010; Pathak 2017). Upon his return from PhD work, he initiated the establishment of Cognitive Science and Psycholinguistics Lab in the Central Department of Linguistics and was permitted to do so by the department with a space at its library, which took a formal and official shape when the Central Department of Linguistics officially set up the Cognitive Science and Psycholinguistics Lab by a departmental decision and made him the Faculty-in-Charge and Principal Investigator of this lab on February 7, 2021. A paper titled “Bilingual Stroop Effect on High and Low Proficient Nepali – English Bilinguals” was presented in the 39th Annual Conference of Linguistic Society of Nepal on November 26 – 27, 2018 (Pathak & Pathak 2018). This was the first study from this lab by an intern who learned the method and made an academic presentation. The first research work that started in this lab was a multi-lab collaborative work on spatial cognition testing on demonstrative use across 29 languages spoken in different parts of the world led by Prof. Kenny Coventry, School of Psychology, University of East Anglia, UK and collaborated by Cognitive Science and Psycholinguistics labs across US, Europe, Asia and Africa. The lab contributed to the testing of demonstrative processing in Nepali language (Coventry et al, under review). This researcher presented a talk entitled “Parallel language activation and cognitive control in bilinguals” in the 2nd Annual conference of Applied Linguistics and ELT organized by Department of English Education, Tribhuvan University on 9 – 11 February, 2019 (Pathak 2019). This researcher gave an invited talk on “Possibility of Cognitive Science in Nepal” on March 22, 2019 organized by Nepal Norway Alumni Association in Hydro Lab Seminar Hall in Lalitpur (Pathak, 2019) and discussed various aspects and significance of starting Cognitive Science in Nepal. This researcher was invited to give a Plenary Session on the theme “Science of Learning: Approaches from Cognitive Science” to the Joint School Teachers’ Workshop (of 6 leading schools of Kathmandu, attended by 500 teachers) organized by Kathmandu University High School at St. Xavier’s School, Jawalakhel, Lalitpur, Nepal on May 25, 2019 (Pathak 2019). Recognizing the work done by this researcher in Nepal, he was invited to deliver a Keynote Speech entitled “Situation of Illiterates in Nepal: What does it mean for Cognitive Science?” at the 3rd International Workshop of Society for Cognitive Science of Culture at Birla Institute of Technology and Science University, Pillani Campus, Goa, February 3 – 7, 2020 (Pathak 2020). A poster was presented on “Bilingual Literacy Effect on Executive Control” from an ongoing work in the lab by Sabita Rijal and Lekhnath Sharma Pathak at the 3rd International Workshop of Society for Cognitive Science of Culture at Birla Institute of Technology and Science University, Pillani Campus, Goa, February 3 – 7, 2020 (Rijal & Pathak 2020).

First Psycholinguistics MA thesis with the title “Effect of first and second language mediated instruction on cognitive control: A psycholinguistic study” by Sabita Rijal was submitted at the Central Department of Linguistics in 2020 which was a product of the Cognitive Science and Psycholinguistics Lab (Rijal 2020). This study compared two

government schools of Kathmandu Valley that used either first language (Nepali) or second language (English) as medium of instruction and measured language comprehension, language production and cognitive control tasks. Language comprehension task was measured using LexTale (Lemhofer & Broersma 2012), language production task was measured using verbal fluency task (Golan & Montoya 2002). Cognitive control was measured using Stroop (Stroop, 1935) and Flanker (Poarch & van Hell 2012) tasks in a mouse tracking paradigm. This study showed that the children who were instructed in L2 performed much better than the children who were taught in L1 instruction in all the measures. Children receiving instruction in L2 performed better even in L1 production tasks compared to the children receiving instruction in L1.

Another study investigating the second language literacy effect on the written and spoken word processing in Lohorung – Nepali bilinguals is in progress (Pathak, Rai & Pathak, in preparation).

Recently, the lab has started investigating a case of L1 attrition and reacquisition on an individual who was adopted at the age of seven from Nepal by an American family, was fluently in Nepali L1 but lost the language completely by age eleven and switched over to English as L1 gradually forgetting previous L1 Nepali completely and has started relearning in the mid-twenties.

4. First International Webinar on Cognitive Science and Psycholinguistics

The founder of this lab is also an alumnus of Norwegian University of Science and Technology (NTNU). As part of collaborative initiative with NTNU, this lab organized its first international webinar in association with NTNU Alumni Nepal and in collaboration with Cognitive Science and Psycholinguistics Lab, Tribhuvan University (TU), Nepal and Language Acquisition and Processing Lab, Norwegian University of Science and Technology (NTNU), Norway on 26 February 2021. It disseminated the works going on in this area at Language Acquisition and Processing Lab, NTNU directed by Prof. Mila Vulchanova and the initiatives being taken in Nepal and the current state of affairs and future prospects and possibilities. This webinar opened up avenues for research and collaboration in the field of Cognitive Science and Psycholinguistics among the interested researchers and create an awareness among the general audience. The theme of the webinar was “Cognitive Science and Psycholinguistics for understanding human mind, brain and cognition: Prospects and Possibilities”. The program was moderated by Prof. Ajay Risal, Head, Department of Psychiatry, School of Medical Sciences, Kathmandu University and Dr. Biraj Singh Thapa, Associate Professor and Team Leader, Green Hydrogen Lab, Department of Mechanical Engineering, Kathmandu University.

A brief introduction of the presenters and their presentation:

Mila Vulchanova is Professor at the Department of Language & Literature, and the Director of the Language Acquisition and Language Processing Lab, Norwegian University of Science & Technology, Trondheim. She is also the Scientific Director of the Norwegian National Graduate School of Linguistics. Her area of expertise includes language development, developmental deficits, language and cognition, advanced experimental

research in language, spatial cognition and language, bilingualism, lexical semantics, language diachrony, the syntax of nominal expressions and language typology. She has secured numerous national and international large-scale grants, among which 7 FP *LanPercept Marie Skłodowska-Curie ITN* (2012-2016) as Coordinator, the Norwegian Research Council FRIHUM project “Situating reference in Language Acquisition” (2012-2016), WP-lead for Horizon2020 Marie Skłodowska-Curie ITN *DCOMM* (2016-2020), MC member and training coordinator of *COST Action IS1406* “Enhancing children's oral language skills across Europe and beyond - a collaboration focusing on interventions for children with difficulties learning their first language” (2015-2019), and the NRC Norwegian National Graduate School of Linguistics (2012-2021). She is currently the coordinator of the Horizon2020 MSCA ITN *e-LADDA* (2019-2024), and WP leader of the Horizon2020 MSCA ITN *SellSTEM*.

Valentin Vulchanov is Senior Researcher at the Department of Language & Literature and one of the founders of the Language Acquisition and Language Processing Lab, Norwegian University of Science & Technology, Trondheim. His expertise spans language and cognition, language in developmental deficits, and language diachrony, the syntax of nominal expressions. He has been PI in a number of large-scale EU and National Norwegian and international research projects, such as Horizon2020 MSCA ITN *e-LADDA* (2019-2024), Horizon2020 MSCA ITN *SellSTEM* (2021-2025), MSCA ITN *DCOMM* (2016-2020), 7th FP MSCA ITN *LanPercept* (2012-2016), Erasmus+ "Development of Online Learning Environment for e-Health" *DOOLEE*, among others.

Mila Vulchanova and Valentin Vulchanov presented on “What pointing gestures can tell us about early communication development”. Drawing upon the research conducted in the Language Acquisition and Language Processing Lab, they presented on the language and gesture interface mainly in the early developmental stages. Their study showed that a greater paradox exists in individuals with autism spectrum disorder where they face problems in figurative language and advanced syntax processing even if they are linguistically talented (Vulchanova et al, 2012) compared to the paradox of problems with pragmatic skills and complex syntax across the spectrum even when structural language remains intact (Landa, 200; Tager-Flusberg et al, 2005). They presented their results of a comparison of figurative language comprehension between individuals with and without autism disorder (Chahboun et al, 2016), a critical review of clinical and experimental research in problems of figurative language processing in atypical population with focus on autism spectrum disorder (Vulchanova et al, 2015), metaphorical priming in high functioning autism (Chahboun et al, 2017), language processing differences in typically growing individuals and those with ASD using both eye-tracking and mouse-tracking (Vulchanova et al, 2019), difficulties experienced by autistic individuals in language and communication using priming paradigm in lexical decision task (Chahboun et al, 2015), exploring current theories of figurative language processing and acquisition in literal or compositional meaning in interpreting non-literal expressions (Vulchanova et al, 2019), acquisition of multiword acquisition in children L1 and adult L2 (Milburn et al, 2021). They provided evidence from research on gesture in ASD, drawing in quantitative and qualitative differences focusing on a novel approach to gesture morphology (Ramos-Cabo

et al. 2019) showing children with ASD produce few pointing gestures, fewer index finger, fewer no contact pointing gesture compared to typically developing children.

At the end of their presentation, Prof. Vulchanova gave an online guided tour of the Language Acquisition and Language Processing Lab at the Department of Language and Literature in NTNU.

Evelyn Arko Milburn is Postdoctoral Fellow at Language Acquisition and Language Processing Lab at the Department of Language and Literature in NTNU. As a psycholinguist, her research is driven by one basic question: "During language comprehension, where does meaning come from?" She uses eyetracking and behavioral methods to investigate this question in several areas of sentence processing. In particular, she is interested in figurative language comprehension, particularly idioms. One of her current projects involves exploring how idiom-internal characteristics interact with linguistic context to drive meaning access during idiom comprehension. However, she is also interested in how extra-linguistic semantic information--such as gesture and world knowledge--interact with language. Her research involves a wide range of participants, from college-age students to healthy older adults to people with aphasia, and she has recently expanded into second-language processing as well.

Evelyn Arko Milburn presented on "Holding Keys and Playing With Fire: An Ongoing Exploration of Idiom Comprehension". She discussed how multiword formulaic expressions like "fish and chips", "don't worry about it" aid fluency and speed processing by reducing load on working memory which comes naturally to native speakers but is difficult to acquire for adult L2 learners. In contrast to native speakers, adult L2 learners struggle with figurative and idiomatic expressions (Milburn & Warren 2019). Against this backdrop of language acquisition, she presented her current study investigating whether native and non-native speakers of English rely on different strategies like word by word processing versus whole phrase retrieval while retrieving and producing idioms using visual world paradigm in which participants look at the pictures and hear sentences while their eyes are tracked as they click on the picture that best completes the sentence, in which sentences could be completed literally or figuratively, but the most appropriate completion was biased by the context. Her results based on growth curve analysis provided evidence that native and non-native speakers rely on different units during comprehension. As people gain more experience with language, their ability to pick up on hidden meanings and nuances also develops changing trajectory of reliance on compositional processing, holistic retrieval, and contextual support. She suggested parents and educators can use their research to help learners from all backgrounds build skill with figurative language.

Lekhnath Sharma Pathak is Assistant Professor (Lecturer) in the Central Department of Linguistics, Tribhuvan University, Nepal. He is the founder of Cognitive Science and Psycholinguistics Lab at the department in which he is the Faculty-in-Charge and Principal Investigator. He uses mainly MouseTracker to investigate the dynamics of human cognitive processing modulated by bilingualism, multilingualism, literacy and culture. He is a Founding Member of Society for Cognitive Science of Culture. He has collaborated in DCOMM project and contributed to spatial cognition. He was invited as a Keynote Speaker

in the 3rd International Workshop of Society for Cognitive Science of Culture at BITS Pilani, Goa in 2020. He is a Secretary and Board Member of NTNU Alumni Nepal chapter.

Lekhnath Sharma Pathak presented on “Prospects and Possibilities of Cognitive Science and Psycholinguistics in Nepal”. He started with a brief introduction to the field of cognitive science and psycholinguistics, methods and tools used to investigate human brain and cognition and its mechanisms. Introducing the field in Nepal, he informed that empirical, scientific, experimental research in the area of Cognitive Science and Psycholinguistics in Nepal began with the starting of Cognitive Science and Psycholinguistics at the Central Department of Linguistics by him in early 2019, which took a formal and official shape when the Central Department of Linguistics officially set up the Cognitive Science and Psycholinguistics Lab by a departmental decision and made him the Faculty-in-Charge and Principal Investigator of this lab on February 7, 2021. Giving a brief sketch of psycholinguistics in Nepal, he introduced MouseTracker, the main tool used in the lab to conduct experiments and collect data. He mentioned of the projects accomplished by the lab which includes an MA thesis by Ms. Sabita Rijal under his supervision, which is also the first empirical and experimental master’s thesis work in psycholinguistics (Rijal 2020). He also mentioned of a mini-research on *Parallel language activation in Nepali-English-Sanskrit: A Mousetracking Psycholinguistics study*. submitted to the Research Directorate, Rector’s Office, Tribhuvan University, Kirtipur, Kathmandu, Nepal (Mini Research Grant No. 68/076-7-8) (Pathak 2020). He also mentioned of the national and international presentations given on the works of the lab and international collaboration and an ongoing work on trilingual processing of Nepali-English-Norwegian in collaboration with NTNU which has been submitted for publication (Pathak et al, under review), including the ongoing research in the lab on Gurung-Nepali bilingual study, Magar-Nepali-English trilingual study. He concluded with the possibilities that the field of cognitive science and psycholinguistics holds in Nepal that Nepal is still a virgin land for Cognitive Science with tremendous potentials (like our waters!). He mentioned of the fields that can be investigated using the tools, techniques and methods of cognitive science in education: Early education to various stages, Mother Tongue Education, Multilingual Education, AI, Robotics, Computer Science, Psychology, Linguistics, Anthropology, Economics, Management; Language: How language shapes our cognition, Speech Language Pathology; Business: What are the consumer behavior and product perception; Health: Mental health, dementia, Autism, dyslexia; Culture: Culture and its influence on our cognition; Ethnicity: Is there ethnic variation in cognition? How do various ethnic groups perceive each other? Forensics: Cognitive Science tools and techniques are effective in lie detection.

Present Head of the Department, Prof. Balaram Prasain and former Head and present Assistant Dean, School of Humanities and Social Sciences, Prof. Dubi Nanda Dhakal spoke of their appreciation on the establishment of the lab and their all support to the lab. Royal Norwegian Embassy representative Mr. Jan-Erik Studsrød, Counsellor/Energy and Climate expressed his happiness on the organization of this webinar in collaboration with NTNU.

5. What we can offer: Expertise and tools

Currently, Cognitive Science and Psycholinguistics Lab is housed in a modest space provided by the Central Department of Linguistics in its departmental library in the university premises in Kirtipur. The lab is also associated with Research Management Cell (RMC) set up in the department with the help of University Grants Commission, Nepal. We have started doing some impactful work and have started publishing in peer-reviewed impact factor scientific international journals. At present, we are using MouseTracker as our main tool for investigating cognitive and psycholinguistic processing mechanisms (for studies published from our lab using this tool, see Pathak et al. 2021; Pathak & Pathak 2022; Pathak et al. under review). We have developed reasonable expertise in statistical analysis using SPSS and R as statistical analysis softwares. We have undergraduate students doing internship in our lab and master's students involved in various research projects as part of their training. We are open to collaboration and offer our expertise on what we have acquired so far.

6. Future Direction

Setting up a research lab and keeping it functional is an arduous task and requires massive financial and technical resources besides the passion and dedication of the PI, which the PI cannot alone manage and needs support from the university and other state machineries. Our vision is to make it a world class scientific lab in the field of cognitive science and psycholinguistics and contribute in nation building by touching upon various aspects human involvement and engagement and factors that can contribute to knowing human mind and brain better. We would like to extend technical lab facilities like eye-tracking, skin conductance and EEG/ERP in future, provided resources are made available to the lab. We would also like to extend more behavioural research designing softwares and introduce more advanced statistical programming and analysis know-how for doing and publishing cutting-edge research from Nepal.

Our plan is to introduce academic programs at undergraduate and graduate level to train more human resources and establish the field in Nepal to stay at par with the international scientific community researching and publishing in this field and to exchange and extend our network and collaborations nationally and internationally. We envision to have our own fully functional academic program with our own independent set up.

7. Conclusion

Nepal is all waiting to unfold itself through the research in cognitive science and psycholinguistics. Nepal provides a richness in culture, ethnicity, linguistic diversity, religious practices, folk beliefs, professional and occupational diversity, ecological and climatic variations that may affect cognition. How such contexts of diversities may affect cognitive mechanisms like perception, memory, attention, language processing. Many neuropsychological conditions like autism, dyslexia, dementia are showing up in abundance but there is no empirical body of research that can inform interventional or therapeutic measures in our own conditions. With human resources equipped with the science and technology of this field can contribute immensely in the field of education, business and management, health and medical sciences, forensics, speech and language

related disorders. It will be in the interest of the academic institutions of higher education, government and state mechanisms to pursue and promote this field in Nepal.

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Appendix: Program Schedule of the International Webinar

Talk Series (NTNU Sustainability): Episode 2

Organized by NTNU Alumni Nepal in collaboration with Cognitive Science and Psycholinguistics Lab, Central Department of Linguistics, Tribhuvan University (TU), Kathmandu, Nepal and Language Acquisition and Language Processing Lab, Department of Language and Literature, Norwegian University of Science and Technology (NTNU), Norway.

Webinar on: Cognitive Science and Psycholinguistics for understanding human mind, brain and cognition: Prospects and Possibilities

Date: February 26, 2021 (Friday)

Time: 5 PM – 6.45 PM (NPT) (17.00 – 18.45) (Nepal Time is ahead of GMT: +5.45 Hours)

- 17.00 Opening Remarks by NTNU Alumni Nepal Chair Mr. Narayan Hari Rijal
- 17.05 Setting up of Cognitive Science and Psycholinguistics Lab in the Central Department of Linguistics, T. U. – Dr. Balaram Prasain, Associate Professor (now Professor) and Head, Central Department of Linguistics, T.U.
- 17.10 "What pointing gestures can tell us about early communicative development" – Prof. Mila Vulchanova & Dr. Valentin Vulchanov, Language Acquisition and Language Processing (LALP) Lab, NTNU
- 17.30 "Holding Keys and Playing With Fire: An Ongoing Exploration of Idiom Comprehension" – Dr. Evelyn A. Milburn, Language Acquisition and Language Processing (LALP) Lab, NTNU
- 17.50 "Prospects and Possibilities of Cognitive Science and Psycholinguistics in Nepal" – Lekhnath S Pathak, Cognitive Science and Psycholinguistics Lab, Central Department of Linguistics, Tribhuvan University, Kirtipur, Kathmandu.
- 18.10 "Cognitive Science and Psycholinguistics – Way Forward" – Prof. Dubi Nanda Dhakal, Assistant Dean, Faculty of Humanities and Social Sciences, Tribhuvan University, Nepal
- 18.15 Remarks by Royal Norwegian Embassy representative Mr. Jan-Erik Studsrød, Counsellor/Energy and Climate.
- 18.20 Remarks by NTNU Alumni Centrally representative
- 18.25 Remarks by Dr. Lava Deo Awasthi, Chairman, Language Commission, Nepal

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18.30 Question – Answer Session

18.45 Closing and Vote of Thanks

Moderator: Dr. Ajay Risal (Moderator), Dr. Biraj Singh Thapa (Co-Moderator)

Rapporteur: Mr. Pratik Bhandari and Ms. Sabita Rijal

Technical support: Mr. Indresh Kumar Thakur

MULTILINGUALISM AND LANGUAGE CONTACT IN MAITHILI: 1-16
TRENDS, TRAITS AND IMPACT IN SOCIOLINGUISTIC SPACES

Bhim Lal Gautam and Prem Prasad Poudel

LANGUAGE MAINTENANCE AND SHIFT IN THE MAJHI COMMUNITY 17-26

Krishna Prasad Chalise

LEXICAL AND GRAMMATICAL BORROWINGS IN RAJI

27-51

Dubi Nanda Dhakal

INITIATING AND INSTITUTIONALIZING COGNITIVE SCIENCE AND
PSYCHOLINGUISTICS IN NEPAL: A REPORT 52-62

Lekhnath Sharma Pathak