

Orthography development for Darma (The case that wasn't)

Christina M. Willis Oko

As the discipline of language documentation and description evolves, so do the expectations placed on researchers. Current trends emphasize collaborative efforts that prioritize tangible contributions to the community, such as a pedagogical grammar, dictionary, or collection of texts. Some argue that for unwritten languages orthography development is imperative so that materials prepared by the researcher (perhaps in collaboration with the community) are accessible to speakers. In light of the current discussions of methodology and ethical issues related to endeavors to document and describe the world's languages, this paper explores the challenges faced by a single researcher (the author) working on a single language (Darma) within a multilingual setting (in India). This project emphasizes ethnographic and discourse-centered research methodologies which reveal language ideologies that are discussed here to demonstrate that while orthography development is a reasonable objective in many cases, one must be sensitive to a variety of interconnecting issues including history, social relationships, language ideology, and local politics associated with writing and education. While orthography development has not been a viable option in the *Darma Documentation and Description Project*, it is nevertheless a matter that needs to be addressed for the benefit of the community as well as ongoing discussions of methodology and best practices in linguistic and anthropological research.

1. Introduction¹ Globally, the number of languages that are strictly oral – without a codified writing system – is estimated to be greater than the number of languages with an orthography by about two to one (Austin 2008:7; Crystal 2000:140, fn 28). The lack of an orthography (i.e., a standardized writing system, Coulmas 2003:35) is closely tied with language endangerment in that we find the vitality of a language to be positively correlated with literacy. So while we find languages without orthographies² that have a sustainable number of speakers, unwritten languages are by and large classified as endangered (Lüpke 2011). Indeed, the Expanded Graded Inter-generational Disruption Scale (EGIDS) rating for an individual language is determined in part by whether or not it is written, standardized and used in education, media

¹The idea for this paper came out of the Orthography course taught by Keren Rice and Michael Cahill at CoLang 2014 at UT Arlington. I would like to thank the instructors and participants of the course for their interest in the Darma Project and useful feedback on crafting a paper from this story. I would especially like to thank Keren Rice for encouraging me to write about this experience and offering her insights on an early draft. I am also grateful to the two anonymous reviewers for their useful comments. Any shortcomings that remain fall on me.

²In this paper, I will use the terms “orthography” and “practical orthography” to refer to standardized and non-standardized writing systems, respectively.



or government (Lewis & Simons 2010). Languages that are identified as “National” garner an EGIDS rating of “Level 0”, and these languages, along with those rated through “Level 5” (“Written”), fall outside of the range of endangerment (Lewis & Simons 2010). Because endangered languages are often without a written form, and a practical orthography is deemed requisite for successful efforts in maintenance or revitalization, researchers working on language documentation and description projects are often faced with the challenge of developing a writing system (Grenoble & Whaley 2006a).

While ostensibly a component of language documentation and description, the issue of orthography development must be approached carefully; thus, ethical and methodological approaches used in the broader endeavor of preserving the linguistic diversity of the world need to be applied to the process of designing and implementing writing systems. Much of the theoretical discussion about orthography development has been introduced in an effort to get linguists to consider innovative methods for field research – including community-based approaches – and to formulate best practices to inform the process (Cahill & Rice 2014; Czaykowska-Higgins 2009; Lüpke 2011; Seifart 2006).³ Having a way to write one’s language is recognized by UNESCO as the right of every community (Robinson & Gadelii 2003:3). Some have argued that orthography development is imperative and must be done early in the documentation of a language so that the materials produced by the project can be accessible to the members of the community (Seifart 2006:275). Even so, the development and standardization of a writing system is viewed as an activity that should be directed by the speakers themselves on a local level (England 1998), where the process is associated with powerful individuals (Dauenhauer & Dauenhauer 1998).

This paper presents a case study of a documentation and description project of an unwritten language for which orthography development was not attempted. Drawing on my experience working with speakers of Darma (ISO 639-3 code *drd*) to create a corpus and grammatical description of their language, I will argue that researchers should not assume that they will be able to develop, much less implement, an orthography early on in the research process. During my experience working with the Darma, I recognized that local, national, and international social and political issues – past and present – faced by speakers of Darma are inextricably intertwined. Because all of these factors have a bearing on orthography development for Darma, I came to realize that my participation in the process of crafting a writing system was untenable and involvement could have put the project into peril.

The goal of this paper is to illustrate this point with the story of the Darma and my experience working with them to document and describe their language. First, I will offer some context for the project itself by providing background information about the inception of the *Darma Documentation and Description Project*⁴ as well as

³For additional resources see the bibliographies for presentations on orthography from InField 2008 and 2010 (Hyslop et al. 2010).

⁴Field research for this project was supported by Fulbright IIE, Fulbright-Hays DDRA, the National Science Foundation Dissertation Improvement Grant (BCS 0236475 with Anthony C. Woodbury as PI), and the Foundation for Endangered Languages. I also wish to acknowledge the ongoing support of the Rung people without whom this project would not be possible.

a description of relevant social and historical details about the area where Darma is spoken and the people who speak the language (§2). I will then turn to the question of orthography development and the practical and social issues it entails (§3). Then I will address the implications of orthography development for both the researcher and the community (§4), which will be followed by a summary and concluding remarks (§5). Ultimately, I caution that it may never be feasible for the researcher to be directly involved in the process of orthography development. Through this case study, I argue that while useful as heuristic devices, we must recognize the limits of proposed methodologies for language documentation and description and remain cautious of mandating the process in language documentation and description projects.

2. Contextualizing the research project My first foray into the field was in 2001 when I went to Dharchula, India to conduct a pilot study (see Figure 1 below).⁵ My goal was to assess the feasibility of a project to document and describe *Rungboli* as spoken by the Rung⁶ people. When I arrived in Dharchula, one of the first things I learned was that Rungboli – also referred to as Runglo – is not a single language, but a cover term used colloquially by speakers to refer collectively to the three languages they speak: Darma (Darmiya, ISO 639-3 code drd); Bangba (Chaudangsi, ISO 639-3 code cdn); and Byangkho (Byansi, ISO 639-3 code bee).⁷ Both *Rungboli* and *Runglo* translate to ‘Rung language/dialect’, where the former, *boli*, is a Hindi loan word for ‘dialect’ and the latter, *lo*, the autochthonous Rung word meaning ‘language/dialect’ (see also §2.1.1 below). During this pilot study, a well-respected member of the Rung community – who happened to be Bangba – urged me to focus my research project on Darma. He argued that the language had scarcely been documented, but should be given priority because it represented the most conservative (and therefore “purest”) Rung language, a belief I encountered repeatedly throughout the course of my research.

When I returned to Dharchula in 2002 to begin working with the Darma to record their language and culture, my first challenge was to convince speakers of Darma that the project was feasible. As I sought to recruit participants, I was told that my endeavor to write a description of Darma would be futile because it is “a mere dialect” and thus has no grammar. During my efforts to persuade speakers that a descriptive grammar of Darma could be written, I realized that I had much to learn about the Darma people and how they fit into the social fabric of the Dharchula area, which is home to both Rung and non-Rung people. While I was not able to convince everyone that Darma has grammar – at least not in the same way that Hindi does – I was able to convince people that the project objective was reasonable and recruit speakers to join me in the venture. Along the way, I learned how to tease apart the nuances of

⁵I am grateful to GIS Support Specialist Jean Aroom (Rice University) for working with me to create the maps presented in this paper.

⁶Pronounced [rəŋ].

⁷Names assigned to each group by Indian and British officials and scholars (e.g., Darmiya, Chaudangsi, and Byansi) continue to be widely used in the literature. Additional contexts where outsiders assign unwanted names to the Rung will be discussed in §2.2.1 below. In this paper and elsewhere, I favor the autonyms that are preferred by the speakers themselves.



Figure 1. Map of Uttarakhand, India highlighting area where Darma is spoken (i.e., Dharchula sub-District of Pithoragarh District).

the local ethnic identity, which ultimately allowed me to interpret the notion of *being Rung* through the discursive practices of participants (see §2.1.1 below).

Methodology was essential to my ability to gain insight into the social context of the fieldwork site. Drawing on three methods for data collection⁸ that originate in the fields of anthropology and linguistics, I recorded natural discourse whenever possible and worked with native-speaker consultants to transcribe and translate the recordings. These sessions often included further exploration of vocabulary and grammatical structures through direct elicitation. Recordings were made in Darma villages where I learned as much as I could about people's day-to-day lives by observing how they interacted and used language in a variety of contexts, all the while asking questions about what I saw.⁹ In 2003, my husband and I followed the Darma

⁸Specifically, my methodology includes (a) recording and analyzing natural discourse, (b) direct elicitation and interviews, and (c) participant observation.

⁹When I began my research with the Darma, linguist-centered approaches to fieldwork predominated. While I am not an advocate of the so-called "Lone Wolf" approach to language documentation and description, I cannot claim that this project was implemented using a modern collaborative approach to documentation (e.g., Community-Based Language Research as described in Czaykowska-Higgins 2009). I did, however, collaborate with the community in that speakers provided guidance in identifying songs and stories that were deemed to be of high cultural value. The catalog of recordings I made comprise community-curated oral literature as well as personal narratives, procedural narratives, and day-to-day conversation.

on their annual migration from their winter villages near Dharchula up to their heritage homeland in the Darma Valley where we visited nine¹⁰ of the fourteen villages.¹¹ Over time, we were assigned kinship ties within the wider Rung community that both reflected our social connections and ratified our relationship according to local marriage customs. My husband was adopted by our Byangkho (Byansi) landlady and I was identified as a daughter of Baun village in Darma Valley. We participated in and observed ceremonies and rites of passage including naming ceremonies, funerals, and marriages – unions of humans as well as deities, the latter of which are performed exclusively in the Darma Valley.

The documentation of Darma comprised data that formed the basis for a grammatical description (Willis 2007a; Oko forthcoming), which is assembled in the spirit of the Boasian trilogy; and thus includes a collection of texts and a glossary. All of the written materials produced present Darma in a practical orthography, which is based on the International Phonetic Alphabet (IPA). Because the IPA largely employs a Roman script, some Darma view the written description of their language as being “in English”, an assessment that has its drawbacks.

2.1 Dharchula Town The Rung live in the Himalayan mountains near the Indo-Chinese (Indo-Tibetan) border in an area straddling the Kali River, which serves as a natural eastern border separating India from Nepal (see Figure 1 above and Figure 2 below). Locals from both sides of the Indo-Nepali border can pass freely between the two countries via the suspension bridge spanning the river. All of the Darma and Bangba villages lie within the Pithoragarh District of Uttarakhand, India while the villages of the Byangkho are located on both the Indian side of the border and across the river in the Darchula District of Nepal's Mahakali zone.

Like much of India, this remote area – identified as Far-Eastern Kumaun – is linguistically and culturally diverse (Willis 2007b). Here the Rung, speakers of Tibeto-Burman languages, live alongside non-Rung locals (e.g., Kumauni and Nepali) who speak Indo-Aryan languages.¹² In this multilingual setting, the social dynamics within the Rung group – i.e., between speakers of the three Rung languages – emerged as an important facet of study, and one that is especially germane to orthography development.

¹⁰We visited the villages Sela, Nangling, Baling, Baun, Filam, Sipu, Tidang, Dugtu, and Dantu, but did not visit Chal, Go, Marccha, Dakar, or Saun (although we passed through several of these villages along the way).

¹¹We made another trip to the valley in 2010 to introduce our young daughter to the community.

¹²It must be noted that the Rung are a minority population in the area. Of the 51,026 citizens of Dharchula catalogued in the 2001 Census, just under 13% (6,572) are Rung.

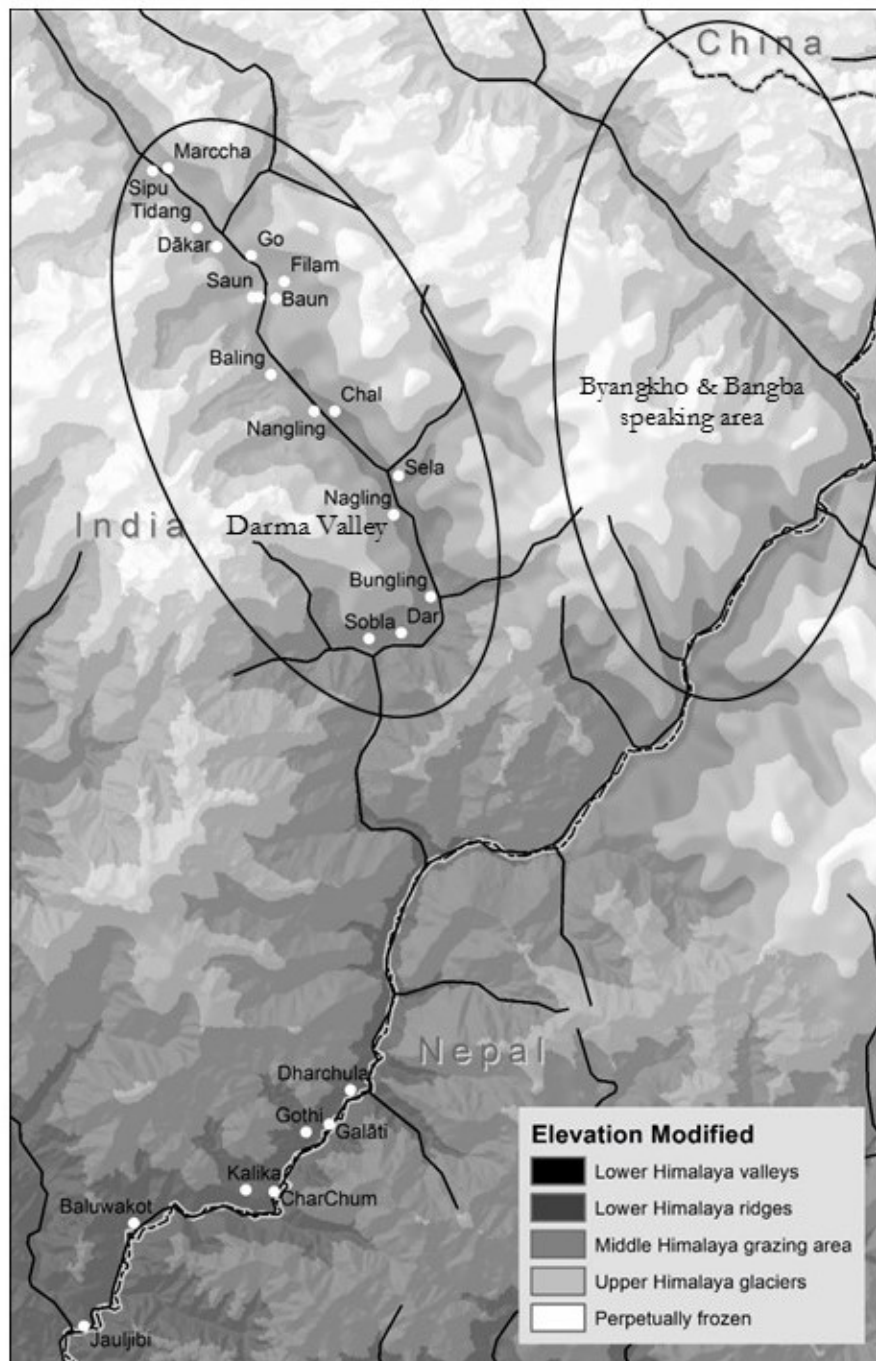


Figure 2. Map highlighting valleys where Rung languages are spoken (with Darma villages labeled) and the Darma winter villages near Dharchula Town.

2.1.1 The Rung tribe and languages¹³ The shared cultural and linguistic practices of the Rung was articulated through reference to one's *Rung* ethnicity or claiming to be a speaker of *Rungboli* or *Runglo*. The process of data collection itself (i.e., recording natural discourse) presented a novel context for discussing one's identity by mentioning ethnicity and heritage language. This type of self-reflective discourse was deemed appropriate in this setting, and is frequently attested in the corpus, especially in the first few minutes of a recording. In these moments after the recorder has been switched on, speakers bring attention to the purpose of the recording through their reference to Runglo – e.g., one speaker urging the other to speak Rung – and contrasting Darma with another language. Meta-commentary is not limited to the first few moments of a recording, however. For example, in audio captured in Baun Village, a group of women were preparing a ceremonial cake and reminiscing about their youth. Several of the women had not been in the valley for decades and had returned to offer thanks to the deities for the financial success of their families. While the conversation was initiated in Darma, one woman who was originally from Garbyang in Byans Valley, spoke in Byangkho lo. Her companions admonished her to speak in Darma, emphasizing that my project was to record the language and culture of the *Darma*, not the Byangkho. This snippet illustrates how speakers can distinguish a distinct tribal identity – e.g., Darma – within the larger Rung group.

Speakers were also heard constructing a Rung identity by contrasting the tribe with the non-Rung of the region, as illustrated in example (1) below. Recorded in the northernmost village in the Darma Valley (Sipu) this extract comes from the beginning of a longer conversation that included explanations of current events and casual conversation. Throughout the dialog, people primarily spoke Darma, but there were healthy portions of code-switching into Hindi – as well as English – motivated by efforts to accommodate the interlopers present during the conversation (i.e., my husband and me). In (1), the family that I was recording was ascertaining my identity by asking me who I was and where I came from. They were also trying to determine the extent of my linguistic repertoire. Early in the exchange, one woman – Speaker A – proclaims that I speak Hindi after which her daughter – Speaker B – observes that I also speak Rung.

- (1) a. *Hindi tse-da.*
 understand-3.NONPAST
 ‘(She) understands Hindi.’
 b. *ō, rəŋ lɛ tse-da.*
 yes Rung also understand-3.NONPAST
 ‘Yes, (she) understands Rung (language) too.’

¹³The term *tribe* is, as Brandt (2014) notes, politically charged in some contexts. Introduced by the British, the term continues to be used by the Government of India in its classification of people and identification of languages. For the current discussion of orthography development, I adopt Brandt's viewpoint that the use of *tribe* is relevant because groups like the Darma are identified as *Scheduled Tribes* by the Government of India (Brandt 2014:88, fn 13). It is also important to note that the Rung refer to their ethnic group as a *tribe*.

In this instance, a contrast is made between the Rung languages and Hindi, and in this context – i.e., Sipu village – *Rung* can be interpreted to mean the Darma language. Speaker B is expressing an ideology in which the three Rung tribes constitute a unified group with a single language, thereby highlighting the concept of *being Rung*, which should not be interpreted as a static state. The potential fluidity of this identity was illustrated in the conversation with the Byangkho speaker, discussed above. Moreover, when asked directly, speakers acknowledge that there are three distinct Rung groups – each with its own language.

A collective Rung identity is reinforced and strengthened through kinship ties. The historic (and modern) tradition is for Rung to marry within the ethnic group. Each tribe comprises multiple clans, all of whom practice clan exogamy. After marriage, the woman relocates to her husband's village to live with his family. Some marriages are also linguistically exogamous – for example, a Darma woman might marry a Byangkho man, in which case she will learn the language of her new home. Children are socialized in the language of their father, but in some domains the mother will use her native language with her children.¹⁴ Customarily, young men and women select their own spouse and marry after the man seeks approval from the family of his betrothed (Srivastava 1953; Nawa 1998). Both men and women inherit property from their parents, with daughters inheriting jewelry from their mothers and sons inheriting land – along with the dwellings on the land – from their fathers. These two traditions – love marriages and inheritance law – are frequently referenced as evidence of gender equality within Rung society. These practices are viewed as essential to the Rung identity and were described to me as being distinct from the customs of their Kumauni and Nepali neighbors.

The Rung belief that their languages are closely linked is supported by linguistic genetic classifications (see the various classifications presented in the LINGUIST List's Multitree 2014), but subgroupings within the Tibeto-Burman family are not understood to be definitive (van Driem 2001a; van Driem 2014; Thurgood 2003; Zograph 1982). The Rung languages – i.e., Darma, Byangkho and Bangba – are most commonly classified, along with Rangkas, as the Almora languages of the Western Himalayan¹⁵ branch (Thurgood 2003:16). Diverging classifications place Darma and Byangkho as sisters in one sub-branch with Bangba stemming from another (Hammarström et al. 2017).¹⁶ Recent scholarship on the classification of Tibeto-Burman languages has included Zhangzhung, which is identified as West Himalayish (van Driem 2001b:41; van Driem 2014; Widmer 2014), with some suggesting that it is closely related to Darma (Martin 2013). Each of the three Rung languages has been documented and described to varying degrees (Grierson 1967; Krishan 2001a; Krishan 2001b; Krishan 2001c; Sharma 1989; Sharma 2007; Sharma 2001a; Sharma

¹⁴Of course, one reason the Rung languages are being lost and are considered endangered is that children are increasingly being socialized in non-Rung languages.

¹⁵Here I use Himalayan and Himalayish synonymously, which should not be interpreted as meaningful. I am simply employing the terms used by the scholars referenced.

¹⁶This classification contradicts the position that Byangkho (Byansi) and Bangba (Chaudangsi) are the same language (see, for example, Sharma 1989).

2001b; Trivedi 1991), with the most comprehensive description being that of Darma (Willis 2007a).

The 2001 Indian Census indicates that of the 6,572 Rung people who were tallied in the Dharchula area, approximately 2,615 live in villages that are associated with the Darma tribe.¹⁷ The villages are not geographically proximate; they are dispersed along the road stretching 23 kilometers from Darchula Town to Baluwakot. Of the total population, it has been estimated that fewer than 1,760 people speak the Darma language (Willis 2007a). While the number of speakers has not been declining at a rapid rate, there are many Darma counted in the Census who no longer transmit the language to their children, including those who no longer live in the Darma-speaking area.

As with other minority groups in India, the Rung regard Hindi and English as symbols of modernization (Annamalai 1998), a view that has contributed to a negative evaluation of the Rung languages. This ideology of inferiority was manifest in daily interactions between parents and their children and interactions within Rung youth peer groups. For example, in and around Dharchula I observed many households where the parents used Hindi or English (or both) in child-directed speech instead of the heritage language(s). When asked about this practice, most responded that they were concerned with the future economic prospects of their children, and viewed native proficiency in the dominant languages as essential for success. In their efforts, these parents have rendered the heritage language a secret code spoken by adults and not understood by children. The resulting language shift has been reinforced through the Hindi- and English-medium schools in the Dharchula area and the fact that well-paying jobs usually require fluency in Hindi or English (and often both). Younger educated Rung frequently use Hindi (and sometimes English) with each other in their interactions outside of school. One reason cited by one of my younger consultants – who was in his 20s at the time – was accommodation. He used Hindi in his daily communication with his peers because he did not want to exclude his non-Rung friends from his conversations with his Rung friends. I anticipate that these attitudes, along with increased national efforts to modernize all of India, will contribute to an increase in the rate of language shift in the community (Annamalai 1998).

2.1.2 Non-Rung languages Dharchula Town is the commercial hub of this remote corner of Uttarakhand, bringing together regional sellers of comestibles and consumer goods, all of whom bring an assortment of languages to facilitate the transactions. In addition to the Rung languages, people in the area speak regional variations of Hindi, Kumauni, and Nepali. The local Hindi vernacular differs from Standard Hindi in that it is frequently infused with Pahari (meaning ‘mountain dialect’). A (far) northeastern variety of Kumauni (kfy), this Pahari is unique to the Dharchula region

¹⁷The census does not track people based on the autonyms they use; thus, census figures reflect neither the number of Darma nor the number of Rung people in the region. The figures reported here were compiled by me using the data provided by the local census taker. The estimates are based on the number of Scheduled Tribe members tallied for each Darma village in the Dharchula sub-district (*tahsil*).

and differs from varieties spoken in places like Almora, which is 209 kilometers (130 miles) southwest of Dharchula.¹⁸ Similarly, a far-western variety of Nepali, which is reported to be distinct from Kathmandu Nepali, is also identified as a local language. Standard Hindi is spoken in some contexts, but mostly to accommodate outsiders. Commercial transactions rarely transpire using a single language; code-switching is widespread. In my observation of Rung speakers in the marketplace, I noticed that the tribal languages were primarily spoken betwixt Rung people, while regional languages (e.g., Hindi, Kumauni, and Nepali) were used during exchanges with people who are not ethnically Rung.

In addition to the local population of Rung, Kumauni, and Nepali, there are Indian nationals from all over the country living in the Dharchula area – most of whom are stationed there for employment in military and government positions (see §2.3 below for further discussion). I ascertained through observation and interviews that these transplants speak English and Hindi in the majority of their (public) interactions. Some transplants from other regions of Kumaun or Nepal living in Dharchula made attempts to master the local varieties of their languages (Kumauni and Nepali, respectively). Also residing in Dharchula during the course of my research was a group of Tibetans who were reported to be stranded in exile. Despite running a local restaurant, the Tibetans and Rung did not interact much, even though the older generation of Rung men claimed to speak Tibetan as an artefact of their experience as traders in Tibetan markets.

While there is a rich linguistic and ethnic diversity found in this far-flung region of Kumaun, the schools in the area are neither maintaining nor valorizing the local languages. Children are educated in Hindi- and English-medium schools where the message is that these are the languages of prosperity. Even Dharchula's *Rung Community School* is an English-medium institution, which underscores a local ideology that prioritizes English as a pathway to financial security. Of course, without an orthography, it is difficult to develop a curriculum in any of the Rung languages.

2.2 Recent history As we find in many pre-literate societies, the historical accounts of the Rung are limited in breadth and depth. Existing records offer a chronological list of the dynasties of Kumaun (e.g., the Chand Dynasty), focusing on land transactions, which were largely the product of conquest (Atkinson 1973; Atkinson 1974). Reference to the *Bhotia* (i.e., Rung) in these historical accounts crops up when *parganas* (districts) such as Darma or regional towns such as Sor (Pithoragarh) came under new leadership or were identified as part of a land grab. Other records come in the form of reports, memoirs, and notes written by British commissioners (Atkinson 1973; Atkinson 1974; Sherring 1906; Sherring 1993) that were based on their administrative and travel experiences. Some of these missives include ethnographic-like descriptions, but the lens used for cultural interpretation lacks objectivity. While such accounts are intriguing because of what they have to offer – i.e., a glimpse of

¹⁸Locals assert that the local Kumauni is different even from the variety spoken in Pithoragarh, which is 90 km (56 miles) to the southwest. See also Sharma's (1994:5–6) discussion of variation in Kumauni in the border areas of Kumaun.

how things used to be – the information provided must be handled with incredulity because the preponderance of negative evaluations of the people and their cultural practices reveals extensive bias. For example, when discussing religious rituals of the Rung, Sherring observes that they “practice formal ablutions,” then adds the snide parenthetical remark: “which many of them require sadly” (1993:69).

Based on all historic accounts – written and oral – we know that for centuries a central component of the Rung livelihood has been transhumance (von Fürer-Haimendorf 1975:24; Hoon 1996). Driven by the seasonal grazing needs of livestock, Rung people move themselves and their herds from winter settlements in and around Dharchula to the northeastern upper valleys where their summer villages are located. This annual migration – called *kunca* in Darma – begins when the snow in the upper valleys starts to melt (around mid-May). Migration ends with everyone shifting back to the lower elevations when the snow returns (around mid-October). The time in Darma Valley is spent planting crops, grazing and tending to animals, harvesting and processing wool, and performing rituals. Some ceremonies are especially sacred and are done exclusively in the valley. Because the villages in the upper valleys are homogeneous, interaction with speakers of non-Rung languages is greatly reduced during migration.¹⁹ After planting the fields, the women stayed in the village to tend the crops and spent much of the day cleaning and carding wool. While the crops were growing, the men used to go to the Takalakot markets in Tibet to trade goods brought from India (e.g., cloth, grains, spices, etc.) for commodities from the Tibetan Plateau (e.g., salt, borax, wool, etc.). This trade activity, combined with subsistence farming, resulted in a comfortable way of life for many Rung (Hoon 1996:77; Sherring 1993; Willis 2007a).

The valleys where the Rung spend their summers are identified collectively as the Darma *pargana*, which is divided into three *pattis* (subdivisions): Darma, Byans, and Chaudans (Sherring 1906:102), with Darma being further divided into the Malla (upper) and Talla (lower) *pattis* (Atkinson 1973:98). Historically, this region – including Dharchula and the surrounding area – was cut off from outsiders because it was difficult to access due to the rugged terrain. In 1962, a border skirmish with China prompted the Indian Government to close the mountain-pass borders, initiating a period of mandated isolation, which continued into the early 1990s. During this time, access to the Dharchula area was restricted, and only individuals who were military or government personnel could enter the region without a permit.²⁰ Moreover, the border closure proved disastrous to the Rung economy because they could no longer follow trade routes into Tibet. In the years following 1962, many Rung were forced to find a new livelihood, which presented a challenge for the uneducated adult population. So, the Rung welcomed the offer from the Indian government in 1967 to become a Scheduled Tribe (Rana 1997:55). This status provides a path to economic

¹⁹The exception to this is the presence of non-Rung servants who accompany the Rung on migration. The servants speak the Rung languages as well as their own.

²⁰The area has also endured technological restrictions. Cell phones were not permitted in the area until 2010 and Internet access was possible only through phone lines. The area suffers from regular power and phone outages, which make regular communication with the outside a challenge.

security through a guarantee of opportunities in education and employment (e.g., seats at university, civil service jobs, and ministerial positions).

Nowadays in the Dharchula area, many Rung have shifted away from a life of transhumance toward a sedentary life. Instead of relocating households and livestock to the traditional villages at higher elevations during the summer months, many Darma stay year-round in their winter villages along the Kali river between Dharchula and Baluwakot. The decision to not participate in migration is motivated by two interconnected objectives, both of which relate to economic security: namely, employment and education. Because the migration season lasts for six months each year (May–October) and is not associated with a salary, it is not feasible to participate in this traditional practice and hold a job. Similarly, children who accompany their parents on migration are away from school for half of the year. Many families recognize the connection between education and employment and have elected to prioritize regular schooling over migration.

Indeed, education was embraced by the Rung in the years immediately following the border closure. Those who could afford to, sent their children to regional boarding schools. In these Hindi- and English-medium institutions, Rung children grew up away from their heritage languages and culture. After graduation, many settled outside of the Dharchula area taking civil service jobs in urban areas across the country. This newly formed diaspora population has become an iconic symbol for the Rung exemplifying how education translates into wealth, stability, and power. This pattern of urbanization is in step with broader strides to modernize India and, as noted in §2.1.1 above, have the potential to encourage language shift, which will significantly impact the long-term status of the Rung languages. These issues are salient within the Darma community and while some are content that they are not transmitting Darma to their own children, there are others who are anxious that this trend will mean the eventual extinction of the language. Additionally, some are concerned that traditional cultural practices will be supplanted by mainstream Indian culture.

The closure of the border with Tibet in 1962 brought other changes to the Dharchula area, most of which are outcomes of the newfound attention from the Indian government. The strong military²¹ presence installed to protect the sensitive border region²² has increased the use of (standard) Hindi in public spaces and has ultimately altered the linguistic landscape of Dharchula. Additionally, military personnel have become increasingly familiar with the rugged landscape, garnered through intensive border patrols. This led the government to explore local river basins in search of suitable places to develop hydro-electric power infrastructure. Experts determined that the Darma (Dhauli) River was an ideal site to construct the largest (at the time) concrete-faced rock-fill dam in Asia. The power project – overseen by the National Hydro-electric Power Corporation (NHPC) – brought officials and engineers from

²¹In addition to central intelligence, regional military troops include the Kumaun Scouts and two border patrols – the Indo-Tibetan Border Patrol (ITBP) and the Sahastra Seema Bal (SSB).

²²Indian government officials and military police also worked to suppress the violent activities of the Nepali Maoists who venture across the border into India and halt the trafficking of contraband (e.g., skins and parts of endangered animals and *yartsa gumba* or ‘natural Viagra’, *Ophiocordyceps sinensis*).

around the world to the area.²³ Roads had to be widened so that machinery and turbines could be trucked to the dam site. Now there are motor roads all the way to the village of Dar in Talla Darma and the Rung are demanding additional infrastructure.

2.2.1 Origins and religion When oral histories are articulated by the Rung themselves, we find differing accounts. Narratives commonly refer to three distinct groups – each with its own language – that comprise a single Rung tribe, when describing how, when, and from where the Rung arrived in the Dharchula area, the chronicles diverge. Over the course of my research, two conflicting histories emerged.

The first claim is that the Rung are of Rajput origin, pushed from the plains of India into the Himalayas after the Mughal invasion (Atkinson 1973:47; Martin 2013:184). Evidence for this history includes traditional male dress, naming practices, and religion. The male costume used to be worn throughout the year, but is now donned only for ceremonies and rites of passage. Consisting of a calf-length white woolen robe (worn over trousers), which is tied with a sash made from white cloth, the costume is accessorized with a turban – fashioned from the same type of cloth as the sash – as well as a shield and sword, which is said to signify the status of the Rung as members of the “warrior caste” (Kshatriya). Further evidence that the Rung are Kshatriya is the use of *Singh* as a male middle name. Those who claim Rajput origin point to the widespread practice of Hinduism by the Rung, arguing that their ancestors brought the religion with them when they moved in to the area. Evidence for this includes the Rung deities Cuti and Gabla who are claimed to be local incarnations of the Hindu gods Parvati and Shiva, respectively. The fact that Shiva resides in this region alongside his consort Parvati is used to substantiate this argument. Indeed, Hindu pilgrims must pass through Rung territory to reach Holy Mount Kailash and the sacred waters of Lake Mansarovar.

The alternative origin narrative ties the heritage of the Rung firmly to the Himalayas and ultimately to people who came from the Tibetan plateau. Primary evidence cited for this lineage are the phenotypical features of the group, characterized by the Rung as “more Chinese looking” (than people from the Plains of India), which indicates Tibetan origin. As with the Rajput argumentation, proponents of a Tibetan origin proffer religion as additional evidence for their claim. Highlighted are the traditional religious practices that are outside the purview of Hinduism, such as the worship of rocks, trees, and other natural phenomena. While I did not encounter Rung people who pointed to the ancient Zhang-zhung kingdom of western Tibet as evidence for a Tibetan origin story, this is likely because they are unaware of the proposed connections (van Driem 2001b; Takeuchi & Nishida 2009; Martin 2013).

Of the two claims, the Rajput origin story was the most prolific. A crucial aspect of this narrative is that it entails a rejection of the moniker *Bhotiya* – that is, the Rung are not of Tibetan origin. Of course, this viewpoint complicates community

²³The dam project team included subcontractors from Germany, France, and South Korea, none of whom were active participants in the community. The latter two groups built their own insular (gated) colonies and had imported food – including wine, sausages, and beef – shipped to them in Dharchula on refrigerated trucks from Delhi.

acceptance of the classification of the languages as Tibeto-Burman. It is interesting to note that accounts of the debate over the origin of the Rung dates back to the early writings of the British (Atkinson 1974; Sherring 1993:69), indicating that the topic was salient in the late 1800s.

2.3 Socioeconomic status Throughout the Dharchula area, the received wisdom regarding the socioeconomic rankings of the Rung is that the Byangkho are the wealthiest and the Darma are the poorest. On one hand, the Rung hold the Darma in high regard because their language and culture are thought to represent original Rung ways of speaking and living. On the other hand, the Darma have low socioeconomic status because they lack resources. Few Darma own valuable property. They live in villages away from the commercial center, many at the subsistence level. While a number of Darma continue to go on the annual migration, which is an iconic *Rung* practice, they do so in order to survive. The Byangkho, however, own much of the property in Dharchula town, including many of the shops and businesses. The Bangba fall in the middle, but are viewed by the Darma as holding the same socioeconomic status as the Byangkho.

Social interactions have offered a glimpse of how salient socioeconomic status is within the community. For example, within the community, I encountered both Byangkho and Bangba who agree that their languages are mutually intelligible, but only the former made claims that their language is the Rung lingua franca. So, while we find many Bangba who recognize similarities between their language and Byangkho, they do not make claims that all Rung understand their language. The notion that Byangkho is understood by everyone is also refuted by Darma speakers. In day-to-day interactions, I observed that when Byangkho speakers use their language with Darma speakers, the Darma will shift the conversation to Hindi (see also Willis 2007c). The Rung are in agreement, however, in the view that Darma is not mutually intelligible with Byangkho or Bangba. I even encountered Byangkho who proudly asserted that they could not understand any Darma.

In interviews, I was told that the high socioeconomic status of the Byangkho dates back to the days when the Rung still traded in Tibet. After the local king gifted the Byangkho their property in Dharchula town, their wealth only increased. It was reported that in the years following the abrupt halt of trade with Tibet, the Byangkho had enough capital to restructure their business model and open up shops in Dharchula Town. They also had the money to send their children away to boarding school. While the diaspora includes members of each Rung group, the majority are said to be Byangkho. Given that the diaspora is heralded as the pinnacle of success, the status of the Byangkho is elevated even more through this association with modern India.

The power of the diaspora was in evidence at the 2004 gathering of the *Rung Kalyan Sanstha*.²⁴ The meeting was held in the Uttarakhand capital, Dehra Dun – about 500 km (310 miles) west of Dharchula – because it was more convenient to

²⁴This organization is dedicated to cultural preservation. The 2004 at-large meeting was the first since the group formed in 1989.

those living outside of the Rung homeland.²⁵ The program included presentations of traditional songs and dances as well as speeches, political and nostalgic. The event was largely financed by the diaspora population, many of whom addressed the forum in highly Sanskritized Hindi, which many of the less-educated Rung struggled to understand. Many of the speeches from Dharchula area residents, however, were delivered in a Rung language, including an impassioned speech from a revered Darma man about the lack of resources available. The fact that he spoke in Darma in this public setting was deemed by some as a jab at the individuals who chose to speak in Hindi, which was viewed as an ostentatious demonstration of their level of education and power.

2.4 Summary of the DDDP The *Darma Documentation and Description Project* originated as a component of my doctoral research and continues today. Motivation for this work stemmed from my desire to participate in the preservation of the world's linguistic diversity by documenting an under-described language. By adopting a method for data collection and analysis that prioritized natural discourse, I was able to glean information that facilitated an interpretation of local language ideologies, which indicate that the Rung view their languages as “mere dialects” and do not consider them viable modes of communication in a world where urbanization and globalization are on the rise. Moreover, direct observation of day-to-day interactions revealed patterns of multilingual language use that suggest a language shift is in progress for the Rung. Indeed, factors such as few speakers and the adoption of dominant languages have contributed to the classification of the Rung languages as “Threatened” – a 6b on the EGIDS level (Simons & Fennig 2017) – and “definitely endangered” by UNESCO's Atlas of the World's Languages in Danger (Moseley 2010). The status of these languages as threatened, along with the lack of recognition of the language from the Indian Government, suggest that orthography development is imperative. But the language attitudes held by speakers, combined with multifaceted social and historical factors, have created a scenario in which attempts at orthography development are fraught.

3. Practical and social issues of orthography development When discussing orthography development, scholars warn that there are myriad issues – both practical and social – all of which should be factored in to every aspect of decision making (Grenoble & Whaley 2006a:137; Cahill & Karan 2008; Cahill 2014:9).²⁶ Once an orthography is developed, communities and individuals stand to experience positive outcomes such as increased pride, the ability to document their language, and practical day-to-day uses of written language (Hinton 2001:240). In the sections that follow, I will highlight some of the issues that have complicated orthography development in the Rung context and discuss how they relate to the social, historical, and political context of the community outlined in §2.

²⁵Subsequent meetings were also held away from Dharchula, which the locals view as a power play.

²⁶Many of these issues are discussed in the literature (Cahill & Rice 2014; Seifart 2006; Lüpke 2011).

3.1 The contest Early on in the project, members of the diaspora suggested that I develop a Rung orthography – my status as a linguist qualified me for the task. While I was unsure that I possessed the skills to develop a writing system that would be suitable – especially at such an early stage in the project – my reluctance rested largely on my cognizance that it might not be a straight-forward endeavor.²⁷ With the clarity of hindsight, I see now that had I entered the contentious battle over orthography development, I would have inadvertently compromised valuable relationships. But after years of work with the Darma, I still have not participated in developing a writing system for wider use, which warrants further explanation.

When trying to convince me to develop an orthography, it was noted that I stood to win thousands of rupees as a reward. According to my field notes from an interview with a Rung elder in Dharchula, an account was established in the mid-1980s with one Lakh Rupees (i.e., 100,000, written ₹1,00,000) to serve as the prize for the individual who developed an orthography.²⁸ Implicit in this call to action is the notion that a *lone individual* will devise a suitable writing system, which will be adopted by the entire Rung community. The prize is intended to provide individuals with an incentive to enter the contest, with the winner being selected by a committee, which is meant to grant credibility to the orthography and facilitate its widespread adoption. The original founder of the trust has since died, but the account is reportedly maintained by the *Rung Kalyan Sanstha*. As it turned out, the original committee was small and each member had his own pet preference for the direction of orthography development that was orthogonal to the other two members. The story goes that each committee member had a relative or friend who submitted an orthography proposal and each was rejected by a vote of 2-to-1. An attempt presented at the 2004 *Rung Kalyan Sanstha* meeting in Dehra Dun was met with much criticism from the audience, and was rejected without even being reviewed by the committee. The contentious nature of the contest has precluded some from entering at all.

3.2 Existing practical orthographies The desire to have a codified writing system to represent all three of the Rung languages was articulated in various contexts, including discussions centered on education, which, as noted in §2.3, is highly valued by the Rung. Of particular relevance to the issue of orthography development is the medium of instruction, which in Uttarakhand is Hindi or English. Many Rung want their children to have oral and written proficiency in these languages to ensure future economic success. Moreover, each medium of instruction is viewed as a bona fide “language” because of its extensive written literature, while each Rung vernacular is relegated to “dialect” status. Despite these negative language ideologies, I encountered individuals who wanted to be able to document their ways of speaking; they had a sense that if a writing system was developed, the Rung languages and culture could be recorded in a written format accessible to speakers. This desire for cultural preservation – along with frustration regarding the slow progress of orthography

²⁷Indeed, the very fact that I was asked to develop an orthography without community input set off alarm bells.

²⁸This claim was corroborated by multiple members of the Rung community, including a bank employee.

development – has served as motivation for some to devise their own practical orthography in order to commit to paper poems, proverbs, and ritual discourse. All of these innovators have used the script of literacy, Devanagari, as the springboard for their individuated practical orthography. One individual I met had created a key for the modifications, but he was exceptional.²⁹ When I presented speakers with a Rung-language document written in one of the novel orthographies, they usually struggled to decipher the message. It is not clear how much of this is due to the inadequacies of the systems themselves and how much can be attributed to the fact speakers expect Hindi words when they see the Devanagari script.³⁰

The existence of these home-grown writing systems and the fact that their creators could not garner support within the community to try them out offers a glimpse of the challenges facing those who attempt orthography development. Part of the issue might be that efforts to devise a writing system for the Rung languages have all been solitary. Without community feedback throughout the process, the likelihood that a system will be adopted by the wider community is diminished (Grenoble & Whaley 2006b:138). In an ideal scenario, one would advocate for community workshops (Stenzel 2014) to develop systems that can then be modified over time after users have the chance to try them out through day-to-day use (Karan 2014). Many of the attitudes expressed by the Rung about the lack of a writing system underscore the notion that an increased level of pride would be a positive outcome of orthography development (Hinton 2001:239–240) and the pursuit should not be abandoned.

3.3 Variation If the request to devise a single Rung writing system is to be fulfilled, the extent of variation between the three languages must be assessed. To do this, it is necessary to have a phonological analysis for each language, including an account of the phonemic system and prosodic features (Robinson & Gadelii 2003; Wedekind & Wedekind 1997). This is problematic for the Rung languages because Bangba has yet to be adequately described. While classified as a dialect of Byangkho in the literature (see, for example, Grierson 1967 and Sharma 1989), the claims do not appear to be based on empirical evidence and have been challenged by scholars (Sharma 2007:8; Willis 2007a) and rejected by Bangba. Indeed, I encountered numerous Bangba speakers who – frustrated with the existing classification – are eager for someone to document their language without a preconceived bias about its relationship to Byangkho.³¹

Understanding the extent of variation between the Rung languages will help determine whether it is better to develop the system based entirely on a single variety, or whether it makes more sense to develop an orthography that standardizes an idealized variety. The former approach would create inconsistencies in the writing of the

²⁹The entire work of this man (now deceased) was written in an old weekly planner. Unfortunately, it is difficult to read in the original and the photo copies he allowed me to make are barely legible.

³⁰The notion that an unmodified Devanagari script is not suitable for representing the Rung languages was salient. On one occasion, a skeptical Rung man asked me to write a Darma word using Devanagari, and was impressed when I explained that the script did not adequately represent all of the sounds in Darma.

³¹In response to the request, I initiated a documentation project for Bangba in 2010. The goal is to build on the existing grammatical sketches of Bangba (Sharma 1989; Krishan 2001c) and produce a comprehensive description of the language based on natural discourse. Because this project is still in its initial stages, the descriptive grammar of Bangba will take some time.

languages not selected. While the latter strategy would result in a system that does not represent any of the three languages. In order to address these questions, we need to understand the relationships between groups of users and how the potential users relate to the dominant language. How these issues are addressed will likely play a role in community acceptance and adoption of a proposed writing system, which means that the success of an orthography hinges on non-linguistic factors – described as ideological and practical issues (Chamberlain 2008:121).

Despite the lacunae in descriptions of Bangba, we can compare the existing sketches of the Rung languages and look for potential challenges. We find variation across the languages in terms of phonology, verb endings, and lexical words (see also §3.3.1 below). Taking lexical variation into consideration, let us imagine how it might be treated if we developed a single Rung orthography based on an amalgam of the three languages. Examples 2–4 below illustrate that the word for ‘leg/foot’ is similar in all three languages, and while clearly cognate across the Rung languages, it is not identical.

(2) [ləkɛ] Bangba

(3) [ləgɛ] Darma

(4) [likɛ] Byangkho

We find that the quality of the first vowel differs in each language and that the intervocalic word-medial stop is attested as voiced in Darma and voiceless in the other languages. Before we can go any further with considering how to represent the first vowel, we need to determine if ‘leg/foot’ reflects a regular sound correspondence between the vowels [ə], [ɛ], and [i] (i.e., whether this type of alternation is attested in other word forms).

Of course, any effort to unify variation under a single orthography can create problems. Consider an alternative approach for orthography development whereby a single Rung language is selected to represent all three. Such a decision could alter the balance of power within the group because the variety selected might emerge with an elevated social status. Such an outcome is described for Pohnpeian orthography development. Faced with dialectal differences, including in the pronunciation of vowels, Rehg (2004:508–509) notes that a single dialect was selected to be represented in the orthography. Reasons cited include number of speakers and the acceptance of all groups for the decision. In the Pohnpeian case, an unintended consequence of the decision to use a single dialect as the basis for a standardized writing system, was that the other dialects were interpreted to be non-standard (Rehg 2004:209). This is relevant to the Rung context because the socioeconomically powerful Byangkho have spearheaded the drive for developing a unified orthography. If they hold sway over the other Rung in discussions, the result could be a writing system based primarily on Byangkho, which they already perceive to be the Rung *lingua franca*. This could elevate the status of Byangkho even more, and further endanger the status of Darma and Bangba (Grenoble & Whaley 2006b:155). Ultimately, social context and community input matters; Errington suggests that “the work of linguists in a postcolonial

world may be scientific, but is never insulated from the worlds of those who speak what they study” (2008:168–169).

3.4 Orthographic type & potential audience Before embarking on the development of a writing system, it is important to consider the target audience. For example, whether potential users are imagined to be native speakers or language learners will influence the depth chosen to represent the system (i.e., shallow or deep). Similarly, whether potential users are literate or pre-literate will factor in to orthography design (Rogers 2005; Seifart 2006).

If the target audience for orthography development is a future generation of native speakers who will be taught to read and write the Rung languages in school, then it makes sense to develop a deep orthography – one that is phonemic where allomorphy is not represented (Rogers 2005). For example, the infinitive morpheme – which is pronounced differently across the three Rung languages – has attested allomorphy in Darma and Bangba, where we find vowel deletion in some contexts. In Bangba, the final vowel is usually elided, so speakers would pronounce the infinitive <-mV> as either [-mə]/[mo], or [-m] depending on the context (Sharma 1989:107; Krishan 2001c). Similarly in Darma, word-final vowels are articulated in some contexts but not in others (Willis 2007a:121–128), so speakers could pronounce the <-mV> suffix [mu] or [m]. We do not find this allomorphy in Byangkho, according to the accounts available (Sharma 1989; Sharma 2001a; Sharma 2007; Trivedi 1991).³² If developing a deep orthography, we could represent the infinitive morpheme with an overt vowel in all contexts, e.g., < mo> (or < mu>), and speakers of each language would pronounce the morpheme according to the phonetic and morphosyntactic system of their language. Such an approach would be well-suited in an environment where native speakers are using their language to create written records of the various genres of oral literature and develop pedagogical materials to use in language maintenance.

If, however, the target audience is a generation of semi-speakers or older pre-literate native speakers, then it might make sense to develop a shallow orthography – one that is phonetic and easier to master. This system would also be useful in a “third generation pursuit” (Seifart 2006 evoking Dorian 1993) whereby orthography development is aimed at a future generation of non-native speakers who will be revitalizing their heritage language. In this context, allomorphy would not be represented; thus, variation in pronunciation would be explicit in the written form. In the case of the infinitive described above, we would find the form written differently across the three languages and the allomorphy found in Bangba and Darma would be overtly expressed.

In Bangba, stem allomorphy is also attested with infinitive forms. Stem-final consonants assimilate with the onset of the infinitive morpheme; thus /nəb/ + INF [nəmmə] ‘to arise’ (Sharma 1989:107). In a shallow orthography Bangba allomorphy would be represented overtly with <nəmmə>; and the difference between Bangba

³²The individual accounts for Byangkho differ in terms of how the infinitive is described. S.R. Sharma (2001a) lists the infinitive as [m], Trivedi (1991:122) records it as [mo], and D.D. Sharma (1989:106) states that speakers pronounce the infinitive with an offglide [mwə].

and Byangkho pronunciation of the infinitive verb ‘to arise’³³ would be apparent because the word would be represented as <nəbmwo> in Byangkho. This approach would underscore the differences that are attested between the Rung languages, which might make it less appealing for some orthography advocates.

These examples illustrate the importance of current efforts to document and describe all three Rung varieties independently. Adequate phonological (and grammatical) descriptions of each language are necessary to determine whether it is better to adopt a phonemic (shallow) or a morphophonemic (deep) orthography (Rogers 2005:177–181).

3.5 Script The choice of script is a long-standing roadblock to Rung orthography development. In the examples of home-grown practical orthographies described above, the script chosen was that of the local literary hegemon, Devanagari. But other scripts have reportedly been proposed – ranging from the obvious computer-age friendly Roman script to the eyebrow-raising suggestion that the Rung languages be represented using Hangul. Whatever the proposal, any arguments in favor of one script over another must address representational adequacy and learnability (Mazaudon 1993). In the context of South Asia, a Nāgari-type abugida is a reasonable candidate³⁴ and two scripts³⁵ emerge as plausible contenders: Devanagari and Tibetan.³⁶ Both descend from the ancient Brāhmi script (Schiffman 2010), and while one could present a logical argument in favor of using either script – indeed members of the Rung community have done so – proposals for each have been rejected.

In the early 20th Century, Sherring (1993:77) noted that the languages of the Rung (whom he referred to as *Bhotiya*) were better suited to the Tibetan script over the Hindi script because the sounds of the languages were more similar to those in Tibetan than Hindi. His claim, unfortunately, is not backed up with empirical evidence. Based on current accounts of the Rung languages, it appears that both Devanagari and Tibetan scripts present relatively minor issues in terms of representational adequacy for the Rung languages. Using Darma as the focus of discussion, Table 1 below highlights the issues related to the phonemic inventory. Following Mazaudon’s (1993)

³³In Darma ‘to arise’ is <nyemu>.

³⁴Addressing the concerns of one reviewer, I offer several reasons why I am not entertaining a Roman-based orthography in this discussion. First, in the context of South Asia we find a rich history of writing systems using a script derived from the ancient Brāhmi, so considering a script that is not Roman-based makes sense (Lüpke 2011:313). Second, prioritizing a Roman-based script in this South Asian context could be interpreted as a post-colonial linguistic ideology that marginalizes the value of literacy developed outside of Europe (Errington 2008). This is especially true when we consider the status of India as a former British colony. Finally, and perhaps most importantly, speakers perceive it as equivalent to writing their language in English, which, as already noted, they find unappealing.

³⁵Another possible script would be the Zhang-zhung script used to write texts in the now extinct Zhang-zhung language of western Tibet (Martin 2013). While the history of the script (Schaik 2011) and classification of the language remain unclear, proposed links between Zhang-zhung and the Rung languages (van Driem 2001b; Martin 2013) make it an appealing choice for orthography development.

³⁶While I will not follow Chamberlain (2008:118) here by differentiating the Tibetan script (Sambhota) from the orthography (Tibetan), it is important to note that the orthographic system of Tibetan does not always reflect the phonetic pronunciation of words represented.

proposal for Tamang, the table assumes that the two contending scripts would be implemented phonetically.

Table 1. Devanagari and Tibetan characters available for Rung orthography.

IPA	Devanagari	Tibetan	IPA	Devanagari	Tibetan
a	आ ा	ཨ	t	—	ཅ
ã	आँ ाँ	ཨྱ ྱྱ	t ^h	—	ཅྱ
i	ई ी	ཨི ཨི	t̪	त	ཅཱ
u	ऊ ू	ཨུ ཨུ	t̪ ^h	थ	ཅཱྱ
e	ए े	ཨེ ཨེ	d	द	ད
ɛ	—	—	n	न	ན
o	ओ ो	ཨོ ཨོ	p	प	པ
õ	ओं ोँ	ཨོྱ ཨོྱ	p ^h	फ	པྱ
k	क	ཀ	b	ब	བ
k ^h	ख	ཁ	m	म	མ
g	ग	ག	j	य	ཡ
ŋ	ङ	ང	r	र	ར
c	च	ཅ	r̥	—	—
c ^h	छ	ཆ	l	ल	ལ
ʃ	ज	ཇ	w	व	ཨྲ
t̪	ट	ཌ	s	स	ས
t̪ ^h	ठ	ཌྱ	h	ह	ཨྱ
ɖ	ड	ᱛ			

The first column includes the IPA representation for the Darma phonemes. The Darma inventory includes six vowel qualities, two of which have both plain and nasal variants, and 27 consonants. Additional sounds that appear in loans from IA languages are not represented in the table (e.g., the breathy voiced stops). In the second and third columns, we find the way each Darma sound would be represented using the Devanagari and Tibetan scripts, respectively.³⁷ Vowels have two forms: full forms – those that would appear in word-initial position (presented on the left); and the combining diacritics – those vowels that follow a consonant (presented on the right). Gaps in the representation are indicated by en-dashes in the table. For ex-

³⁷The sounds are presented in the order of the Hindi and Tibetan alphabets.

ample, we have representation for dental (ṭ, ṭʰ, ḍ) and palatal stops (ç, ʃ) in both Devanagari and Tibetan scripts, but there is no way to represent both the alveolar (ṭ, ṭʰ) and palatal (ç, ʃ) stops using the Devanagari script. The Darma alveolar stops have heavy frication preceding the closure, which makes them similar to affricates. Based on distributional evidence, acoustic analysis, and palatograms, these are identified as distinct from the palatals and are described as (spirantized) alveolar stops. While there is a single grapheme for the palatal stops in the Devanagari script, Darma's spirantized alveolars would need to be represented using conjoined (conjunct) characters (e.g., ढ़). Looking at the table, we also find that neither script can accommodate the front mid lax vowel [ɛ], which would require an innovation. Finally, there are a handful of words that have tone and voiceless sonorants, which an orthography would need to represent. In the end, these issues are relatively minor and we could employ modifications used in emerging orthographies for Tibeto-Burman languages of Nepal (Noonan 2003; Mazaudon 1993) to address them.

With respect to the learnability criteria, using a modified Devanagari script seems like the sensible choice because Hindi is the dominant language of the state of Uttarakhand and those who are already literate could potentially learn the modifications quickly. Of course, using a script associated with one language can have unwelcome consequences. As Noonan (2003) notes, literacy in one language can influence spelling conventions when using the same orthography to represent another (genetically unrelated) language (see also Hinton 2014). Another risk of using Devanagari in the context of India is the risk of being classified as a dialect of Hindi, something the government has done for other languages (Brandt 2014:84). The alternative script, Tibetan, presents issues for learnability because the system would be new to all Rung language learners.

In sum, while the learnability criteria would be satisfied for many Rung if a Devanagari-based orthography were to be developed, the issue of representation would be unresolved without modifications to the existing script. Conversely, if a Tibetan script were used, there would be fewer modification, but the Rung would have to learn how to write a new script. There is one more component beyond representational adequacy and learnability that must be factored in to any script proposal, namely religion.

In the context of India, religion and script have historically been intimately connected (Rogers 2005:199), which reflects tendencies attested worldwide. As Coulmas (2003:201) notes, "the present distribution of scripts testifies to the close link between writing system and religion." For those Rung who identify as Hindu and claim that the Rung have been Hindu from long ago and for those who reference a Rajput heritage, a Devanagari-based script is not objectionable on religious grounds. Indeed, such a script could codify this relationship and perhaps ratify the claim of Rajput status with outsiders. While I did not meet many Rung who deemed the Tibetan script as suitable for their language, those who expressed an objection to modifying the Tibetan script stated that by doing so, they would ratify the label from outsiders that the Rung are of Tibetan origin.³⁸ My casual observation is that it is not possible

³⁸Indeed, this is a motivation for not proposing Zhang-zhung as a plausible option for a Rung script.

to predict who might strongly object to using Devanagari as a script based on religion. I met Rung who identify as practitioners of the traditional religion,³⁹ Rung who identify as Hindu, and individuals in between, all of whom are opposed to modifying the Devanagari script to use for the Rung languages. Some expressed a concern that the languages would become more like Hindi if they used the Devanagari script, and others argued that it would be impossible to modify the script to be used with the Rung languages.

3.6 Summary While I went to the Dharchula community with the goal of writing a descriptive grammar of Darma, I recognize that this language cannot be conceptualized as an abstract object of study decontextualized from the larger community. Instead, I think of this research site as a “complex linguistic [ecology] with fuzzy external boundaries and intricate and overlapping internal groupings” (Himmelmann 2008:344). Dharchula and the surrounding villages are linguistically and socially diverse communities, so it is no surprise that extra-linguistic factors play an important role in the context of orthography development. Brandt suggests that speakers “search for ways to strengthen their identities” (2014:88) when they worry about the status of their language and culture, which seems to be the case for the Rung community who, in response to language shift, see an orthography as a path to language and cultural preservation. Of course, we must recognize that individual language ideologies will likely impact a speaker’s attitudes towards any proposed writing system for the Rung languages. Ultimately, multiple issues factor into discussions of Rung orthography development, including group and individual identity, the origin of the people, religion, and socioeconomic status.

4. What is at stake? In a situation where a language is not written and orthography development is desired, it behooves researchers to respond thoughtfully. We must consider the ramifications of our actions in terms of our status in the local context and anticipate how our choices will impact our credibility as scholars at the local level and within the academy. These reflections should not lead us to conclude that we must endeavor to develop an orthography no matter what; in fact, we should approach the topic of orthography development with great tact and care. It is incumbent on us to get a firm sense of the possible politicized aspects associated with participating in the process; we should envision the prospective consequences of our actions.

4.1 What is at stake for the linguist? While there are seasoned field linguists who caution us about the potential pitfalls of orthography development (Lüpke 2011; Rice 2012), there is an increasing push in the discussion of ethical practices in language

³⁹Some aspects of the traditional practices are similar to those described for the ancient Bön religion, which is associated with the Zhang-zhung kingdom of western Tibet (see discussions in: Martin 2013; van Driem 2001b). Sherring (1993:78–79), however, describes the religious practices of the Rung at the turn of the century as distinctly not Bön-like, which he deems a positive characteristic. He states “we can find among them so little of the degrading immorality and demon-worship of the Bon faith,” and concludes that the Rung left Tibet before the Bön faith developed.

documentation that suggest that we are obligated to develop an orthography. Seifart goes so far as to argue that we should evaluate projects based on whether or not an orthography has been developed:

Much of the success of a language documentation depends on casting these records in an orthography that appeals to the speech community. As a matter of fact, if it is accepted that the documentation has to be accessible to the speech community, the development and implementation of a practical orthography in the speech community is an absolutely necessary task in the early phase of a documentation project. (2006:275)

While this argument is made in an effort to get linguists interested in orthography development and to provide information regarding best practices to inform the process, it does suggest that it is possible and beneficial in all scenarios to embark on orthography development. As researchers and granting agencies seek deliverables that can be enumerated to demonstrate productivity, orthography development is appealing in that it offers a tangible contribution to language users. Adopting orthography development into a list of best practices means that linguists who fail to participate in the process risk being viewed by their peers in language documentation and description – or even by granting agencies – as not contributing in a meaningful way to the community where they work.

Also at stake is the appearance of not being a cooperative participant in the project. When weighing the potential downside of introducing a writing system to a community with strong oral traditions, Guérin (2008:62–63) suggests that it is most ethical for the linguist to follow the desires of the community. As noted, the Rung do desire the development of a writing system, but cannot resolve important issues such as which script to use to represent the languages. Because this is a political issue within the community, outsiders (e.g., linguists working on the local languages) run the risk of alienating members of the community by aligning themselves with one approach over another.

Another concern relates to the conception of “community” and what this means within the scope of documentation and description. In other areas of language-based research, the concept of Speech Community (Gumperz 1993) has been rejected in favor of the more dynamic Community of Practice (Eckert & McConnell-Ginet 1992; Holmes & Meyerhoff 1999), which is oriented around mutual engagement, joint enterprise, and shared repertoire. Indeed, within the context of orthography development, the notion of “community” for the Rung becomes complicated. As Holton (2009:169) observes, “there are many levels of community, so that it is not easy to determine who speaks for or represents the community.” The very question of community becomes complicated for the Rung when the issue of orthography is raised, because while the notion of a *Rung lo* (language) is salient in discussions of oral traditions, when it comes to rendering the languages of the three groups to a written format, individuals disagree on the similarities and differences between the three varieties.

4.2 What is at stake for the community? When considering the implications of speaking a language that is strictly oral, the issue of vitality and the relationship with literacy and education is high on the list. While he is clear that writing will not protect a language from extinction, Hagège notes that all things being equal the language with “a writing system will generally be better equipped to resist [obsolescence]” (Hagège 2009:166). In India, individual states have the power to decide which languages are used as the medium of education in the schools. Part of a tripartite system of literacy (Schiffman 2010:464), it is sanctioned that a local language serve as the medium of education along with Hindi and English. A prerequisite of this policy is that the local language must have a writing system.

Additionally, the status of individual languages in the context of South Asia often relates directly to whether or not an orthography exists. “Languages” have a writing system and, in some cases, vernaculars that use the script of another more prominent language are viewed as “dialects” (Brandt 2014:84). While still spoken in many contexts throughout the community, Darma is certainly threatened by these ideologies. Hagège observes that “...at the present time, the languages recognized by the constitution and guaranteed survival are those that are written, as opposed to those of small ethnic groups, jeopardized by the absence of writing” (2009:211). Because Darma and the other Rung languages are not recognized in the Eighth Schedule of the Indian Constitution, the threat to the survival of these languages is significant. As already noted, the Government does not even recognize the group as Rung. Rather, in the list of Scheduled Tribes, the Rung are identified as *Bhotia* – a term also used for different groups in Himachal Pradesh and the North East (e.g., groups in Sikkim and West Bengal). The ethnonym *Bhotia* is also used to identify the languages of these groups (Singh 1997:45; Singh & Manoharan 1997) despite evidence that suggests there are multiple distinct languages under this umbrella term (e.g., sketches found in Grierson 1967).

Literacy, however, is not the only outcome of designing an orthography. When speakers can write their language, they are empowered with the ability to participate in creating a record of their own language. Of course, as I discovered, even the desire to have a standardized writing system can be dampened by competing forces. In the case of the Darma, complex social and political factors have impeded efforts to develop and institute a Rung orthography. The comments presented here should not be interpreted to mean that I view orthography development as an insurmountable task, however. We can see examples of orthography development for Native American languages in California where the communities were not in agreement with regard to the best approach for writing their language. There was disagreement within specific communities and disagreement with proposals put forth by linguists (Hinton 2014). Case studies presented suggest that in some instances, the best writing system for the community may emerge over time, and that the needs of those who will use the system should take priority. Indeed, Karan (2014) suggests that the process not be rushed. Ultimately, speakers will not adopt a system that they do not support, so it may be best to encourage speakers to develop their own system and offer input along the way.

5. Concluding remarks This paper argues that orthography development for Darma and the Rung languages is an untenable project *for now*. At issue are concerns that include linguistic factors (e.g., the lack of documentation for all of the Rung languages), social factors (e.g., identity as Rung and as Darma), and factors that fall in between the linguistic and the social (e.g., disagreement about the choice of script). While some of the matters were immediately apparent to me, other pitfalls were not discovered until later in the research experience. In the end, I would like to echo the voices who suggest that one's contribution to the community in return for access to their language might not include orthography development (Rehg 2004; Lüpke 2011:321), especially not in the early stages of a project (see Rice 2012:419).

We find examples where orthography development failed because community involvement was lacking during the process (Rehg 2004). Such efforts underscore the notion that the endeavor should be undertaken only with community support or at the behest of the community (Lüpke 2011; Rehg 2004; Topping 2003). But embedded in these requests are possible challenges. We must consider whether there are underlying motivations in asking an outsider to help. In the case of Darma, my status as a linguist was just part of the equation. I was also an outside voice whose opinion could potentially influence the powerful Byangkho. It is also important to consider possible outcomes of orthography development that are not beneficial to the community. In India, the rate of literacy has increased substantially over the course of a fifty-year campaign (Harrison 2007:148), but because many languages do not have standardized writing systems, and literacy campaigns are not geared towards advocating literacy in minority languages per se, this type of campaign means literacy in the dominant language, which in the context of Darma speakers is Hindi. This process can reinforce negative attitudes towards the heritage language and result in an increase in language shift (Annamalai 1998:24). So while literacy – broadly speaking – is portrayed as a human right, and language advocates strive to extend literacy to minority languages, some argue that literacy development in vernacular languages can portend the demise of the very languages that they aim to protect, in part because it results in increased literacy in the majority language⁴⁰ (see, for example, discussions in Mühlhäusler 1990 and Guérin 2008:62–64).

Rice (2012:416) states that “arguments about choices in orthography may find their roots in differences between groups in the community.” This certainly appears to be the case with the Rung and it is not clear at this time how best to proceed with orthography development. As an outside researcher, I entered a complex social environment that had evolved over centuries. Participating in the act of developing an orthography would have political ramifications that could directly impact my ability to continue my work with the community. By remaining agnostic, I have had the opportunity to gain a deeper understanding of the relationships between and within the Rung groups without jeopardizing my goal of creating the best documentation and description of the traditions and languages of the Darma. I hope that in the future

⁴⁰Also, in revitalization contexts, the dominant language is often used as the language of instruction for the minority language, which both hampers natural language acquisition and prioritizes the written form over spoken discourse (Hinton 2001:241).

this long-standing engagement will allow me to participate in productive discussions regarding the development of a Rung orthography.⁴¹ Ultimately, I envision successful orthography development for the Rung languages as coming from the speakers themselves. In his assessment of work with the Micronesian languages, Rehg (2004) supports the notion that speakers of endangered languages will be the ones to save them, and if orthography development is viewed as part of endeavors for language preservation (Seifart 2006), then speakers will need to take the lead in developing and establishing standardized writing systems for their language. On my most recent research trip (2017) I discussed orthography development with individuals who are uniquely poised to facilitate the process. Because they are ethnically Rung and have training in linguistics it is more likely that they will be able to propose a system that appeals to a broad spectrum of Rung, especially those who hold power within the *Rung Kalyan Sanstha* and the appointed orthography committee. In the interim, I can encourage the process, offer expert advice, and reinforce the notion that documentation in the form of audio recordings, transcriptions, and grammatical descriptions can serve as “evidence that the language can be written” (Lüpke 2011:321).

References

- Annamalai, E. 1998. Language Survival in India: Challenges and Responses. In Kazuto Matsumura (ed.), *Studies in Endangered Languages*, 17–31. Tokyo, Japan: Hituzi Syobo Publishing Ltd.
- Atkinson, Edwin T. 1973. *The Himalayan Gazetteer*. Reprint of 1882–86 edition. Delhi: Cosmo Publications.
- Atkinson, Edwin T. 1974. *Kumaun Hills: Its History, Geography, and Anthropology with Reference to Garhwal and Nepal*. Delhi: Cosmo Publications.
- Austin, Peter K. 2008. *One Thousand Languages—Living Endangered and Lost*. Berkeley, CA: University of California Press; Ivy Press.
- Brandt, Carmen. 2014. Script as a Potential Demarcator and Stabilizer of Languages in South Asia. *Language Documentation & Conservation* Special Issue 7 (Language Endangerment and Preservation in South Asia). 78–99. <http://hdl.handle.net/10125/4602>.
- Cahill, Michael. 2014. Non-Linguistic Factors in Orthographies. *Developing Orthographies for Unwritten Languages*, 9–25. Dallas, Texas: SIL International.
- Cahill, Michael & Elke Karan. 2008. Factors in Designing Effective Orthographies for Unwritten Languages. *SIL Electronic Working Papers* (2009–001: 16).
- Cahill, Michael & Keren Rice. 2014. *Developing Orthographies for Unwritten Languages*. Dallas, Texas: SIL International.
- Chamberlain, Bradford Lynn. 2008. Script Selection for Tibetan-related Languages in Multiscriptal Environments. *International Journal of the Sociology of Language* 192. 117–131.

⁴¹One reviewer inquired about participating in Orthography Workshops whereby issues are discussed with members of the community. But as Rehg (2004) cautions, such committee-based approaches can be problematic if those who volunteer or are appointed to lead the discussion have their own agenda. This has already been an issue with the committee overseeing the contest to develop a Rung orthography.

- Coulmas, Florian. 2003. *Writing Systems: An Introduction to their Linguistic Analysis*. Cambridge: Cambridge University Press.
- Crystal, David. 2000. *Language Death*. Cambridge: Cambridge University Press.
- Czaykowska-Higgins, Ewa. 2009. Research Models, Community Engagement, and Linguistic Fieldwork: Reflections on Working within Canadian Indigenous Communities. *Language Documentation & Conservation* 3(1). 15–50. <http://hdl.handle.net/10125/4423>.
- Dauenhauer, Nora Marks & Richard Dauenhauer. 1998. Technical, Emotional, and Ideological Issues in Reversing Language Shift: Examples from Southeast Alaska. In Lenore A. Grenoble & Lindsay J. Whaley (eds.), *Endangered Languages: Current Issues and Future Prospects*, 57–98. Cambridge: Cambridge University Press.
- Driem, George van. 2001a. *Languages of the Himalayas: An Ethnolinguistic Handbook of the Greater Himalayan Region*. Vol. 2. (Handbook of Oriental Studies Section 2 South Asia). Leiden: Brill.
- Driem, George van. 2001b. Zhangzhung and its next of kin in the Himalayas. *New Research on Zhangzhung and Related Himalayan Languages*, 31–44. (Bon Studies 3). Osaka: National Museum of Ethnology.
- Driem, George van. 2014. Trans-Himalayan. In Thomas Owen-Smith & Nathan W. Hill (eds.), *Trans-Himalayan Linguistics*, 11–40. Berlin; Boston: de Gruyter.
- Eckert, Penelope & Sally McConnell-Ginet. 1992. Think Practically and Look Locally – Language and Gender as Community-Based Practice. *Annual Review of Anthropology* 21. 461–490.
- England, Nora C. 1998. Mayan Efforts Toward Language Preservation. In Lenore A. Grenoble & Lindsay J. Whaley (eds.), *Endangered Languages: Current Issues and Future Prospects*, 99–116. Cambridge: Cambridge University Press.
- Errington, Joseph. 2008. *Linguistics in a Colonial World: A Story of Language Meaning, and Power*. Malden, MA: Blackwell Publishing.
- Fürer-Haimendorf, Christoph von. 1975. *Himalayan Traders: Life in Highland Nepal*. London: John Murray.
- Grenoble, Lenore A. & Lindsay J. Whaley. 2006a. *Saving Languages: An Introduction to Language Revitalization*. Cambridge/New York: Cambridge University Press.
- Grenoble, Lenore A. & Lindsay J. Whaley. 2006b. Orthography. *Saving Languages: An Introduction to Language Revitalization*, 137–159. Cambridge, UK: Cambridge University Press.
- Grierson, George A. 1967. *Linguistic Survey of India*. Reprint [1903]. Vol. 3–1. 11 vols. Delhi: Motilal Banarsidass. <http://www.joao-roiz.jp/LSI/search>.
- Guérin, Valérie. 2008. Writing an Endangered Language. *Language Documentation & Conservation* 2(1). 47–67. <http://hdl.handle.net/10125/1804>.
- Gumperz, John J. 1993. Types of Linguistic Communities. *Anthropological Linguistics* 35(1/4). 130–142.
- Hagège, Claude. 2009. *On the Death and Life of Languages*. (Trans.) Jody Gladding. New Haven; London: Yale University Press.
- Hammarström, Harald, Robert Forkel & Martin Haspelmath. 2017. *Glottolog 3.0*. Jena: Max Planck Institute for the Science of Human History. <http://glottolog.org>.

- Harrison, K. David. 2007. *When Languages Die: The Extinction of the World's Languages and the Erosion of Human Knowledge*. Oxford; New York: Oxford University Press.
- Himmelman, Nikolaus P. 2008. Reproduction and Preservation of Linguistic Knowledge: Linguistics' Response to Language Endangerment. *Annual Review of Anthropology* 37. 337–350.
- Hinton, Leanne. 2001. New Writing Systems. In Leanne Hinton & Ken Hale (eds.), *The Green Book of Language Revitalization in Practice*, 239–250. San Diego: Academic Press.
- Hinton, Leanne. 2014. Orthography Wars. In Michael Cahill & Keren Rice (eds.), *Developing Orthographies for Unwritten Languages*, 139–168. Dallas, Texas: SIL International.
- Holmes, Janet & Miriam Meyerhoff. 1999. The Community of Practice: Theories and Methodologies in Language and Gender Research. *Language in Society* 28(2). 173–183.
- Holton, Gary. 2009. Relatively Ethical: A Comparison of Linguistic Research Paradigms in Alaska and Indonesia. *Language Documentation & Conservation* 3(2). 161–175. <http://hdl.handle.net/10125/5113>.
- Hoon, Vineeta. 1996. *Living on the Move: Bhotiyas of the Kumaon Himalaya*. Thousand Oaks, CA: Sage Publications.
- Hyslop, Gwendolyn, Keren Rice & Kristine Stenzel. 2010. Orthography Development: The “Midwife” Approach. Course. Paper presented at the InField, Salem, OR.
- Karan, Elke. 2014. Standardization: What's the Hurry? In Michael Cahill & Keren Rice (eds.), *Developing Orthographies for Unwritten Languages*, 107–138. Dallas, Texas: SIL International.
- Krishan, Shree. 2001a. Darma, Chaudangsi, and Raji. In Randy J. LaPolla (ed.), *New Research on Zhangzhung and Related Himalayan Languages*, 343–345. Osaka: National Museum of Ethnology.
- Krishan, Shree. 2001b. A Sketch of Darma Grammar. In Randy J. LaPolla (ed.), *New Research on Zhangzhung and Related Himalayan Languages*, 347–400. Osaka: National Museum of Ethnology.
- Krishan, Shree. 2001c. A Sketch of Chaudangsi Grammar. In Yasuhiko and Randy J. LaPolla Nagano (ed.), *New Research on Zhangzhung and Related Himalayan Languages*, 401–448. Osaka: National Museum of Ethnology.
- Lewis, Paul M. & Gary F. Simons. 2010. Assessing Endangerment: Expanding Fishman's GIDS. *Revue Roumaine de Linguistique* 55(2). 103–120.
- LINGUIST List. 2014. *Multitree: A digital library of language relationships*. Bloomington, IN: Department of Linguistics, The LINGUIST List, Indiana University. <http://multitree.org/>.
- Lüpke, Friederike. 2011. Orthography Development. In Austin, Peter K. & Julia Sallabank (eds.), *The Cambridge Handbook of Endangered Languages*, 312–336. Cambridge/New York: Cambridge University Press.
- Martin, Dan. 2013. Knowing Zhang-Zhung: The Very Idea. *Journal of the International Association for Bon Research* 1. 175–197.


- Mazaudon, Martine. 1993. Writing Tamang: A Brief Note on Alphabetisation, Spelling and Transcription in Tamang. *Syomhendo (Kathmandu, Nepal)*, (July-September). 15–26.
- Moseley, Christopher. 2010. *Atlas of the World's Languages in Danger*. 3rd ed. Paris: UNESCO Publishing. www.unesco.org/culture/languages-atlas/en/atlasmap.html.
- Mühlhäusler, Peter. 1990. Reducing Pacific Languages to Writing. In John E. Joseph & Talbot J. Taylor (eds.), *Ideologies of Language*. London: Routledge.
- Nawa, Katsuo. 1998. Ethnic Categories and International Border: The Case of Byans, Far Western Nepal. *Journal of the Indian Anthropological Society* 33. 65–75.
- Noonan, Michael. 2003. Recent Adaptions of the Devanagari Script for the Tibeto-Burman Languages of Nepal. http://crossasia-repository.ub.uni-heidelberg.de/202/1/Recent_Adaptions_of_Devanagari_Script.pdf.
- Oko, Christina Willis. forthcoming. *A Grammar of Darma*. Brill.
- Rana, J.P. Singh. 1997. *Himalayan Heritage*. New Delhi: MD Publications PVT LTD.
- Rehg, Kenneth L. 2004. Linguists, Literacy, and the Law of Unintended Consequences. *Oceanic Linguistics* 43(2). 498–518.
- Rice, Keren. 2012. Ethical Issues in Linguistic Fieldwork. *The Oxford Handbook of Linguistic Fieldwork*, 407–429. Oxford; New York: Oxford University Press.
- Robinson, Clinton & Karl Gadelii. 2003. *Writing Unwritten Languages: A Guide to the Process*. Working Paper. Paris: UNESCO.
- Rogers, Henry. 2005. *Writing Systems: A Linguistic Approach*. Malden, MA: Blackwell Publishing.
- Schaik, Sam van. 2011. A New Look at the Tibetan Invention of Writing. In Yoshiro Imaeda, Matthew Kapstein & Tsuguhito Takeuchi (eds.), *New Studies of the Old Tibetan Documents: Philology, History and Religion*, 45–95. Tokyo: Research Institute for Languages and Cultures of Asia and Africa, Tokyo University Foreign Studies.
- Schiffman, Harold F. 2010. South and Southeast Asia. In Joshua A. Fishman & Ofelia García (eds.), *Handbook of Language and Ethnic Identity: Disciplinary and Regional Perspectives*, Vol. 1, 452–469. 2nd ed. Oxford; New York: Oxford University Press.
- Seifart, Frank. 2006. Orthography Development. In Jost Gippert, Nikolaus P. Himmelmann & Ulrike Mosel (eds.), *Essentials of Language Documentation*, 275–279. Berlin; New York: Mouton de Gruyter.
- Sharma, Devi Datta. 1989. *Tibeto-Himalayan languages of Uttarkhand*. Vol. 1. (Studies in Tibeto-Himalayan Languages–III). New Delhi: Mittal Publications.
- Sharma, Devi Datta. 1994. *Linguistic Geography of Kumaun Himalayas*. New Delhi: Mittal Publications.
- Sharma, Suhnu Ram. 2001a. A Sketch of Byangsi Grammar. In Yasuhiko and Randy J. LaPolla Nagano (ed.), *New Research on Zhangzhung and Related Himalayan Languages*, 271–341. (Senri Ethnological Reports 19). Osaka: National Museum of Ethnology.
- Sharma, Suhnu Ram. 2001b. A Study on the Tibeto-Burman Languages of Uttar Pradesh. In Yasuhiko and Randy J. LaPolla Nagano (ed.), *New Research on*

- Zhangzhung and Related Himalayan Languages*. (Senri Ethnological Reports 19). Osaka: National Museum of Ethnology.
- Sharma, Suhnu Ram. 2007. *Byangsi Grammar and Vocabulary*. Pune: Deccan College Postgraduate and Research Institute.
- Sherring, Charles A. 1906. Notes on the Bhotias of Almora and British Garhwal. *Memoirs of the Asiatic Society of Bengal* 1 (8). 98–119.
- Sherring, Charles A. 1993. *Western Tibet and the Indian Borderland: The Sacred Country of Hindus and Buddhists*. Reprint [1906]. New Delhi: Asian Educational Services.
- Simons, Gary & Charles D. Fennig (eds.). 2017. *Ethnologue: Languages of the World, Twentieth Edition*. Dallas, Texas: SIL International. <https://www.ethnologue.com/>.
- Singh, K.S. 1997. The Scheduled Tribes and Their Languages. In Anvita Abbi (ed.), *Languages of Tribal and Indigenous Peoples of India: The Ethnic Space*, 37–69. Delhi: Motilal Banarsidass Publishers Private Limited.
- Singh, K.S. & S. Manoharan. 1997. *Languages and Scripts*. Vol. IX. (People of India National Series). Calcutta: Oxford University Press.
- Srivastava, R.P. 1953. “Rang-Bang” in the Changing Bhotia Life. *Eastern Anthropology* 6. 190–203.
- Stenzel, Kristine. 2014. The Pleasures and Pitfalls of a “Participatory” Documentation Project: An Experience in Northwestern Amazonia. *Language Documentation & Conservation* 8. 287–306. <http://hdl.handle.net/10125/24608>.
- Takeuchi, Tsuguhito & Ai Nishida. 2009. The Present Stage of Deciphering Old Zhangzhung. *Issues in Tibeto-Burman Historical Linguistics*, 151–165. (Senri Ethnological Studies 75). Osaka: National Museum of Ethnology.
- Thurgood, Graham. 2003. A Subgrouping of the Sino-Tibetan Languages: The Interaction Between Language Contact, Change, and Inheritance. In Graham Thurgood & Randy J. LaPolla (eds.), *The Sino-Tibetan Languages*, 3–21. (Routledge Language Family Series 3). London: Routledge.
- Topping, Donald M. 2003. Saviors of Language: Who Will Be the Real Messiah? *Oceanic Linguistics* 42. 522–527.
- Trivedi, G.M. 1991. *Descriptive Grammar of Byansi: A Bhotiya Language*. Calcutta: Anthropological Survey of India.
- Wedekind, Klaus & Charlotte Wedekind. 1997. *The Development of Writing Systems: A Guide*. Asmara: The Ministry of Education, Curriculum Department.
- Widmer, Manuel. 2014. A Descriptive Grammar of Bunan. Bern, Switzerland: University of Bern Doctoral Dissertation.
- Willis, Christina M. 2007a. A Descriptive Grammar of Darma: An Endangered Tibeto-Burman Language. Austin: University of Texas at Austin Doctoral Dissertation.
- Willis, Christina M. 2007b. Documenting One Language in a Multi-Lingual Community. In Thera Crane, Oana David, Donna Fenton, Hannah H. Haynie, Shira Katseff, Russell Lee-Goldman, Ruth Rouvier & Dominic Yu (eds.), *Proceedings of the Annual Meeting of the Berkeley Linguistics Society*, Vol. 33, 487–498. Berkeley, CA: Berkeley Linguistics Society and the Linguistic Society of America.

- Willis, Christina M. 2007c. Converb Constructions in Darma—A Tibeto-Burman Language. In Douglas S. Bigham, Frederick Hoyt, Nikki Seifert, Alexandra Teodorescu & Jessica White (eds.), *Texas Linguistics Society 9: Morphosyntax of Underrepresented Languages*, 299–318. Austin, TX: Stanford: CSLI Publications.
- Zograph, G.A. 1982. The Classification and Characteristic Features of the Tibeto-Burman Languages. In trans. G.L. Campbell, *Languages of South Asia: A Guide*, Vol. 3, 183–190. (Languages of Asia and Africa). London; Boston: Routledge & Kegan Paul.

Christina M. Willis Oko

willisoko@gmail.com

 orcid.org/0000-0001-7638-4109