

Background

As part of a Field Methods class in 2015, I collected data on Bumthang, a Tibeto-Burman language from central Bhutan through interviews with an informant. I used this data to analyse the structure of the noun phrase in the language, which turned out to be a highly unusual and very rare type of phrase structure. In addition to analysing the linguistic data, I explore the historical implications.

Noun Phrases

Noun phrases are groupings of words which minimally consist of a noun but can also include words which give more information about that noun, such as adjectives and numerals. Figure 2 shows ways languages encode this.

Linguists make generalisations about where these 'modifiers' are positioned in relation to the noun and classify noun phrases into four main types.

- Type 0: there is no order
- Type 1: modifiers appear to the left
- Type 2: modifiers appear to the right
- Type 3: modifiers appear on both sides

Of the languages that have order, Type 3 is the rarest type and the Bumthang noun phrase structure that I investigated is a very good example of this type.

The Bumthang Noun Phrase

Noun phrases in Bumthang contain a variety of modifying elements which appear as below.
 Left of noun: possession, determiners, relative clauses
 Right of noun: adjectives, numerals, quantifiers, article
 When internal ordering is taken into account, the noun phrase structure of Bumthang looks like:
 NP → (PossP) (Det) (RelC) N (Adj) (Focus) (Num | Quant)-(Approx) (Univ)-(Art)

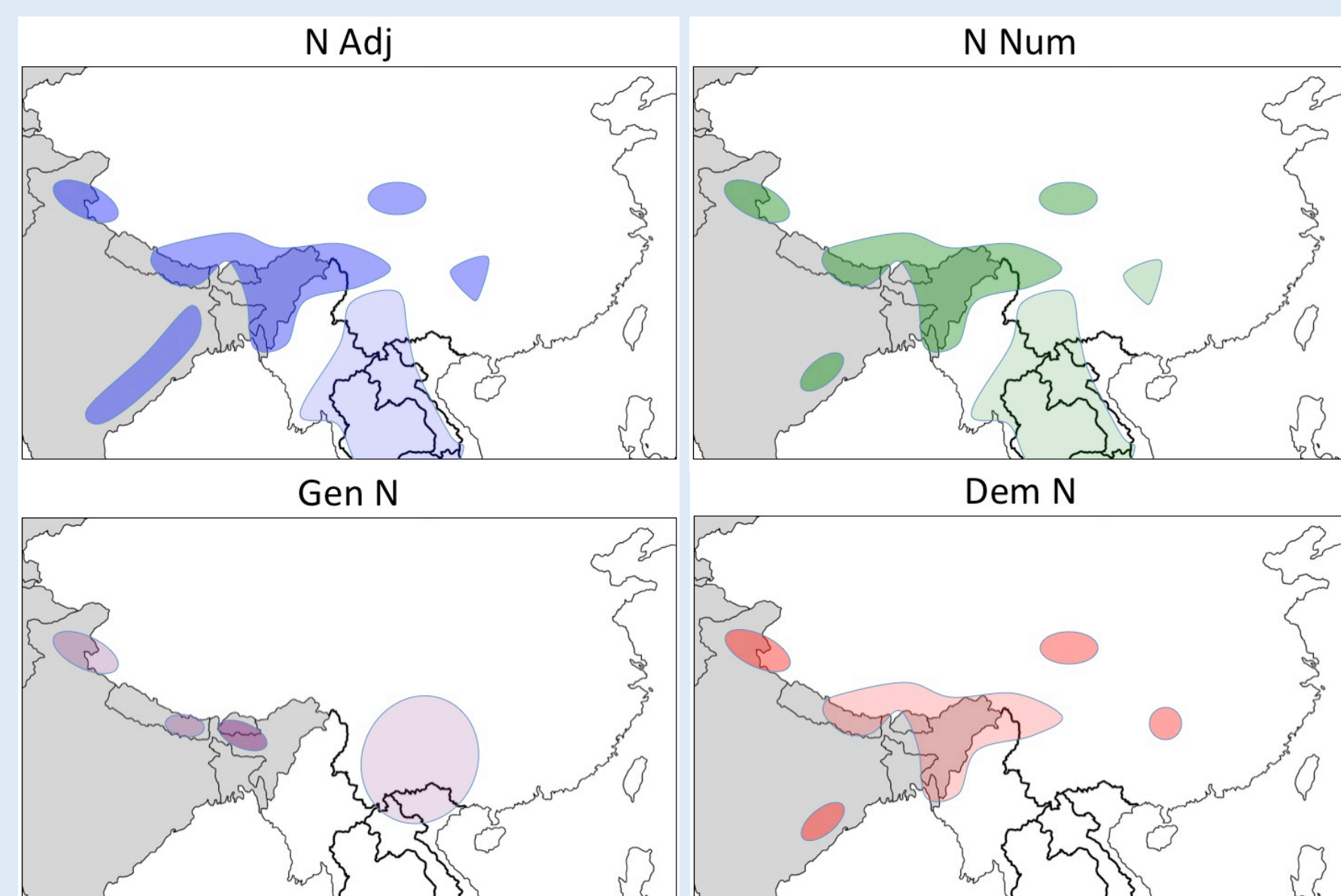


Figure 1: Distribution of orders found in the Bumthang noun phrase across the Himalayas. These pairs reflect variation commonly discussed in language universals.



Figure 2: How many yaks? Whose yaks are they? Different languages code information differently.

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| The possessor can appear before or after the noun. English: my yaks Bumthang: ཡལ་ རྒྱལ་ Korean: 내 야크 Indonesian: yak saya | The numeral can appear before or after the noun. English: three yaks Bumthang: ལྔ་ རྒྱལ་ Korean: 세 야크 Indonesian: tiga ekor yak |
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Some languages show consistent order, while others vary. Other modifiers can align one way or the other.

Poss Dem N Adj Num

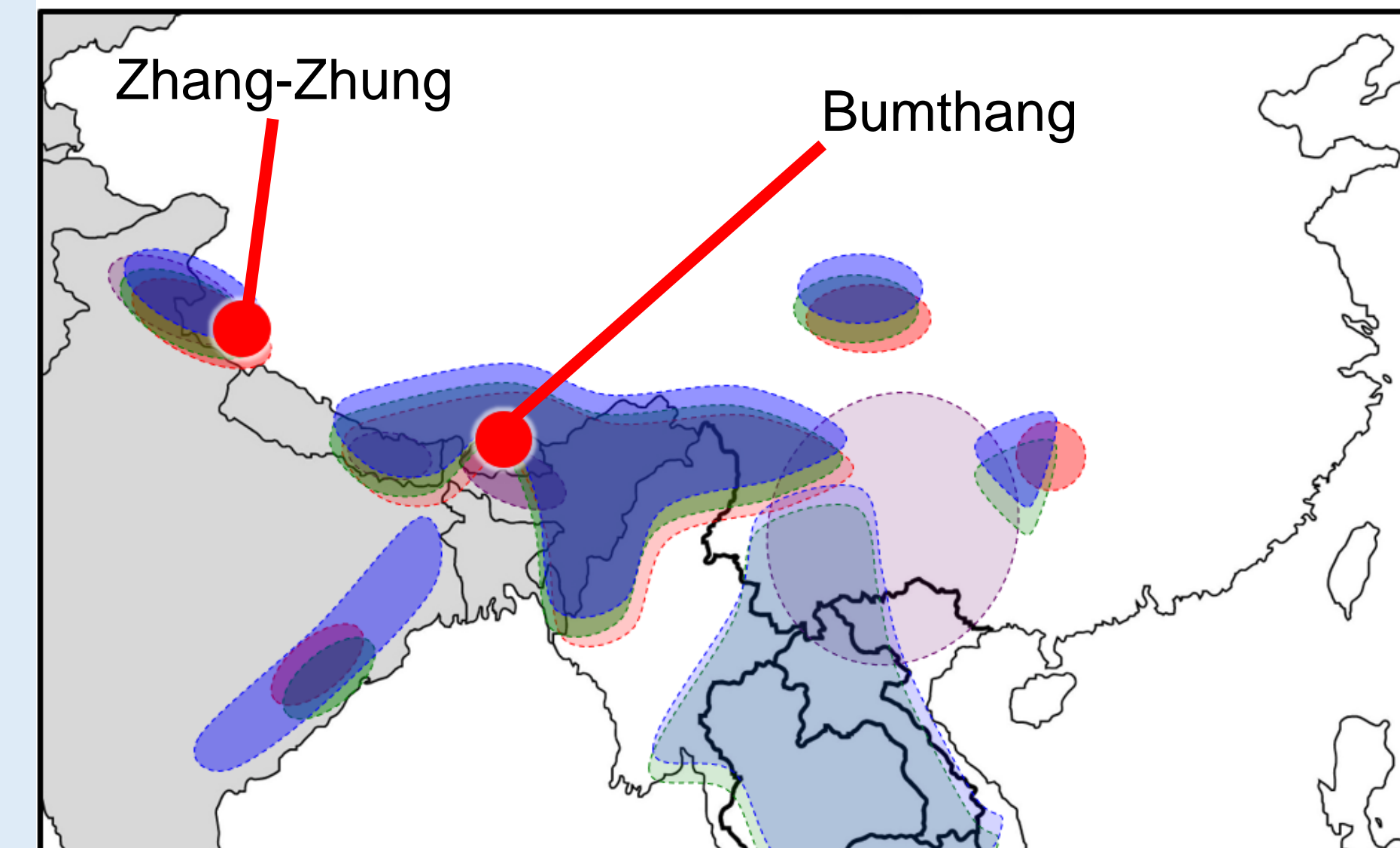


Figure 3: Distribution of features present in the Bumthang noun phrase in the Himalayas

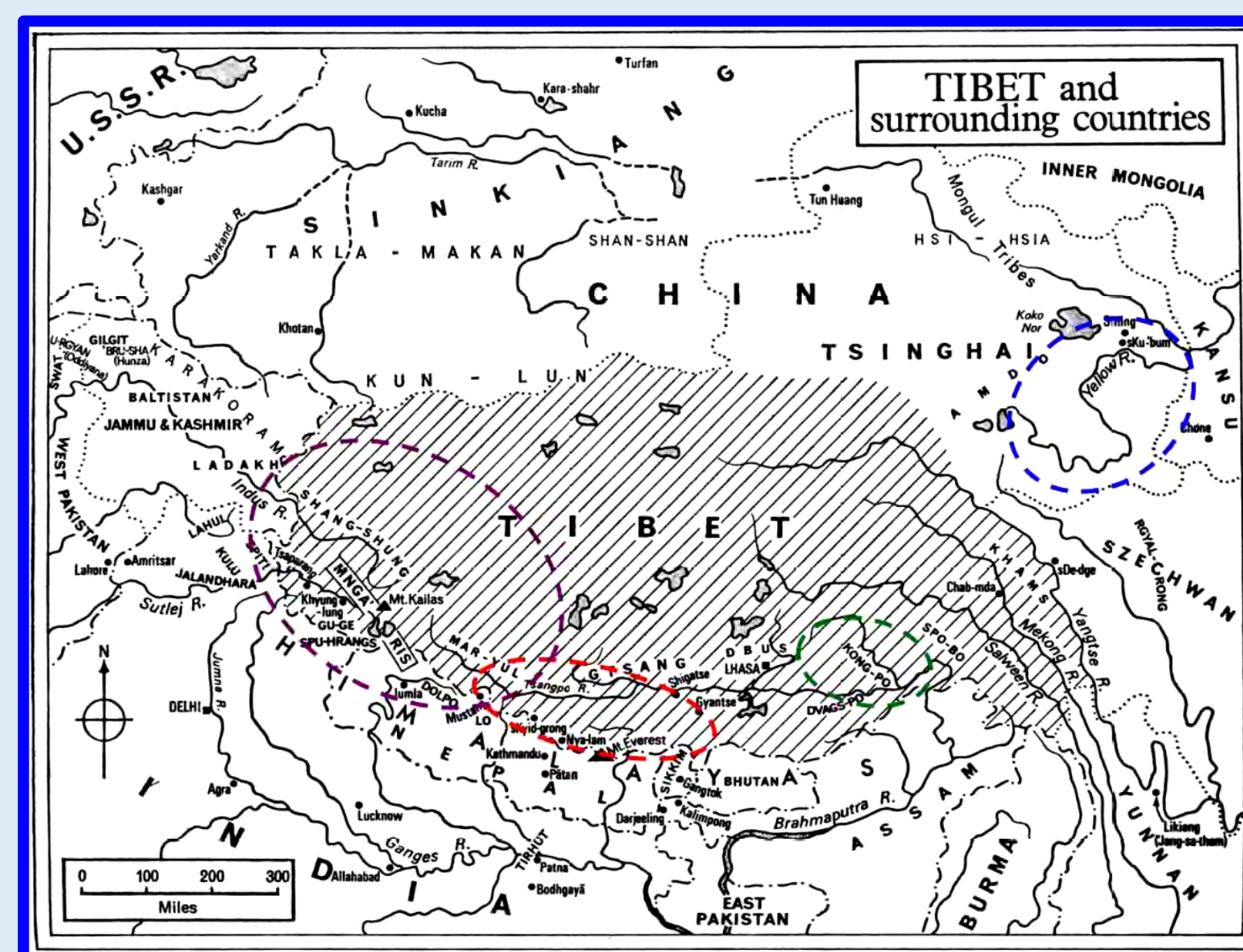


Figure 5: Map of the Himalayas, indicating the ancient Zhang-Zhung empire (purple) and locations indicated in Bön origin stories (red, green and blue) (Blezer et al. 2013:103).



Figure 4: Dorji Wangchuk (འཇམ་དབང་ལྷ་བོ་), friend, teacher and cook extraordinaire.

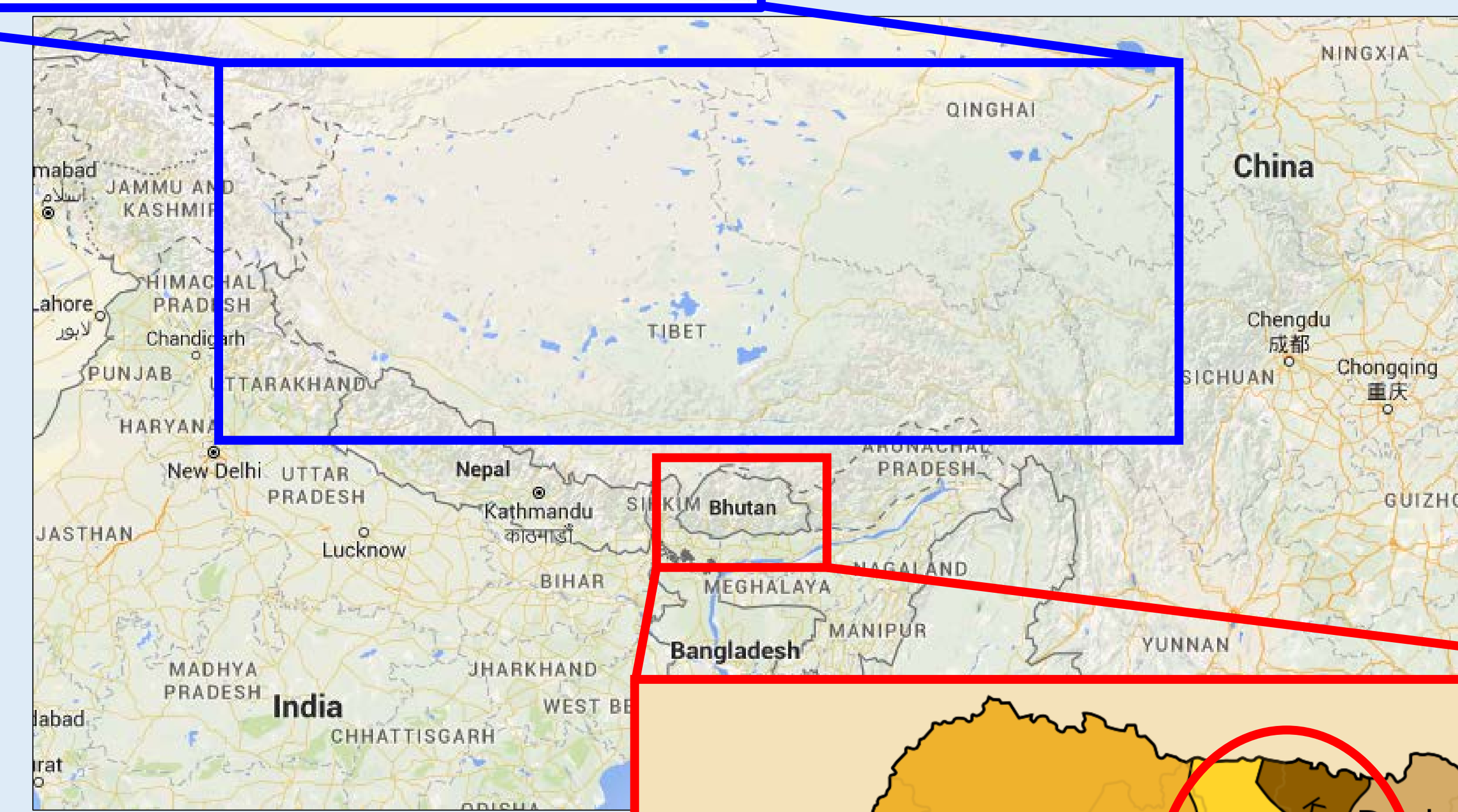


Figure 6: Map of the Himalayas, Google Maps 2016.

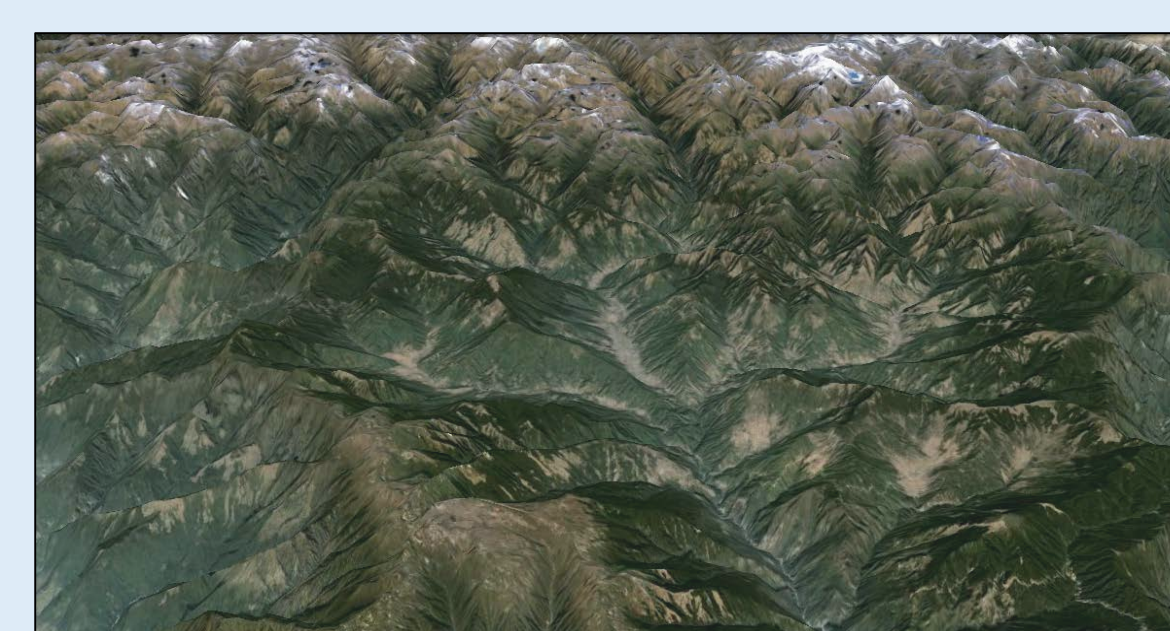


Figure 8: Bumthang is located in the high centre of northern Bhutan, south of the Tibetan plateau.



Figure 7: Map of Bhutanese languages, after van Driem "Dzongkha" (1993).

Linguistic and Historical Implications

What is the significance of the Bumthang noun phrase structure? Given global distribution of individual modifier orders with respect to the head noun, the theoretical possibility of a language having a noun phrase order of Poss Dem N Adj Num is about 5%. Figure 1 shows the distribution of the separate pairs in the Himalayas.

However, less than 0.1% of languages have this structure. This means the order is unexpectedly rare in languages worldwide, likely due to the processing strain caused when parsing ambiguously-headed phrases.

The noun phrase structure of Bumthang matches only one other language in the world: Zhang-Zhung, the language of a 1,500 year old empire from Western Tibet, as seen in Figure 3. This suggests that the languages of Bumthang and Zhang-Zhung were previously part of the same linguistic ecology.

One causing factor might be that 1,500 years ago speakers of both languages followed the same pre-Buddhist religion, Bön. This could have allowed speakers of Bumthang, Zhang-Zhung and other intermediary languages to come into significant contact. Figure 5 supports this hypothesis.

Following the Zhang-Zhung empire the Tibetan empires expanded, promoting Buddhism and raising the prestige of Tibetan and Tibetic languages. This led to a new wave of language contact, this time with Tibetan as the donor language.

Bumthang speakers were relatively isolated and did not come into extended contact with Tibetan speakers (see Figure 8). This explains why most surrounding languages have noun phrases more similar to Tibetan or Indian languages.

Work on the prehistory of the Himalayas is still in its infancy, but it is clear that linguistic analysis can provide major contributions to our knowledge. This work paints only one picture of many.

Acknowledgements

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