The Development of Subordinators from Postpositions In Bodic Languages
Author(s): Carol Genetti

Please see “How to cite” in the online sidebar for full citation information.

Please contact BLS regarding any further use of this work. BLS retains copyright for both print and screen forms of the publication. BLS may be contacted via http://linguistics.berkeley.edu/bls/.

The Annual Proceedings of the Berkeley Linguistics Society is published online via eLanguage, the Linguistic Society of America's digital publishing platform.
The Development of Subordinators from Postpositions
In Bodic Languages
Carol Genetti
University of Oregon

This paper will present data showing syncretism of
case postpositions and clausal subordinators in
languages of the Bodic branch of Tibeto-Burman. We
will see that the syncretism is not random, but that
certain postpositions match up with certain subordina-
tors regularly enough to establish patterns, and
suggest a trend of grammaticalization. The main
patterns are as follows:

(1) LOCATIVE > if/although, when/while
     ABLATIVE > when/while/after, because,
     non-final
     ALLATIVE > purpose
     DATIVE > purpose
     ERGATIVE/INSTRUMENTAL > because,
     when/while

These patterns of grammaticalization are explainable
semanically in terms of a localistic case theory
developed by Diehl (1975), and can be seen to be exten-
sions of four basic cases to the semantic domains of
spatial, temporal and logical relations. Syntactic
motivation for the development of postpositions to
subordinators can be at least partially explained by a
strong tendency toward nominalization in these lan-
guages.

The data for this study was taken from a number of
grammars and volumes of texts, and includes informa-
tion on the following Bodic languages:

(2) Tibetan
    Classical Tibetan
    Western
    Balti
    Purki
    Ladakhi
    Lahul
    Lhomi
    Lhoke
    W. Himalayan
    Kanauri
    Bunan
    Central
    Sherpa
    Kagate
    Garhwal
    Jirel
    Nyamkat
    Lhasa
    South
    Danjongka
    W. Central Himalayan
    Vayu
    Chepang
E. Himalayan  | Gurung-Tamang  
--- | ---  
Limbu  | Gurung  
Thulung  | Tamang  
Khambu  | Thakali  
Khaling  | Newari5  
Sunwar  

Three typological features of Tibeto-Burman languages are directly relevant to this study. First, Tibeto-Burman languages are rigidly verb-final, with SOV being the unmarked word order. Second, these languages are all ergative. And third, Tibeto-Burman languages are clause chaining.

Clause chains in Tibeto-Burman consist of a number of non-final clauses whose verbs lack full morphological marking, and which instead are typically marked by suffixes which link them to the final clause. I will refer to these suffixes as "non-final" (NF). The final clause in a chain is distinguished by full inflection (usually tense/aspect, modality, etc.) on the verb.

The data which I searched for in each language consisted of the full case paradigm, and a set of common subordinators:

(3) Postpositions  | Subordinators  
--- | ---  
ergative  | when  
genitive  | while  
instrumental  | after  
dative  | before  
locative  | since  
ablative  | because  
allative  | if  
associative  | although  

Appendices 1 and 2 present the data on postpositions and subordinators respectively.

Many languages exhibited syncretism across postpositional categories. The most common pattern was genitive-ergative syncretism, but this is not representative of the branch as a whole; all but one of the examples came from Tibetan languages. This is the result of loss of the final -s which differentiated ergative and genitive in Classical Tibetan. Aside from this, there is a preponderance of ergative-instrumental, dative-locative, locative-allative and locative-ablative pairs. Since the ergative and instru-
mental also often share the same functions as subordin- 
nators, ergative and instrumental will be considered a 

single category. While some of the other pairs, 
particularly locative-ablativive, do at times code the 
same semantic meaning as subordinators, they also can 
differ in this regard, so will be kept separate. 

Equating the functions and meanings of subordin-

ators across languages is a more difficult task than 
equating cases. While every grammar gives a list of 

Case postpositions, data on subordinators is compara-
tively rare. And, translations are not necessarily 
accurate in their reflection of function. For example, 
a morpheme translated in a grammar as 'when' may apply 
to both punctual clauses ('when') and durative clauses 
('while'). Similarly, a non-final marker may be 
glossed alternately as 'when', 'after' and 'because', 
due to the pragmatics of clause chains and their 
role of coding sequential, and often causal, events. 

Consequently, we will consider 'when' and 'while' 
to constitute one category, unless otherwise mentioned. 
The morphemes glossed as 'after' are usually identical 
to those meaning 'when' or the non-final markers, so 
'after' will not be treated as an independent category. 
Similarly, 'since' is either specifically temporal or 
causal, so will not be considered separately. There 
was not enough data on 'as/like' or 'although' to 
establish patterns of grammaticalization. Therefore, 
we are left with the following five categories of 
subordinators:

(4) when/while because purpose 

non-final

Not all of the subordinators are clearly related 
to postpositions (e.g. Classical Tibetan tsing 'while', 
Vayu tiling 'because', and Newari telle6 'while'). 
There are many examples of subordinators which seem to 
have verbal origin, such as a Sherpa non-final marker 
simaa which appears to be derived from the verb 
'to finish' (Schoetteindreyer 1980). The subordinator 
'when' is commonly derived from a noun meaning 'time'. 

It is clear that the development of postpositions 
to subordinators is a productive process. In Classical 
Tibetan, the ablative las is used for 'while', and the 
other ablative nas for 'when' and 'because'. In 
Lhasa, the phonological reflexes of las and nas are lEE 
and nEE. lEE is not used as an ablative, but means 
'because'. nEE is the ablative postposition, and has 
also grammaticalized as the non-final marker nE. Since 
the Classical Tibetan non-final marker is (s)te, and
since CT nas has a more specific subordinating function, these are presumably new developments in Lhasa.

Another example comes from Newari. In Classical Newari, the locative element was ga. In contemporary Newari, this has developed to the postposition 'if', and another locative, le, is showing up in combinations with other elements as a subordinator, for example bol-e 'time-LOC' 'when'. Along with these clear examples of the productivity of the grammaticalization process, there are enough different postpositional morphemes involved, to assure that the process is productive and not morpheme-specific.

One advantage of a cross-linguistic approach to this problem, is that a morpheme found as a subordinator but unattested as a postposition in one language, may be cognate to a postposition in another language. For example, the Lhomi subordinator for purpose and conditional clauses is tu, which is not attested in Lhomi as a postposition. However, ru and tu are the allomorphs of the allative in Classical Tibetan and Lhoke, are attested as the locative in Lahul, Jirel and Khaling, and related forms, ri and ti are found as locatives and allatives in Gurung, Tamang and Thakali. Thus, given evidence from other languages for allative markers as a source for purpose marking, we can hypothesize a locative/allative source for the Lhomi subordinator.

However, there are notorious problems in equating the phonological forms of grammatical morphemes across languages (DeLancey 1984). Little work has been done on Bodic comparative phonology. The relevant forms are often of a simple CVC or CV structure, and it is unclear to what extent a single consonant can be taken as evidence for cognacy. Furthermore, many Tibeto-Burman case forms are etymologically bi-morphemic (DeLancey 1984), and it seems likely that this is the case for some subordinators as well. My hypotheses concerning relatedness of forms are based solely on inspection. While there are many forms which are clearly phonologically and semantically related, the details of the etymologies are yet to be worked out, and it could be that some of the equations of forms are unjustified, or remain unmentioned. However, the patterns of syncretism turn up frequently enough that the suggested generalizations seem justified.

I will now exemplify the major patterns of syncretism between postpositions and subordinators, and mention some less frequent patterns and exceptions. While I will here mention only a few of the languages for each pattern, more complete data is given in the appendices.
Ergative/Instrumental. The ergative/instrumental is found most commonly as a subordinator meaning 'because'. In Newari, 'because' is gul-i, which is clearly derived from the nominalizer gul plus an allomorph of the ergative/instrumental/ablative morpheme no. In Khambu, the same derivation is found: om-a consists of the nominalizer om and the ergative a. In Bunun it is the instrumental dang, as opposed to the ergative tsi, which is the causal subordinator.

The ergative/instrumental is also found functioning as the temporal subordinator 'when/while'. In Thakali, the morpheme ce codes ergative, instrumental, and ablative as a postposition, and 'while' as a subordinator. In Thulung, 'when' is derived from the noun 'time' suffixed by the ergative/instrumental. In Limbu, the ergative/instrumental jill can mean either 'if', 'because' or 'when', so codes as causal sequence.

Ablative. The ablative is used for many of the same subordinating functions as the ergative/instrumental. Most commonly it is found as 'when/while/after'. It also codes 'because', 'if', temporal and causal 'since', and functions as a non-final marker.

As a marker of 'because', it is found, for example, in Lhasa lph Classical Tibetan nas, Purki no, and Gurung seré. In other languages the subordinator meaning 'because' looks like a Bodic ablative, but is not attested as such in that language. For example, Ladakhi pasang appears to be composed of the nominalizer pa and a morpheme sang; the latter may be related to the Classical Newari ergative së, the Limbu non-final marker (s)lang, and the Chepang ablative sey.

The ablative appears in the derivation of temporal subordinators in Ladakhi, Classical Tibetan, Purki, Lhomi, Kagate, Vayu and Thakali. In most of these it combines with some other element, such as the non-final marker in Kagate, or the genitive/ergative/instrumental ki in Lhomi. Vayu nana 'while', appears to be related to the ablative na attested in many of the Tibetan dialects, as well as in Limbu and Newari.

The ablative is found as a non-final marker in Khambu, Limbu, Jirel and Lhasa, and is a likely source for the non-final markers in Purki, Balti and Thulung.

Locative. The most common syncretism in my data is that between the locative and 'if', which is found thirteen times. For example, in Classical Tibetan and most of the Tibetan dialects, the locative na is used for 'if'. While the Thakali locative is ri, the morpheme for 'if' la-na appears to be cognate to widespread TB locative elements *la and *na. In Ladakhi, Purki, and Lhasa, the morpheme is present in 'although'; all three are concatenations of the
locative na and the particle yang 'even, also'. Outside the Tibetan family, we find, for example, modern Newari sa, which is clearly derived from the Classical Newari locative, and Thulung la, which is both locative and 'if'.

The locative is also commonly found as 'when/while', as in Balti na/nam, and Ladakhi zana. Outside of the Tibetan languages, this morpheme doesn't act alone as a temporal subordinator, but is found in conjunction with other elements. Examples are Sunwar's bela-mi 'when' from 'moment' plus the locative (c.f. Newari bole 'when'); and Newari tolle 'while', which could be derived from the Classical Newari noun ta meaning 'long time' and the locative le. In Bunan, the locative/allative/dative marker tog is one element of the subordinator as-tog 'when'; the first morpheme is probably an allomorph of the nominalizer -g. In Chepang the morpheme 'when' is tok (which looks to be cognate with the Bunan form), and the morpheme for 'while' is tok-hang, where hang is also attested as a locative noun meaning 'in, inside'.

Allative. The allative morphemes, when functioning as subordinators, appear most frequently on purpose clauses. Allative markers with this function were found in Lhasa, Lahul, Lhoke, Bunan, Thakali, and Thulung. Examples are the Bunan allative/purpose marker de, and the Lhasa purpose marker -r, which appears to be derived from the Classical Tibetan allative ru. The allative is also found as 'if' in Lhomi and possibly Lhoke, but there is not yet enough evidence to establish this as a general pattern.

Dative. Since there is often syncretism of dative and allative case, the two categories cannot be clearly separated, and it is not surprising to find them coding the same function as subordinators. The dative is used to code purpose in Ladakhi, Balti, Lahul, Sherpa, Nyamkat, Garhwal, Jirel, Thakali, Sunwar and Newari. When the large number of allative sources for purpose markers are considered, it is clear that this is a goal-marked category. The only dative morpheme which grammaticalizes to anything other than a purpose marker is the Bunan locative/allative/-dative tog used as 'when'. This use could be associated with the locative rather than the dative meaning.

Associative. There is not enough evidence of associative morphemes being used as subordinators to determine any patterns. The little evidence available is that the associative is used for 'when/while' in Ladakhi; 'as soon as' in Ladakhi and Classical Tibetan; and is a non-final marker in Vayu, although there the associative and locative are the same morpheme.
Summary. The major patterns of co-occurrences of postpositional and subordinating morphemes are presented below. The most common patterns are listed first, others in descending order of frequency:

(5) LOC > if/although, when/while/after
ABL > when/while/after, because, NF
ALL > purpose
DAT > purpose
ERG/INST > because, when/while/after

Now that these grammaticalization patterns have been established, it is necessary to account for both the process of semantic extension which these patterns suggest, and the syntactic mechanism which allowed for the development of nominal to verbal morphology.

The semantic explanation which I will propose to account for the patterns of grammaticalization relies on a localistic theory outlined by Lon Diehl (1975). Diehl's theory is similar to those of Gruber (1976) and Anderson (1971), in that his schema uses four deep semantic cases -- Theme, Location, Source and Goal -- to account for all basic case relations in all sentence types.

While Diehl's theory differs from other localistic approaches on a number of points, his primary innovation is the introduction of four semantic spheres or 'spaces', in which the four basic case relations function. The four spaces account for the morphosyntactic and semantic similarities between, for example, expressions of action, movement through space, and movement through time. While the relations between the cases remain stable, the interpretation of a given case is dependent upon the semantic space in which it is located.

There are four spaces in Diehl's theory. The first space is 'social' (SOC), and indicates "location with respect to positions defined or interpreted to be (human) beings" (1975: 98). The second space is 'location' (LOC), and locates physical objects in space. The third space is 'temporal' (TEM), and locates events in time. The fourth space is 'logical' (LOG), and concerns the relations of propositions. Diehl (1975: 103) discusses the inherent ordering of the four spaces -- SOC-LOC-TEM-LOG -- which is based on what he calls the "egodeictic hierarchy" as well as on relative abstractness. The main focus of Diehl's paper is the application of his schema to account for regularities in word order cross-linguistically. At this point, however, I will limit myself to discussion of the logical space, how it relates to the other three
spaces, and how it applies to the patterns of grammaticalization presented above.

The logical space is related to the other three by the regularities which exist between temporal and logical relations. Diehl (1974: 102) presents the following quote from Kimball (1973: 8-9):

There is a manifest regularity between the relations expressed by a word in its temporal and logical uses. Namely if a word W says that event E1 occurs earlier than E2 in time, then in its logical use a statement P1 W P2 means that P1 is a condition of P2. Where E1 W E2 says that E1 is temporally prior, P1 W P2 says that P1 is logically prior.

This suggests the process by which postpositions can become grammatically extended to subordinators. A postposition coding social, spatial or temporal relations becomes extended to a more abstract field, and broadens its semantic scope. However, the basic relationship it codes between arguments (here propositions or clauses) remains the same. The following chart displays how the different case relations code slightly different semantic meanings depending on the space in which they are expressed (Based on Diehl 1975):

<table>
<thead>
<tr>
<th>Location</th>
<th>Source</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC</td>
<td>associative</td>
<td>ergative</td>
</tr>
<tr>
<td>SPA</td>
<td>locative</td>
<td>ablative</td>
</tr>
<tr>
<td>TEMP</td>
<td>when/while</td>
<td>since (abl)</td>
</tr>
<tr>
<td>LOG</td>
<td>if</td>
<td>because</td>
</tr>
</tbody>
</table>

The assignment of 'because' as the logical extension of source is straightforward. If one clause is semantically the source of another, then it is also the cause. Similarly, if one clause represents the semantic goal of another, it is the purpose. The extension of the locative to 'if' is not as obvious. For now, this question will be put aside, while I discuss the application of the Space Case schema to the patterns of grammaticalization presented in (5).

Diehl's schema easily accounts for many of these patterns. DAT and ALL are both semantic goals, with purpose as their logical extension. ERG/INST and ABL are both sources, so their functions as 'since' (both temporal and causal) and 'because' are also predicted by the schema. The ABL use as a non-final marker also follows from the standard interpretation of clause...
chains as having a sequential and causal connection. Locative case in the temporal space produces 'when/while'. The patterns which seem to contradict the schema are the source categories coding 'when/while'. Also a general explanation of the LOC-'if' syncretism is called for.

Some background concerning Tibeto-Burman clause chains offers one possible explanation for source categories extending to 'when/while'. In at least some Tibeto-Burman languages a morphological distinction is made between clauses related sequentially, and clauses whose temporal relations are simultaneous (Scott DeLancey, p.c.). The natural interpretation given to sequential clauses in a sentence, is that one followed as a consequence, or was the source of, the other. Thus one hypothesis is that ablative would develop into sequential markers, and locatives into markers of simultaneity. The problem with this is that in Jirel and Vayu, the two languages in which I found a clear distinction made between sequential and simultaneous, all simultaneous markers were derived from the ablative, and one of the sequential markers was locative. While this flatly contradicts the hypothesis, my data is limited, so the hypothesis should not be completely rejected until further research is done. The use of ablative to code 'when/while' could still be attributed to an extension from source to sequence, regardless of whether this difference is distinguished by separate non-final markers.

One other possible explanation is that the ablative may be used for 'while', whereas the locative would be used for 'when'. This seems plausible in light of the fact that the ablative is also sometimes used for path, as in 'by way of' or 'through'. Thus if it denotes an extended spatial relation it may also denote extended temporal relation.

We now turn to the question of why 'if' seems to be the appropriate interpretation of the locative in the logical space. First note that, of the twenty-two examples where 'if' appeared to be derived from postpositions, thirteen have clearly locative origins. This seems to provide evidence that the locative in the logical space does indeed code condition. The question is the nature of the semantic extension from spatial or temporal location to condition. For now I can offer only a tentative suggestion.

The subordinator 'when' in past tense sentences denotes a temporal relationship between two clauses, from which a causal relationship is often inferred. However, due to the irrealsis nature of all future clauses, 'when' in the future is necessarily hypothe-
tical. If two future events are expressed in two clauses joined by 'when', the event denoted by the 'when' clause must occur prior to the other; it is interpreted as a precondition. The use of 'when' to denote hypothetical precondition thus seems like one possible derivation for 'if'. From the future, this use can then be extended to other hypothetical situations, and the subordinator takes on a clearly logical use. However, in order to fully understand the semantic derivations of these morphemes, more information is needed on the fine semantic distinctions coded by subordinators in these languages, including work on hypotheticals, counter-factuals, and modality.

Now that we have seen that the semantic extensions suggested by the grammaticalization patterns can be accounted for, it remains to consider the syntactic mechanism by which such a process can occur. This can be explained at least in part by typological features of Tibeto-Burman syntax. All Tibeto-Burman languages are rigidly verb final and postpositional. They also have a strong tendency to nominalize clauses. In Newari, for example, the nominalizer -gu not only marks relative clauses and adjectival phrases, but is frequently used on subordinate and complement clauses, on verbs before copulas indicating speakers judgement, and even on independent verbs sentence-finally (Kolver 1977, see also Matisoff 1972 for an extensive discussion of a very similar and probably cognate pattern in Lahu). Verb phrases or whole clauses are thus treated as noun phrases syntactically. When whole clauses can function as nominal constituents in a sentence, they allow for the suffixing of nominal morphology, in particular case suffixes and other postpositions.

NOTES

1. As noted by Haiman and Thompson (1984), we need an adequate typology of what are now considered 'subordinate clauses'. Here I am working with hypotactic, adverbial clauses; more work is needed to characterize these more precisely.

2. This research was supported in part by the National Science Foundation, grant BNS-8313502, and by a grant from the Joint Committee on South Asia, of the Social Science Research Council and the American Council of Learned Societies, with funds provided by the Ford Foundation and the National Endowment for the Humanities. Scott DeLancey has offered invaluable assistance in all aspects of this project. I alone am responsible for errors and inconsistencies.

3. A fair amount of data was taken from the Linguistic Survey of India, much of which is not necessa-
rily reliable in phonetic detail. Newari data is my own. Lhasa data was provided by Scott DeLancey.
4. The classification is roughly based on Matisoff’s (1974) list of Tibeto-Burman languages arranged by the genetic affiliations proposed by Shafer. Additional suggestions were provided by Scott DeLancey.
5. Newari appears to be a Bodic language, but at this point there is no strong evidence for grouping it into any of the proposed subfamilies.
6. Information regarding transcription is given in the introduction to the appendices.
7. Diehl uses the terms IT, AT, FROM and TO.

REFERENCES
Francke, A.H. 1903. Sketch of Ladakhi Grammar. JASB 70.
——. 1974. Sememic and Grammatical Structures in Gurung. SIL.
Hale, A., ed. 1973. Clause, Sentence and Discourse Patterns in Selected Languages of Nepal. SIL.
Hodgson, B. 1857 & 1858. Comparative Vocabularies of the Broken Tribes of Nepal. JASB 26:317-522,
27:393–442.
Pike, K. and E. Pike. 1982. Grammatical Analysis. SIL.
Roerich, G. 1933. The Tibetan Dialect of Lahul.
APPENDICES

Due to limitations of space, I have included in the appendices only the forms which appeared to be relevant to the grammaticalization process discussed above. Forms for which there is allomorphic variation are marked by an asterisk following the citation. Optional elements are enclosed in parentheses.

Transcription is from the original sources; tone was rarely marked, so is not included. I consistently used the following symbols to represent the IPA:

\[
\begin{align*}
\emptyset & \quad [\emptyset] \\
E & \quad [\varepsilon] \\
\phi & \quad [\varphi] \\
? & \quad [?] \\
ng & \quad [\eta]
\end{align*}
\]

The languages are arranged with respect to probable genetic affiliation.

Appendix One: Bodic Postpositions

<table>
<thead>
<tr>
<th>Language</th>
<th>erg</th>
<th>inst</th>
<th>dat</th>
<th>loc</th>
<th>abl</th>
<th>all</th>
<th>assoc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cla.Tib.</td>
<td>kyis*</td>
<td>kyis*</td>
<td>la</td>
<td>na/la</td>
<td>nas/las</td>
<td>ru*</td>
<td>dang</td>
</tr>
<tr>
<td>Balti</td>
<td>si</td>
<td></td>
<td>la</td>
<td>kha</td>
<td>na</td>
<td>na-yambo</td>
<td></td>
</tr>
<tr>
<td>Purki</td>
<td>is*</td>
<td>na</td>
<td>la*</td>
<td>la/ka</td>
<td>nø</td>
<td>sa</td>
<td></td>
</tr>
<tr>
<td>Ladakhi</td>
<td>yi*</td>
<td>nang*</td>
<td>la</td>
<td>na/nø</td>
<td>nas/ne</td>
<td>nang*</td>
<td></td>
</tr>
<tr>
<td>Lahul(KL)</td>
<td>lai*</td>
<td>ai*</td>
<td>la</td>
<td>la/ru*</td>
<td>ne</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lahul(KK)</td>
<td>su/hi</td>
<td>su/si</td>
<td>la</td>
<td>la</td>
<td>na/sang</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garhwal</td>
<td>go(?)</td>
<td></td>
<td>la/ba</td>
<td>la</td>
<td>su</td>
<td>la</td>
<td>nyibo</td>
</tr>
<tr>
<td>Jirel</td>
<td>gi / ki</td>
<td></td>
<td>la</td>
<td>du/pa*</td>
<td>la</td>
<td>la</td>
<td>tang</td>
</tr>
<tr>
<td>Kagate</td>
<td>i / gi</td>
<td></td>
<td>la</td>
<td>la/na</td>
<td>sale</td>
<td>la/sala</td>
<td></td>
</tr>
<tr>
<td>Lhasa</td>
<td>qi*</td>
<td>qi*</td>
<td>la*</td>
<td>la*</td>
<td>nEE</td>
<td>la*</td>
<td>dang</td>
</tr>
<tr>
<td>Lhoke</td>
<td>kyi*</td>
<td></td>
<td>lo/lu*</td>
<td>la/nu</td>
<td>r/tu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lhomí</td>
<td>ki</td>
<td>ki</td>
<td>la</td>
<td>la/na</td>
<td>ni</td>
<td></td>
<td>tang</td>
</tr>
<tr>
<td>Nyamkat</td>
<td>su</td>
<td>k/gi*</td>
<td>la*</td>
<td>nā/su</td>
<td></td>
<td></td>
<td>dang</td>
</tr>
<tr>
<td>Sherpa</td>
<td>s/k/re</td>
<td>s</td>
<td>laa</td>
<td>nā/laa</td>
<td>nā/sur</td>
<td>laa</td>
<td></td>
</tr>
<tr>
<td>Danj.K.</td>
<td>iì</td>
<td></td>
<td>lo</td>
<td>la</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kanauri</td>
<td>as*</td>
<td></td>
<td>nu*/pang o</td>
<td>ts/ch</td>
<td>dok?ts</td>
<td>nang*</td>
<td></td>
</tr>
<tr>
<td>Bunau</td>
<td>tsi*</td>
<td>dang</td>
<td>rog*</td>
<td>mang</td>
<td>chi/rog de</td>
<td>nang*</td>
<td></td>
</tr>
<tr>
<td>Gurung</td>
<td>di*</td>
<td>di*</td>
<td>lai</td>
<td>ri</td>
<td>le*/ser62</td>
<td>ri/samma</td>
<td>ne</td>
</tr>
<tr>
<td>C.Newari</td>
<td>së</td>
<td>an*/nā</td>
<td>ta</td>
<td>sa</td>
<td>an*/nā ke</td>
<td>va</td>
<td></td>
</tr>
<tr>
<td>Newari</td>
<td>nø*</td>
<td>nø*</td>
<td>tø</td>
<td>le</td>
<td>nø*</td>
<td>le</td>
<td>ke</td>
</tr>
<tr>
<td>Tamang</td>
<td>se*</td>
<td>se*</td>
<td>da*</td>
<td>ri*/ma*</td>
<td>kyam-se</td>
<td>ri*</td>
<td>chhyam</td>
</tr>
<tr>
<td>Thakali</td>
<td>ce</td>
<td>ce</td>
<td>ca (ri)</td>
<td>ri</td>
<td>ce</td>
<td>ca (ri)</td>
<td></td>
</tr>
<tr>
<td>Thulung</td>
<td>ka</td>
<td>ka</td>
<td>lai</td>
<td>Da*/la</td>
<td>lam*</td>
<td>Da*</td>
<td>nung</td>
</tr>
<tr>
<td>Limbu</td>
<td>le*</td>
<td>le*</td>
<td>n*/le*</td>
<td>o* / le*</td>
<td>nu(le)</td>
<td>le/re</td>
<td></td>
</tr>
<tr>
<td>Khambu</td>
<td>å</td>
<td>å</td>
<td>lai</td>
<td>bi*/la</td>
<td>(la)ka/bika</td>
<td>kai</td>
<td></td>
</tr>
<tr>
<td>Khaling</td>
<td>å</td>
<td>å</td>
<td>bi/tu*</td>
<td>kaa</td>
<td>thaa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sunwar</td>
<td>mi*</td>
<td>a</td>
<td>kali</td>
<td>m*/ga*</td>
<td>le</td>
<td>mi*</td>
<td>nu</td>
</tr>
<tr>
<td>Vayu</td>
<td>ha</td>
<td>ha</td>
<td>he/nong</td>
<td>khen/nongnana</td>
<td>nong</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chepang</td>
<td>i</td>
<td>i</td>
<td>kay</td>
<td>hang</td>
<td>sëy</td>
<td>tang</td>
<td>ka*/kus</td>
</tr>
</tbody>
</table>
Appendix Two: Bodic Subordinators

Language when while because if NF purpose
Cla. Tib. la/nas las/la la/nas/kyis na te/par
Balti na(m) e/se nare e/se la
Purki nə banə nə sə*/sənə
Ladakhi zana(s)* la/pasang na te chesla
Lahul na e/ste* na/tu/cela
Garhwal yangna tin la
Jirel jini la*/gin* la
Kagate atesu na
Lhasa duugangla3 phardu 1EE/ na nE/cEE r tsaang
Lhoke i la* nə/nu di/te/nə r
Lhomu kin tu tu
Nyamkat yangna tu tu
Sherpa bubela ni/yin na/si ni/yin la
Danj.k. na/nu
Kanauri ən(?) ma
Bunah astogi/(s)ta/tg bonthreg4/ nang ji* de/ (s)dang bonthreg
Gurung ma(le) sero5 ya/dubiya i/si elxagirî6
Newari bole/ki tōlle gulī sa/sā a tō
Tamang chhyam mā/min se se/sam si/se* ri
Thakali kaahngri7 maa/ce lana si ri
Thulung lo na/hongnga/belaka la na Da
Limbu 1E* 1E* 1E* (s)ang sE*
Khambu omā
Khaling lo to kho saa
Sunwar nu sha/senu/ nganu belami
Vayu he/nana tiling khen/he/sa nana/ha/nong
Chepang tok/ tokhang ti/ yakay/yati ti/?ak lang
tokbelahang dharna(nang)

Notes
1. Roerich (1933) discusses two Lahul dialects, Kolong (KL) and Koksar (KK). While he differentiates between the two when citing postpositions, he does not distinguish them in his discussion of subordinators.
2. This form and the samma allative are temporal.
3. phar: 'place in between'.
4. bon-threg is the benefactive.
5. sero is the temporal ablative. That the temporal ablative is the one to grammaticalize is nice evidence for grammaticalization as a process of abstraction.
6. This morpheme has the following derivation:
   e GEN +lxagi 'sake' + ri LOC.
7. khaang: 'time'.