

An Analysis of Syntax and Prosody Interactions in a Dolakhā Newar

Rendition of *The Mahābhārata*

(with appendices and sound files)

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This study explores the relationship of prosodic and syntactic structure in a Dolakhā Newar rendering of a portion of *The Mahābhārata*. Six intonation types are identified and described. The strongest syntax/prosody correlation is between final intonation and finite verb morphology. Finite clauses may be found with continuing intonation; in these cases the speaker manipulates the syntactic and prosodic levels for functional reasons. Prosodic units combine to form larger structures which we call *prosodic sentences*. These are defined as prosodic macro-units optionally containing any number of continuing intonation units and ending with final intonation. Prosodic sentences may be internally complex and exhibit embedding. Boundaries between narrative sentences are produced by the convergence of finality at the syntactic and prosodic levels.

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1. Introduction¹

Dolakhā Newar² (hereafter referred to as Dolakhāe) is spoken in the village of Dolakhā, located about 130 kilometers to the east of Kāṭhmāṇḍu. Dolakhāe is considered

¹ We wish to thank Wallace Chafe and Sandra Thompson for helpful discussion of ideas found in this paper. Special thanks are also due to H.S. Gopal, Steven Fincke, Nick Kibre, and Jim Reed, who provided advice and technical assistance with Unix and speech analysis software, and Matthew Gordon, who provided assistance with Praat. Any errors are, of course, entirely the responsibility of the two authors. It should be noted that the ordering of authors' names reflects priority of authorship.

² The language of the Newars has been most commonly referred to by scholars in this century as "Newari", a term which is an Indicization of the ethnonym "Newar". Some in the Newar community have found this term to be objectionable, and there has been a recent movement to change to one of two terms, either "Newar" or "Nepāl Bhāsā". Although the government of Nepal officially adopted "Nepāl Bhāsā" as the language name, this appellation is also not without controversy. We thus follow many of our colleagues in adopting the simple ethnonym "Newār" as

to be a dialect of Newar, although it is mutually unintelligible with the Kāṭhmāṇḍu dialect, which is generally assumed to be the standard. Dolakhāe grammar differs from the Kāṭhmāṇḍu dialect in a number of crucial respects; see Genetti (1994a) for details.

Like many other languages in the region, Dolakhāe exhibits complicated syntax, allowing for sentences that are not only long, but also made complex by multiple layers of chaining and embedding. Of course, when spoken, sentences of this nature are not produced as single utterances, but are broken up into smaller prosodic units by the speaker. Prosody constitutes a separate level of linguistic structure that is complementary to syntactic structure and overlays it temporally. When there are complex syntactic structures, prosodic structures are generally also complex, and the speaker may use them to differentiate structural levels, to indicate semantic or rhetorical relationships between clauses, to clarify the status of referents, and to accomplish other functional tasks.

The current study explores the relationship of prosodic and syntactic structure by analyzing one single narrative in detail. The narrative was recorded on the evening of January 5th, 1989 in the village of Dolakhā. The speaker was Mrs. Sanu Laxmi Joshi, a woman of middle age, who has a great talent for storytelling. Mrs. Joshi is a bilingual, fluent in both Nepali and Dolakhāe. The recording was made in an upstairs bedroom in the house of Mrs. Kalpanā Shrestha, in the presence of Carol Genetti, Dr. Laura Crain,³ Kalpanā Shrestha, and several other Dolakhāe speakers. The narrative is slightly less than eight and three-quarters minutes in length. The story of the narrative is an interesting one, as it relates a portion of the great Hindu epic, *The Mahābhārata*. The narrative is a folk version of the epic, and the story line is divergent from the traditional version in several interesting ways. The substance of the narrative and the areas of divergence are discussed in Appendix I.

To analyze the relationship between syntax and prosody, the narrative was transcribed phonemically, and then prosodically. Each prosodic unit was then categorized based on its intonation contour. We identify six distinct types of intonation used in the narrative, and include a description of each one. In addition, pauses and prosodic accent have been transcribed. A full discussion of prosodic categories and our transcription conventions is given in section 2. Transcription conventions and abbreviations are also listed in Appendix II.

The text was also analyzed syntactically. Our transcription system clearly marks sentence boundaries. It also indicates direct quotation by putting all quoted material in italics. A sketch of relevant aspects of Dolakhāe syntax is given in section 3.

the language name. The name of the dialect spoken in Dolakhā, which Genetti previously referred to as Dolakha Newari, will also be changed to the native version, Dolakhā Newar, and shortened to Dolakhāe (the final -e being the genitive suffix), which is the name used by the speakers themselves.

³ Laura Crain is a linguist who studies Nepali. The same evening that this Dolakhāe narrative was recorded, she made a recording of the same narrative told by the same speaker in Nepali. This version of the narrative, with broad prosodic transcription, appears in Genetti (1994b).

In section 4, correlations between syntactic units and prosodic units are presented, along with a discussion of their implications.

We explicitly discuss the notion of "sentence" in section 5. We follow Chafe (1994) in recognizing the existence of prosodic sentences which are independent of syntactic sentences, but have structural parallels. We claim that speakers signal significant boundaries between sentences in narrative primarily by the alignment of final syntax and final intonation.

Appendix III contains the transcribed narrative in its entirety, with linguistic glosses and free translation. Additional observations on the interaction between syntax and prosody may be found in the annotations, located in Appendix IV.

Previous work on the interaction of prosody and syntax varies both in goals and in method. The current study is inspired by the work of Chafe (1980, 1988, 1993, 1994). It similarly seeks to understand the relationship between prosody and syntax through the detailed and qualitative analysis of naturally occurring discourse. This paper complements two prior studies on intonation in the Kathmandu dialect of Newar, Kansakar (1977) and Hargreaves (1986), which also examine the interaction of intonation with other linguistic subsystems. In particular, Hargreaves (1986) explores many of the issues with which we are concerned.

2. Prosody in Dolakhāe

Speech is not pronounced in long, monotonous sequences of phones, but in short "spurts" or "bursts", which have characteristic changes in pitch, tempo and loudness. Units of this type have been given numerous names by different scholars, including "tone groups" (Palmer 1922, O'Connor and Arnold 1973), "intonation groups" (Cruttenden 1986) "tone units" (Knowles 1984), "intonation phrases" (Selkirk 1986) and "intonation units" (Chafe 1988, 1993, Du Bois et al. 1993). Since the terms "tone" and "intonation" both refer to pitch, and since pitch is only one of several factors that differentiate one such unit from the next, we have decided to adopt the more general term **prosodic unit**. In our transcription, prosodic units are numbered sequentially and placed on separate lines.

We follow the general approach of Du Bois et al (1993) in identifying a set of timing and pitch cues which serve to mark the boundaries between prosodic units. Timing cues involve the tempo of speaking, and include **pauses**, which frequently occur between prosodic units, **lengthening**, which tends to occur at the ends of prosodic units, and **initial anacrusis**, which refers to the relative rapidity with which speakers often begin prosodic units. Of the three timing cues, pauses are the most commonly occurring, as 232 of the 362 prosodic units in the text (roughly 64%) have pauses preceding them.⁴ Following the transcription system of Du Bois et al. (1993), pauses are indicated in our text with a sequence of dots: Two-dot pauses indicate very short disruptions in fluency, whereas three-dot pauses indicate longer pauses of approximately three-tenths of a second or

⁴ Pauses may also occur within prosodic units, but this is relatively rare.

longer. Extremely long pauses (of more than one second in length) additionally have the length of the pause given in parentheses.

Lengthening commonly occurs within prosodic units, as well as at their ends. Final lengthening occurs in 105 (29%) of the prosodic units. Lengthening is marked with a colon (:). Extended lengthening is marked with a double-colon (::).

Initial anacrusis involves a fairly complex set of timing relations, and is not indicated in our transcription.

In addition to timing cues, prosodic unit boundaries are also signaled by three types of pitch cues: **transitional continuity**, which refers to the shape of the contour near its terminal point; **pitch reset**, which refers to a discontinuous resetting of pitch to a higher or lower level; and **overall coherence** of a pitch contour, which refers to whether or not a given stream of speech seems to have been produced with a unified pitch contour as part of a single intonational plan.

We have identified six distinct types of intonation in the Dolakhāe narrative, using transitional continuity as the primary distinguishing factor, as it is the most important of the three pitch factors and is easiest to accurately assess. Overall coherence has been used to greatest extent in the identification of the narrative final intonation type, where a prolonged high level pitch over the entire prosodic unit distinguishes it from the others. The six intonation types are marked by the punctuation at the end of each line in our transcription. The prosodic characteristics of the six types are outlined below.

The six features used to identify prosodic units are logically independent, and in fact occur together in various combinations and to various degrees. Therefore, the identification of prosodic units is not a straightforward process in all cases. We rely most heavily on pauses, lengthening, and transitional continuity in identifying prosodic unit boundaries. Determining the boundaries of prosodic units is in some cases difficult, especially where the speaker is speaking rapidly without pauses or lengthening, and the pitch range of the intonation contour is reduced.

Our methodology in determining the prosodic structure of the text was as follows. First, each of us independently divided the text into prosodic units, initially achieving approximately 80% agreement on the positioning of prosodic unit boundaries. We then independently marked each prosodic unit for transitional continuity; this process yielded about 75% accuracy on our first attempt. This led to several refinements in our analysis of intonation, resulting in complete agreement on the assignment of prosodic units to the intonation type categories, and on the prosodic unit divisions. The fact that one of us (Slater) did not know the language before beginning the project helped us to avoid syntactic bias in our prosodic unit analysis, since establishing the prosodic patterns independently of syntactic analysis eliminates the potential for circularity in the analysis of syntax/prosody interactions.

In addition to marking intonation, our transcription also marks prosodic accent, which generally appears once in each prosodic unit. Prosodic accent is typically realized with dramatic pitch movement over a single syllable. A prosodically accented syllable is often also pronounced with relatively high intensity. In our transcription, the symbol ^

immediately precedes a syllable bearing prosodic accent. In some cases, we have identified more than one syllable in a single prosodic unit as bearing this degree of prominence; in some prosodically backgrounded units, no prosodic accent has been identified at all.⁵

Appendix 1 presents a complete list of the symbols used in our transcription. Most of these symbols follow Du Bois et al. (1993), although we have made some modifications to the system to suit our purposes for this study, and to maintain consistency in the use of some typographic symbols with Genetti's previous work on Dolakhāe.

2.1 Intonation types

For this study, we have identified six distinct intonation types, each of which has a characteristic phonetic shape. In this section we present a brief description of each type, and also provide a graph which traces the fundamental frequency (F_0) of a prototypical example of the type. Although the relationship between fundamental frequency and the perception of pitch in natural discourse is complex and not fully understood (Cruttenden 1986; see t'Hart--Collier--Cohen (1990) for explicit discussion), the traces may be taken as rough examples of the pitch contours of each type.

Each of the six intonation types has been given a label based on its function. These labels are: prototypical final, narrative final, interrogative final, exclamatory final, anticipatory continuing, and non-anticipatory continuing. Sometimes, however, a speaker may choose not to use one of the primary types of distinctive intonation. Units of this kind occur infrequently; only twelve prosodic units in this text were so marked. Half of these were found co-occurring with non-lexical utterances such as *ā::*, or *m::*. They have been assigned to a category of "other". There are also two units which were abandoned prior to completion and thus do not have transitional continuity; these have been labeled "truncated".

It is clear from our labeling that we see the six intonation types as belonging to two distinct groups -- final and continuing.⁶ Du Bois et al (1993) state that each of these categories might be further subdivided on a language-particular basis. We consider our work to be a preliminary extension in this direction.

In the studies of the Kathmandu dialect, Kansakar (1977) identified two distinct types, rising and falling. The rising category was divided by Hargreaves into two subtypes, "rising" and "rising with elongated final syllable" (1986: 190). Hargreaves also

⁵ See Kansakar (1977) for a discussion of prosodic accent (his "emphatic stress") and intonation in the Kathmandu dialect.

⁶ Du Bois et al (1993: 53) refer to a three-way distinction of transitional continuity which is taken to be basic in human language: final, continuing and appeal (interrogative). We consider interrogative intonation to be a subtype of the final category, since interrogatives generally occur with final syntax and, in turn-taking, indicate to the hearer that the current turn is finished and that the hearer should take the floor.

identifies falling and level intonation contours. Thus this work also contributes to a more fine-grained analysis of the basic two-way distinction in intonation type.

2.2 *Description of intonation types*

2.2.1 Prototypical final intonation

Prototypical final intonation, which occurs 101 times in our text, is characterized by a steady fall in pitch over the last several syllables of a prosodic unit, from a mid-to-low baseline pitch, with decreasing amplitude. Final intonation commonly occurs on finite verbs at the ends of sentences, and often indicates the end of a larger group of prosodic units which we may call a **prosodic sentence** (see section 5). An F_0 trace of a prototypical example of this contour type is given in Figure 1. The arrow points to the beginning of the final word *jur-a*.⁷

⁷ Fundamental frequency traces were produced by Praat. The vertical axis in Figure 1 indicates fundamental frequency in hertz. Duration is indicated along the horizontal axis in seconds. Thus, the lexical material in Figure 1 lasts less than one second (beginning time=37.1 seconds, ending time=37.97 seconds) and ranges in pitch from just over 100 to about 250 Hz. A vertical line is inserted to indicate where pronunciation of the final word *jur-a* begins. (We would like to point out that different amounts of time elapse in each of the seven figures presented here, since the display size is constant but the amount of lexical material is not.)

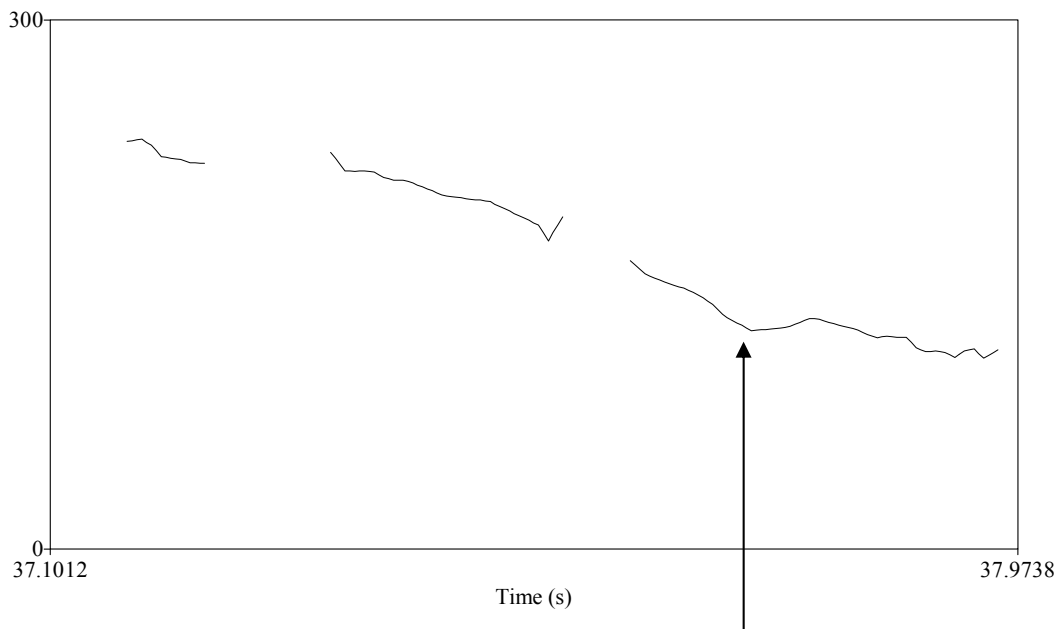


Figure 1. Prototypical Final Intonation

Unit #164: *^satyawati jur-a.*

A subtype of prototypical final intonation is one which appears to be pragmatically marked with significant lengthening of the final syllable and a rising/falling contour. This type of final only occurs twice in the current narrative, both times marking events of great importance in the story. This type of final is quite distinctive, and seems to be a characteristic of Newar. Genetti's impression is that it is particularly common in narratives in the Kāṭhmāṇḍu dialect. An example of a F_0 trace of this type is given in Figure 2; the length of the final syllable in this example is .52 seconds. The arrow indicates the beginning of the final word *sīt-a*:

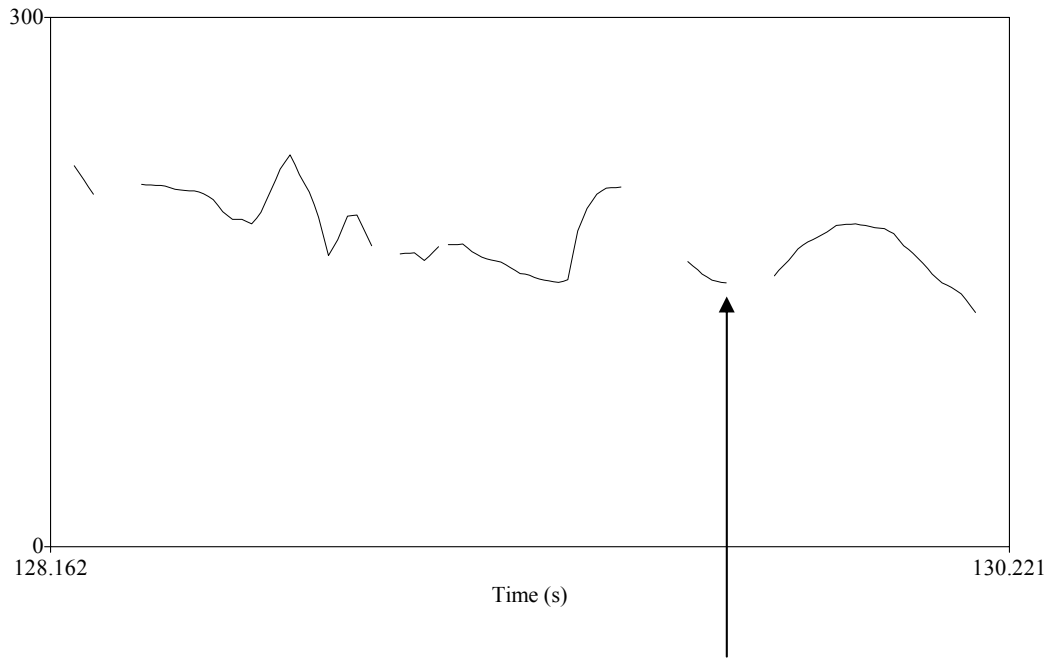


Figure 2. Newar Final Lengthening
 Unit #228: *ci^trāṅga bicitrāṅga si-^ta::*

2.2.2 Narrative final intonation

This type occurs 19 times in our text. It is characterized by a high, level pitch throughout the entire prosodic unit. This contour is commonly used by Dolakhāe speakers in narrative discourse, and its functions remain to be investigated. In this text, it is used primarily in quoted speech. An F_0 trace of a prototypical example of narrative final intonation is given in Figure 3. The arrow indicates the beginning of the final syllable /jeu/. (The dips in the pitch contour drawn by the program occur on the consonantal segments.)

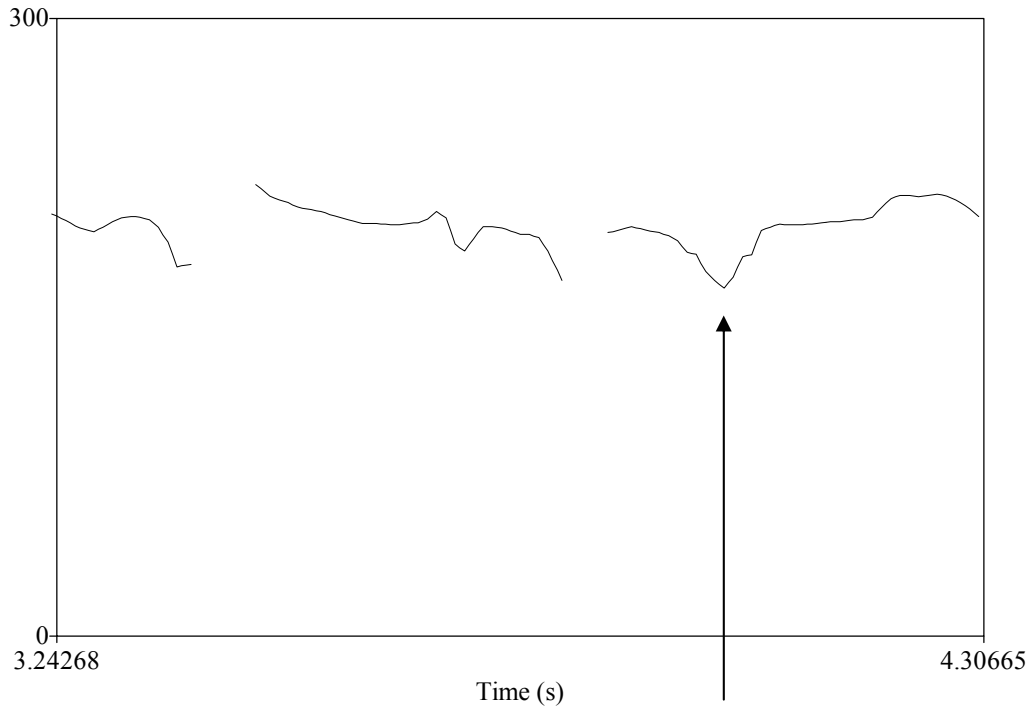


Figure 3. Prototypical Narrative Final Intonation

Unit #249: u ^kae: mica jeu: |

2.2.3 Interrogative final intonation

Interrogative intonation is characterized by a very high rise in pitch at the end of a prosodic unit. Only three examples of interrogative intonation were found in the narrative, two of which were on tag questions. A graph of the F_0 values of one of our examples is given in Figure 4. The figure registers a fall after the initial sharp rise, however, the fall is not strongly perceptible due to reduced amplitude. The arrow in Figure 4 points to the beginning of the final syllable [ho]. Note that the pitch range of the display has been extended to 350 hertz as the speaker reaches a high point of about 315 hertz at the end of the unit.

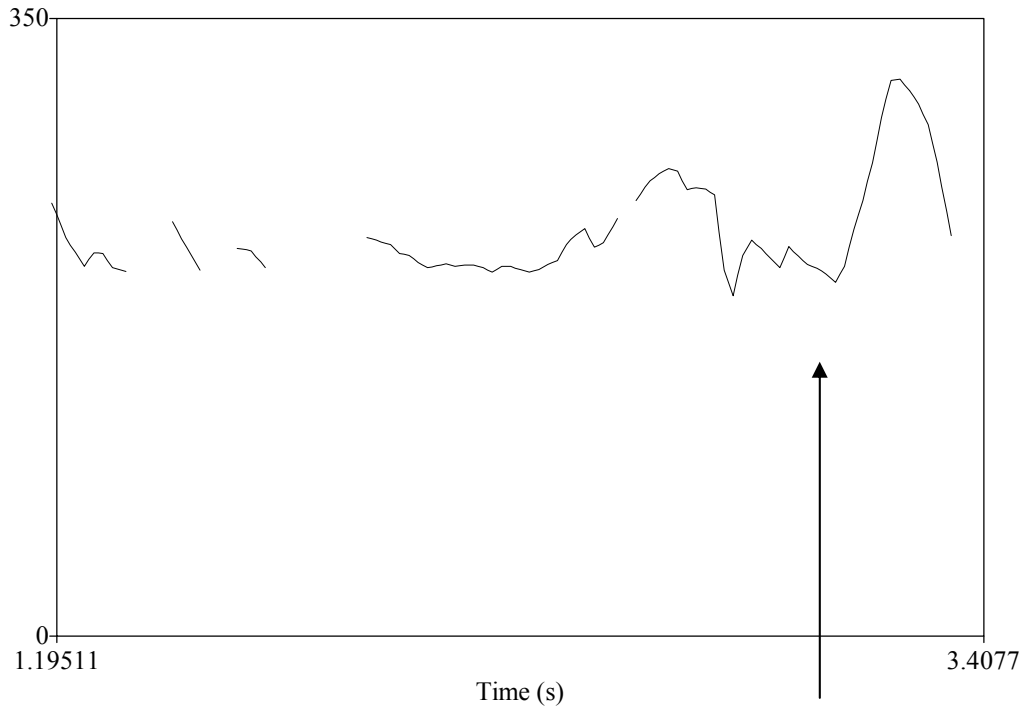


Figure 4. Prototypical Interrogative Final Intonation

Unit #181: *āle thapakka mā=ŋ nir^kai ḍō-i ho:?*

2.2.4 Exclamatory final intonation

This type occurs 25 times in our text. It is characterized by a steep rise/fall in pitch on the final syllable of the prosodic unit. It differs from the anticipatory continuing type in that the rise and fall are equally salient and in that amplitude does not decrease until well after the beginning of the final fall. It typically occurs on vocatives, exclamations and utterances with high emotive content. It is also used when the speaker switches from main-line narrative to direct quote within a single prosodic unit (see section 4.2). An F_0 trace of a prototypical example of exclamatory intonation is given in Figure 5; the arrow points to the beginning of the last syllable /*gā*/.

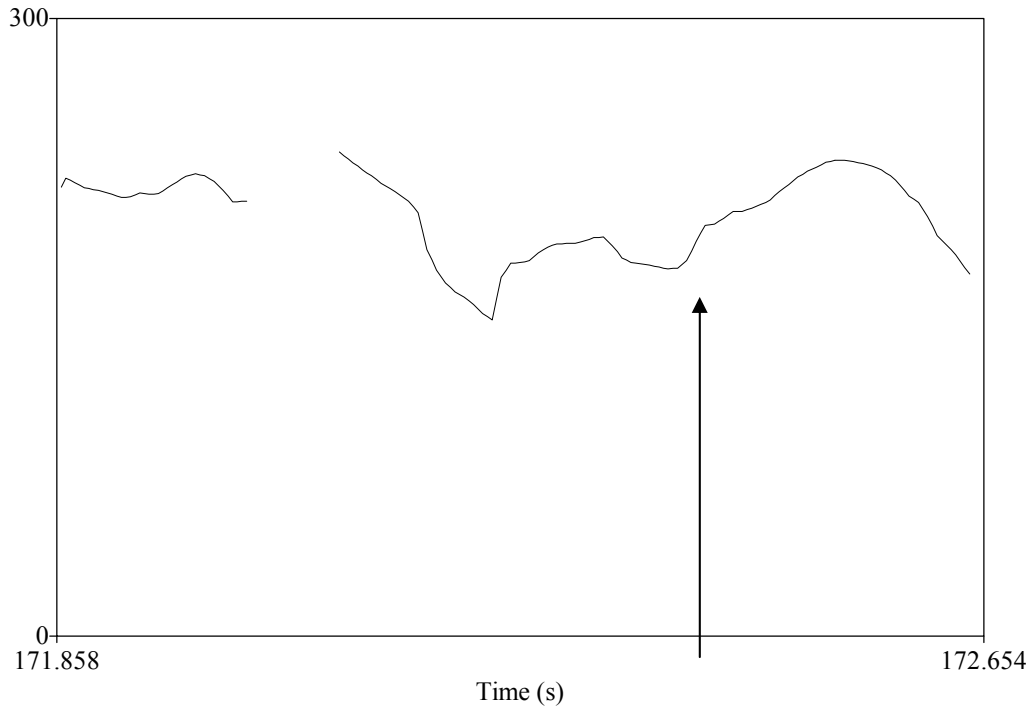


Figure 5. Prototypical Exclamatory Final Intonation

Unit #96: *nichi gaŋ^gā!*

2.2.5 Anticipatory continuing intonation.

This intonation type, which occurs 105 times in our text, is characterized by a strong rise on the nucleus of the final syllable in the prosodic unit. Often, this rise is followed by a sharp drop in pitch which is short in duration and low in amplitude. Because the amplitude peak on the last syllable of these units occurs prior to the beginning of the fall in fundamental frequency, they are perceived as primarily rising in pitch. Timing factors are also important; units of this type often have lengthened final syllables, and generally (73% of occurrences) are followed by a pause.

This type represents the most prototypical subset of what Du Bois et al (1993) identify as "continuing" contours. We have found it useful for this study to separate these most prototypical continuing contours from other non-final contours which are described in the class "non-anticipatory continuing" below. Anticipatory intonation signals that another prosodic unit is coming, and often occurs on non-final verbs. A prototypical F₀ trace for anticipatory continuing intonation is given in Figure 6. Although the final contour shows a strong final drop, this is not audible, as the amplitude is significantly decreased at this time. The arrow points to the beginning of the final syllable [li].

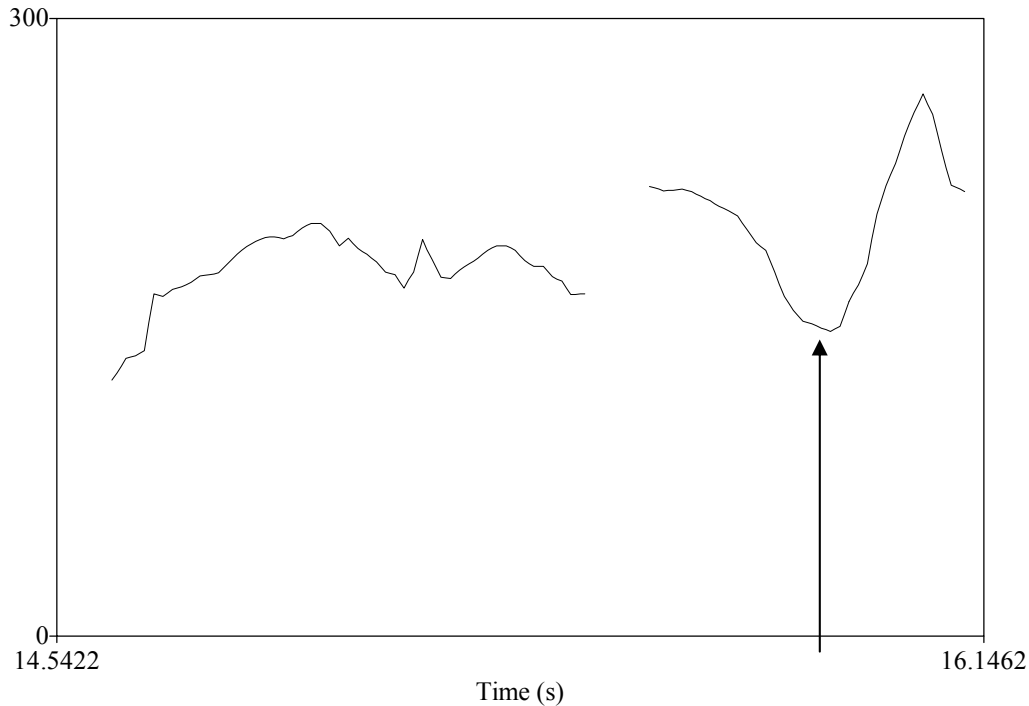


Figure 6. Prototypical Anticipatory Continuing Intonation

Unit #150: *bihāyeŋ-an hā-en ^ta-en li;*

2.2.6 Non-anticipatory continuing intonation.

There are 95 occurrences of this type in our text. It includes intonation contours of a variety of phonetic shapes, but they all end with at least a slight rise in pitch. In some cases the contour resembles that of an anticipatory contour, but does not rise as dramatically; this is often due to being "checked" as a result of rapid timing. Only about 27% of the units of this type are followed by a pause.

No clear binary distinction between "anticipatory" and "non-anticipatory continuing" contours is actually possible. Rather, continuing contours fall along a continuum from most prototypical to less prototypical in phonetic shape. Therefore, our judgement of which of these contours should be labeled anticipatory and which should not is to some extent arbitrary, at least to the extent that the boundary could equally well be drawn slightly differently. Nonetheless, we feel that a distinction of this sort is warranted, since it calls attention to the fact that speakers rely to varying degrees on intonational cues to give functional signals to their hearers. Figure 7 presents the F_0 trace of a typical example of non-anticipatory continuing intonation. When compared with Figure 6, it is clear that the final rise is on a different scale than that found with anticipatory contours. The arrow points to the beginning of the final syllable [jān]

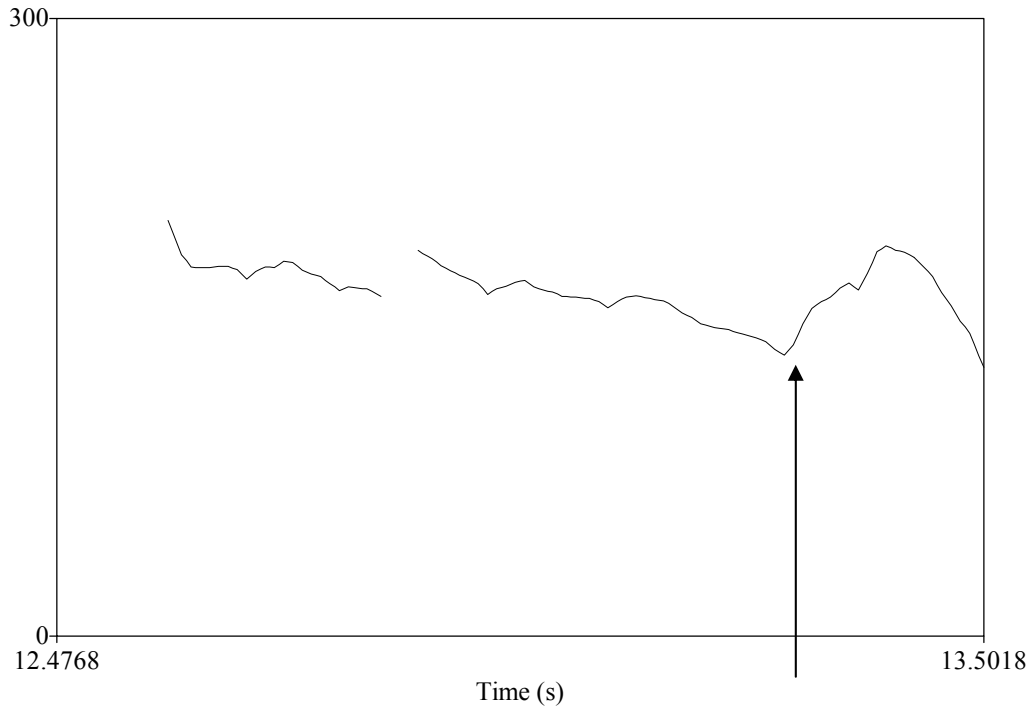


Figure 7. Typical Non-anticipatory Continuing Intonation

Unit #147: *sanatanu ^rājā=n,*

2.3 General discussion

The fundamental final versus continuing distinction is taken as basic in human language by Du Bois et al (1993). The system of intonation types which we have outlined here for Dolakhāe acknowledges this basic dichotomy, recognizing that various subtypes all fall into one or the other of these two primary categories.

It may be further noted that we consider prototypical final and anticipatory continuing types to represent the most prototypical instantiations of these two basic categories. The fact that they are the most frequently occurring types may be taken as further evidence for this privileged status.

There is some asymmetry, however, in the internal composition of these two basic categories. The subtypes of final intonation differ from one another not in degree, but in pattern type; narrative, interrogative and exclamatory finals have significantly different contour shapes than those found on prototypical finals. On the other hand, many non-prototypical continuing tokens differ from the prototypical continuing type not so much in contour shape, but only in degree (amount of the final rise in pitch). Our "non-anticipatory continuing" category includes continuing contours which resemble, but do not **strongly** resemble, the central continuing type; there is no analogous category for contours which resemble the prototypical final type, but do not strongly resemble it.

This asymmetry suggests that final and continuing intonation types differ with respect to how nearly a contour must approximate a prototypical pattern in order to be judged a member of either category. For continuing contours, the resemblance may be weak; wide variation in phonetic shape is allowed. Final contours, however, may not deviate much from their prototypical patterns. This suggests that continuing intonation may be viewed as the default type. When a speaker wishes to indicate finality, this must be done with a contour which strongly resembles some final type; if a strong enough resemblance is not achieved, the contour will be interpreted as continuing.

3. Background on Dolakhāe syntax

This section provides a brief sketch of the core areas of Dolakhāe syntax that will be necessary for a full understanding of the analysis presented. Brief discussions of the noun phrase, word order, the verbal complex, and complex sentences are included. Readers interested in more detail may refer to Genetti (1994a). Example numbers are given in parentheses; numbers before each line reference the prosodic unit numbering of the text.

3.1 The noun phrase

The noun phrase consists of a head noun, preceded by genitive, adjectival or relative clause dependents. The noun may have an enclitic casemarker, and may be followed by particles of emphasis or contrast. In some instances, dependents of head nouns are postposed to the end of a sentence.

3.2 Word order

Like all languages of Nepāl, Dolakhāe has verb-final word order. Preverbal arguments, oblique NPs, adverbials, and other elements may occur in any order in narrative discourse. This ordering is determined at least in part by pragmatic considerations. It is possible to postpose elements after the verb; this appears to be a position of marked focus in Dolakhāe.

3.3 The verbal complex

The verbal complex consists of the main verb and verbal auxiliaries. Verbal auxiliaries follow the main verb and carry the finite inflection of the clause. The main verb is either in infinitive or participial form, depending on the auxiliary. All auxiliary verbs can function as lexical verbs in their own right. The five primary verbal auxiliaries in the current narrative and the morphological forms of the main verbs which precede them are as follows:

(1)	Stem	Lexical Meaning	Grammatical Function	Form
	<i>tar-</i>	'put'	perfect	participle
	<i>don-</i>	'finish'	perfect	participle
	<i>con-</i>	'sit'	progressive	participle
	<i>bir-</i>	'give'	benefactive	participle
	<i>mal-</i>	'need'	necessity	infinitive ⁸

The structure of the verbal complex is further complicated when verbs are borrowed from Nepali. Intransitive Nepali verbs contain the Nepali stem suffixed with *-ai* and followed by the Dolakhāe verb *jur-* 'happen, become'. To import transitive verbs from Nepali, the Nepali verb is left in stem form and followed by the verb *yet-* 'do'. In the latter case the verb *yet-* 'do' is generally reduced in a phonological fusion with the stem.

The combination of the strategy for borrowing verbs with the verbal auxiliaries results at times in quite long string of verbs that form a single predicate:

(2)

319. .. *siliᅅga risi=e sarāp par-ai ju-en coᅅ-an ^li* ;
 ... Siliᅅga Risi=GEN curse befall-PR be-PART stay-PART after
 'After he had fallen under the curse of Siliᅅga Risi,'

(3)

11. ... *ale kho ^pā:r tār-ai ju-i maldan-a hā gangā* .
 ... then river across ferry-PR happen-INF must-3sPST EVID Gangā
 'Then he needed to cross the Ganges river'

3.4 Complex sentences

Multi-clausal sentences are extremely common in Dolakhāe. The final clause of a syntactic sentence can be unambiguously identified since its verb will carry finite inflection. Non-final clauses will be non-finite, with the exception of clauses embedded within direct quotes. There are several types of non-final clauses.

3.4.1 Adverbial subordinate clauses

An adverbial subordinate clause carries a suffix which contains specific semantic information regarding the relationship of the adverbial clause to the following one. The most common subordinators found in the current narrative are *-li* 'after' (designating

⁸ It is not clear whether this verb should be treated as an auxiliary or as a main verb with a complement. This issue awaits further study of the details of the verbal complex.

temporal sequence) (22, 60), and *-ṅa(sin)* 'when' (designating either temporal sequence or temporal overlap) (67, 101).

3.4.2 The participial construction

The participial construction consists of one or more non-finite, dependent clauses obligatorily followed by a clause which is either finite, or which carries morphology which places the entire clause in one of several syntactic relationships with the surrounding material. The construction is called participial following historical trends in Newar linguistics; it is more accurate to analyze it as a converb (Genetti to appear). Participial clauses can occur in sequence and can co-occur with other types of clause linkage, resulting in long syntactic sentences of considerable complexity. Participial verbs carry a suffix glossed PART, which appears as *-an* or *-en*, and may have an additional suffix *-i/-e* (52, 79, 82).

3.4.3 Direct quotation

Direct quotation is used frequently in Dolakhāe narrative and conversation. To aid the reader in identifying direct quotation in the current text, all direct quotes have been printed in bold. Direct quotes have all the features of complete, independent sentences, but are embedded objects within a larger transitive clause which contains a quotative verb.⁹ Often *haṅ-an*, the participial form of the verb *hat-* 'say', is used as a complementizer, as in the following example:

(4)

244. ... [^]*bisma=ta tu* ,
... Bhīṣma=DAT EMPH

245. ... [^]*chin tu yer-i mal-a u rāje* ,
... 2sERG EMPH do-INF must-3sPST this kingdom

246. [^]*chin tu yer-i mal-a u rāje* ,
2sERG EMPH do-INF must-3sPST this kingdom

247. *haṅ-an hat-ṅa[^]sin: ;*
say-PART say-when

'When they said to Bhīṣma "You are the one who must rule this kingdom. You are the one who must rule this kingdom."'

⁹ The transitivity of the clause may be established by the requirement for subjects to be in the ergative case, and by the transitive form of the third-person singular past verb form, *-cu*.

However, *haŋ-an* may also be used as a main verb in a clause chain. The following case illustrates this, where *haŋ-an* in prosodic unit 194 is the only quotative predicate:

(5)

193. ... *upen bāla-ku ^tālna mo-sō jeu* .
 ... 3PL good-NR2 behavior NEG-see maybe

194. ... *haŋ-an* ,
 ... say-PART

195. *thau=e janma-en ta-e kae=n nis-^mā=n* ;
 REFL=GEN be.born-PART put-NR2 son=ERG two-CL=ERG

196. .. *^saŋkā yet-cu* .
 .. suspect do-3sPST
 '(They) said, "Maybe they are not observing proper behavior." Her own two sons whom she had given birth to, suspected her.'

One result of the complex interweaving of the basic storyline with direct quotations is a complex syntactic structure, as quotatives (which themselves may be syntactically complex) are embedded as object complements within transitive clauses. In Dolakhāe, the degree of complexity achieved by this strategy is remarkable, as entire conversations can be embedded within one well-formed syntactic "sentence". Indeed, the amount of embedded material can be so extreme that one wonders about the utility of considering such structures to be single syntactic sentences at all.

To start to explore this issue, we will consider a quite simple example, where the issue of syntactic sentencehood is relatively uncontroversial. For convenience, clause-final verbs are underlined.

(6)

19. ... (1.9) *māji=n ^lau ō!*
 ... ferryman=ERG EXCL go(IMP)

20. ... *ota pa^rāsar risi=ta* ,
 ... 3sDAT Parāsār Risi=DAT

21. *kho tār yeŋ-an ^bi-u hat-cu hã* .
 river ferry do-PART give-IMP say-3sPST EVID
 'The ferryman said "Lau, go! Ferry Parāsār Risi across the river."'

The verbal complex of the second embedded clause is complex. The first verb is the transitive verb 'to ferry', borrowed from Nepali *tarṇu* so followed by the Dolakhae verb *yet-* 'do'. The verb *biu* 'give' is functioning as an auxiliary and allows the presence of the benefactive object, *parāsar risi*. Syntactically, this can be seen as a simple SOV sentence: the subject in the ergative case begins the sentence, this is followed by an object complement consisting of two well-formed sentences, both in the imperative mood, and the non-embedded finite verb comes at the end. Note that both the subject of the sentence and the quotative verb are not put in separate prosodic units from portions of the quoted material. This implies a tight relationship between the subject and the verb, which are part of the backbone of the narrative, and the direct quote which both elaborates and advances the narrative structure. Also note that the subject and verb create a syntactic unit which frames the direct quote. This frame aids in the transitions between the external level of the main-line narrative and the internal level of the lives of the story's characters. In this narrative, all direct quotes are followed by a quotative verb; thus hearers may await the quotative verb as a cue to process the shift back to the main line.

An alternative syntactic analysis would be one which put a sentence break at the end of each finite verb within the direct quote. Then the quotative verb *hat-cu hã* would necessarily be put into a sentence by itself. In addition, the subject *māji=n* would be stranded, since it would be put into a syntactic unit where it holds no grammatical relationship with a verb.

While this analysis may seem unmotivated when one considers a simple example, such as (6), more complex examples, such as (7), may call into question the syntactic unity of stretches with extensive embedded quotation. In particular, one may wonder whether units like (7) are pre-planned (as a unified syntactic structure may suggest). This example is the longest sentence in the narrative, consisting of nineteen prosodic units:

(7)

242. .. *dokhuseṇ* ;
.. all

243. *sabhā jur-ṅasin* ;
meeting happen-when

244. ... [^]*bisma=ta tu* ,
... Bhīṣma=DAT EMPH

245. ... [^]*chin tu yer-i mal-a u rāje* ,
... 2sERG EMPH do-INF must-3sPST this kingdom

246. [^]*chin tu yer-i mal-a u rāje* ,
2sERG EMPH do-INF must-3sPST this kingdom

247. *haṅ-an hat-ṅa[^]sin:* ;
say-PART say-when
248. ... *[^]ji yā:* !
... 1s EMPH
249. .. *pari[^]wār niyojan ju-i doṅ-gu mi* |
.. family planning happen-INF finish-NR1 man
250. .. *[^]tyāgi barta=n jin:* .. *[^]ma-yet-ki.*
.. denial fast=INST 1sERG .. NEG-do-1sNONFUT
251. ... *u rāje janta mā=ṅ [^]māl!*
... this kingdom 1sDAT need-EMPH (NEG)need
252. *gaddi=ku co=ṅ [^]mo-con-gi.*
throne=LOC stay=EMPH NEG-stay-1sNONFUT
253. ... *haṅ-a-lāgin* ;
... say-NR2-because
254. *āu [^]hāti yer-i=uri le!*
now what do-1FUT=TOP PRTCL
255. ... *hat-ṅasin* ,
... say-when
256. *[^]e:* |
EXCL
257. ...(1.19) *[^]hātiṅ [^]āpat par-ai jur-sa* ,
... anything trouble befall-PR happen-if
258. *ji samj-ai jur-sin [^]nā [^]mā:* !
1s remember-PR be-IMP PRTCL mother
259. ... *haṅ-an* ,
... say-PART

260. *^byāsji=n haṇ-an ta-u.*
Byāsji=ERG say-PART put-3sPH

'When they all had a meeting, they said to Bhīṣma "You are the one who must rule this kingdom. You are the one who must rule this kingdom". When they said that he replied "As for me, I am a man who has had a vasectomy. Because of [my committment to] self-denial and fasting, I will not do it. I do not need this kingdom. I won't sit on the throne at all". Because he said that, they said "Now what to do?" and when they said that, [Satyawati remembered that] Byās had said "Hey, if any trouble befalls you, remember me, mother."'

We consider this syntactic unit to be a single syntactic sentence since it has only one finite verb which is not embedded within a direct quote. Following a subordinate clause, this unit contains four direct quotes, three of which are internally complex. First the people of the country address Bhīṣma, then Bhīṣma replies, then the people wonder what to do, then Byās's earlier speech to his mother is referred to. The whole thing strikes a native English speaker as being rather long and unwieldy, and in consideration of speaker-processing issues, one may be strongly tempted to subdivide this into shorter sentences, each ending with the finite verb at the end of a direct quote (or even at the end of each sentence within a direct quote). Thus, for example lines 251-255 could be reanalyzed as follows:

(8)

251. ... *u rāje janta mā=ṅ ^māl!*
... this kingdom 1sDAT need-EMPH (NEG)need
"I don't need this kingdom!"

252. *gaddi=ku co=ṅ ^mo-con-gi.*
throne=LOC stay=EMPH NEG-stay-1sNONFUT
"I won't sit on the throne."

253. ... *haṇ-a-lāgin;*
... say-NR2-because

254. *āu ^hāti yer-i=uri le!*
now what do-1FUT=TOP PRCL
'Because he said this, the people said, "Now what to do?"'

255. ... *hat-ṅasin,*
... say-when
'When they said this...'

There are problems with this type of analysis. To begin with, it is common for quotative verbs to follow the complementizer *haŋ-an*. The proposed reanalysis would put a sentence break between the complementizer and its complement, rendering the syntactic status and function of the complementizer unclear. Second, this would sometimes serve to strand arguments of the quotative verb by putting them in units in which they play no part, for example line 244 contains a dative noun phrase which is an object of *hat-ŋasin* in 247. A third problem would be the status of the now sentence-initial non-finite quotative verbs, such as *haŋ-a-lāgin* in 253. Examples of this sort never occur with any nominal or deictic reference to the quoted material, a gap which has no explanation if these are really separate clauses. Also, in this analysis these appear to have the character of recapitulation, but rather than repeating the previous predication, they use a separate verb, something not found in recapitulation otherwise.

All of these problems are avoided if one identifies the syntactic sentence as a coherent syntactic unit ending in a non-embedded finite verb. Nevertheless, we would like to suggest that sentences, even though they are single syntactic units, are not necessarily pre-planned. Instead, the syntax of the language is structured in such a way as to allow the speaker a considerable degree of "on-line" flexibility in deciding when to close the sentence off; indeed, the speaker has this option at every non-embedded verb. This in turn results in flexibility in the amount of content to be packaged within a single sentence. In the example given, a solution to a conflict is proposed in the first quotation, but is dashed in the second. The third quotation repeats the hopelessness of the situation, while the fourth points the way to the actual solution. Since the syntax of the language is able to incorporate through embedding the entire array of syntactic structures, the speaker can in this way use the sentence as a significant unit in structuring the discourse. The study of the range of discourse functions held by sentences is unfortunately beyond the scope of the present paper (but cf. Chafe 1980, 1987, 1994).

4. Correlations between prosodic and syntactic units

We begin this section by noting that the correspondence between intonation and syntax is neither obligatory nor unique. This point has been made by t'Hart--Collier--Cohen-(1990: 100), commenting on the ability of intonation to disambiguate sentences with identical strings of words:

However, with regard to such a demonstrable relation between syntax and intonation, we want to emphasize two points: first, the observable correspondence is not obligatory; and second, there are no melodic features that are uniquely and exclusively used for the purpose of marking aspects of syntactic structure.

We agree with these points and have found them to be true in our research. However, the non-obligatory nature of the correspondence between intonation and syntax makes attested correlations even more interesting; syntax/prosody interactions are the

result of speaker choice during the structuring and production of discourse. The fact that correlations exist shows that speakers use prosody functionally.¹⁰

To identify the correlations between syntax and intonation type, each prosodic unit was classified based on its syntactic content. Clausal units contain a clause-final verb.¹¹ These were additionally subclassified depending on whether the verb was finite or non-finite.¹² Other syntactic types include NPs, adverbials, nominal modifiers, and vocatives. In addition, we have posited an "other" category for exclamations (e.g. *oho* 'oh!'), non-lexical utterances (e.g. *m:*), hesitations, and two elements whose syntactic status is unclear.

In some cases, prosodic units contain more than one type of syntactic content, for instance, a prosodic unit might contain an adverbial followed by an NP, or a clause followed by a vocative in the beginning of a direct quote. For the purpose of determining numerical correlations between content and prosodic types, we categorized such units by the type of the final syntactic element they contained. There were two reasons for this. First, transitional continuity, the strongest cue used for classification of intonation type in this study, by definition occurs at the end of the unit, hence overlays the syntactic constituent which comes last. Second, intonation is partly cataphoric, in that it marks the unit in relation to what follows. In cases of more than one syntactic element in a prosodic unit, it is generally the final syntactic element which holds the strongest structural relation to the material which follows, hence an intonation contour applies to the final element, and not to what precedes. The issue of prosodic units with complex syntax is further discussed in section 4.2.

4.1 Correlations between syntactic content and intonation type

4.1.1 Clausal prosodic units

Of the 362 prosodic units in the narrative, 243 are clausal. The correlations between finite and nonfinite clauses and the six intonation types are given in Table 1:¹³

¹⁰ On the other hand, the non-obligatory nature of the relation between syntax and prosody suggests that prosody may not "grammaticalize". Exploration of this point is beyond the scope of the current study.

¹¹ In a few cases, a finite verb was followed by an NP in the same prosodic unit which was an argument of the verb. These cases were also classified as clausal.

¹² We also initially looked at subtypes of nonfinite clauses, e.g. clause chains, subordinate clauses with *-li* 'after', and other types of subordinate clauses. We found no distinct prosodic patterns correlating with these distinctions, hence do not present that data here.

¹³ The two truncations were not categorized syntactically, and are not included in the tables.

\Intonation Type	Finite	Nonfinite
Prototypical final	91	0
Narrative final	14	1
Interrogative final	1	0
Exclamatory final	10	0
Anticipatory continuing	12	61
Other continuing	14	37
Other	2	0
Total	144	99

Table1. Correlations between intonation type
and clausal prosodic units

The striking result shown in this table is the very strong correlation between the final intonation types (prototypical, narrative, interrogative, and exclamatory) and finite clauses. Of the 117 clausal uses of the final intonation types, only one was used with a non-finite verb (prosodic unit 25; see annotations for further discussion). The continuing intonation types are found with both finite and non-finite clauses; roughly 22% are found with finite clauses, and 78% are with non-finite clauses. Thus the overwhelming pattern is for final intonation to co-occur with finite (hence final) verbs and continuing intonation to co-occur with non-finite verbs; the speaker uses prosody together with syntax to indicate whether a sentence is ending, or will continue.

The twenty-six cases of anticipatory and other continuing intonation with finite verbs are quite interesting. They are discussed in the annotations, but two general patterns can be mentioned here. Sometimes finite clauses with parallel structure and content are placed into a list, and are marked as such prosodically by the mismatch between finite clause and continuing intonation. An example is given in (9). Here Satyawati is telling Byās of the deaths in her family. Interestingly, the speaker repeats the statements with proper nouns as opposed to kin terms; both times she uses list intonation with the first finite clause:

(9)

266. .. *chana bā* [^]*sit-a* ;
.. 2sGEN father die-3sPST

267. *kñja-pen=uj* [^]*sit-a* .
brother-PL=EMPH die-3sPST

268. .. *rājā* [^]*sanatanu=ŋ* *sit-a* ;
 .. king Śanatanu=EMPH die-3sPST
269. ... *ci[^]trāṅga bici[^]trāṅga haṅ-a* *kae=uṅ* [^]*sit-a* .
 ... Citrāṅga bicitrāṅga say-NR2 son=TOP die-3sPST
 'Your father died, your brothers died. King Śanatanu died, Citrāṅga and
 Bicitrāṅga died.'

A second pattern that gives rise to continuing intonation co-occurring with finite verbs is found in examples where the finite clause stands in a causal relationship with the following clause. It is interesting that in these examples the speaker chose not to use an explicitly causal subordinating conjunction. In each case this structure is found in embedded quotation when the interlocutors are in a heated discussion. Our impression is that the use of the finite verb form strengthens the clause as an independent assertion, and that the prosody then takes on the role of indicating interclausal relations (cf. Fox 1994, Chafe 1988). An example is the following:

(10)

135. *sampati* [^]*ma-da* ,
 wealth NEG-have
136. *jin* [^]*m:a-bi-gi* *chana* *bā=ta* .
 1sERG NEG-give-1s 2sGEN father=DAT
 "'She will have no wealth; I will not give her to your father.'"

In this example, Makche Ganda's father is refusing to give her in marriage to King Śanatanu, since he is worried that Bhīṣma as crown prince will leave her penniless after the death of the king. The use of the full finite verb in 135 implies that the fact that she will be destitute is uncontroversial. The continuing intonation, on the other hand, marks the sentence as non-final and prepares the listener for the concluding remark.

4.1.2 Non-clausal prosodic units

Table 2 presents the correlations between intonation type and non-clausal prosodic units. //

Intonation Type	NP	Modifier	Vocative	Advl.	Other	Total
Prototypical final	8	2	0	0	0	10
Narrative final	0	1	0	0	3	4
Interrogative final	0	0	0	0	2	2
Exclamatory final	2	0	8	0	5	15
Anticipatory con.	28	3	0	1	0	32
Other continuing	30	3	0	8	3	44
Other	2	0	0	1	7	10
Totals	70	9	8	10	20	117

Table 2. Correlations between intonation type and non-clausal prosodic units

Restricting our attention initially to the three syntactic categories with lexical content (NPs, modifiers and adverbials), we notice again an overwhelming tendency for the continuing intonation types to be used; only 13 of the 89 prosodic units which contain these categories are pronounced with one of the final intonation types. Thus, as with the clausal prosodic units, we find very strong correlations between syntactic units that are non-final and intonation that is non-final. The twelve examples that go against the basic pattern are interesting and are discussed in the annotations, and briefly in section 5.

All eight examples of vocatives are pronounced with exclamatory intonation. The only term of address with exclamatory intonation which is not syntactically vocative is *nokari* 'servant' in line 294. Here it appears that the speaker originally planned to make this vocative, but then decided instead to convert it to a genitive modifier of an NP.

Turning to the non-clausal prosodic units that do not carry lexical content, it is interesting to note that the two most common intonation types, prototypical final and anticipatory continuing, are not used at all. Exclamations like *oho* and *lau* were produced with either narrative final or exclamatory intonation. Non-lexical utterances such as *m*:¹⁴ were not pronounced with any of the six distinct types of intonation, and were intonationally classified as "other". In two examples at the beginning of the text (prosodic units 5 and 6), the speaker uses utterances with low-content lexical items as she hesitates and contemplates how best to begin. Both are pronounced with continuing intonation.

¹⁴ These utterances do not appear to be "pause fillers", because they seem purposeful and seem somehow to indicate speaker attitude about the events unfolding in the narrative.

4.2 Prosodic units that contain more than one syntactic type

Of the 362 prosodic units in the narrative, only 43, or about 12%, contain elements from more than one syntactic unit. There are several clear patterns that fall into this category.

The most common type of syntactically-complex prosodic unit is one which contains the end of a direct quote, followed by either the complementizer *haṅan*, or the quotative verb, or both. There were twelve such examples in the narrative. An example of this type is the following:

(11)

264. *hāī* [^]*āpat* *par-ai* *jur-a* *hat-ṅasin* ,
what trouble befall-PR be-3sPST say-when
"Mother, what trouble has befallen you?" And when he said this,'

In such cases, the quotative verb is commonly pronounced with reduced amplitude.

A second, complementary, pattern is one which contains elements of a quotative main clause followed by the beginning of a quotation. Interestingly, all 8 examples of this type were pronounced with exclamatory intonation. In most of the examples the quoted material was either a vocative or an exclamation, as in the following:

(12)

65. ... [^]*āmun* *haṅ-an* *ta-u* *ki* [^]*bā* !
... 3sERG say-PART put-3PH that father
'He had said "Father!"'

But in three examples, the quoted material contained a short clause with exclamatory final intonation, as in the following:

(13)

137. ... *hat-ṅa* [^]*ma-[^]khe* !
... say-when NEG-be
'When he said that [Bhīṣma] said "It must not be!"'

This appears to be a set construction type.

A third pattern puts two clauses into a single prosodic unit if the first clause is marked as purposive, and the second clause consists only of the verb 'go'. An example is:

(14)

100. *asnān* [^]*yet-da* *on-a* .
bathe do-IP go-3sPST
'(He) went to bathe.'

There were five examples of this type in the database. The fact that the sequence "go to X" is always contained within the same prosodic unit suggests that this construction has grammaticalized, and that the two verbs should be considered to be part of a single verbal complex with andative meaning. Note that no other adverbial subordinate clause occurred in a single prosodic unit with a main verb.

The fourth pattern involves clause-chaining constructions, specifically those which consist of chained verbs with no intervening arguments or adjuncts. In such cases it is often difficult to discern the location of clause boundaries. Three of the ambiguous examples contained the sequence *bihā yeŋ-an hār-* 'to marry and bring (into one's home)'. The other two had the sequence *oŋ-an con-* 'to go and stay'. Both cases could be analyzed as serial verb constructions with each verb denoting different aspects of what is conceived to be a single event. An interesting aspect of this analysis is that *con-* generally codes the progressive when it occurs with other verbs in the verbal complex. Here, however, it is clearly not progressive, but retains its lexical meaning of 'stay' or 'reside'. The sequences *bihā yeŋ-an hār-* 'to marry and bring' and *oŋ-an con-* 'to go and stay' are the only examples in the narrative where two non-grammaticalized verbs occur in a chain with no intervening elements. This suggests that verbs do not occur freely in this construction, and that these sequences are at least partially lexicalized.

Of the 43 examples of syntactically-complex prosodic units, 30 of them may be classified as following one of these four patterns. The remaining 13 are of diverse types; they are discussed in the annotations. The prosodic unit which contained the most syntactic material is the following, a single sentence composed of three distinct clauses in a chaining structure:

(15)

286. .. *ji yā* [^]*chāi* *yeŋ-an* *bālaske* *wāsti* *phi-en*
 .. 1s EMPH makeup do-PART beautiful clothes put.on-PART

tuŋ [^]*ũ-ĩ* |
 EMPH go-1FUT

"I shall put on makeup and fine clothes and go,"

4.3 Other observations

We will mention here two other interesting observations. One is that both the exclamatory final and the narrative final intonation types occur overwhelmingly in quoted material, as 43 of the 44 instances of these types are found in quotes. It seems as if the speaker is using these intonation patterns to imitate conversational patterns of intonation.

The second observation is that while there are a number of clauses in the narrative which are questions syntactically, only the two tag questions (which occur at each end of the narrative) receive interrogative intonation. Since the speaker manipulates her intonation patterns to approximate conversational intonation in the production of direct quotes, this suggests that interrogative intonation may not be as pervasively used with

syntactic questions as is common in some languages. Genetti's informal observations confirm this; formal confirmation awaits a study of Dolakhāe conversational interaction.

4.4 Summary

The strongest syntax/prosody correlation which is found in this narrative is that between final intonation and finite verb morphology. Only one clausal unit has final intonation but non-finite morphology. Continuing intonation occurs more commonly with non-finite clauses than with finite clauses (at a ratio of about 4:1). When finite clauses are pronounced with continuing intonation, the speaker is signalling prosodically that more material is coming, and that the speaker has not yet reached a point of completion.

Turning to the non-clausal units, the strongest correlation is between vocatives and exclamatory intonation. Prosodic units that contain noun phrases, adverbials or modifiers are generally pronounced with continuing intonation. This is expected, since all of these categories generally precede the verb. In a few cases, noun phrases and vocatives are pronounced with final intonation. In such cases, the speaker is using prosody to signal finality, hence that these elements are not part of a clause that has yet to be produced.

Both the occurrence of finite clauses with continuing intonation and the occurrence of noun phrases or modifiers with final intonation confirm the independence of prosodic and syntactic structure. While syntactic structure has constituted one of the primary focuses of linguistic research, little is known about the nature of prosodic structure. Our study suggests that prosodic units combine to form larger structures; we follow Chafe (1994) in labelling these units **prosodic sentences**. We turn now to an exploration of such units, and their interaction with syntactic sentences.

5. Discussion: Syntactic and prosodic sentences

We will define a prosodic sentence as a prosodic macro-unit optionally containing any number of prosodic units with continuing intonation, and necessarily ending in a prosodic unit with final intonation (compare Hargreaves' "continuity sequence" (1986: 193)).¹⁵ The most common type of prosodic sentence in the narrative has multiple prosodic units that follow exactly this intonational pattern. The following examples are illustrative:

(16)

7. .. *pussata* [^]*mahinā=e* ;
.. Pussata month=GEN

8. .. *barta* [^]*con-ḡasin:* ;
.. fast stay-when

15. Although we say "necessarily ending" we recognize that when speakers produce natural discourse they may abandon a prosodic sentence prior to completion, just as they may choose not to complete a syntactic sentence.

9. ...*(2.12)* *ith-- ^tirtha ũ-i-ta oᅇ-gu parāsar risi .*
 ... FS pilgrimage go-INF-IP go-PH Parāśar Risi
 'When he was observing the fast of the month of Pussata, Parāśar Risi went to go on a pilgrimage.'

(17)

275. ... *byāsji ye-i doᅇ-an ^li: ;*
 ... Byāsji come-INF finish-PART after
276. ... *lau mā hat-ᅇa^sin: ;*
 ... Hello mother say-when
277. ... *āle ^thi-mā ,*
 ... then one-CL
278. *ᅇwā-ku=^ri iri on-a .*
 senior-NR1=TOP daughter.in.law go-3sPST
 'Byāsji having come, when he said "Lau, mother!" then the eldest daughter-in-law went.'

(18)

298. ... *bi^du:r ;*
 ... Bidur
299. ... *paᅇ^ᅇu:k ;*
 ... Paᅇᅇuk
300. ... *^ᅇhirtarāᅇtra .*
 ... ᅇhirtarāᅇtra
 'Bidur, Paᅇᅇuk, ᅇhirtarāᅇtra. '

One may be tempted to equate non-final prosodic units to non-final clauses in syntactic sentences. While non-final clauses are almost universally pronounced with continuing intonation, hence constitute non-final prosodic units, the opposite correlation does not hold. That is, non-final prosodic units may contain many more types of syntactic content than the clause. Hence the parallelism between the two categories breaks down.

It is interesting to note that prosodic sentences may have internal complexity similar to that found in syntactic sentences. In particular, prosodic sentences may be

embedded within prosodic sentences (contra Fox 1994; but see Du Bois et al 1993). An example is the following:

(19)

218. ... *bisma=ta* *nyen-ŋasin* ;
... Bhīṣma=DAT ask-when

219. *^e* |
EXCL

220. ... *^kā:si* *oŋ-an* ,
... Kāśi go-PART

221. *^jal-ai* *jur-sa* *jukun* ,
burn-PR happen-if only

222. *u* *pāp* *kaṭaun-ai* *jur-^a* !
this sin cut-PR be-3sPST

223. ... *hat-cu* .
... say-3sPST
'When they asked Bhīṣma, [he] said "E! Only if you go to Kāśi and [die by] burning will this sin be cut from you."'

The prosodic unit in line 218 is the first unit in this prosodic sentence (line 217 has final intonation). It is pronounced with anticipatory continuing intonation, so is non-final. This unit is immediately followed by lines 219-222, all of which constitute a direct quote. This quote has its own prosodic structure. Line 219 is an exclamation pronounced with narrative final intonation, and so is a full prosodic sentence. Lines 220 through 222 constitute yet another prosodic sentence, this time with the prototypical pattern of a series of continuing units followed by a final. We would like to argue that the prosodic sentence opened in line 218 does not conclude with the adjacent unit which has final intonation in line 219, nor with the next prosodic sentence ending in line 222, but instead ends in line 223.

When the speaker produces a direct quote, she shifts from relating a sequence of events of the main-line narrative to mimicking the speech of the narrative's characters. The storyteller uses a number of means to make this shift convincing, including the use of exclamations, shifts in deixis and context, adjustment of morphosyntactic marking, changes in amplitude, and in the production of intonation patterns that would be appropriate in the speech context being mimicked. When such shifts are made, the main-line narrative is in essence suspended until the end of the quoted material. Hargreaves refers to such sequences as "displacement sets" (1986: 193) indicating displacement from

the primary event sequence. The main line is re-established by the production of a quotative verb (and optionally a complementizer).

Returning to example (19), in line 219 the speaker signals a shift to the quotative mode, and so suspends the prosodic unit begun in line 218. We believe that hearers are able to interpret such shifts by using their knowledge of syntax, narrative style, context, etc., and thus will not interpret lines 218 and 219 as constituting a prosodic sentence, just as they would not consider line 218 to be a clause of the syntactic sentence ending in line 222. Instead, the prosodic unit opened in line 218 remains unfinished (as does the syntactic unit that it simultaneously opens). Likewise, speakers are aware that the prosodic sentence begun in 218 does not conclude with the unit in line 222, even though it also has final intonation (and a finite verb); hearers await the shift back to the main-line narrative, which is signaled by the presence of a quotative verb. The unit in line 223 both accomplishes this shift and ends the sentence at the prosodic and syntactic levels. Thus we claim that both syntactic structure and discourse context will influence the interpretation of prosodic structure.¹⁶

Not surprisingly, it is also possible for prosodic structure to influence the interpretation of syntax. For example, continuing intonation realized on a finite clause may function as a subordinator (as in example 10 above). Final intonation produced on a unit which contains a simple noun phrase can have the opposite effect, and assert the finality of a syntactic unit which normally is non-final (see below).

Thus, speakers weave prosodic and syntactic sentences in their production of narratives. The units traditionally referred to as "sentences" we will call **narrative sentences** for purposes of disambiguation. The function of narrative sentences is beyond the scope of the current paper, but it seems probable that something similar to what Chafe (1994) defines as a **center of interest** will prove to be relevant. In any event, in the production of narrative, speakers are able to decide where to end one narrative sentence and begin another. Such boundaries are signaled by the convergence of finality at the syntactic and prosodic levels. Similar conclusions have also been reached by Chafe (1994) and by Ford and Thompson (1996). The latter study, based on natural English conversation, found that turn taking generally occurred at positions where final prosody and final syntax co-occurred. Thus hearers also recognize that such cues indicate the completion of significant units.

We noted in 2.3 that final intonation contour types do not seem to allow wide variation in phonetic form. This may be partially due to the importance of intonational finality as one signal of larger discourse boundaries. The range of intonational signals a speaker uses to convey such crucial information is limited, so that each production of final intonation is unambiguous and distinct. This results in the appearance of highly distinct categories that do not allow for wide variation.

17. Hargreaves (1986) presents a similar analysis of the interaction of syntax and prosody in the embedding of quoted material, although it concerns Kathmandu Newār and is framed in different analytical terms.

70 of the 82 narrative sentence breaks had both final intonation and a finite verb at the level of the main-line narrative. The remaining 12 examples can be divided into two groups. One group consists of four sentences which have idiosyncratic properties. Sentence 1 included a postposed modifier that directly followed a finite verb with final intonation and no intervening pause. The postposed modifier is thus added to the end of the sentence, and has the same final intonation, still closing it off. Sentence 3 was essentially abandoned while the speaker was trying to figure out what to say next. Sentence 4 included only low-content lexical material that functioned to hold the floor while the speaker decided what to say. And in one example (sentence 79), final intonation occurs on a locative NP that is a constituent of the previous non-finite clause. This is followed by a long pause and a full reset of pitch and tempo in the beginning of the next line. Thus the prosodic treatment clearly indicates a major break, even though the speaker did not produce final syntax. It is interesting that all four of these anomalous examples occur at the beginning and the end of the narrative. It seems likely that in these cases, the speaker was working out how to smoothly begin and end the narrative.

The remaining eight cases where final prosody does not occur with a finite verb in the main-line narrative, but still suggests narrative sentence finality, all have either single NPs or nominal modifiers as the only element in the prosodic unit. All eight examples serve either to focus on a newly-introduced and important character in the narrative (lines 55, 92, 300, 357), or to clarify or reiterate the identity of a referent (144, 145, 152, 241). These discourse functions do not require a predicate. Instead, the combination of context, NP syntax and final intonation are sufficient to convey these functions.

6. Conclusions

We have identified six distinct types of intonation in the Dolakhāe narrative. These six types fall into two groups of final versus continuing. The primary correlations between intonation and syntax are: (1) the final intonation types do not co-occur with non-final clauses; (2) the continuing intonation types generally co-occur with non-final clauses, modifiers, adverbials and noun phrases; (3) vocatives are always pronounced with exclamatory intonation; (4) the narrative final and exclamatory types are almost always found co-occurring with direct quotes.

We have suggested that prosodic units combine to form more complex units which we have called prosodic sentences. Prosodic sentences may be complex, and involve embedding. Prosodic and syntactic sentences are complementary tools at the speaker's disposal in the production of discourse, and interact in interesting ways (as exemplified in the annotations given in Appendix IV). By producing final syntax simultaneously with final prosody, the speaker signals that she has reached the end of a narrative sentence. Other strategies also exist and are dependent on functional considerations. Syntax and prosody crucially interact to code semantic content and discourse function in the production of narrative.

Appendix I. Transcription Conventions and Abbreviations

A. Symbols

Prosodic Unit Transitional Continuity

Final Types

Prototypical Final	.	<i>period</i>
Interrogative Final	?	<i>question mark</i>
Narrative Final		<i>vertical pipe</i>
Exclamatory Final	!	<i>exclamation mark</i>

Continuing Types

Anticipatory Continuing	;	<i>semi-colon</i>
Non-anticipatory Continuing	,	<i>comma</i>

Other Types

Other	/	<i>front slash</i>
Truncated	--	<i>two dashes</i>

Timing

Lengthened Syllable or Segment	:	<i>colon</i>
Extra Long Syllable or Segment	::	<i>multiple colons</i>

Pauses

Short (less than .3 sec.)	..	<i>two periods</i>
Medium	...	<i>three periods</i>
Long (1.0 sec. or longer)	...(1.6)	<i>three periods & time</i>

Prosodic Accent

^	<i>caret before accented syllable</i>
---	---------------------------------------

Morphological analysis

Affix boundary

- *dash (word-internal)*

Clitic boundary

= *equals sign*

Truncated word

- *dash (word-final)*

B. Other Conventions

Prosodic Unit Boundary

carriage return

Quoted Speech

bolded text

Sentence-final Boundary


blank line

C. Abbreviations

1	first person	2	second person
2H	second person honorific	3	third person
ABL	ablative	ALL	allative
CAUS	causative	CL	classifier
COMP	complementizer	DAT	dative
ERG	ergative	EVID	evidential particle
FP	filled pause	FUT	future
GEN	genitive	HES	hesitation particle
HON	honorific	IMP	imperative
INF	infinitive	INST	instrumental
IP	infinitive of purpose	L	linker
LOC	locative	NEG	negative
NR1	nominalizer/relativizer1	NR2	nominalizer/relativizer2
p	plural	PART	participle
PH	past habitual	PR	present
PROH	prohibitive	PRTCL	particle
PST	past	Q	question particle
REFL	reflexive	s	singular
TOP	topic particle		

Appendix II. Glossed and Translated Text


The sound files for each sentence may be heard by clicking on the speaker icon which is available on the web version of this paper.

Sentence 1 

(1) *pa^rāsar risi ^da-u hã.*
Parāsar Risi have-PH EVID


(2) *^thi-mā.*
one-CL

There was Parāsar Risi, one man.

Sentence 2 


(3) ... *^khe rā?*
... be Q

Yes?

Sentence 3 

(4) ... *āle parāsar ri^si=n;*
... then Parāsar Risi-ERG


Then Parāsar R

Sentence 4 

(5) ...*(1.49) ã i^thi,*
... FP like.this


(6) ...*(1.81) ^hāthi hã,*
... what say

Like this -- What to say ...

Sentence 5 


- (7) .. *pussata* [^]*mahinā=e*;
 .. Pussata month=GEN
- (8) .. *barta* [^]*con-ṅasin*::;
 .. fast stay-when
- (9) ...*(2.12) ith--* [^]*tirtha* *ũ-i-ta* *oṅ-gu* *parāsar risi*.
 ... FS pilgrimage go-INF-IP go-PH Parāsar Risi

When he was observing the fast of the month of Pussata, Parāsar Risi went to go on a pilgrimage.

Sentence 6 


- ... *tirtha* *on-ṅa*[^]*sin*::;
 ... pilgrimage go-when
- (11) ... *ale* *kho* [^]*pā:r* *tār-ai* *ju-i* *maldan-a* *hã* *gaṅgā*.
 ... then river across ferry-PR happen-INF must-3sPST EVID Gangā

When he went on the pilgrimage, then he needed to cross the Ganges river.

Sentence 7 

- (12) ... *gaṅgā* [^]*pār* *tār-ai* *ju-i=ta*;
 ... Gangā across ferry-PR happen-INF-IP
- (13) [^]*māji:=e* *mica*;
 ferryman=GEN daughter
- (14) ... *makche* *ganda* *haṅ-a* *da-u* *hã*.
 ... Makche Ganda say-NR2 exist-3PH EVID

To cross the Ganges river, there was the ferryman's daughter, named Makche Ganda.

Sentence 8 

- (15) ... *da-* *kho* *pār* *tār* [^]*yeṅ-an* *bi-ul*
 ... FS river across ferry do-PART give-IMP

- (16) ... (1.25) *haŋ-an* [^]*māji=ta* *hat-cu* *hã*.
 ... say-PART ferryman=DAT say-3sPST EVID

He told the ferryman "Ferry me across the river".

Sentence 9 

- (17) ... *āle* [^]*māji=ta* *haŋ-an-e*,
 ... then ferryman=DAT say-PART-L


- (18) *māji=e:* *mi^ca-ŋ*,
 ferryman=GEN daughter=EMPH

- (19) ... (1.9) *māji=n* [^]*lau* *ō!*
 ... ferryman=ERG EXCL go(IMP)

- (20) ... *ota* *pa^rāsar risi=ta*,
 ... 3sDAT Parāsar Risi=DAT


- (21) *kho tār yeŋ-an* [^]*bi-u* *hat-cu* *hã*.
 river ferry do-PART give-IMP say-3sPST EVID

Then he having said this to the ferryman, the ferryman said to his daughter "Lau! Go and ferry Parāsar Risi across the river".

Sentence 10 

- (22) ... *āle* *kho tār yeŋ-an* *bi-en* *ũ-i* *doŋ-an* [^]*li*;
 ... then river ferry do-PART give-PART go-INF finish-PART after

- (23) ... *ãku* *ekdam* [^]*bã::lā-ku* *ekdam* *thi-gur* [^]*din* *da-u* *hã*.
 ... there very beauty-NR1 very one-CL day exist-3PH EVID


Sentence 11 

- (24) ... (1.41) *āle* *ãku=lān* [^]*lau!*
 ... then there=ABL EXCL

- (25) ... *chi ho* *ji ā* *dam^pat* *mil-ai* *ju-en*
 ... 2s and 1s TOP husband.wife join-PR happen-PART


- (26) ... *uku riti^dān*;
... here intercourse
- (27) ... *riti^dān: ^phõ-i mal-a hat-cu hã.*
... intercourse ask.for-INF must-3sPST say-3PST EVID

Then there he said "Lau! I must ask that you and I come together as husband and wife and have sex here."

Sentence 12 

- (28) ... *āle riti^dān hat-ḡasin,*
... then intercourse say-when
- (29) *ji ^bālaka*
1s child
- (30) ... *jin ^hāi yer-i-uri riti^dān phoḡ-an,*
... 1sERG what do-INF-TOP intercourse ask.for-PART
- (31) ... *^hat-cu hã.*
... say-3sPST EVID

Then when he said "sex", she said "I am a young child. What shall I do, now that you have asked for sex?"

Sentence 13 

- (32) ... *āle janta ek^dam ^saram lag-ai jur-al*
... then 1sDAT very modesty touch-PR happen-3sPST
- (33) ... *janta ^hāi yer-i/*
... 1sDAT what do-1FUT
- (34) *ji yā ^mo-ũ-i;*
1s TOP NEG-go-1FUT
- (35) *inagu ^ji ā khã dā-lā-u ji.*
like.this 1s TOP talk PROH-talk-IMP 1s

- (36) [^]*māji=e* *mica*,
ferryman=GEN daughter
- (37) [^]*ḡā nā da-ul*
fish odor have-NR1
- (38) ... *ji m- ^nām he ^māji=e mica*,
... 1s FS name EMPH ferryman=GEN daughter
- (39) *makche ganda jana ^nām:*,
Makche Ganda 1sGEN name
- (40) ...*(1.08) ānthi da-^hat!*
... like.that PROH-say(IMP)
- (41) .. *hat-cu.*
.. say-3sPST

Then she said "I am very modest. What shall I do? I won't go. Don't talk to me like this. As the ferryman's daughter, I have the odor of fish. I am the ferryman's daughter. My name is Makche Ganda. Don't talk to me like that."


Sentence 14



- (42) ... *janta ^lās cā-i dam:l*
... 1sDAT shyness feel-INF have
- (43) ... *hat-ḡasin*,
... say-when
- (44) *chana ^lās: chop yeḡ-an bi haḡ-an*,
2sGEN shyness cover do-PART give(1sFUT) say-PART
- (45) ... *bō khosu ^dyā::mba*,
... ground fog thick
- (46) ... *bō kho^su*,
... ground fog
- (47) ... *jamma yeḡ-an bi doḡ-an ^li:*,
... gather do-PART give(INF) finish-PART after


- (48) ... *āle* *^āmu*,
... then that
- (49) .. *pa^rāsar risi* *^ho*;
.. Parāsar Risi and
- (50) ... *makche gan^da=e;*
... Makche Ganda=GEN
- (51) ... *riti^dān jur-a hā.*
... intercourse happen-3sPST EVID

When she said "I feel shy", he said "I will cover your shyness", and having conjured a thick fog on the ground, then Parāsar Risi and Makche Ganda had sex.

Sentence 15 


- (52) ... *riti^dān ju-i doᅇ-a^n-i;*
... intercourse happen-INF finsh-PART-L
- (53) ... *^āme kae;*
... 3sGEN son
- (54) *^byās haᅇ-a janm-ai jur-^a.*
Byās say-NR2 be.born-PR happen-3sPST

Once they had sex, her son named Byās was born.

Sentence 16 

- (55) .. *^byās-ji.*
.. Byās-HON

Byasji.

Sentence 17 


- (56) ... *byās-ji kae janm-ai ^ju-en-i,*
... Byās-HON son be.born-PR happen-PART-L

(57) *janm-ai ju-i sāt ā[^]mu,*
be.born-PR happen-INF as.soon.as 3s

(58) ...*(1.31) [^]pār tar-ai ju-en;*
... across cross-PR happen-PART

(59) ... *[^]tyāgi barta=ku on-a.*
... denial fasting=LOC go-3sPST

When the son Byāsji was born, as soon as he was born, he crossed the river and went to [lead a life of religious] self-denial and fasting.


Sentence 18 

(60) ... *tyāgi barta=ku ũ-i doᅇ-an [^]li;*
... denial fasting=LOC go-INF finish-PART after

(61) ... *ām [^]māji=e mica [^]makche=ri,*
... that ferryman=GEN daughter Makche=TOP

(62) .. *chē [^]pul-en yer-a.*
.. house return-PART come-3sPST


Having gone to [lead a life of religious] self-denial and fasting, that ferryman's daughter Makche came back to her home.

Sentence 19 

(63) .. *chē [^]pul-en ye-en,*
.. house return-PART come-PART

(64) *ām kanyā kanyā [^]tuᅇ jur-a.*
that virgin virgin EMPH happen-3sPST

Having come back to her home, she lived as a virtual virgin.

Sentence 20 

(65) ... [^]*āmun haŋ-an ta-u ki ʿbā!*
... 3sERG say-PART put-3PH that father


(66) ... [^]*mā thaeta ʿhātiŋ;*
... mother 2honDAT anything

(67) [^]*āpat par-ai jur-a hat-ŋasin;*
trouble happen-PR happen-PST say-when

(68) *ji samj-ai jur-sin ʿnā!*
1s remember-PR happen-IMP(HON) PRTCL


(69) ... *haŋ-an ta-en ʿmāji=e mica oŋ-gu.*
... say-PART put-PART ferryman=GEN daughter go-3sPH

He had said "Father! Mother! If any trouble befalls you, remember me!", and [Byās] having said this, the ferryman's daughter went.

Sentence 21 

(70) ...*(1.01) āle ʿjir-a hat-cu.*
... then be.ok-3sPST say-3sPST

Then she said "OK".

Sentence 22 

(71) ... *āle ʿcon-ŋa con-ŋa con-ŋa con-ŋa,*
... then stay-when stay-when stay-when stay-when


(72) ... *āmur,*
... 3s

(73) *ʿbā=n=uŋ ma-si-u,*
father=ERG=EMPH NEG-know-3sPH

(74) *ʿmā=n=uŋ ma-si-u,*
mother=ERG=EMPH NEG-know-3sPH

- (75) *gunān ām ^bālaka=e bālaka tu ju-en con-a.*
 who=ERG 3s child=GEN child EMPH happen-PART stay-3sPST

Then living there on and on, her father didn't know, her mother didn't know, no-one (knew), and she was like a young child.


Sentence 23 

- (76) ... (1.04) *āle libi ukuna pa^t̃i;*
 ... then later that.other side

- (77) ... *^rājā santanu;*
 ... king Sanatanu


- (78) ... (1.44) *bi^hā=ta ^thika ju ju-en con-a.*
 ... wedding=DAT preparation happen(NR1) happen-PART stay-3sPST

Then later on the other side, it happened that King Sanatanu was preparing for his wedding.

Sentence 24 

- (79) ... *^gaṅgā debi bihā yeṅ-an hār-ju.*
 ... Gāṅgā Debi wedding do-PART bring-3sPST

He married and brought Ganga Debi.

Sentence 25 

- (80) ... *^gaṅgā debi bihā yeṅ-an hā-en-e,*
 ... Gāṅgā Debi wedding do-PART bring-PART-L

- (81) *āme ^khu-mā mucā janm-ai jur-a.*
 3GEN six-CL child be.born-PR happen-3sPST

Having married and brought Ganga Debi, his six children were born.

Sentence 26



(82) .. *^khu-mā muca janm-āi ju-en-e,*
.. six-CL child be.born-PR happen-PART-L

(83) *ām mucā-pen thau thau ^thāi on-a.*
that child-PL REFL REFL place go-3sPST

The six children being born, those children each went to his own place.

Sentence 27



(84) ... *āu jana ic^chyā purṇa jur-a:!*
... now 1sGEN desire fulfilled happen-3sPST

(85) ... *ā:!*
... *ā::*

(86) *haṇ-^an-e;*
say-PART-L

(87) *ām gaṅgā debi ^on-a.*
that Gangā Debi go-3sPST

Saying "Now my desires are fulfilled", that Ganga Debi left.

Sentence 28



(88) .. *thi-mā ^bisma haṇ-a kae janm-ai jur-a.*
.. one-CL Bisma say-NR2 son be.born-PR happen-3sPST

One son named Bhisma was born.

Sentence 29




(89) .. *bisma=^lān ām:!*
.. Bisma=ABL 3s


(90) ... *ta^pasyā=lān jīt-ai ju-en,*
... asceticism=ABL win-PR happen-PART

(91) *āme* [^]*bisma pitāmha haṇ-a nām.*
3sGEN Bisma Pitāmha say-NR2 name

Through Bhisma --- by winning [spiritual growth] through meditation, his name became Bhisma Pitāmha.

Sentence 30 


(92) ... [^]*bisma.*
... Bisma
Bhisma.

Sentence 31 

(93) ... *āle* [^]*bisma haṇ-a kae ho,*
... then Bisma say-NR2 son and

(94) *sanatanu* [^]*nāpa con-a.*
Sanatanu together stay-3sPST

Then the son called Bhisma and Sanatanu stayed together.

Sentence 32 

(95) ...*(1.1) sanatanu rājā* [^]*con-ṇa con-ṇa con-ṇa,*
... Sanatanu king stay-when stay-when stay-when

(96) *nichi* *gaṇ^gā!*
one.day Gangā


(97) .. *asnān* [^]*yet-da ũ-i haṇ-an;*
.. bathe do-IP go-1FUT say-PART

(98) [^]*sanatanu rājā,*
Sanatanu king

(99) [^]*gaṇgā,*
Gangā


- (100) *asnān* [^]*yet-da* *on-a*.
bathe do-IP go-3sPST

As Sanatnu was living, one day he said "I am going to bathe in the Ganges" and King Sanatanu went and bathed in the Ganges.

Sentence 33 

- (101) ... *as*[^]*nān yet-da on-ṅasir*;
... bathe do-IP go-when
- (102) ... *āle* [^]*ṅā ebam*,
.. then fish every
- (103) *prakār=e* [^]*ḍwā-ku*,
kind=GEN big-NR1
- (104) *ci*[^]*cā ḍwā-ku ḍwā-ku*,
small big-NR1 big-NR1
- (105) *thi-gur la*[^]*h:ar-na on-a hã*.
one-CL queue-?? go-3sPST EVID

When he went to bathe, then fish of every kind, big ones, little ones, big ones, big ones, went by in a line.

Sentence 34 

- (106) .. *āle* [^]*sor-ṅasir*;
.. then look-when
- (107) ... *u* [^]*mā: jeu:|*
... this mother maybe
- (108) *u* [^]*bā: jeu:|*
this father maybe
- (109) *u* [^]*kae: mica jeu:|*
this son daughter maybe


(110) ... *haŋ-an*,
... say-PART

(111) *man=ku* *^kalpanā* *yeŋ-an*;
mind=LOC imagination do-PART

(112) ... *ām rājā sanatanu* *^chē* *yer-a*.
... that king Sanatanu house come-3sPST

Then when he looked at this, saying "Maybe this is the mother, maybe this is the father, maybe these are the sons and daughters", he imagined it in his mind, then King Sanatanu came to his own house.

Sentence 35

(113) ...*(1.35)*  *rājā sanatanu chē* *^ye-i* *doŋ-an* *^lī*;
... king Sanatanu house come-INF finish-PART after

(114) ...*(1.79)* *āle i^thi:!*
... then like.this


(115) *apsoc thau* *bi^cyauna=ku* *con-a*,
regret REFL bed=LOC stay-3sPST

(116) *apsoc yeŋ-an* *con-^ŋa*;
regret do-PART stay-when

(117) .. *^bisma yer-a*.
.. Bisma come-3sPST

King Sanatanu having come to his house, then like this, he stayed on his bed, regretful, and as he was regretting, Bhisma came in.


Sentence 36

(118) ...  *e* *^bā!*
... hey father

(119) ...*(1.03)* *hāi jur-a* *thaeta* *^hāi*,
... what happen-3sPST 2HON.DAT what

- (120) *^āpat par-ai jur-a.*
trouble befall-PR happen-3sPST
- (121) *bā ^har-sin;*
father say-IMP(HON)
- (122) ... *haŋ-an hat-ŋa^sin,*
... say-PART say-when
- (123) *ji beba^hārik=ku,*
1s family.life=LOC
- (124) *^bul-ai ju-i yer-a.*
go astray-PR happen-INF come-3sPST
- (125) ... *āle ^bā=n:!*
... then father=ERG
- (126) *gun ^hā-i-ta le hat-ŋasin;*
who bring-FUT-2HON PRTCL say-when
- (127) .. *jin ām ^māji:=e mica ^hā-i hat-a-gi.*
.. 1sERG that ferryman=GEN daughter bring-1FUT say-PR-1s
- (128) ... *hat-cu.*
... say-3sPST

"Hey father! What happened? What trouble has befallen you? Tell me father"
When he said this, [King Sanatanu replied] "I have gone astray in my family life."
When [Bhisma] said "Father, who will you bring?", he said "I say I will bring that
ferryman's daughter."

Sentence 37 

- (129) ... *e: ^jir-al*
... EXCL be.ok-3sPST
- (130) ... *haŋ-an,*
... say-PART

- (131) *^ph:on-da on-ḡasin;*
ask.for-IP go-when
- (132) ... *e: chana bi^haiti:--*
... EXCL 2sGEN legal.wife
- (133) ... *=^ta=uri,*
... DAT=TOP
- (134) *chin chē-ku ^ta-i-na jana mica lyā^hāiti=ta=uri,*
2sERG house-LOC put-FUT-2s 1sGEN daughter concubine=DAT=TOP
- (135) *sampati ^ma-da,*
wealth NEG-have
- (136) *jin ^m:a-bi-gi chana bā=ta.*
1sERG NEG-give-1s 2sGEN father=DAT
- (137) ... *hat-ḡa ^ma-^khe:!*
... say-when NEG-be
- (138) ... *(1.0) jana bā=ta,*
... 1sGEN father=DAT
- (139) *^bi tuḡ maldan-a,*
give EMPH must-3sPST
- (140) *jin ^thae: hākhena tu,*
1sERG 2HON in.front EMPH
- (141) *pari^wār niyojan yet-a-gi hat-cu.*
family planning do-PR-1s say-3sPST

Saying "That is proper", when he went to ask [for her hand in marriage, her father said:] "Hey you will put your legal wife in the house; my daughter will be a concubine. She will have no wealth; I will not give her to your father." When he said that [Bhisma] said "It must not be! You must give her to my father. I will go in front of you and have a vasectomy".



(142) ... *āle āmu hā^khena*,
... then 3s in.front

(143) *pari^wār niyojan yet-cu*.
family planning do-3sPST

Then he had a vasectomy in front of him.

Sentence 39



(144) ... *^bisma*.
... Bisma

Bhisma.

Sentence 40



(145) ... *^tyāgi barta=ku coᅇ-gu mi*.
... denial fast=LOC stay-NR1 man

A man who lived a life of self-denial and fasting.

Sentence 41



(146) ... *mā^ji:=e mica bihā yeᅇ-^an;*
... ferryman=GEN daughter wedding do-PART

(147) ... *sanatanu ^rājā=n*,
... Sanatanu king=ERG

(148) *bi^hā yeᅇ-an*,
wedding do-PART

(149) *^hār-ju*.
bring-3sPST

He married the ferryman's daughter, King Sanatanu married the ferryman's daughter and brought her [to his home].

Sentence 42



- (150) ... *bihā yeṅ-an hā-en ^ta-en lī;*
 ... wedding do-PART bring-PART put-PART after
- (151) ... *āme ci^trāṅga bicitrāṅga haṅ-a ^nis-mā kae*
 ... 3sGEN Citrāṅga Bicitrāṅga say-NR2 two-CL son
- janm-ai jur-a.*
 be.born-PR happen-3sPST

After having married and brought the ferryman's daughter, his two sons Citrāṅga and Bicitrāṅga were born.

Sentence 43

- (152) ... (1.42) *^sanatanu rājā=e.*
 ... Sanatanu king=GEN

King Sanatanu's.

Sentence 44


- (153) .. *^kae nis-mā janm-ai ju-en-i,*
 .. son two-CL be.born-PR happen-PART-L
- (154) *^kae nis-mā janm-ai ju-en,*
 son two-CL be.born-PR happen-PART
- (155) *^iri-uṅ ^hār-ju.*
 daughter.in.law=EMPH bring-3sPST

The two sons being born, the two sons being born, he brought daughter-in-laws [to be their wives].

Sentence 45

- (156) ... (1.0) *iri-uṅ bihā yer-i doṅ-a^n-ī;*
 ... daughter.in.law wedding do-INF finish-PART-L
- (157) *sanatanu rājā ^sit-a.*
 Sanatanu king die-3sPST

After the daughter-in-laws had married [the sons], King Sanatanu died.


Sentence 46 

(158) ... *siŋ-a[^]n-í*;
... die-PART-L

(159) *āme* ^{*^*}*nām*;
3sGEN name

(160) ... ^{*^*}*sat:yawati jur-a*.
... Satyawati become-3sPST

He died and her name became Satyawati.

Sentence 47 


(161) ...*(1.0)* *āmu* ^{*^*}*hoe*!
... 3s HES

(162) .. ^{*^*}*māji=e* *mica=e* *nām*;
... ferryman=GEN daughter=GEN name

(163) ... ^{*^*}*makche ganda=e* *nām*;
... Makche Ganda=GEN name

(164) ^{*^*}*satyawati jur-a*.
Satyawati become-3sPST


She, um, the ferryman's daughter's name, Makche Ganda's name became Satyawati.

Sentence 48 

(165) ...*(1.01)* *āle* *ām* ^{*^*}*satyawati=r*;
... then that Satyawati=ERG

(166) .. *ap[^]soc yeŋ-an* *con-a*.
.. sorrow do-PART stay-3sPST

Then that Satyawati was sorrowing.

Sentence 49 

(167) ... *ap*[^]*soc* *yeṅ-an* *coṅ-an-i* *satyawati=n;*
... sorrow do-PART stay-PART-L Satyawati=ERG

(168) ...*(2.01)* *āle* *^kae* *bisma=n;*
... then son Bisma=ERG

(169) ... *^dij-a* *thāi=ku,*
... sleep-NR2 place=LOC

(170) *bi*[^]*chyāuna=ku,*
bed=LOC

(171) ... *^mā!*
... mother

(172) *^thamun* *dukha* *bwār* *dā-pā-gu:*
2honERG trouble worry PROH-feel-2HON

(173) ... *^ji* *damu:*
... 1s have

(174) *daṇḍā* *surtā* *hā*[^]*tiṅ* *dā-pā-gu.*
punishment grief anything PROH-feel-2HON

(175) ... *haṅ-an,*
... say-PART

(176) *ni*[^]*teṅ* *samjāipujāi* *yeṅ-an,*
daily comfort do-PART

(177) *ta-en* *lī;*
put-PART after

(178) *mā* *^khāt=ku* *dij-an* *coṅ-an,*
mother bed=LOC sleep-PART stay-PART

- (179) *kae* [^]*bõ=ku* *con-a.*
son floor=LOC stay-3sPST

Satyawati was sorrowing, then her son Bhisma, at her sleeping place, at her bed, said "Mother! Don't feel any troubles or worries. I am here. Don't feel any grief or chastisement". Comforting her daily [in this manner], the mother was sleeping on the bed, and the son sat on the floor.

Sentence 50

- (180) ...^(1.03) *bõ=ku* *cõ-i* *doŋ-an* [^]*li;*
... floor=LOC stay-INF finish-PART after
- (181) *āle* *thapakka* *mā=ŋ* *nir[^]kai* *ḍõ-i* *ho:?*
then slowly mother=EMPH sleepy sleep-INF when
- (182) .. *āmu* *kae=n;*
.. that son=ERG
- (183) *s-* *thapakka,*
fs slowly
- (184) ... *chaṭṭa* [^]*sirak-na* *phā-k-e* *ta-en;*
... carefully quilt-INST cover-CAUS-PART put-PART
- (185) *mā=ta* [^]*thi-ŋ* *ma-thi-en.*
mother=DAT touch-EMPH NEG-touch-PART
- (186) ... *thau* [^]*khopi=ku* *on-a.*
... REFL alcove=LOC go-3sPST

After he had sat on the floor, when the mother was gently sleeping, the son slowly and carefully having covered her with a quilt, without touching the mother at all, he went to his own room.

Sentence 51

- (187) ... *thau* *khopi=ku* *ũ-i* *doŋ-an* [^]*li;*
... REFL place=LOC go-INF finish-PART after
- (188) ... *āle* [^]*āme* *tu.*

... then 3sGEN EMPH

(189) .. *satyawati=e tu kae ci^trāṅga bici^trāṅga haṅ-a ^kae=n;*
.. Satyawati=GEN EMPH son Citrāṅga Bicitrāṅga say-NR2
son=ERG

(190) ... *oho!*
... EXCL

(191) ... *^mā=uṅ jawāni;*
... mother=EMPH youthful

(192) *dāi=^uṅ jawāni.*
brother=EMPH youthful

(193) ... *upen bāḷa-ku ^tālṅa mo-sō jeu.*
... 3PL good-NR2 behavior NEG-see maybe

(194) ... *haṅ-an,*
... say-PART

(195) *thau=e janma-en ta-e kae=n nis-^mā=n;*
REFL=GEN be.born-PART put-NR2 son=ERG two-CL=ERG

(196) .. *^saṅkā yet-cu.*
.. suspect do-3sPST

Having gone to his own room, then her very sons, Satyawati's very own sons called Citrāṅga and Bicitrāṅga said "Oho! Mother is young and our elder brother is also young. Maybe they are not observing proper behavior." Her own two sons whom she had given birth to, suspected her.

Sentence 52



(197) ... *^saṅkā yer-i doṅ-an li kae-pisin;*
... suspect do-INF finish-PART after son-PL.ERG

(198) ...*(1.47) āle niteṅ ^mā=ta;*
... then daily mother=DAT

- (199) .. *^chek yer-i lag-ai jur-a.*
 .. check do-INF touch-PR happen-3sPST

The sons having suspected her, then they checked on their mother daily.

Sentence 53

- (200) .. *^chek yet-ŋa chek yet-ŋa,*
 .. check do-when check do-when
- (201) .. *ākheri=ku ^mā=n;*
 .. end=LOC mother=ERG
- (202) ... *ho ^dāi=na,*
 ... and brother=ERG
- (203) *hā^tiŋ ^pāp yeŋ-a ma-kha-u ju-en con-a.*
 nothing sin do-NR2 NEG-be-NR1 be-PART stay-3sPST

They kept checking on her, and in the end it turned out that it was actually the case that the mother and elder brother were not committing any sins.

Sentence 54

- (204) *o^ho:!*
 EXCL
- (205) ... *^chijina:.*
 ... 1.INCL.ERG
- (206) *^binā nāhak=ku,*
 pointless unjustly=LOC
- (207) *mo-khoŋ-a khã saŋkã yet-ku ^dāi:!*
 NEG-see-NR2 talk suspect do-1plPST brother
- (208) .. *chijin āu,*
 .. 1.INCL now
- (209) *^hāi yer-i-uri mal-eu.*
 what do-INF-TOP need-3FUT

- (210) .. *chijita* [^]*pāu*: *lag-ai* *jur-a*.
 .. 1.INCL.DAT sin touch-PR become-3sPST
- (211) ...*(1.08)* *haṅ-an*,
 ... say-PART
- (212) .. *āu* *u* [^]*khã* *gunta* [^]*ṅye-i*.
 .. now this talk who.DAT say-1FUT
- (213) .. *hat-ṅasin*;
 .. say-when
- (214) [^]*jānne* *sunne* *ām* [^]*he*:,
 knowing hearing 3s EMPH
- (215) ... *bisma* [^]*khyaṅ*,
 ... Bisma be
- (216) *ām* *he* [^]*bisma* *pitāmha=ta* *tuj* *ṅye-i* *mal-a*.
 3s EMPH Bisma Pitāmha=DAT TOP ask-INF must-3sPST
- (217) ... *hat-cu* *bismapi=ta* [^]*ṅyen-ju*.
 ... say-3sPST Bismapi=DAT ask-3sPST

He said "Oho! We have pointlessly and unjustly suspected them without seeing any evidence, elder brother! Now what do we need to do? We are touched with sin." When [the other] said "Who shall we tell this to?". Then [the first] said "One who knows and hears everything is Bhisma. We must ask Bhisma Pitāmha" and they asked Bhismapi.

Sentence 55



- (218) ... *bisma=ta* *ṅyen-ṅasin*;
 ... Bisma=DAT ask-when
- (219) [^]*el*
 EXCL
- (220) ... [^]*khā:si* *oṅ-an*,
 ... Khāsi go-PART

- (221) *^jal-ai jur-sa jukun,*
burn-PR happen-if only
- (222) *u pā:p kaʃaun-ai jur-^a!*
this sin cut-PR be-3sPST
- (223) ... *hat-cu.*
... say-3sPST

When they asked Bhisma [he] said "E! Only if you go to Khāsi and [die by] burning will this sin be cut from you."

Sentence 56

- (224) ... *^ānθi yeŋ-an-i;*
... like.that do-PART-L
- (225) *^khā:si on-a.*
Khāsi go-3sPST

Sentence 57

- (226) ...*(1.40)* *^khā:si oŋ-an;*
... Khāsi go-PART
- (227) ... *^jal-ai ju-en;*
... burn-3sPR be-PART
- (228) *ci^trāŋga bicitrāŋga sit-^a:.*
Citrāŋga Bicitrāŋga die-3sPST

Sentence 58

- (229) *siŋ-an-i ^lau!*
die-PART-L EXCL
- (230) ... *rājā sanatanu=e rā^je,*
... king Sanatanu=GEN kingdom
- (231) ...*(1.05)* *=ku coŋ-gu ^manta.*

... =LOC stay-NR1 finished

(232) .. *u rāje ha^ʔo jur-a āu.*
.. this kingdom leaderless become-3sPST now

(233) *githi yer-eu.*
how do-3sFUT

(234) ... *rāje ^haʔa-i jur-a.*
... kingdom leaderless become-3sPST

(235) .. *^rāje=ku gunan,*
.. kingdom=LOC who.ERG

(236) ... *u ^mahal=ku co-eŋ,*
... this palace=LOC stay-3sFUT

(237) ... *haŋ-an-e;*
... say-PART-L

(238) *^khā jur-a.*
talk happen-3sPST

They died, and [the people] said "Lau! [The line of heirs] to rule King Sanatanu's kingdom is finished. This kingdom has now become leaderless. What to do? The kingdom is leaderless. In this kingdom, who will stay in the palace?" The discussion went in this manner.

Sentence 59



(239) ... *sa^bhā: jur-a.*
... meeting happen-3sPST

They had a meeting.

Sentence 60



(240) *gāū ^sabhā chē mi-pe jur-ŋasin;*
village meeting house man-PL be-when

(241) *twāl chār ^chimeki.*
area four neighbors

The village people had a meeting -- the people from all directions.

Sentence 61



(242) .. *dokhuseŋ;*
.. all

(243) *sabhā jur-ŋasin;*
meeting happen-when

(244) ... *^bisma=ta tu,*
... Bisma=DAT EMPH

(245) ... *^chin tu yer-i mal-a u rāje,*
... 2sERG EMPH do-INF must-3sPST this kingdom

(246) *^chin tu yer-i mal-a u rāje,*
2sERG EMPH do-INF must-3sPST this kingdom

(247) *haŋ-an hat-ŋa^sin;*
say-PART say-when

(248) ... *^ji yā!*
... 1s EMPH

(249) .. *pari^wār niyojan ju-i doŋ-gu mil*
.. family planning happen-INF finish-NR1 man

(250) .. *^tyāgi barta=n jin: .. ^ma-yet-ki.*
.. denial fast=INST 1sERG .. NEG-do-1sNONFUT

(251) ... *u rāje janta mā=ŋ ^māl!*
... this kingdom 1sDAT need-EMPH (NEG)need

(252) *gaddi=ku co=ŋ ^mo-con-gi.*
throne=LOC stay=EMPH NEG-stay-1sNONFUT

- (253) ... *haṅ-a-lāgin*,
... say-NR2-because
- (254) *āu* [^]*hāti* *yer-i=uri* *le!*
now what do-1FUT=TOP PRTCL
- (255) ... *hat-ṅasin*,
... say-when
- (256) [^]*e!*
EXCL
- (257) ...*(1.19)* [^]*hātiṅ* [^]*āpat* *par-ai* *jur-sa*,
... anything trouble befall-PR happen-if
- (258) [^]*ji* *samj-ai* *jur-sin* [^]*nā* [^]*mā!*
1s remember-PR be-IMP PRTCL mother
- (259) ... *haṅ-an*,
... say-PART
- (260) [^]*byāsji=n* *haṅ-an* *ta-u*.
Byāsji=ERG say-PART put-3sPH

When they all had a meeting, they said to Bhisma "You are the one who must rule this kingdom. You are the one who must rule this kingdom". When they said that he replied "As for me, I am a man who has had a vasectomy. Because of [my committment to] self-denial and fasting, I will not do it. I do not need this kingdom. I won't sit on the throne at all". Because he said that, they said "Now what to do?", and when they said that, [Satyawati remembered that] Byās had said "Hey, if any trouble befalls you, remember me, mother".

Sentence 62

- (261) ... *āle* *āme* [^]*byās.*,
... then 3sGEN Byās
- (262) *samj-ai* *ju-e[^]n-i*;
remember-PR be-PART-L
- (263) ... [^]*caṭṭa* *mā!*

... immediately mother

- (264) *hāti* [^]*āpat* *par-ai* *jur-a* *hat-ṅasin*,
what trouble befall-PR be-3sPST say-when
- (265) *u* *rāje* *yer-i* [^]*maldan-a*,
this kingdom do-INF need-3sPST
- (266) .. *chana* *bā* [^]*sit-a*;
.. 2sGEN father die-3sPST
- (267) *kṅja-pen=uṅ* [^]*sit-a*.
brother-PL=EMPH die-3sPST
- (268) .. *rājā* [^]*sanatanu=uṅ* *sit-a*;
.. king Sanatanu=EMPH die-3sPST
- (269) ... *ci*[^]*trāṅga* *bici*[^]*trāṅga* *haṅ-a* *kae=uṅ* [^]*sit-a*.
... Citrāṅga bicitrāṅga say-NR2 son=TOP die-3sPST
- (270) ...*(1.18)* *har-i* *doṅ-an* [^]*i*;
... say-INF finish-PART after
- (271) ...*(1.20)* *āle*,
... then
- (272) ... *kae=uri=pisin*;
... son=TOP=PL.ERG
- (273) ... *libi* *ye-e*[^]*n-e*;
... later come-PART-L
- (274) ... *āle* *ām* [^]*byāsji* *yer-a*.
... then that Byāsji come-3sPST

Then she remembered her Byās and immediately he said "Mother, what trouble has befallen you?" And when he said this, she replied "Someone must rule this kingdom. Your father died, your brothers died. King Sanatanu died, Citrāṅga and Bicitrāṅga died." After she said this, then the sons -- he came later, and then that Byās came.

Sentence 63



(275) ... *byāsji ye-i doᅇ-an ^l̄i;*
 ... Byāsji come-INF finish-PART after

(276) ... *lau mā hat-ŋa^sin;*
 ... Hello mother say-when

(277) ... *āle ^thi-mā,*
 ... then one-CL

(278) *ḍwā-ku=^ri iri on-a.*
 senior-NR1=TOP daughter.in.law go-3sPST

Byāsji having come, when he said "Lau, mother!" then the eldest daughter-in-law went.

Sentence 64



(279) ... *ḍwā-ku=^ri iri oho!*
 ... senior-NR1=TOP daughter.in.law EXCL

(280) ... *ji yā githi yer-i,*
 ... 1s EMPH how do-1FUT

(281) *lās ^cār-a-gi haᅇ-an,*
 shy feel-PR-1s say-PART

(282) *i^thi: yeᅇ-an,*
 like.this do-PART

(283) *mi^khā ti-en on-ŋa^sin;*
 eyes close-PART go-when

(284) ... *ḍhirta^rāᅣra janm-ai jur-a.*
 ... Dhirtarāᅣra be.born-PR be-3sPST

The eldest daughter-in-law, saying "Oho! How shall I do this? I am feeling shy", and going like this, when she closed her eyes and went, Dhirtarāᅣra was born (fathered by Byās).

Sentence 65



(285) ... [^]*dhirtarāṣṭra janm-ai ju-en-i*,
... Dhirtarāṣṭra be.born-PR be-PART-L

(286) .. *ji yā [^]chāi yeṅ-an bālaske wāsti phi-en*
.. 1s EMPH makeup do-PART beautiful clothes put.on-PART

tuj [^]ī-ī
EMPH go-1FUT

(287) ... *haṅ-an*,
... say-PART

(288) [^]*chāi-che yeṅ-an [^]wāsti phi-en on-ṅasir;*
make.up-REDUP do-PART clothes put.on-PART go-when

(289) ... [^]*pāṅ:ḍuk janm-ai jur-a*.
... Pāṅḍuk be.born-PR be-3sPST

Dhirtarāṣṭra was born, and [the younger daughter-in-law] saying "I shall put on makeup and fine clothes and go", when she put on makeup and fine clothes and went [to Byās], Pāṅḍuk was born.

Sentence 66



(290) ... [^]*pāṅ:ḍuk janm-ai ju-en-i lita me[^]bu-ṅ damu!*
... Pāṅḍuk be.born-PR be-PART-L again other-also have

(291) ... *haṅ-an*,
... say-PART

(292) ***noka[^]ri!***
servant

(293) ... [^]*sata bir-ju*,
... call give-3sPST

(294) ... ***noka[^]ri!***
... servant


(295) ... =e [^]*lon;*

... GEN womb

(296) ... *ghartini noka^ri=e lon=u^ri;*
... house.servant servant=GEN womb=TOP

(297) ... *bi^dur janm-ai jur-a.*
... Bidur be.born-PR be-3sPST

Pāṇḍuk having been born, when [Satyawati?] said "Again we must have another", she called "Servant girl!". And from the servant girl's womb, from the womb of a house servant, Bidur was born.


Sentence 67 

(298) ... *bi^du:r,*
... Bidur

(299) ... *paṇ^ḍu:k,*
... Paṇḍuk

(300) ... *^ḍhirtarāṣṭra.*
... Dhirtarāṣṭra

Bidur, Pāṇḍuk, Dhirtarāṣṭra.

Sentence 68 

(301) ... *so-mā janm-ai ^jur-a;*
... three-CL be.born-PR be-3sPST

(302) *ḍhirtarāṣṭra ^kānā ju-e-lāgin,*
Dhirtarāṣṭra blind be-NR2-because

(303) *rāje bi ma-^jir-a;*
kingdom give NEG-proper-3sPST

(304) ... *ā:/*
... ā:

(305) *bi^dur,*

Bidur

- (306) *ghartini-e kae ^ju-en,*
house.servant=GEN son be-PART
- (307) *rāje bi ma-^jir-a;*
kingdom give NEG-proper-3sPST
- (308) ... *pāṇḍuk=ta rāje bir-^ju.*
... Pāṇḍuk=DAT kingdom give-3sPST

The three were born, and because Dhirtarāṣṭra was blind, it was not proper to give him the kingdom. Bidur was the son of a house servant, so it was not proper to give him the kingdom. They gave Pāṇḍuk the kingdom.

Sentence 69

- (309) ... (1.07) *pāṇḍuk=ta rāje bi doṅ-an ^li;*
... Pāṇḍuk=DAT kingdom give(INF) finish-PART after
- (310) ... *āle ^pāṇḍuk=na,*
... then Pāṇḍuk=ERG
- (311) ... (1.43) *oṅ-an ^āmur.,*
... go-PART 3sERG
- (312) .. *kuntī mā^tri haṅ-a bihā yet-cu.*
.. Kuntī Mātri say-NR2 wedding do-3sPST

After Pāṇḍuk was given the kingdom, he went and married Kuntī and Mātri.

Sentence 70

- (313) ... *m::*
... m::
- (314) *dhirtarāṣṭra=n ^gāndāri bihā yet-cu.*
Dhirtarāṣṭra=ERG Gāndāri wedding do-3sPST

Dhirtarāṣṭra married Gāndāri.

Sentence 71

(315) ... *āle ām ^pāṇḍuk=na bihā yer-i doṅ-an ^li;*
 ... then that Pāṇḍuk=ERG wedding do-INF finish-PART after

(316) *nīs-mā misā=e ^lon=uy;*
 two-CL woman=GEN womb=EMPH

(317) *san^tān ma-da.*
 descendants NEG-have

Then Pāṇḍuk having married the two women, from their wombs there were no descendants.

Sentence 72

(318) *si^liṅga risi=e sarāp par-ai ju-en cō.*
 Siliṅga Risi=GEN curse befall-PR be-PART stay(3PH)

He had fallen under the curse of Siliṅga Risi.

Sentence 73

(319) ... *siliṅga risi=e sarāp par-ai ju-en coṅ-an ^li;*
 ... Siliṅga Risi=GEN curse befall-PR be-PART stay-PART after

(320) ... *āle ām ^pāṇḍuk=e;*
 ... then that Pāṇḍuk=GEN

(321) ... *kuntī mā^tri haṅ-a;*
 ... Kuntī Mātri say-NR2


(322) ... *āle ^lau:!*
 ... then EXCL

(323) ... *āu ^santān ma-da;*
 ... now descendants NEG-have

(324) *haṅ-an,*
 say-PART

(325) *^khāsi=ku oṅ-an coṅ-gu-tan/*
Khāsi=LOC go-PART stay-PH-3p

After he had fallen under the curse of Siliṅga Risi, then Pāṇḍuk's wives Kunti and Mātri saying "Lau! Now we have no descendants", they went and stayed at Khāsi.

Sentence 74 

(326) ... *san^tān ma-da haṅ-an,*
... descendants NEG-have say-PART

(327) *khāsi oṅ-an con-ṅa^sin;*
Khāsi go-PART stay-when

(328) ... *āu ^hāti yer-i!*
... now what do-1FUT

(329) *santān=e-lāgin uku ^coṅ-gu chijita gith-- yer-i.*
descendants=GEN-for here stay-NR1 1EXCL.DAT how do-1FUT

(330) ... *haṅ-a^n-e;*
... say-PART-L

(331) ... *ā^le,*
... then

(332) .. *bāga^bān!*
.. god

(333) ...*(1.62) darma^rāj!*
... Darmarāj

(334) ... *satar-^jur.*
... call-3sPST

Saying "We have no descendants", when they went and stayed at Khāsi, they said "Now what will we do? For the sake of having children, how shall we do this while staying here?" Then (Kunti) called the god Dharmarāj.

Sentence 75



(335) ... [^]*dharma yudriṣṭi janm-ai jur-a;*
... Dharma Yudriṣṭi be.born-PR be-3sPST

(336) ...*(1.07) mṛ:/*
... m::

(337) ... [^]*bāyu satar-ju.*
... Bāyu call-3sPST

Dharma Yudriṣṭi was born, hmmm, she called Bāyu.

Sentence 76



(338) ... [^]*bimsen janm-ai jur-a;*
... Bimsen be.born-PR be-3sPST

(339) ...*(1.03) â:/*
... â::

(340) [^]*indra satar-ju.*
Indra call-3sPST

Bhimsen was born, ah, she called Indra.

Sentence 77




(341) .. [^]*ārjun janm-ai jur-a;*
.. Arjun be.born-PR be-3sPST

(342) ... *āu ^chanta ^so-mā ^gat-a.*
... now 2sDAT three-CL enough-3sPST

(343) ... *haṇ-an,*
... say-PART

(344) *pāṇ^ḍuk-na hat-cu.*
Pāṇḍuk-ERG say-3sPST

Ārjun was born, then Pāṇḍuk said "Three is enough for you".

Sentence 78 

(345) ... *āu chana kehē mat-* --
... now 2sGEN sister Mat- --

(346) .. *a:/*
.. HES

(347) *mātri=^ta=g mal-a.*
Mātri=DAT=EMPH need-3sPST


(348) ... *hat-ŋa^sin;*
... say-when

(349) *a^sanai kumār ye-en;*
Asanai Kumār come-PART

(350) *^mātri=ta;;*
Mātri=DAT

(351) .. *sahakal nahakal ^janm-ai jur-a.*
.. Sahakal Nahakal be.born-PR be-3sPST

"Now your sister Mat-, uh, Mātri needs some", when he said this Asanai Kumār came and Sahakul and Nahakul were born to Mātri.

Sentence 79 

(352) ... *sahakal nahakal janm-ai ju-e^n-i;*
... Sahakal Nahakal be.born-PR be-PART-L

(353) *khāsi=lān ^ye-e:n;*
Khāsi=ABL come-PART

(354) ... *^thau chē=ku.*
... REFL house=LOC

When Sahakul and Nahakul were born, they came from Khāsi to their own house.

Sentence 80



(355) ...*(1.32)* *indra parsat haṅ-a thāĩ=ku con-ṅa^sin;*
... Indra Parsat say-NR2 place=LOC stay-when

(356) ... *di^dāu=ri,*
... brother=TOP

(357) ...*(3.34)* *^duryodhan.*
... Duryodhan

When they lived at the place called Indra Parsat, the elder brother Duryodhan.

Sentence 81



(358) ...*(1.0)* *duryodhan=na ^dukha bi-en;*
... Duryodhan=ERG trouble give-PART

(359) *^rāje ma-bi-en;*
kingdom NEG-give-PART

(360) *āpen ^indra parsat=ku;*
they Indra Parsat=LOC

(361) *ām he ^ṅā-mā=ta lahi-en coṅ-an coṅ-gu.*
3s EMPH five-CL=DAT raise-PART stay-PART stay-3PH

Duryodhan was giving them trouble, and he wouldn't give them the kingdom, and they lived at Indra Parsat raising the five children.

Sentence 82



(362) ...*(1.08)* *āu ^dan-a ka ma-khe rā?*
... now finish-3sPST PRTCL neg-be Q

Now it is finished, isn't it?

Appendix III. Annotations

Sentence 1

This sentence consists of two prosodic units, the second containing a postposed modifier of *parāsar risi*. The intonation on both units falls with the prototypical final contour. *thi-mā* does not appear to be an afterthought, but instead seems to help distinguish this character from a background, highlighting the prominence of Parāsar Risi in the story.

Sentence 2

This is a tag question, equivalent to English "you know?", inviting a backchannel response (none was audible on the tape).

Sentences 3-4

The speaker starts a sentence with a strong subject noun phrase and anticipatory continuing intonation. The two prosodic units which we separated into sentence 4 are each preceded by long pauses. The speaker is clearly deciding how to proceed with the narrative, and the two utterances in lines 5 and 6 are not part of the storyline, but contain low-content lexical material, pronounced at lower amplitude. The speaker starts in again with a fresh sentence in line 7, thus abandoning the initial NP of line 4.

Sentence 5

This sentence contains three prosodic units. Line 7 contains a genitive modifier of the noun *barta* which begins line 8. However, line 7 is pronounced with anticipatory continuing intonation and a short pause separates the two. While the syntax clearly marks the material in line 7 as a modifier, hence an integral part of the noun phrase ending with *barta*, the prosody sets it off. This gives the impression that line 7 is functioning to set the temporal background, telling the hearer that the following episode takes place during the month of Pussata. Thus the syntactic and prosodic structure have separate functions.

Line 8 ends the clause begun in line 7 with a typical adverbial subordinator and anticipatory continuing intonation. There is a long pause before line 9; the speaker shows some uncertainty as to exactly how to formulate this portion of the narrative. Once the pause is completed, however, the material in line 9 is pronounced rapidly, and the postposed subject nominal is included under the prototypical final contour.

Sentence 6

This first line of this sentence follows a pattern that is commonly used throughout the narrative. It is pronounced with anticipatory continuing intonation and functions as a recapitulation of the events of the preceding sentence.

Sentence 7

The noun phrase in line 13 stands in an appositive relationship with the subject noun phrase of line 14. Appositives are often split prosodically in this manner.

Sentence 8

In this example, there is a long pause separating the quoted material from the mainline narrative. Also, the complementizer *haŋ-an* is pronounced with low pitch and amplitude.

Sentence 9

The speaker clears her throat during the long pause at the beginning of line 19. The syntactic status of *māji=e mica=ŋ* 'the ferryman's daughter' in line 18 is ambiguous. It could be analyzed as the dative argument of the ditransitive verb which ends the sentence, thus 'the ferryman said to his daughter'. The problem with this is that recipients are consistently marked with the dative case, which the noun phrase in line 18 lacks. It is also possible that the speaker began a sentence in which the ferryman's daughter would be the subject, but that during the long pause and cough, she changed her mind, and started over on line 19.

Sentence 11

This sentence is interesting in that it contains four of the six intonation types. The first three are all within a direct quote. Line 25 is pronounced with narrative final intonation, but ends with a clause-chaining form of the verb and not with a finite verb; this is the only example in the database where a final intonation type occurs with a non-final verb form. Genetti's (non-native) intuition on this is that the phrase is final, and so that the intonation takes precedence over the syntax. Unfortunately, no native-speaker judgements are available to us on this point.

In lines 26 and 27 *ritidān* 'intercourse' is pronounced twice, the first time with anticipatory intonation. This might be related to the high affective value of the particular word. It is also possible that the speaker decided more elaboration was needed and she was not ready to refer to the act of intercourse in the main line of the narrative.

Sentence 12

Line 28 is a recapitulation but is not typical in that it has non-anticipatory continuing intonation. This is probably related to the relatively rapid tempo, and the lack of a pause before the following prosodic unit.

Line 30 is interesting in that it has a postposed clause chain, an unusual construction. The fact that it is pronounced in the same prosodic unit as the finite clause clarifies that it holds a syntactic relationship with that clause, as opposed to with the following clause.

Sentence 13

As indicated in section 3.4.3, there are strong syntactic reasons to consider long direct quotes with following quotative verbs to be single sentences as opposed to sequences of sentences. This example, however, is not as clear as the ones discussed in that section, primarily because the quoted material constitutes a monologue as opposed to a dialogue, so there is no need to indicate intervening arguments, and there are no references to the quotative verb until the end. We have considered this to be a single sentence to maintain consistency of analysis, but recognize that the structure of some examples may be indeterminate.

Line 33 has unusual intonation. It is falling, but does not fall as low as a prototypical final. We have marked it as "other".

Lines 34 and 35 have been problematic from the beginning. The speaker produced this portion of the text with extreme rapidity and we are unclear on both the segmental/morphological transcription and the semantics. The analysis given was proposed by a native speaker, and is likely to be very close to what was intended.

Lines 36, 38, 39 are all structurally copular clauses which lack an overt copula. Deletion of the copula is common in Dolakhāe. It is interesting that all three lines have non-anticipatory continuing intonation which links them intonationally, but that none of the three are syntactically linked with the following material.

Sentence 14

Line 44 is interesting in that it contains not only a direct quote but also the quotative verb. Combining these under the same contour creates the impression of a causal link between Parāsar's decision to hide Makche Ganda's shyness and his subsequent actions. If *haŋ-an* were in a separate prosodic unit, its primary function would be to predicate the quotative verb and to place it as a separate action in a sequence of actions, hence part of the main line of the story. By placing the verb and the quote in a single prosodic unit, the speaker provides background information as to the reasons for Parāsar's subsequent actions.

In lines 45 and 46 the noun phrase *bō khosu* 'groud fog' appears twice. The adverbial *dyāmba* 'thick' is pronounced with highly marked lengthening and intonation to

give this word emphasis. The repetition of the noun phrase then clarifies the status of this NP as the object of the upcoming verb.

The final four prosodic units are used for the production of a single clause. The act of intercourse between Makche Ganda and Parāsar Risi is crucial for the story; in other examples, also, crucial events are predicated over a number of prosodic units, and thus given heightened prominence. The anticipatory continuing intonation of 49 and 50 give the strong sense that the speaker is clear about the predication and is leading up dramatically to the climactic event.

Sentence 15

Line 54 ends with a lengthened vowel which has its own rise-fall intonation realized within the general decline of pitch that characterizes final intonation. This contour type is typical of Nepāl Bhāsā dialects. This speaker seems to use it to mark events of significance, like this, the birth of Byās.

Sentence 16

Line 55 contains a single NP which renames the same character as was mentioned in the appositive of the previous sentence. The function of the repetition seems to be to establish this referent as a central character in the narrative; a pattern that occurs several other times.

Line 55 constitutes a prosodic sentence, due to its final intonation. Whether or not one would consider it to be a syntactic sentence depends on one's theoretical position about the nature of syntactic structure -- an issue we do not here address. The prosodic structure and discourse function of the utterance clearly mark this as an independent narrative sentence.

Sentence 17

Line 57 ends with a third-person singular pronoun, referring to Byās. Since the pronoun occurs after the verb, its syntactic status is ambiguous. It could be a postposed subject of the preceding verb 'be born', or it could be the subject of the following clause 'to cross (a river)'. In this case, the the prosodic unit has strong anticipatory intonation and is followed by a long pause. This suggests that the material within the prosodic unit is unified syntactically and that the pronoun is the subject of the first clause, not the second.

It should be noted that the clause articulated in prosodic unit 57 adds crucial information to the narrative, although it might appear to be another recapitulation. The point is that Byās is born with the full physical and cognitive abilities of an adult, as opposed to being born as a baby. He is able to cross the river and go to pursue an ascetic lifestyle, and he is able to talk to his mother and tell her to call on him in times of trouble. This clause is given prominence in four ways. It contains the adverbial subordinator *sāt* 'as soon as' which provides semantic clarification. It contains a postposed pronoun *āmu*,

which is in a position of high focus in Dolakha. It is prosodically distinct, as both pitch and loudness increase during the production of the unit. And it is followed by a very long pause, which also sets it off from the following information.

Sentence 20

Line 65 contains a quotative verb followed by a vocative which begins the direct quote. This is a common pattern in Dolakhāe (see 4.2). Interestingly, both *bā* and *mā* are morphosyntactically vocative, but only *bā* is put in the initial prosodic unit. In line 66, the closure for the aspirated [t^h] of *thaeta* is quite long, and has the effect of producing a pause-like break after *mā*, which also has prosodic accent. While *mā* is not highlighted by ending the prosodic unit, other prosodic cues function to give it prominence.

Line 66 ends in *hātīṅ* which means 'anything' if the predicate is affirmative (as in this case) or 'nothing' if the predicate is negative. *āpat par-* is borrowed from Nepali, and means 'for trouble to occur'. It is syntactically ambiguous, in that the noun *āpat* could be analyzed as an argument of *par-* or as an incorporated noun, resulting in a complex predicate. We assume the latter. With this analysis *hātīṅ* is an argument of *āpat parnu*, as is the dative subject *thaeta*. *hātīṅ* occurs finally in the prosodic unit, and is pronounced with prosodic accent. This may serve to emphasize the meaning of the pronoun, rendering it something similar to 'anything at all'.

Sentence 22.

There are several interesting phenomena in this sentence. Line 72 contains a single pronoun *āmu* 'she' which does not hold a grammatical relationship with any verb in the sentence. Our impression is that it was abandoned, and that the referent was re-activated by the pronoun *ām* in 75.

Lines 73 and 74 are both independent sentences in that they each contain a fully finite verb, but are not located within a direct quote. We have included them as part of this sentence due to the prosodic structure. Both are pronounced with continuing intonation. Notice that they form a "list" (see 4.1.1) and that the *gunān* in the beginning of line 75 also falls into this list. Thus it can be translated "Her father didn't know, her mother didn't know, nobody (knew)". The predicate of the last portion has been elipted, and instead there is a switch to a new clause.

Sentence 27

Line 85 contains a single non-lexical utterance *ā::*. Our impression is that the prosody overlaying this utterance conveys speaker attitude, and that this is neither a filled pause (during which the speaker tries to decide on what to say next), nor is it part of the direct quote. It is interesting that such a comment may intervene between the direct quote and the quotative verb.

Sentence 29

Line 89 appears to contain a false start. The prosody is non-typical or might be truncated. It appears that the speaker wanted to produce the clause that is realized in 90, but mistakenly said *bisma=lān* as opposed to *tapasya=lān*. It is clear that *bisma=lān* holds no syntactic position in the sentence. *ām* appears to be part of the abandoned material, and may have been intended to be the subject of *jīt-ai ju-en*.

Sentence 30

This prosodic unit contains a single NP, *bisma*, which serves to establish the referent as a major character in the narrative. Compare the similar prosodic treatment of the introduction of Byās in line 55.

Sentence 31

In this sentence it is interesting that the single noun phrase *bisma haṅ-a kae ho sanatanu* 'the son called Bisma and Sanatanu' is realized over two prosodic units. The break comes at the conjunction, the logical positioning of a split.

Sentence 32

Line 96 contains an adverbial followed by the beginning of a direct quote. *gaṅgā* refers to the river Ganges, the place where King Sanatanu plans to bathe. It follows the regular prosodic pattern of placing exclamatory intonation on prosodic units that switch from the main line to the quote (see section 4.2).

Sentence 33

This sentence seems to have very loose syntax. On the other hand, the speaker pronounces it with a clear rhythmic pattern that produces nice imagery. Note that there are no pauses between lines 102 and 105, which gives unity to this stretch.

Syntactically, the initial noun *ṅā* 'fish' in 102 is followed by a number of adjectives, but in Dolakhāe the normal position for modifiers is before the noun. In addition, the syntactic relationship between the various types of fish and the queue in line 105 is unclear. Finally, the noun *lahar* 'line, queue' apparently is suffixed by *-na*, which has the shape of the ergative casemarker, but the noun does not seem to have an ergative function.

Sentence 34

In this sentence the material in direct quotes, lines 107-109, exhibits a beautiful parallelism at both the syntactic and prosodic levels. Note that copulas in equationals are optional in Dolakhāe and the speaker has chosen not to use them in this case.

Line 110 contains the quotative verb *haŋ-an*. This can be analyzed either as a complementizer, marking the complement of *kalpanā yet-* 'imagine', or as a separate quotative verb, rendering a meaning similar to 'he said to himself, and imagined it'. Structures of this nature motivate the reanalysis of quotative verbs into complementizers (Saxena 1988).

Sentence 35

The speaker clears her throat during the long pause at the beginning of line 114.

Sentences 36 and 37

Sentence 36 contains an embedded conversation, which consists of six complete sentences (finite verbs are in lines 119, 120, 121, 124, 126, 127). The sequence *haŋ-an hat-ŋasin* in 122 is structurally a complementizer followed by a subordinate form of the verb 'say'. It is pronounced at very low amplitude and with rapid tempo. It seems as if the prosody is functioning here to de-emphasize the quotative verbs, marking them as temporarily backgrounded, while the quotation itself is put in the foreground. It is also interesting to note that the quotative verbs in lines 122 and 126 come between speaker turns; this is a common pattern in the narrative.

It is interesting that the speaker ended sentence 36 with line 128, when one additional turn in the conversation is found in the beginning of sentence 37. In our analysis of this stretch of narrative, sentence 37 is thus split between two conversations (one between Bisma and Sanatanu and the other between Bisma and Makche Ganda's father), presumably produced at two different times and in two different locations. Another possible analysis is one that would put a sentence break after the response *e jir-a* "oh, ok" in line 129. The reason for postulating this structure is that the following verb *haŋ-an* appears to be prosodically separated from the quote by a pause, and at the same time it appears to be prosodically linked to the following line by the lack of a pause. This temporal quality gives the impression that *haŋ-an* is functioning as a recapitulation instead of as a foreground verb. As with other areas of language, structural indeterminacy is found in prosody/syntax interactions, and gives speakers flexibility in the production of discourse.

Line 119 contains a finite verb which is not final in its prosodic unit. The material after the verb appears to be arguments of the complex predicate *āpat par-ai jur-a* (compare lines 66-67 in Sentence 20). The break between the prosodic units is minimal, as there is no pause, and the rising intonation on the final element is reduced.

Lines 132 and 133 are unusual in that the boundary comes between a noun and its two clitics. Our impression is that the speaker paused to consider what predication the noun should be contained in, and then produced the casemarker and clitic of emphasis after deciding.

Line 134 is one of the prosodic units that contains the most information in the narrative. The beginning of the unit (through *ta-i-na*) finishes the clause that began in line

132. The remaining material constitutes an equational which lacks a copular verb. The presence of the dative morpheme is unusual in this construction; it appears to offer a parallelism with *bihaiti=ta=uri*, with which it directly contrasts.

Lines 138 to 141 are pronounced very rapidly without pauses. There was some debate over whether the whole sequence constituted one very long prosodic unit or several smaller units. The content of this unit is crucially important for this story, since Bisma decides to have a vasectomy, which creates a break in the line of succession. The speaker produces this portion loudly and with rapid tempo.

Sentences 39 and 40

Each of these sentences consists of a single NP, both of which refer to the same participant, namely Bisma. They are prosodically separated from the preceding sentence, and from each other, by both intonation contour and by pauses. Thus the speaker is using line 144 to clarify the identity of the man who took the oath, and line 145 to make a statement about his nature. The two are not part of the same clause.

Sentence 43

This sentence consists of a genitive modifier of the noun phrase *citrāṅga bicitrāṅga haṅ-a nis-mā kae* 'the two sons Citrāṅga and Bicitrāṅga' which functions as an argument of the final clause in the preceding sentence. The addition of the modifier clarifies that King Sanatanu is the father, and thus indirectly points out that they are potential heirs to the throne. The speaker paused considerably before producing this prosodic unit; she was probably considering whether or not further clarification was necessary.

Sentence 49

Line 167 contains a clear case of a postposed subject noun phrase. The presence of the ergative morpheme clearly marks the NP as an argument of the preceding verb.

Line 168 is the subject of the verb in line 175. It is remarkable how much material may intervene between a subject and a verb.

This sentence contains a sequence of four phonological sentences embedded into a larger one, which comprises the narrative sentence. The final intonation in line 174 falls quite low, and there is also a decline in amplitude. At the beginning of 175, the point of return to the main prosodic sentence, both amplitude and pitch raise significantly.

Sentence 50

The speaker sniffs during the pause at the beginning of line 184.

It is interesting that line 181 has interrogative intonation produced over a syntactically subordinate clause. The other two examples of interrogative intonation both contain tag questions (lines 3 and 362).

Sentence 51

Line 188 contains a genitive modifier of the noun *kae* 'son' in line 189. It appears that the speaker wished to clarify the mother-son relationship by giving prominence to the genitive pronoun prosodically, and by the use of the emphatic particle *tu*. She then clarifies the identity of the mother in the beginning of 189, thus repeating information that the speaker considers to be important.

189 itself contains two references to the sons. They appear to be in an appositive relationship, although in general both NPs in an appositive relationship will be marked for case. This unit is pronounced fluently, with no break of any kind between the two coreferential NPs. 195 also contains two NPs in an appositive relationship. In this case it is the double marking of the ergative which indicates that the numeral-classifier *nīs-mā=n* is not dependent on the preceding noun *kae=n*.

Sentence 53

The speaker sniffs during the pause at the beginning of line 202.

Sentence 54

Line 207 ends in the noun *dāi* 'brother'. The exclamatory intonation gives the impression that this is a vocative, as does the fact that this noun holds no grammatical relation with the surrounding verbs. Since the (elder) brother in question cannot be Bisma (as can be seen from the content of the sentence), it must refer to the younger of Citrāṅga and Bicitrāṅga, who is addressing the elder of that pair. This is the only place in the narrative where the brothers are ever separated.

Sentence 57

The speaker clears her throat during the long pause at the beginning of line 226.

Sentence 58

In this sentence it is possible to consider some of the initial clauses (lines 229-232) to be a main-line discussion of the situation now facing the country, as opposed to being part of the direct quote attributed to the people of the kingdom, and marked by the complementizer in 237. We have decided to consider it all to be part of an extended direct quote because of the exclamation at the end of line 229; the exclamatory intonation

over *lau* is what is typically found when the direct quote begins midway through a prosodic unit (see section 4.2).

The boundary between lines 230 and 231 divides a noun phrase from its clitic, as happened in lines 132 and 133.

The word *manta* is difficult to classify lexically in Dolakhāe, because it does not inflect like a verb, but does not co-occur with verbs like a noun. My consultants translate it as 'finished', although its semantics are quite specific, referring to an area where people had been before, but have left. In this case, the translation 'finished' is appropriate in the sense of King Sanatanu's genealogical line being finished.

Lines 235 and 236 contain an ergative interrogative pronoun but an intransitive verb. The speaker is swallowing as she pronounces the beginning of line 236, which creates some disfluency. It appears that she produced the pronoun with the intention of using a transitive verb (perhaps 'rule'), then changed the predication to 'stay in the palace' without repeating (and correcting) the interrogative pronoun.

Sentence 60

Because the NP produced in line 241 has final intonation, it has predicative force; it appears to be an existential clause without an overt copula.

Sentence 61

The syntactic structure of this sentence was discussed in section 3.4.3. Interestingly, the quotative verbs in this sentence are pronounced clearly and are not reduced, prosodically or segmentally.

Sentence 62

At the end of line 264 the quotative verb *hat-ŋasin* is pronounced with low amplitude and is highly reduced, the /h/ is not audible, and the vowel combines with the vowel of the past suffix of *jur-a*. Thus it is prosodically backgrounded. It functions here to mark change of interlocutor.

The anticipatory continuing intonation that co-occurs with finite verb morphology in 266 and 268 is appropriate since each of these clauses is the first item in a list of two events (see 4.1.1).

There is a long pause between 269 and 270. This gives the impression of a sentence break; another possible analysis would be to close one sentence after 269 and analyze it as ending in a direct quote without a quotative verb, and 270 as a sentence-initial recapitulation. Since it is rare to find direct quotes that are not followed by quotative verbs, we chose to keep this together in a single sentence.

The end of this sentence contains some disfluencies. The speaker sniffs during the pause at the beginning of line 271 and clears her throat before line 272. Line 272 refers to

"sons", presumably Citrāṅga and Bicitrāṅga, who have already died. The noun is in ergative case, but there is no transitive verb that follows; the two are not arguments of any verb in the sentence. The speaker seems to start over in 273, although Byās' arrival on the scene was already implicit, since he had completed the conversation with his mother that is the main focus of this sentence. However, the whole series from 270 to 274 has regular intonation patterns, despite the thematic inconsistencies.

Sentence 64

Line 279 is split between a subject noun phrase and the beginning of a direct quote. While it is common to find exclamatory intonation in such cases, this unit is pronounced with narrative final intonation on the exclamation. This intonation type seems appropriate for a shy daughter-in-law and appears to contribute to character development.

Line 282 *ithi: yeṅ-an* 'doing like this' was probably accompanied by a facial gesture involving closed eyes.

Sentence 65

Line 286 contains our longest and most syntactically-complex prosodic unit. It consists of a sentence embedded as a direct quote, with three complete clauses in a chain. We have listened to this repeatedly, and it is clear that there is no prosodic break. The entire unit is pronounced quite rapidly, with a sustained high pitch that clearly unifies the material prosodically. Line 288 contains the same sequence of events (this time as part of the main-line narrative as opposed to being embedded within a direct quote), and again the three clauses are produced within a single prosodic unit.

Sentence 66

Line 292 contains a vocative direct quote indicating how they called the servant in. It clearly is related to the the following line. In 294, the speaker initially repeats the vocative (with exclamatory intonation), then pauses and reanalyzes this bare noun, giving it a casemarker and converting into a genitive modifier. Line 296 clarifies the syntactic structure and can be seen as a repair strategy. It also contains an additional elaboration on the status of the servant, by specifying that she was a *ghartini* 'house servant', and thus of higher social standing than some other servants.

Line 293 ends in a finite verb but has continuing intonation. Thus the speaker signals that this syntactically-final verb does not mark the end of a narrative sentence.

Sentences 64-66

Each of these three narrative sentences reports the birth of one of the three sons who are pivotal characters in the *Mahābhārata*. This section of the narrative is thus a nice

display of how prosody is used to express narrative structure, since one main-line narrative sentence is used for the events leading to and including the birth of each son. The fact that the finite verb *bir-ju* was pronounced with continuing intonation in line 293 might be related to the speaker's desire to produce such parallel prosodic structure in this important part of the narrative.

Sentence 67

This sentence consists of a list of the names of the three sons, each pronounced with a prototypical intonation contour, and a pause before each one. This list serves to clarify the primary point of the preceding three sentences, namely the introduction of these three crucial characters. It parallels earlier uses of single NPs to establish the introduction of important referents (sentences 55 and 92).

Sentence 68

The verbs in lines 301, 303 and 307 are finite but pronounced with anticipatory continuing intonation. This treatment forms a list with the final verb of the sentence. The whole series is a statement of the reasoning for giving the kingdom to Paṇḍuk, and the final line states the conclusion.

The final intonation on line 308 is lengthened and contains the rise/fall typical of Nepāl Bhāsā narrative. Again we see that it co-occurs with landmark events in the construction of the narrative.

Sentence 73

Line 325 is pronounced with falling intonation throughout the unit until the final syllable which is pronounced with a slight rise. Thus the intonation does not appear to be prototypical, hence the assignment of this unit to the 'other' category. The general fall over the unit, however, clearly marks this as being the end of a narrative sentence.

Sentence 74

Lines 332-334 are each given equal prominence and sound prosodically parallel, except for the fact that unit 334 is pronounced with a fall. It could be that the speaker chose to put *bāgabān* 'god' in a separate unit to emphasize the supernatural status of those called down to impregnate the two wives.

The long pause before line 333 contains a clearing of the speaker's throat.

Sentences 75-77

These sentences exhibit syntactic, prosodic and thematic parallelisms. Each starts with a finite clause that describes the birth of one of the Pandava brothers. These clauses

are pronounced with anticipatory continuing intonation, creating a list of these three clauses, each one introducing another brother. It is interesting that the clauses in the list are interspersed with finite clauses that predicate the calling down of the various gods who are the fathers of the sons. The final intonation in these clauses renders them sentence-final. In addition, lines 336 and 339 contain non-lexical utterances whose prosody indicates a type of speaker comment on the event, emphasizing the birth of each son.

Sentence 79

The first two lines of this sentence contain chained clauses with typical continuing intonation. The last line contains a single locative NP pronounced loudly and with clearly falling intonation that marks it as final. The long pause before the beginning of the next unit also serves to mark a major prosodic boundary between the two. The interesting thing is that line 354 contains no finite verb. Instead the locative morphology seems to mark it as an adjunct of the preceding clause.

Sentence 80

Here the speaker begins with a regular subordinate clause, then brings in a new character. In line 356 she uses a kin term, then there is a long pause during which she might have been trying to remember the name of this character. She uses final intonation to establish the referent, then restarts the predication in the next sentence.

Sentence 81

In this, the final sentence of the narrative, the speaker produces four lines with typical prosodic patterns. She does not pause between the lines, and it seems as if she has decided that this is where she will end the narrative, hence her fluent production.

Sentence 82

This sentence functions to assert the close of the narrative. It also contains a tag question which then invites interaction from the listeners, and offers a smooth conversion from monologic to dialogic discourse.

Appendix IV. A Folk Retelling of *The Mahābhārata*

This narrative recasts the central story of *The Book of Origins* of the great Hindu epic *The Mahābhārata*. (van Buitenen (1973) was the English translation consulted). This epic essentially concerns a dispute over which branch of a family should rightfully inherit the throne of the kingdom of Kuruksetra in northern India. The reason this is an issue is that over several generations the genealogy is skewed, due to a wide variety of circumstances affecting eldest sons. The Dolakhāe narrative recounts the events that result in this confusion of succession, ending with the birth of the five Pāṇḍava brothers, who are then set to battle the many sons of Dhīrtarāṣṭra; this struggle constitutes the central part of *The Mahābhārata*. The narrative as it is presented here differs from the epic in several interesting ways, enumerated below. It is unclear to what extent these discrepancies can be attributed to a different oral history resulting in a distinct Dolakhāe version, and to what extent the changes have been made at the choice of the speaker.

1.1 A summary of the Dolakhāe narrative

The tale begins during the reign of King Sanatanu. A young girl named Makche Ganda is required to ferry a holy man, Parāsar Risi, across a river. During the journey, Parāsar Risi requests that the girl have sex with him, and in deference to her modesty, he hides them in thick fogs and clouds during the act. This results in the spontaneous birth of a son named Byās (Kriṣṇa Dvaipāyana in *The Mahābhārata*), who himself becomes a holy sage, and, after making his mother promise to remember him in times of trouble, goes off to pursue an austere lifestyle. Makche Ganda returns home and lives as a virtual virgin. This comprises the first major episode of the narrative (ending with line 70).

The story then skips to King Sanatanu. His first wife, Ganga Debi (the goddess of the river Ganges), gives him six children, leaving him with a son, Bhisma, also a wise and holy man. Bhisma is clearly the logical and rightful heir to the kingdom. Ganga Debi, having fulfilled her wishes for children, returns to the river, leaving Sanatanu alone. He bathes one day in the river, and observes schools of fish, which instills in him the desire to start another family. His son, seeing him in deep meditation, asks him what is wrong, and upon hearing the reason proposes to bring a new wife. King Sanatanu wants to marry Makche Ganda.

When Bhisma goes to negotiate the arrangements, Makche Ganda's father states he will not give his daughter to the king in marriage, since after the death of Sanatanu, the kingdom will go to Bhisma, as opposed to the children of Makche Ganda and Sanatanu, and she will be left destitute. In order to placate the father and prove his determination to avoid this state of affairs, Bhisma openly does *pariwār niyojan* 'family planning' (i.e., he has a vasectomy), thus rendering himself incapable of producing heirs. This act is of extreme importance to the unfolding of *The Mahābhārata*, since the first most logical heir to the throne loses his candidacy along with his potency. The speaker uses four prosodic units in referring to this one act (142-145), thus clarifying and emphasizing its importance. This may be considered the end of the second episode.

King Sanatanu marries Makche Ganda, and they have two sons, Citrāṅga and Bicitrāṅga, also potential heirs to the throne. The two are both married. The king dies and Makche Ganda's name changes to Satyawati. As Satyawati is in a state of depression following the death of her husband, she is regularly comforted by her stepson Bhisma. Bhisma gives her advice and waits in her room until she is asleep, then carefully covers her and steps out of her room at that time. Unfortunately, Satyawati's two sons, seeing this interaction, suspect that their mother and half-brother are having sexual relations. They watch them carefully and at last are convinced that their suspicions are groundless. This serious blunder is considered to be a sin, and in wondering how to atone for it, they decide to ask the advice of wise Bhisma. Bhisma tells them that the only way they can atone for such a sin is to go to Khāsi and die by self-immolation, which they do. In this way the next two heirs to King Sanatanu's throne die before their wives are able to produce offspring. This constitutes the third episode.

Now the crux of the conflict has arrived. All of King Sanatanu's sons are dead with the exception of the impotent Bhisma. The latter is begged to take the throne but refuses, citing his preference for religious austerities and his inability to reproduce. Satyawati then remembers her first son Byās, who is called in and impregnates the two wives of Citrāṅga and Bicitrāṅga and also one of their servants. Thus the illegitimate son of the second wife of the king produces the heirs to the kingdom, three boys: Dhirtarāṣṭra, son of the senior wife but blind; Pāṇḍuk, son of the second wife; and Bidur, son of the servant. Dhirtarāṣṭra is deemed to be ineligible as heir due to his blindness, even though he is the first son and born to the senior wife. Bidur is ineligible to inherit the throne due to his mother being from a low caste, so Pāṇḍuk is declared to be heir. This portion of the story can be considered the fourth episode.

Pāṇḍuk marries two women, Kunti and Mātri. Dhirtarāṣṭra marries Gāndāri. However, due to a curse from another holy man, Silinga Risi, Kunti and Mātri produce no children. Since they need to produce heirs, they do the appropriate pujas and call down five gods to impregnate them. Kunti gives birth to Dharma Yudhiṣṭira, Bāyu and Bimsen in this manner, and Mātri gives birth to Sahakal and Nahakal. These are the famous five Pāṇḍava brothers. Once again we can see the skewed lineage, as Pāṇḍuk, whose claim to the kingdom is not uncontested to start with, does not himself provide the seed for his five sons. This is the fifth episode.

In ending the narrative, the speaker briefly alludes to the trials to come, by stating that Duriyodhan (eldest son of Dhirtarāṣṭra) gives the Pāṇḍava brothers hardship. She leaves us with the five boys being raised by their parents. The central portion of the remainder of the Mahābhārata concerns the struggles between the Pāṇḍavas and the sons of Dhirtarāṣṭra.

1.2 Significant differences between the narrative and the Mahābhārata

There are a number of areas where the Dolakhāe narrative differs from the actual Mahābhārata. Some of these cases might be due to the speaker's decision to exclude certain elaborations that would take the story far afield from the basic narrative. For example, in the Dolakhāe version, Ganga Debi, the first wife of King Sanatanu, bears six

children, each of whom *thau thau thāi on-a* 'went their own way'. Only Bhisma remains as a character in the story. In the Mahābhārata on the other hand, Ganga Debi gives birth to eight children, the first seven of whom she murders. To explain why her actions are appropriate is rather complicated and is tangential to the primary storyline of the narrative. Thus it is possible that the speaker purposely chose to omit this portion of the epic, or it could be that such tangential elaborations have fallen out of the story in the development of the traditional folk rendition.

In addition to several such cases which may be characterized by a lack of elaboration, there are three major areas where the substance of the narrative is quite different from that in the original story. It is unclear to what extent these cases represent different interpretations of the story which may be widespread among the people in Nepal or some greater region of South Asia, or whether this version of the story is specific to Dolakhā itself, or even to the storyteller. We are not folklorists, and here do not offer an analysis of the differences; instead we simply identify them.

King Sanatanu's vision

In the Mahābhārata, King Sanatanu's desire to remarry is sparked when he first smells Makche Ganda's divine fragrance (which she acquired when Parāsar Risi rid of her of her fish smell), then seeks her out, and finds her to be "lovely like a Goddess". He himself approaches her father with an offer of marriage, but on hearing that he must promise that Makche Ganda's children inherit the kingdom, he finds this price to be too high, since the kingdom should by rights go to Bhisma. He returns to his castle lovesick. Bhisma finds him this way, and proceeds to hold the negotiations himself, which results in his renouncing his claim to the kingdom. The fact that Bhisma voluntarily takes on the task is another example of his selflessness, concern for his father, and overall virtue.

By contrast, in the Dolakhāe version, King Sanatanu goes to bathe in the Ganges. He sees in the water a school of fish, and thinking that they are a family with mother, father and children, he is instilled with a desire for family life. Bhisma finds him brooding on this, and when he learns that his father wishes to start a family, asks whom he should bring to be his wife. The father chooses Makche Ganda, for reasons left unstated.

Bhisma's act

In the original Mahābhārata, in order to insure his father's happiness by making the marriage with Makche Ganda possible, Bhisma both renounces the kingdom and takes an oath of celibacy. This is considered to be an act of extreme self-sacrifice, and also attests to his strength of will and moral courage. Later, when his two half-brothers have died and Makche Ganda begs him to impregnate their wives, he refuses her request and keeps his honor in tact.

By contrast, in the Dolakhāe version, Bhisma is able to make use of twentieth-century technology, and simply have a vasectomy. This thus assures Makche Ganda's

father that Bhishma will not have children to contest his own grandchildren's claim to the kingdom. It also immediately disqualifies him as a potential participant in the impregnation of the widows of Citrāṅga and Bicitrāṅga. On the other hand, the vasectomy still leaves Bhishma capable of the sexual act, if not the result. He is not required to take a vow of celibacy, so the act does not attest to his strength of will and self-restraint.

The deaths of Citrāṅga and Bicitrāṅga

Bhishma's decision to have a vasectomy, as opposed to taking a vow of celibacy, is also tied up in the fate of his half-brothers, Citrāṅga and Bicitrāṅga. In the original Mahābhārata, first Citrāṅga is born, and becomes king after the death of Santanu. He was a great warrior, and defeated many kings and champions. At last he fought with the supernatural king of the Ghandharvas, and was killed in the battle. Bicitrāṅga was only a boy at this time, and so Bhishma took the reigns of the kingdom as regent until he grew to manhood. Then Bhishma brought two beautiful wives for him. He whiled away seven years with them, and eventually fell ill of consumption, which van Buitenen (1973:xviii) interprets as a death due to sexual exhaustion, although crucially he left no heirs.

In the Dolakhāe version, the brothers are always referred to as a pair, and they share the same actions and fate; each has one wife. The brothers are suspicious of the close relationship between their mother and their half-brother, since both are *jawāni*, young, strong, physically capable. Since Bhishma is not celibate, but has simply had a vasectomy, he is a potential lover for their mother. However, it is clear that Bhishma has no such intentions, as he carefully covers her with a blanket *thij ma-thien*, without touching her at all. The brothers, after keeping careful watch on the pair, realize that their suspicions are unfounded and confess the sin of suspicion to the all-knowing Bhishma. Bhishma tells them that the sin can only be cleansed through self-immolation at Khāsi, and so the two obediently go to Khāsi and meet their deaths.

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