

SYNTAX AND PROSODY: INTERACTING CODING SYSTEMS IN DOLAKHA NEWAR

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1 Introduction

The most common methodology in linguistics is to transcribe words, phrases, sentences, or texts onto paper, and then to analyze the linguistic features that are represented in the transcription. This is an excellent and valuable methodology, and I have used it myself extensively. However, it is important to realize that this methodology reifies the linguistic transcription as a static object, whereas language itself is dynamic, produced in real time to meet the communicative and interactional aims of the interlocutors. In producing language, speakers are constantly making decisions about what information to convey, how to organize that information, and how to present the information in a fashion that allows the hearer to process it. We can enrich our understanding of language structures and how they are used by expanding our methodology in a way that allows us to understand the unfolding of the discourse in real time. One way to do this is to work not just with the static transcripts, but with the tapes and videos as well, as these media automatically incorporate the temporal dimension of the speech event.

Once we analyze the sound together with the transcribed text, we realize at once that there is an entire modality in the speech event which most transcription systems ignore.¹ This other modality is, of course, prosody, the organization of phonological segments into a series of hierarchical units, and their production in terms of loudness, pitch, rate of speech, etc. Prosody and the segmental stream of speech are produced coterminally, and both are equally important to the organization and presentation of discourse.

Discourse is largely structured through the production of morphosyntax, which indicates the relationships between units and also, in many instances, their boundaries. In producing discourse, speakers are actively making decisions about how to parse the intended information into syntactic units, how to use morphology and syntax to show the relationships between those units, and how to control the flow and highlighting of information. As these decisions are being made about the organization of the morphosyntactic level of speech, simultaneous and very similar decisions are being made about the prosodic level of speech. Speakers must decide how to parse the information into prosodic units and how to use prosody to show the relationships between those units. Speakers also use prosody to direct the hearer's attention to participants and events of different levels of importance, and to indicate his or her attitude towards the information being conveyed.

Prosody and syntax are simultaneous, but still independent, domains of speech, and there are interesting parallels between prosodic and syntactic structure. Prosodic and

1. A third modality is gesture, broadly construed to include eye-gaze, body position, facial expression, etc. Since I do not have video data, I won't be discussing this modality.

Shoichi Iwasaki, Andrew Simpson, Karen Adams & Paul Sidwell, eds. *SEALSXIII: papers from the 13th meeting of the Southeast Asian Linguistics Society* (2003). Canberra, Pacific Linguistics, 2007, pp.53-66.

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syntactic units often align, although they are not required to do so, and speakers may produce syntax/prosody “mismatches” for particular communicative purposes. In addition, prosody and syntax show structural parallels at the macro-level of organization: both have units which are hierarchically organized, and both produce complex structures via embedding. Finally, prosody and syntax are mutually informative, each providing cues to the structure of the other.

The goal of this paper is to explore the parallels between the independent but interacting coding systems of syntax and prosody in Dolakha Newar, a Tibeto-Burman language spoken in Nepal. After presenting the basic typological features of the language, I will describe five intonation contours that are commonly found in Dolakha Newar narrative texts. I will demonstrate how speakers use intonation to organize prosodic units into macro-units which I call “prosodic sentences”. I will argue that prosodic and syntactic sentences have parallel structures and that both allow for embedding. Despite the structural parallels between the two coding systems, they are still clearly independent, as I will demonstrate through exemplification and discussion of syntax/prosody “mismatches”. The paper illustrates how the inclusion of the prosodic level in the analysis of syntax is necessary for a full understanding of language as a dynamic system of communication.

2 Background on Dolakha Newar

Newar is a Tibeto-Burman language spoken primarily in Nepal. The total Newar population is about seven-hundred thousand (Bandhu 2003: 7). Most Newars live in the Kathmandu Valley, where there are three dominant dialects (Kathmandu, Patan and Bhaktapur), as well as a number of smaller varieties. In addition, there are other Newar villages located throughout Nepal, many of which have dialects of Newar distinct from those of the Kathmandu Valley.

The most conservative dialect which has been recorded to date is spoken in the village of Dolakha, located approximately 130 kilometers to the east and north of Kathmandu. This Dolakha dialect is mutually unintelligible with those of the Kathmandu Valley. They could be considered different languages instead of different dialects, however since the Newars constitute a single ethnic group, all speakers consider their language to be “Newar”. The mutual intelligibility of the two dialects is caused by significant differences in the phonology, morphology, and syntax of the languages. The split between the dialects occurred a minimum of 700 years ago.

Dolakha Newar is a non-tonal language with a fairly simple phonemic inventory. It has many polysyllabic words, and is primarily suffixing. The language has morphological ergativity indicated by an enclitic casemarker. Despite this, the language has primarily nominative syntax, and there is strong evidence for a subject category (Genetti 2007). Dolakha Newar is a verb-final language, although sometimes elements are postposed in connected speech, and it exhibits many of the typological correlates of verb-final word order that have been discussed in the literature, such as the presence of postpositions as opposed to prepositions, and the positioning of modifiers before the modified noun (Greenberg 1966, Hawkins 1983, Croft 1990).

One typological correlate of verb-final word order that is important for the current paper is the ordering of dependent clauses before main clauses. Syntactic sentences end when the speaker produces a clause with a finite verb. Thus finite clauses are by definition sentence-final. Dependent clauses, including complement clauses, converbal clauses, and

nominalized clauses, precede the final clause and are thus both non-finite and non-final.² The structure of the complex sentence is represented in (1). Any number of non-finite clauses may occur prior to the production of the final clause:

- (1) Structure of the complex sentence
 Non-final clause
 Non-final clause
 Final clause

At the end of each clause, the speaker must make a decision about the structuring of the sentence. Should s/he produce a finite verb, thus closing off the sentence and marking the end of a significant discourse unit? Or should s/he produce a non-finite verb, indicating that the sentence will continue, and use verb morphology to specify the syntactic and semantic relations between clauses? We can see that final verbs in this language become significant “decision points” for the speaker in the structuring of the discourse (Genetti and Slater 2004).

At the same time that speakers are making decisions about whether to indicate continuation or finality in the syntactic domain, they are also making decisions about whether to mark continuation or finality in the prosodic domain. Consider example (2), taken from a recorded narrative:³

- (2) *khu-mā* *mucā janm-ai* *ju-ene;*
 six-CL child born-BV happen-PART
 ‘The six children were born (and),
- ām* *mucā-pen thau thau thāĩ on-a.*
 DEM child-PL REFL REFL place go-3sPST
 the children each went to their own place.’

The sentence contained in (2) consists of two clauses produced over two prosodic units. Each prosodic unit is represented on a separate line.⁴ In this example, the clause boundaries and the prosodic boundaries occur in the same position. The first prosodic unit contains a converbal clause (the general converb is glossed PART(iciples) in Newar linguistics; Genetti 2005), and the second contains a finite clause. At the end of the first clause, the speaker decided to continue the sentence with the converb rather than break it off with finite morphology. Had she chosen to do so, the first line would have been a complete sentence: “The six children were born.” By using the converb, she shows an integration of the events depicted in the two clauses.

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2. The only exception to this is direct quotation, which is embedded as an object complement, and carries the morphology appropriate for the speech situation it is attributed to.
3. The following grammatical glosses are used in this paper: BV borrowed verb; CL classifier; COMP complementizer; DAT dative; DEM demonstrative; ERG ergative; EXCL exclamation. FUT future; GEN genitive; INF infinitive; NEG negative; NOM nominalizer; PART participle (converb); PH past habitual; PL plural; PRTCL particle; PST past; REFL reflexive; TOP topic.
4. I use the term “prosodic unit” to indicate a stretch of speech uttered under a single intonation contour, and marked off by pause, changes in tempo, and other prosodic cues. This is what Chafe (1980 and later) refers to as an intonation unit. See also Du Bois et al (1993).

At the same time that she is marking the continuation or finality of the syntax, the speaker is also marking the continuation or finality of the prosody. The verbs which are in final position in these prosodic units are overlaid by the terminal intonation contours. In the first line, the pitch contour is rising; in the second line it is falling. The pitch trace of (1) is given in Figure 1, which plots the F0 in hertz over time. The arrows indicate the beginning of the verbal suffix of each unit.⁵

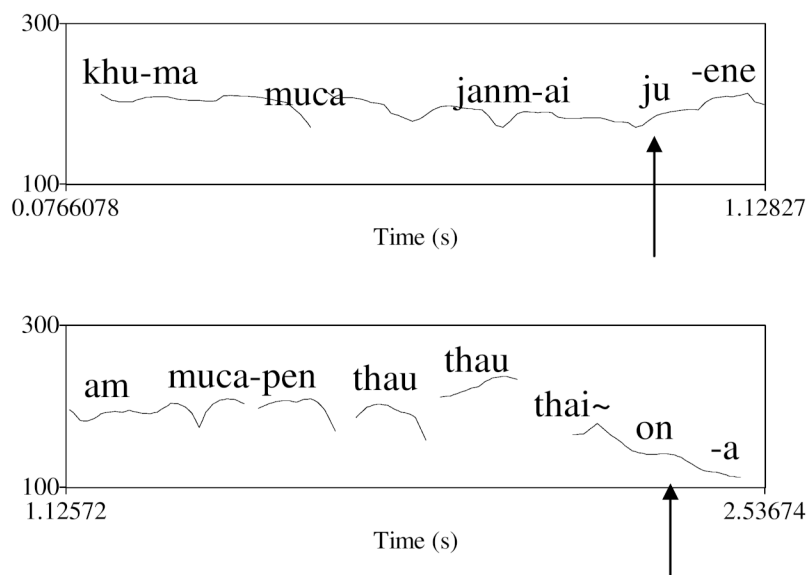


Figure 1: *Pitch trace of example (1)*

We can see that the syntactic and prosodic marking of continuation and finality are contemporaneous. This is a common pattern which is due primarily to the fact that verbal suffixes come at the end of the clause in a verb-final language, and that ends of clauses are frequently at the ends of prosodic units, the position of terminal contours. I turn now to a brief description of the terminal contours used in the production of narrative discourse in this language.

3 Terminal intonation contours in Dolakha Newar

As with many other areas of linguistics, the field of intonation studies is rich with multiple perspectives, approaches, and sets of terminology. For this paper, I will be focusing on the terminal intonation contours, the pitch movements produced over the last two or three syllables of a prosodic unit. The focus on terminal contours was chosen because these contours are primarily responsible for indicating the relationships between prosodic units; terminal contours function to determine the broader prosodic organization of the text. Following Du Bois et al (1993), I will be using a functional categorization of terminal contours. They make the following observation:

5. The acoustic analysis and pitch traces were produced by Praat. The font which overlays the pitch trace does not accept diacritics; these are in the transcription under the figure heading.

At the end of a prosodic unit, a speaker will indicate intonationally whether the discourse business at hand is completed, or whether it will continue. (Du Bois et al 1993: 53)

“Transitional continuity” is the term used to refer to the two-way categorization of terminal contours into “final”, indicating completion, or “continuing”, indicating the speaker’s intention to go on. In my own work, I have found that this two-way division does not represent the richness of final contours in Dolakha Newar, and so I have made further subdivisions in these categories, distinguishing three types of final contours and two types of continuing contours (Genetti and Slater 2004). Each type of terminal contour is indicated by punctuation which is placed at the end of the prosodic unit. The five contours and their punctuation are listed in (3):

- | | | | | | | | | | |
|------------------------|---|--------------|-------------------|------------------------|-----------------------------|---------------------|------------------------------|-----------------------|--|
| (3) | Terminal contour types in Dolakha Newar | | | | | | | | |
| | <table border="0"> <tr> <td><u>Final</u></td> <td><u>Continuing</u></td> </tr> <tr> <td>Prototypical final [.]</td> <td>Anticipatory continuing [;]</td> </tr> <tr> <td>Narrative final [!]</td> <td>Non-anticipatory contin. [.]</td> </tr> <tr> <td>Exclamatory final [!]</td> <td></td> </tr> </table> | <u>Final</u> | <u>Continuing</u> | Prototypical final [.] | Anticipatory continuing [;] | Narrative final [!] | Non-anticipatory contin. [.] | Exclamatory final [!] | |
| <u>Final</u> | <u>Continuing</u> | | | | | | | | |
| Prototypical final [.] | Anticipatory continuing [;] | | | | | | | | |
| Narrative final [!] | Non-anticipatory contin. [.] | | | | | | | | |
| Exclamatory final [!] | | | | | | | | | |

3.1 Final intonation contours

There are three types of final intonation contours. Prototypical final intonation is the most common. It is realized by a steady fall from the syllable in the unit which receives prosodic accent. An example is given in Figure 2; the arrow (here and in subsequent examples) indicates the beginning of the last word of the unit:

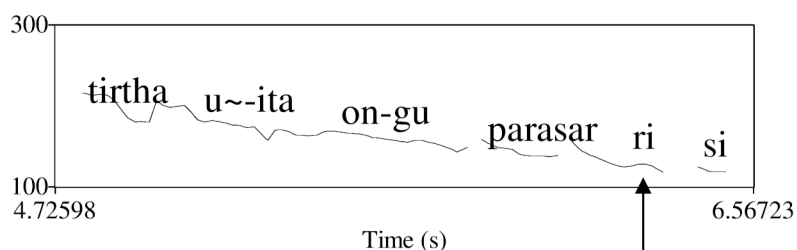


Figure 2: *Prototypical final contour*

<i>tirtha</i>	<i>ũ-ita</i>	<i>on-gu</i>	<i>paraasar risi</i>
pilgrimage	go-INF	go-3PH	Parāsar Risi
‘Parāsar Risi went to go on a pilgrimage.’			

The second common final contour has sustained level pitch throughout the prosodic unit. I refer to this as “narrative final intonation”, as I have observed it primarily in narrative discourse. An example is given in Figure 3:

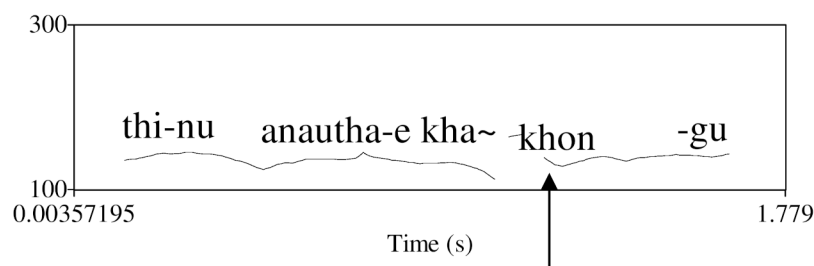


Figure 3: *Narrative final intonation*

thi-nu anauthā=e khā khon-gu /
 one-day strange=GEN thing see-1PH
 ‘Today we have seen this strange thing.’

The third type of final intonation is the exclamatory final. It is commonly found on exclamations and vocatives. It is realized by a distinctive rise-fall contour over the final word. Both the rise and the fall are clearly audible. An example is given in Figure 4:

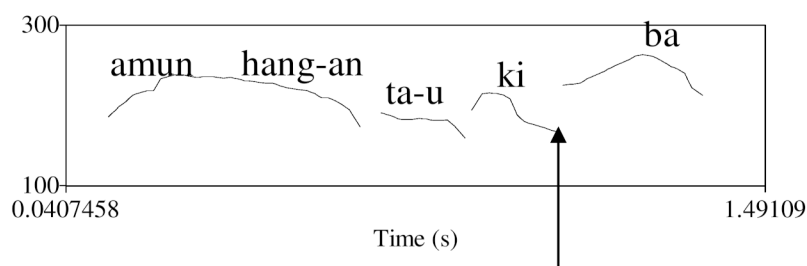


Figure 4: *Exclamatory Final intonation*

āmun hang-an ta-u ki bā !
 3sERG say-PART put-NOM COMP father
 ‘He said “Father!”’

3.2 Continuing intonation contours

I divide the continuing intonation contours into two categories. Anticipatory continuing has a marked rise at the end of the unit (about 60 hertz in the example below), and is commonly followed by a pause. In about a third of the units there is additionally a short drop in pitch during the latter half of the ultimate syllable. This drop is short and usually occurs with reduced amplitude, so it is not strongly perceptible. An example of anticipatory continuing intonation is given in Figure 5:

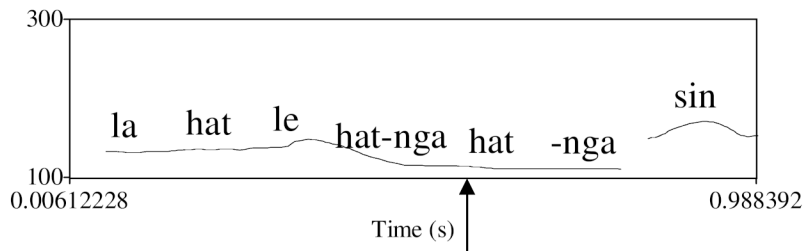


Figure 5: Anticipatory continuing

la hat le hat-nga hat -nga sin ;
 EXCL say PRTCL say-when say-when
 ‘When they said: “Ok, say it then”’.

The other type of continuing contour does not have as dramatic a rise as the anticipatory continuing. The distinction between the two types of continuing contours is gradient, and the decision as to where to draw the line in the classification is somewhat arbitrary, as the division between the two could be made at any spot along the continuum. In general, contours were classed as anticipatory continuing if they had a marked rise and as non-anticipatory if the rise was moderate (in the example below the rise was 16 hertz). An example of a non-anticipatory continuing final contour is given in Figure 6:

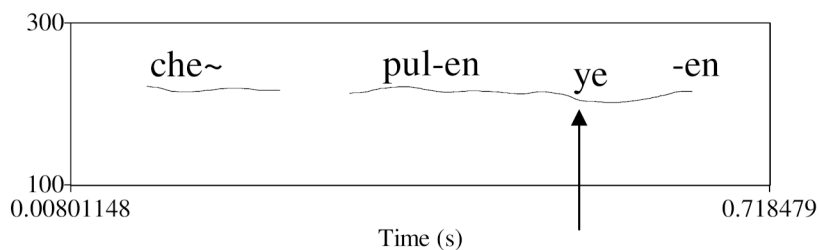


Figure 6: Non-anticipatory continuing

chẽ pul-en ye-en ,
 house return-PART come-PART
 ‘Returning to the house...’

4 Parallels in syntactic and prosodic structures

The classification of prosodic units by continuing and final transitional continuity allows us a deeper understanding of how prosodic units are related to each other. Continuing units instantiate larger prosodic macro-units which are kept open until the production of a final intonation contour. This is a very common pattern in the narrative data; an example is given in (4):

- (4) *thi-mā = n = uri* ;
one-CL=ERG=TOP

hatapata lungmā tuphi hā-ene ;
quickly mortar broom bring-PART

āku ta-en tar-ju /
there put-PART put-3sPST

‘One, quickly bringing a mortar and broom, put and kept them just so.’

Here we see two prosodic units with continuing intonation contours followed by a single prosodic unit with a final intonation contour. Genetti and Slater (in press) have labeled such prosodic macro-units “prosodic sentences”, since they have striking parallels in structure with syntactic sentences in languages of this type. In particular, the structure of the complex *syntactic* sentence given in (1), is directly paralleled by the structure of the complex *prosodic* sentence; both have a series of non-final units followed by a final unit.

Prosodic sentences function in narrative to produce prosodic cohesion over a number of independent prosodic units. Prosodic sentences are similar to the “prosodic presentation units” of Halford (1996), and the “talk units” of Halford (1996: 33-34) and Esser (1998: 481). The definition of these prosodic macro-units is somewhat different from my own, as these scholars are working within a different tradition of contour analysis which does not invoke transitional continuity. However, it appears that both approaches converge on identifying the same units. The prosodic sentence is also similar to the notion of “paratone” (Fox 1973, Brown 1977, Brown et al 1980, Fox 1984, Wichman 2000: 105-107, Wennerstrom 2001: 100-108 and *passim*). The paratone is conceptualized as an intonational paragraph (although smaller than a written paragraph (Brown et al 1980: 26)). It has been defined in different ways, depending in part upon the intonational model being used for the analysis. However it appears that the units identified as paratones in those frameworks would substantially overlap with what I call prosodic sentences. Prosodic sentences are also similar to what Fox (1984) terms “subordinating intonation structures”. More work is needed to compare, contrast, and ultimately synthesize the various proposals for prosodic macro-units currently found in the intonation literature.

Prosodic sentences usually correlate with syntactic sentences in narrative, sharing with them both initial and final boundaries. However the two do not necessarily overlap. An example of a prosodic sentence that is not a syntactic sentence is given in (5):

- (5) *bidur* ;
pāṇḍuk ;
ḍirtaraastra .
‘Bidur, Panduk, Dhirtarastra.’

This example consists of a list of three proper names, giving the order of the birth of three sons. It is the prosodic structure which makes this sequence of three noun phrases cohesive. The prosody in this example functions like syntax in providing information about the structural relationship between elements.

In addition to the parallels in the internal structuring of prosodic and syntactic sentences, there are also parallels in how syntactic and prosodic sentences combine. As with syntactic sentences, it is common for prosodic sentences to occur in sequence. It is also possible for prosodic sentences to be embedded (Genetti and Slater 2004). In my narrative data, this generally occurs when the speaker produces direct quotation. The quoted material is embedded both syntactically (as an object complement of a transitive verb of speaking), and prosodically. An example is given in (6); quoted material is in bold:

- (6) Prosodic embedding
- a. *bisma = ta nyen-ṅasin* ;
Bhisma=DAT ask-when
- b. *e* !
exclamation
- c. *kāsi oṅ-an* ,
Kasi go-PART
- d. *jal-ai jur-sa jukun* ,
burn-BV happen-if only
- e. *u pāp kaṭāun-ai jur-a* !
this sin cut-BV happen-3sPST
- f. *hat-cu* .
say-3sPST
‘When they asked Bhisma, [he] said: “E! Only if you go to Kasi and [die by] burning will this sin be cut from you.”’

The speaker begins this sentence with a sequential converbal clause which recapitulates the action of the previous sentence. This clause is part of the main line of the narrative. The speaker then leaves the main line, as she shifts from producing the voice of the narrator to producing the voice of the character Bhisma in the production of the embedded direct quote (lines (b) through (e)). She then shifts back to the voice of the narrator with the quotative verb in line (f). Here she produces a finite form of the quotative verb, thus ending the syntactic sentence.

Turning to the direct quote, we can see that it is also complex. It begins with an exclamation *e*, which is followed by a general converbal clause in (c), a conditional converbal clause in (d), and a finite clause in (e). All this constitutes a single complex sentence, which is syntactically the complement object of the quotative verb *hat-cu*.

There are a number of morphosyntactic and prosodic cues which signal to the hearer that the material in lines (b) through (e) is embedded, including the production of an exclamation (not normally found in the main line of narrative), changes in voice quality, and changes in deixis (e.g. the use of the proximal demonstrative *u* in line (e)). All of these cues function as signals to the hearer to suspend the first clause of the sentence produced in (a) until the return to the main line in (f). The hearer correctly interprets the sentence as “When they asked him, he said X”, rather than “When they asked him – hey – he went to Kāsi”, an interpretation that doesn’t take lines (b) and (c) as embedded.

The syntactic structure of this sentence is paralleled quite directly by the prosodic structure. The first line of the prosodic sentence ends in anticipatory continuing intonation. This intonation type opens a prosodic sentence which can only be closed by final

intonation. The next prosodic unit, line (b), does contain narrative final intonation, however, the very same cues that serve to inform the hearer to embed this line syntactically also inform the hearer to embed this line prosodically. The same process of suspension that occurs at the syntactic level also occurs at the prosodic level. The hearer keeps open the prosodic sentence begun in line (a) while processing the two embedded prosodic sentences in lines (b) through (e). When the speaker returns to the main line narrative in line (f), the suspended prosodic sentence is resumed, and closed with the production of final intonation. The prosodic structure of (6) may be schematized as in (7), with the embedded lines offset to the right:

- (7) Prosodic structure of (6)
- a. continuing intonation [;]
 - b. final (end first embedded pros. sent.) [!]
 - c. continuing [,]
 - d. continuing [,]
 - e. final (end second embedded pros. sent.) [!]
 - f. final (end of non-embedded prosodic sentence) [.]

The majority of examples of prosodic embedding in my narratives are of this type, where the embedding co-occurs with direct quotation. Prosodic embedding is not restricted to this, however, but can occur anytime that the main line of the discourse is temporarily suspended, e.g. in the pursuits of “side interests” (Chafe 1980: 34-36), or in the production of “parenthesis” (Cruttendon 1986: 129, Bolinger 1989: 186ff, Wichman 2000: 94-101). A particularly relevant observation on parenthesis is made by Wichman, who notes: “The examples I have quoted have in common that if they were deleted they would leave the rest of the utterance prosodically coherent” (2000: 99). This is exactly the pattern which I have found with prosodic embedding. In example (9) above, lines (b) through (e) could be removed resulting in well formed structures at both the prosodic and syntactic levels. However, since the majority of my examples of embedding contain quoted material, I am reluctant to use the term “parenthesis”, which implies a digression possibly unrelated to the surrounding discourse. In narrative, quoted material is a crucial portion of the narrative content, and often functions to move the storyline forward. Nevertheless, the ability to suspend a prosodic sentence, insert something else, and then return to it, appears to be a common and probably universal phenomenon.

We have seen that in this language syntactic sentences and prosodic sentences are strikingly parallel in structure. They have similar internal properties in that both are formed by one or more non-final units followed by a final unit. They also have similar combinatorial properties in that both can occur in sequence or can be embedded. It is also true that the boundaries between prosodic and syntactic sentences commonly match up. When speakers produce final intonation contours together with finite verb morphology, they are signaling the end of significant units in the narrative (Genetti and Slater 2004). These units correspond to the layman’s concept of “the sentence”. They have been called “talk units” by Halford (1996), and “narrative sentences” by Genetti and Slater (2004). The discourse function of these units has not been adequately studied, however Chafe’s (1980: 26, 1994: 142) “center of interest” appears to be a promising direction of future research.

The convergence of syntactic and prosodic finality is also relevant to turn taking (Ford and Thompson 1996).

5 Independence of syntactic and prosodic structures

While syntactic and prosodic structure have strong parallels and substantially overlap, it is clear that correspondences between them are neither obligatory nor unique, as pointed out by t'Hart et al (1990:100) and others. The fact that the relationships between syntax and prosody are non-obligatory renders the attested correlations even more interesting; speakers are choosing to produce parallel structures the majority of the time. When speakers make the opposite choice, so that the two modalities do not run in tandem, they provide evidence for their independence. The study of such syntax/prosody “mismatches” – cases that go against common patterns of correlation between syntax and prosody – is particularly interesting when they are examined in the larger discourse context; speakers produce mismatches in order to meet particular communicative aims.

The fact that syntactic and prosodic boundaries usually co-occur has been established in a number of studies (Iwasaki and Tao 1993, Tao 1996, Matsumoto 2000). Genetti and Slater (2004), who analyzed the syntax/prosody correlations in one Dolakha Newar text in detail, found that 86% of prosodic unit boundaries followed either a noun phrase or a clause boundary. Similarly striking results were found for the co-occurrence of the marking of continuation and finality: 81% of the finite clauses in the narrative occurred with final intonation, while 99% of the non-finite clauses occurred with continuing intonation.

Despite these high percentages of co-occurrence, there are clearly some cases which contradict the attested patterns. This is one type of syntax/prosody “mismatch” (Genetti 2003): a mismatch in syntactic and prosodic boundary. An example is given in (8):

- (8) *pusata main = e* ;
Pusata month=GEN

barta con-ŋasin ;
fast stay-when
‘When it was the fast in the month of Pusata...’

Syntactically, this example consists of a simple intransitive clause with a subject and an intransitive verb. The subject noun phrase contains a genitive modifier *pusata main=e* ‘of the month of Pusata’ preceding the head noun *barta* ‘fast’. The result is a well-formed and integrated clause. Although this is one integrated syntactic unit, the speaker made a decision to distribute the clause over two prosodic units. While one might expect a break between the subject noun phrase and the verb as the major constituents of the clause, the speaker does not produce this. Instead, she breaks the noun phrase itself apart, putting the genitive modifier into one prosodic unit, and the head in another. In order to understand this seemingly odd decision, one must look more broadly at the narrative context. This sentence was produced in the first line of a long and involved narrative. The genitive modifier is set off prosodically in order to establish the temporal reference of the following episode. At the same time that the speaker separates *pusata main* prosodically, she also

smoothly produces the genitive clitic, marking it as dependent on the following head, and constructing a well-formed and integrated syntactic sentence.

Another type of syntax/prosody mismatch is found in the marking of finality and continuation. That is, a unit can be marked as final in one modality and simultaneously marked as continuing in another. An example of this is given in (9):

- (9) *sampati ma-da* ,
 wealth NEG-have
- jin ma-bi-gi chana bā = ta* .
 1sERG NEG-give-1sFUT 2sGEN father=DAT
 ‘She will not have wealth. I will not give her (in marriage) to your father.’

This example consists of two finite clauses in sequence, each containing a finite verb and each constituting an independent syntactic sentence.⁶ By contrast, the example contains only one integrated *prosodic* sentence; it has one line with continuing intonation and one with final intonation. The locus of the mismatch is the first line, *sampati ma-da*, ‘she will not have wealth’, which is marked as final at the syntactic level and continuing at the prosodic level. To understand why the speaker produced this mismatch, one again needs to consider the wider context of the narrative. This example is an embedded direct quote in a conversation regarding marriage negotiations. It is spoken by the father of the prospective bride, who is concerned for her financial future and therefore (at this stage of the negotiations) refuses to give the girl in marriage. The continuing intonation functions here to mark a significant relationship between the proposition of the first line and that of the second. The context allows the speaker to infer that the interpropositional relationship is causal; it is because of his conviction that she will be destitute that he is refusing the marriage. This raises the question of why the speaker did not then mark this causal relationship explicitly by using the causal converb, *ma-da-e-lāgin* ‘because she will not have’. The answer is that the production of the finite verb form allows the material of this clause to be presented as an assertion, clarifying and strengthening the father’s position in the negotiation. Since the speaker can indicate the interpropositional relationship with prosody, the verb form is free to be used for independent rhetorical purposes.

It is clear from these examples that a full understanding of how speakers weave syntax and prosody together can only be arrived at through a detailed qualitative analysis of a particular discourse at a particular point in time. While quantitative studies are clearly important in showing overall patterns and trends in the data, they must be balanced by detailed examination of the use of particular forms in context.

6 Conclusions

This paper has demonstrated that in Dolakha Newar there are a number of striking parallels between prosodic and syntactic structures. The marking of continuation or finality is realized at the ends of units in both domains, and these usually overlap temporally. Both syntax and prosody form macro-units with non-final units followed by final units. Also,

6. The existential verb *dar-* has irregular inflection. This is the negative past/present form.

both allow for the embedding of one unit into another. It is interesting to note that these parallels are due in part to the verb-final typology of the language; languages with other types of constituent ordering may not exhibit parallelisms to the same degree. Genetti (2003) explores this point in more depth.

Although there are significant parallels between syntactic and prosodic structure, speakers manipulate each independently and there are no required one-to-one correlations between domains. Evidence for this point is found in the production of syntax/prosody mismatches. Speakers can skew the two domains in order to meet the broader goals of the discourse.

This study was based on a methodology which includes detailed examination of the sound of recorded narratives together with their segmental transcription. The result is a richer study which reveals the interaction between the syntactic and prosodic domains. Listening to the recording as one performs an analysis allows a fuller understanding of why a particular coding decision was made at a particular point in time, and a fuller understanding of the dynamic process of discourse production.

Notes

I would like to thank Wallace Chafe, Matthew Gordon, Keith Slater, Greg Brown, Daniel Wood, and the UCSB Prosody Group for assistance and inspiration. All mistakes are my own responsibility.

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