# THE PRAGMATIC FUNCTION OF INTONATION IN ENGLISH AND SLOVENE

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#### **Abstract**

The article examines the pragmatic role of intonation whose prime function is to enable the hearer to make inferences from the utterance's context in order to enrich the interpretation. Intonation does not alter the sense of lexical items. Instead it provides the hearer with an opportunity to choose between different interpretations at the lexico-syntactic level. The intonation systems of different European languages exhibit quite a large number of similarities regarding the pragmatic role of intonation. The analysis of the communicative functions of tone, key and termination in English and Slovene was an attempt to prove the hypothesis of natural, iconic meanings of intonation.

### A DISCOURSAL APPROACH TO THE ANALYSIS OF INTONATION

Since the seventies discourse has become a key focus of linguistic research. Consequently, phonologists researching intonation have switched their interest from mere description of pitch contours of individual clauses and sentences to larger chunks of speech. They have tried to establish the function of different prosodic features in the development of spoken interaction, their influence upon the speaker/hearer convergence and the context of interaction. In other words, phonologists were no longer interested in the emotional, attitudinal and grammatical functions of prosodic features but rather in how they contribute to the ever-changing nature of spoken discourse and its understanding.

In the British linguistic tradition a discourse analysis school was established in Birmingham. Starting with discourse analysis of teacher/pupil interaction in a class-room situation John Sinclair and Malcolm Coulthard (1975) developed an interactional model applicable to any spoken interaction. The analysis of discourse functions of different prosodic features was carried out by David Brazil and resulted in an intonation model different from previous ones (Crystal, O'Connor & Arnold, Halliday) in that it related communicative meanings and values to tones, keys and pitch sequences valid in all occurrences of these prosodic features (Brazil, 1985).

In his work on discourse intonation, Brazil (1985) has proposed that certain relationships exist between tone units which are manifested by means of different prosodic elements, such as the choice of tone, key and termination.

The choice of tone marks the discoursal function of the whole unit. Thus, for example, a fall marks the information as new, whereas a fall-rise marks the matter as old, shared or already negotiated.

In Brazil's intonation model key is "any prominent syllable which precedes the tonic syllable in its tone unit as an onset syllable" (Brazil, 1985:23). There are three levels of key: high, mid and low. The choice of key puts the tone unit in a special relationship with the previous one. Thus high key expresses contrast, mid key expresses a simple additive relation, while the low key expresses existential equivalence.

Termination is associated with the last prominent syllable in a tone unit. It is a particular pitch level at which tones are realized. The choice of termination mainly restricts the use of key in the following tone unit.

The discoursal functions of tone, key and termination are mainly to enhance lexical and grammatical cohesion and to achieve coherence in speech.

# THE DISADVANTAGES OF THE TRADITIONAL MODEL OF SLOVENE SENTENCE INTONATION

The traditional model of Slovene sentence intonation was developed by Jože Toporišic (1984) on the basis of the analysis of the reading of literary texts. Thus his model is not a description of spontaneous speech but rather a prescription of an ideal sentence intonation which can nowadays only be heard on stage or in carefully prepared texts read by professional readers. The application of the model to the analysis of spontaneous speech must necessarily reveal several prosodic features which the model could have accounted for had it been developed on the analysis of spontaneous speech.

Furthermore, the model mainly deals with the description of pitch movements in individual clauses or sentences, emphasizing the influence of word intonation, i.e. the tonemic accent, upon the pitch contour of a clause or a sentence. Consequently, Toporišic distinguishes among different types of pitch contours typical of statements, commands and questions, thus giving preference to the grammatical function of intonation above all other functions.

Having developed the intonation model well before discourse analyses came into full swing, Toporišic does not grant prosodic features any functions they might play in the development of a spoken interaction or how they influence the speaker/hearer relationship. He marginally admits that intonation may have emotional and attitudinal functions mainly expressed in the change of key, tempo and timbre.

# THE REASONS FOR THE APPLICATION OF BRAZIL'S MODEL TO SLOVENE SPOKEN CORPUS

The Slovene intonation model as developed by Toporišic is the only valid intonation model which has not been publicly challenged yet. As a matter of fact, phono-

logical and prosodic research has stagnated. It has been only due to the Slovene-English contrastive analysis that some prosodic research has been carried out lately.

The existing Slovene intonation model and Brazil's communicative approach to the analysis of prosodic features are incompatible both in the structure of tone units, as well as in the meanings associated to different prosodic features. The purpose of my analysis was to find out how the prosodic features of tone, key and termination influence the meaning and the communicative value of utterances and how they contribute to the cohesion of the message both in English and in Slovene. Thus only one of the models had to be used for the analysis of both languages. I chose Brazil's intonation model and applied it to the analysis of a Slovene spoken corpus consisting of interviews, sport broadcasts and news readings.

## THE DISCOURSAL MEANINGS OF TONES IN ENGLISH AND SLOVENE

### **ENGLISH**

The various descriptions of intonation have attributed varying meanings to different pitch movements: grammatical (Halliday, 1967), attitudinal and emotional (O'Connor, Arnold, 1973), or discoursal (Brazil, 1985). Descriptions of the meanings of tones in English vary according to their local or abstract nature. The attitudinal approach is said to exhibit local meanings of tones when they are used in different types of sentence. A description which seeks the common factor in all the uses of a particular tone is said to be an abstract one. Such is Brazil's (1985) discoursal approach to intonation, in which he tries to define how different prosodic features (i.e. tone, key, termination) affect the communicative value of an utterance. Discoursal meanings of different tones deal with concepts like shared knowledge of a speaker and listener(s) and the desire of a speaker to dominate, while key and termination express the expectations that a speaker has about the addressee's reply.

Brazil distinguishes between two basic, unmarked tones, the fall and the fall-rise. The former is proclaiming, the latter referring. The term referring means that the fall-rise marks the matter of the tone as part of the shared, already negotiated, common ground occupied by the participants in an on-going interaction. The fall, in contrast, presents the matter as new, i.e. not yet part of the common ground, hence the term proclaiming.

In addition to the two unmarked tones, there are also two marked ones, the proclaiming rise-fall and the referring rise, which are used exclusively to express dominance in spoken interactions. Dominance can either refer to the social roles that the speakers exhibit, or, more commonly, to the control of the discourse that is held by one participant (often the current speaker) who can expect to be allowed to proceed uninterrupted to the end of the turn. It has to be pointed out that the dominant speaker can choose between the unmarked (non-dominant) and marked (dominant) tones. There are, however, types of discourse where the listeners expect the speakers to behave according to their dominant roles (e.g. doctor-patient, judge-witness, teacher-pupil interactions).

According to Brazil, the level tone does not exhibit any interactive nature. It is a tone which occurs normally in "ritualized or precoded speech" (Brazil, 1995:244). In spontaneous speech, the level tone is frequently used when speakers need time to plan ahead. To distinguish it from the discourse that is speaker-hearer-sensitive, Brazil calls this kind of performance "oblique discourse" (Brazil, 1995:244).

### **SLOVENE**

In Slovene sentence intonation Toporišič distinguishes three main pitch movements that are realized on the nuclear syllable: the falling, the rising and the level. There are variations of these pitch contours which depend on the word intonation as well as on the type of clause or sentence.

The analysis of Slovene spoken corpus has shown that the use of the falling, rising or level tones is similar to their use in English. It has been proved that the fall in Slovene is also used with reference to information which is new, whereas the rise is often used anaphorically, i.e. referring back to information which has already been introduced. The use of the level tone is practically the same as in English, namely, to express hesitation.

Although Toporišič does not recognize the fall-rise, the analysis has shown a significant occurrence of the fall-rise in Slovene. The use of the fall-rise tone is on the increase mainly in TV news and sport broadcasts.

The analysis of the actual realization of the fall-rise tone in a tone unit has shown that the tone has three possible realizations:

- it can be realized within one polysyllabic word:
  - Vozil ni mogoče premakniti zato, ker so to večinoma kolesna vozila, /v **bojih**/ pa so pnevmatike prerešetane ...
- it can be realized within one phrase:
  - Andrej ima zelo / ☑ netipično po ↗ škodbo kolena;
- it can be realized as a split fall-rise, i.e. the falling part is realized at the beginning of the tone unit, whereas the rising part comes towards the end of it:

# /Če pro घ daja britanskega blaga v Slo ¬ veniji / nima prav dolge tradicije

Contrary to Received Pronunciation, the realization of the fall-rise within one polysyllabic word is very rare in Slovene and can be regarded more as an exception than a rule. The other two realizations are much more frequent and exhibit some typical patterns of occurrence.

The fall-rise in phrases usually occurs in nominal phrases with the pre-modifier being either an adjective, a pronoun or a numeral. The pre-modifier takes the falling pitch movement, whereas the head word takes the rising. The communicative value of such a fall-rise is twofold: the falling part introduces new information and the rising part highlights something which is already known to the speakers but is important for a complete transfer of the message.

The split fall-rise is not realized within one phrase, thus it is possible to regard such tone units as units with two nuclei. In Slovene these units fall into four major groups according to the distribution of the falling and the rising parts within the tone unit. Thus we distinguish the following groups:

- 1) 凶 on the negative adverb or a pronoun ... ↗ on the last lexical item Škoda je, da danes na startu 凶 ni Andreja ↗ Miklavca
- 2) ⊌ on a lexical verb ... ¬ on a noun or a pronoun

Bi nam lahko najprej čisto na kratko strnil, kaj se je od včeraj, / ko je ministrski svet

po \u211trdil svoja pogajalska izho \u221dišča

- 3)  $\[ \]$  on an adverb ...  $\[ \]$  on the last lexical item in za spoznanje  $\[ \]$  manj ostro tudi  $\[ \]$  Češko
- 4)  $\vee$  on a noun ...  $\nearrow$  on a noun.

Morda se bodo razglabljanja / o **po⊿menu obiska velškega ⊅princa** / še nadaljevala.

When the tone is not realized within a single phrase, then the rising part simply indicates the syntactical and semantical non-finality, whereas the falling part carries the main message. Thus the discoursal function of the split fall-rise is to inform the listener and not to make reference to something which is already shared or old information.

# THE DISCOURSAL MEANINGS OF KEY AND TERMINATION IN ENGLISH AND SLOVENE

In his work on discourse intonation, Brazil (1985) has also proposed that certain relationships exist between tone units. These are manifested by means of prosodic features which he has called key and termination. If tones exhibit certain pitch movements, then key and termination refer to the pitch level of the first (i.e. key) and the last (i.e. termination) pitch prominent syllables. Both, key and termination, can be realized at three different pitch levels: high, mid or low.

The communicative value of the high key is to present the matter expressed in the tone unit as being contrary to the expectations of the hearer. The low key, on the other hand, presents the matter as something which follows naturally from the previous matters and is in agreement with the hearer's expectations. The mid key expresses no special expectations on the part of the hearer, its function being only to add one piece of information to the other.

The pitch level of the last prominent syllable, i.e. the nucleus, is called termination. Its communicative function is to signal the speaker's expectations with regard to the key of the following intonation unit. In other words, high termination anticipates high key, whereas mid termination anticipates mid key. Low termination does not set up any expectations regarding the key of the following tone unit.

The only existing description of the Slovene sentence intonation could not be used for the analysis of discourse functions of key and termination in Slovene. Toporišič claims that Slovene speakers mainly use mid key. The choice of high or low key is restricted to emotionally marked utterances or when speaking to small children or animals. Hence a similar attempt to apply Brazil's intonation model to the recorded data of spoken Slovene was made.

I analysed two interviews with senior Slovene politicians. The purpose of the auditory analysis was to establish:

- 1) a possible number of keys and terminations;
- 2) possible combinations of key and termination;
- 3) communicative and discoursal functions of keys and terminations within one turn, as well as between the turns.

Since most of the turns of the two interviewees were relatively long and covered several topics and subtopics, I also observed the way speakers used prosodic features of key and termination to mark new subtopics, expand information or explain their points of view.

### KEY AND TERMINATION IN THE ANALYSED DATA

The auditory analysis of the Slovene data has shown that in Slovene, too, we may distinguish between three pitch levels of the first accented syllable in the pretonic segment (high, mid and low key), as well as three pitch levels of the tonic syllable (high, mid and low termination).

I separately analysed:

- key and termination within one tone unit,
- termination and key between two turns, and
- key in the beginning of a new pitch sequence.

## KEY AND TERMINATION WITHIN ONE TONE UNIT

There are restrictions governing the combination of key and termination within one tone unit. The following combinations of key and termination are possible in the Slovene language:

- 1. High key + high termination Meaning:
  - contrast

Tako kot bi lahko človek domneval, če bi opazoval samo zunanje slovensko dogajanje, potem se ustvarja vtis, da Slovenija postaja Avgijev hlev korupcije, nesolidnosti, kriminala, podkupljivosti. // Jaz mislim, da tako ni, //ker potem je razumljivo pričakovanje ljudi, da tako kot je bil očiščen Avgijev hlev, da se bo tudi tu pojavil heroj, ki bo to storil.

- repetition of shared information

Kar zadeva moje deponirane knjižice sem že dostikrat odgovoril in odgovarjam še enkrat:  $/ \uparrow$  jaz 'nisem ni $\urcorner$ koli deponiral knjižice,  $\uparrow$ /nisem o tem govoril.

- emphasising the importance of the event/decision

Ampak jaz vidim racionalno jedro in domet te razprave, ki ni samo razprava v vladi, ampak je postala naša splošna razprava zdaj,/  $\uparrow$  da se o'krepi zavest o po  $\searrow$ membnosti  $\uparrow$ /

## 2. High key + mid termination

Although the difference in meaning between the tone units with high key + high termination and those with high key + mid termination is not essential, it has to be mentioned since it is by far the most frequent combination of key and termination in the Slovene corpus.

## Meaning:

- contrast; mid termination enables a wider range of choices regarding the key of the following tone unit; a less declarative and condescending attitude to the addressee.

Torej s to splošno oceno se ne strinjam. //↑ 'Mi \(\simeg\) smo država v pre\(\tau\)hodu. //Veliko stvari moramo narediti v kratkem času ...

## 3. Mid key + high termination

Typical of this combination is the rising tone with high termination. This restricts the choice of key in the next tone unit which can thus only begin with either a mid or a high key.

## Meaning:

- the high key announces that the next tone unit will be either in contrast or will provide detailed explanation of facts, depending on the key of the next tone unit.

Jaz sem enkrat že v razgovoru z vami dejal, **/jaz za no'beno pometanje pod preproge nisem:** ↑ /'mislim, da imajo drža vljani /
pra vico zvedeti resnico o vseh vprašanjih,ki jih te afere odpirajo.

# 4. Mid key + mid termination

## Meaning:

- the mid termination does not restrict the choice of key in the following tone unit; it is most frequently used to explain one's point of view

... dostikrat sem zadnje dneve slišal vprašanje, kdaj sem in kako sem bil obveščen, da je orožje na mariborskem letališču. Iz časopisja. //Šele kas neje,/ko je Mi'nistrstvo za notranje za deve /pro silo,/če bi krimina'listi lahko dobili vpo gled vpreiskovalnih dejanjih,/ki so jih opravljali,/v dokumen tacijo,/...

## 5. Mid key + low termination

The low termination is almost always realised within a falling tone. The combination is typical of final tone units and marks the end of a pitch se-

quence. This means that the next tone unit, which is also the beginning of a new pitch sequence, can begin in any key.

Kot pravite je vlada razpravljanje, odločanje /o tem aktu'alnem problemu odlo ⊔žila. ↓ //'Torej se ga ne izo ¬giba, ↑/ampak je ocenila, da lahko koristneje o njem presodi čez teden dni.

# 6. Low key + mid termination Meaning:

- the low key expresses existential equivalence with the previous tone unit, whereas the mid termination announces that the message is not complete. Ampak jaz vidim racionalno jedro in domet te razprave,/ki ⊿ni samo razprava v vladi,/√ 'ampak je postala naša ¬splošna razprava /⊿ zdaj,/da se okrepi zavest o pomembnosti neodvisnosti sodišč kot eden temeljev pravne države in demokratične parlamentarne ureditve.

# 7. Low key + low termination Meaning:

- expresses existential equivalence with the previous tone unit and marks the end of a pitch sequence; used in appositions.
  - Za jutri dopoldan se bo tukaj oglasil predsednik Predsedstva Republike Slovenije,/ $\checkmark$  go'spod Milan  $\lor$ Kučan.  $\checkmark$  //
- inserted clauses or phrases which meaningfully complement or explain the previous clause or phrase

Pri tem je seveda poseben problem SOVA,/ $\sqrt{}$  o'ziroma nekdanji  $\sqrt{}$ VIS,  $\sqrt{}$  /ki ga praktično ni in s tem je,/ $\sqrt{}$  'to si upam tr $\sqrt{}$ diti,  $\sqrt{}$  /v tem trenutku slovenska država protiobveščevalno praktično nezaščitena.

### TERMINATION AND KEY BETWEEN TWO TURNS

Cohesion between two turns is established by means of the termination which ends one turn and the key which begins the next turn. The pitch contour of Slovene sentence intonation is gradually descending and is generally not in favour of the so-called pitch jumps and pitch slumps which are quite typical of English intonation. Thus the function of the termination in the Slovene language is mainly to restrict the choice of key in the next tone unit. Hence there should never be more than one level difference between the termination and the key of two successive tone units. The exception is low termination, which can be followed by any key.

The analysis of interviews has shown how different terminations ending the reporters' questions influenced the interviewees' choice of key.

Table 1. Termination and key between turns.

TERMINATION (reporter)		KEY (interviewees)	
level	number	level	number
high( <b>个</b> )	8	high (♠)	6
		$mid ( \rightarrow )$	2
mid (→)	13	high (↑)	3
		$mid ( \rightarrow )$	9
		$low(\mathbf{\psi})$	1
low (↓)	5	high (♠)	2
		mid ( <b>→</b> )	3
		low (↓)	-

Table 1 shows a relatively high degree of agreement in the level of termination and key. The discoursal meanings of different combinations of termination and key are presented in Table 2.

*Table 2. The agreement of key and termination between questions and answers.* 

QUESTION		ANSWER	
Termination	Meaning	Key	Meaning
high (个)	to challenge the	high (↑)	contradicts
	speaker	$mid ( \rightarrow )$	agrees,
			explains
mid ( <b>→</b> )	a 'neutral' question	high (个)	contradicts
		mid ( <b>→</b> )	explains,
			adds,
			agrees
		low $(\Psi)$	disagrees
low (↓)	ends a pitch	high (个)	contradicts
	sequence	mid ( <b>→</b> )	explains,
			adds

If the communicative function of high termination in questions is to challenge the speaker by restricting the choice of the initial key in the answer, then it is possible to conclude that both interviewees in the data accepted the challenge and answered six times with high key, thus contradicting the interviewers' opinions. Only twice did they answer in mid key, thus accepting the interviewers' points of view, adding necessary explanation or expanding the idea.

Mid termination, which allows all three keys, was used with the so-called 'neutral' questions, i.e. questions which were not accompanied by the interviewers' opinions, and merely asked for information or clarification. Hence the prevailing number of mid keys in the interviewees' responses.

Since the communicative value of low termination is merely to end a pitch sequence, and as such does not restrict the interviewees, they could start their responses in any of the three keys available.

## KEY IN THE BEGINNING OF A NEW PITCH SEQUENCE

Phonological paragraphing is a feature which divides spoken discourse into units similar to written paragraphs. Brazil has observed that speakers use pitch to form units larger than one word group. These units are characterised by the overlapping of syntactically and semantically complete units with low falling tones. This usually signals that the speaker has completed his thought as well as his turn and expects somebody else to continue or he himself intends to introduce a different topic or subtopic. Brazil called a series of tone units where the last one ends with low termination a pitch sequence. The key which begins the next pitch sequence puts the whole sequence in a relationship with the previous pitch sequence. Thus hearers can establish coherent links between two successive pitch sequences, whereby the key plays the role of the anaphoric reference.

## 1. High Key

# Meaning:

- introduces a new topic or subtopic

Ja vedno poslanci pač odločajo, velikokrat sicer po svojih nagibih, ne tako koordinirano, kot se včasih zdi. Tudi koaliciji se velikokrat očita ravno to, da pač ne deluje ravno koordinirano in usklajeno. //↑ Kar se tiče 'zakona o pranju de ¬narja, ↑ // bi rad poudaril, da ge je v postopek, v proceduro parlamentu, Državnemu zboru, poslala vlada.

- puts the second pitch sequence in a contrastive relationship with the previous pitch sequence.

Skratka ocene, zunanje ocene, so pozitivne in bistveno odstopajo od tega, kar pravite, da opozicija trdi. ↓ //↑ 'Vendar opo →zicija ↑/že po naravi vedno kritizira. Najbrž bi se začudli, če bi naenkrat zagledali opozicijsko stranko, ki, ki hvali vladne rezultate, vladni program. Tega najbrž ni nikjer v svetu. ↓ //↑ 'Dejstva pa ¬so, ↑/da se vsi gospodarski pokazatelji v zadnjem času popravljajo, ...

# 2. Mid key

## Meaning:

- explaining and providing new information, opinions, etc.

↑ Člani sveta, kakorkoli bo sestavljen, moj predlog je, da bi to bilo pri vladi in da mu načeljuje predsednik vlade, morajo člane nacionalnega sveta obveščati o vseh relevantnih podatkih, do katerih pridejo in stvar

tega sveta, tega organa je, da potem to službo usmerja in da tudi pove, katere informacije smatra on za relevantne, katere pojave je treba spremljati in s katerimi stvarmi se ni potrebno ukvarjati.  $\checkmark$  // Itak pa ostanejo / zdaj po naravi te službe to samo stvari, ki so povezane z obveščevalnim in protiobveščevalnim delovanjem  $\checkmark$ .//

## 3. Low key

Meaning:

- expresses existential equivalence between the two pitch sequences

No such examples were found in the analysed corpus.

### **CONCLUSION**

The pragmatic function of intonation is to enable the hearer to make inferences from the utterance's context to enrich the interpretation without altering the sense of lexical items. At the same time it provides the hearer with a number of different interpretations at the lexico-syntactic level.

The purpose of the contrastive analysis of the discoursal functions of tone, key and termination in English and Slovene has proved that there are quite a large number of similarities between the languages. It has also proved that Slovene speakers make use of the fall-rise pitch movement and that its use is on the increase in public speech mainly in media and politics.

In Slovene the fall-rise pitch movement is basically a stylistic device which speakers use for two different purposes. First, the tone enables them to convey two things at the same time: they introduce new information (the fall) and point to the semantic and syntactical non-finality (the rise). Second, the fall-rise enables them to emphasize the semantic link which exists between the head word and its pre-modifier.

Comparing the occurrence of the fall-rise in Slovene and English, we find out that in Slovene the tone cannot occur in final tone units or questions, whereas in English this is frequently the case. In addition, the discourse functions of the tone in Slovene and English are completely different: in English the tone expresses reference to common ground that exists between the speaker and the listener; in Slovene it is primarily a proclaiming tone whose communicative function is to expand the common ground with new information.

Considering these differences it would be difficult to assume that the fall-rise tone in Slovene has been borrowed from the English language. Its recent appearance in Croatian (Ivas, 1996) in similar contexts as in Slovene underlines the tone's stylistic character.

The analysis of discoursal meanings of key and termination in the Slovene language has shown that their prime function is to establish cohesive as well as coherent links between a series of tone units. The discoursal functions of key and termination were analysed both within one turn, as well as between turns.

It can be concluded that there are seven combinations of key and termination in Slovene. High key can combine only with high or mid termination, mid key with any

termination, whereas low key combines with either mid or low termination. The discoursal function of key is to establish the anaphoric cohesive link with the previous tone unit. Coherence between the two tone units is established by expressing contrast, addition or existential equivalence by means of high, mid and low key, respectively. The same discoursal functions of key are found between larger units, i.e. pitch sequences.

The discoursal function of termination in Slovene is to restrict the choice of key in the next tone unit which can be exploited in interviews to an important extent. The data show that the interviewers are aware of this possibility to control and influence the interviewees in their answers.

In their responses to questions, the interviewees use high key to express contrastive meaning, to clarify and emphasise their points of view, to repeat and explain misunderstood statements and to avoid further misunderstandings or doubt about the felicity of the message

They use mid key to explain and enumerate facts, viewpoints or reasons for decisions.

The low key is most frequently used to express existential equivalence and as such is usually found in appositions, inserted phrases or clauses and words or phrases with an 'empty' meaning which serve as fillers.

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