

YIELDING OR MAINTAINING THE FLOOR: THE ROLE OF INTONATIONAL MORPHEMES IN THE TURN-TAKING SYSTEM IN MONTENEGRIN

SANDRA VUKASOJEVIĆ¹

Abstract. The aim of this paper is to determine the occurrence and role of the intonational morphemes in the turn-taking system in Montenegrin. The focus is on the function of boundary tones in helping the interlocutors project a possible completion point and on their potential interaction with other linguistic components in that respect. The basic assumption is that the interlocutors follow not only the syntactic signals, but also the intonational ones while taking turns and successfully organizing the conversation. The empirical study, which involves the analysis of Montenegrin TV talk shows, points to the low boundary tone L% as the cue most frequently used in signaling transition relevance place. However, the high boundary tone H% was registered as well, although sometimes at points where it was unexpected.

Keywords: Turn-taking system, boundary tones, TV talk shows, F₀ variations.

1. INTRODUCTION

Conversation is a complex and linguistically intriguing system that includes two or more participants. Its successful and solid organization depends on the number of rules and principles the interlocutors should comply to. However, one of the basic rules in conversation is that one speaker talks at a time (Sacks *et al.* 1974: 700), and upon ending his/her turn, another interlocutor enters and takes the floor. This constant transition of speakers in conversation is known as turn-taking system.

For decades, turn-taking system has been explored from various aspects (Duncan 1972; Sacks *et al.* 1974; Goodwin 1981; Schaffer 1983; Schegloff 2000; Local and Kelly 1986; Du Bois *et al.* 1993; Auer 1996; Ford and Thompson 1996; Gravano 2009; Gravano and Hirschberg 2009, 2012; *inter alia*). The issues of interest have been: the flow of the conversation, smooth and unproblematic shifts from one speaker to another, the cues used by a current speaker for signaling turn end/continuation, overlapping talk and the ways of its repairing. Yet in this paper I deal with the basic features of the turn-taking system in Montenegrin from the intonational point of view. The aim of the research is to explore and outline turn

¹ Faculty of Philology, Danila Bojovića bb, 81400 Nikšić, Montenegro, sandrav@t-com.me.

management and the particular role played by the intonational morphemes in it. For this purpose, I investigated the turn transitions in conversation in relation to two boundary tones, L% and H%. The following issues were treated:

- a) the function of boundary tones in signaling a transition relevance place in the turn-taking system in Montenegrin;
- b) with respect to a), the independence of the boundary tones or their interaction with other linguistic elements (syntactic, pragmatic).

2. THEORETICAL BACKGROUND

2.1. Basic features of turn-taking system in conversation

Among the central questions elaborated within the framework of CA is turn-taking system. Sacks *et al.* (1974) have provided the thorough and highly influential account of the mentioned system. Pointing to the *turn* as a unit of social interaction, the authors specify the basic features of conversation: one speaker talks at a time; the speaker change occurs; the instances of overlapping talk are common, but they are brief; turn order, its size and its relative distribution vary as well as the length of conversation and the number of participants in it, and so on (Sacks *et al.* 1974: 700–701). Additionally, they introduce the turn-allocation techniques used in conversation. Since the turn isn't determined in advance, a set of rules must be applied for the purpose of smooth turn shift. The rules refer to the *current-speaker-selects-the-next-speaker principle*, and to the *self-selection principle*. Regardless of which principle is applied, the turn transitions must occur at *transition relevance places* (TRP). According to Sacks *et al.* (1974), TRP is a point in conversation seen as potentially completed syntactic unit at which turn can pass from the current speaker to the next one. The significance of TRP is particularly emphasized as it is the moment in conversation that enables the interlocutors to detect the plausible end of the current speaker's turn. Consequently, the turn-end anticipation provides not only one party speaking at a time, but also the reduction of gaps and pauses in conversation.

2.2. Turn-taking system of TV talk shows

As our corpus is made up of Montenegrin TV talk shows, it is essential to point out the differences between the elements of the turn-taking system in ordinary conversation and those in the analyzed shows. Ilie (1999) defines TV talk shows as a semi-institutional type of discourse concerning the fact they combine the elements of everyday conversation as well as those of institutional discourse. In this section I will list only the basic differences, relevant for the subject of this research.

Institutional discourse (public debates, trials, classroom talk, doctor-patient conversation, etc.) abounds with rigorous principles and restrictions. The topics to be discussed are predetermined. The same is with the roles of the speakers (Greatbatch 1986, 1988; Harris 1989; Ilie 1994). Normally, one speaker controls the whole system and his/her role is to ask the questions, to allocate turns to the speakers, to interrupt them (Atkinson and Drew 1979). Yet Heritage (1998) states that certain exceptions are plausible in such a predetermined context. Still, the level of tolerance and flexibility in the institutional discourse is extremely low. On the contrary, turn-taking system in ordinary conversation is pretty flexible regarding the topic, turn order, size and duration. Therefore, the following question arises: do TV talk shows share more similarity with the institutional discourse or with ordinary conversation in respect of turn-taking system?

The detailed analysis leads to the conclusion that TV talk shows possess the elements of both types of spoken discourse. First, the basic principle of the shows is based on the question-answer strategy, typical of institutional discourse. The hosts, having the main role in the shows, introduce the topics and their guests, as well as ask the questions. However, flexibility is evident in this respect, i.e. the situations in which the guests ask the questions and the hosts answer them can be registered.

Besides, the hosts have the right to choose the speaker, to interrupt him/her and to give the turn to another speaker. Yet the self-selection principle is frequently used by the guests in the show, which leads to overlapping talk.

Finally, the time constraints are imposed on TV talk shows. Thus, the duration of a speaker's turn is limited, unlike in everyday conversation. Still, the length of the turn is not predetermined. Its duration varies due to many factors. The host usually interrupts the speaker who talks about items not linked to the topic of the show. Additionally, interruptions are inevitable when it comes to commercial breaks.

In summary, the formal and informal features, restrictions and flexibility, spontaneity and meticulous plan intertwined in TV talk shows are the elements that make this type of discourse unique. Therefore, the efficient and minute turn-taking system analysis in TV talk shows demands the inclusion of components of institutional discourse as well as of ordinary conversation.

2.3. The position of intonation in previous studies of turn-taking system

Having proposed a model for the organization of turn-taking system, Sacks *et al.* (1974) emphasize the importance of TRP where speaker change may occur. TRP refers to a potentially completed ongoing turn-constructive unit (TCU). The authors state that interlocutors can anticipate the end of TCU on the basis of syntactic elements. The participants follow the syntactic cues to determine whether a TCU is about to end. However, Sacks *et al.* (1974: 721–722) mention the significance of intonation in projecting the possible completion point.

Schaffer (1983) includes the intonational component into the conversation analysis, attempting to determine its function at the end of TCUs. Her results show that lexico-syntactic elements are more reliable cues than the intonational ones in projecting the potential turn end. In the study of Cutler and Pearson (1986: 152), the listeners, having listened carefully to some recorded parts, “found downstep in pitch a good turn-yielding cue but a pitch up step a good turn-holding cue”. Their findings point to the difference between the falling contour, as a signal of finality, and (high/low) rising contour, as a signal of continuation. Yet the authors remark on the number of utterances of falling/rising intonation that could not be determined precisely by the listeners in the context of turn-taking.

Oreström (1983) studies the turn-taking system in British English conversation and concludes that the interaction of prosodic, syntactic and semantic completion points is a relevant cue for turn-shift. With respect to this, he points to the significance of two more elements – decrease in volume and pause.

Du Bois *et al.* (1993) explore the turn-continuation after the TRP. They assume the current speaker signals the end or continuation of the turn by simply selecting an intonational contour. The two basic contours, falling and rising, are isolated. According to the authors, the falling contour implies finality, while the rising one implies incompleteness in the majority of languages. Nonetheless, Du Bois *et al.* (1993) do not exclude the possibility of other intonational realizations being potential indicators of the end/continuation of the turn.

Investigating the conversational data in German, Auer (1996) is interested in the phenomenon of *syntactic expansion* of a turn, which refers to the turn continuation “beyond a possible syntactic completion point” (p. 59). His findings point to the independent role of intonation and syntax in turn-taking. According to Auer (1996: 84), “every syntactic expansion may be prosodically integrated and thereby ‘camouflaged’, or ‘exposed’ by being uttered in a new intonational contour”.

Examining turn-taking in English conversation, Ford and Thompson (1996) base their analysis on Orestöm’s proposal (1983) regarding the interaction of prosodic, syntactic and pragmatic level at projected completion points. However, unlike Orestöm’s research, the investigation of 20-minute conversation includes overlapping talk, as well as more than just two speakers. The authors’ findings indicate the high degree of coincidence between the syntactic completion points, final pitch boundaries and pragmatic closures. Those places are defined as Complex Transition Relevance Places (CTRP).

Their statistical analysis suggests that a syntactic completion point is the least reliable signal of turn-end (Ford and Thompson 1996: 155). Furthermore, the turn exchange is likely to occur at CTRP. Still, they register 29% of examples where the speaker turn is changed at non-CTRP. In order to justify the phenomenon, Ford and Thompson (1996: 158) state these situations demonstrate the use of specific strategies, intentional and purposeful, by the participants. Finally, some data imply the turn continuation of the current speaker after the projected completion point.

Gravano and Hirschberg assume that a turn-taking attempt by the interlocutor depends on the number of indicators concertedly used by the speaker (2009: 253). Having examined the Columbia Games Corpus, they propose some turn-yielding cues: a high-rising or falling intonation at the end of the inter-pausal unit, lower intensity and pitch, a longer duration of the last inter-pausal unit (Gravano and Hirschberg 2009: 259).

The studies presented and their results refer mostly to the analysis of the English conversation. When it comes to Montenegrin, no data can be found. Yet, as Montenegrin is the standardized variety of Serbo-Croatian used in Montenegro, we will present the theoretical assumptions and results obtained by research of Serbo-Croatian prosody.

In the investigation of this issue within the Montenegrin linguistics, I start from the autosegmental-metrical account of the Serbo-Croatian intonational system and its annotation conventions provided by Godevac (2005). With respect to turn-taking system, the two intonational morphemes – boundary tones emerge. Godevac introduces two boundary tones, low (L%) and high (H%). Apart from being aligned with the last syllable of the intonational phrase, L% tone is a feature of syntactically marked declaratives, imperatives and interrogatives, signaling the completion of the sentence. On the other hand, H% tone can be found at the end of syntactically unmarked questions, and its main function is to indicate “the absence of completion ... and continuation” (Godevac 2005: 162). In examining the Serbian prosodic organization, Jekanović-Mihajlov (2006) emphasizes the role of F_0 . Depending on the fall or rise of F_0 in the final position, the phrase can be determined as a complete or incomplete (Jekanović-Mihajlov 2006: 234). Kurtić *et al.* (2009) reach the same conclusion investigating the declarative utterances in Bosnian Serbo-Croatian, stating that falling contour will be interpreted by the conversation participants as a potential cue for turn-end. Thus, in this study I explore the general function of boundary tones with relation to their significance in turn management.

3. DATA AND METHODOLOGY

The data used in this study are various Montenegrin TV talk shows. The total length of the material is 7 hours, 33 minutes and 29 seconds. The details regarding the corpus are presented in Table 1.

TV talk shows, various in respect to the topics discussed, were chosen at random and video recorded. The recordings were converted into an adequate audio file and the material was orthographically transcribed in Microsoft Word. For the annotational purpose, I opted for the combination of SC_ToBI labels provided by Godevac (2005) and transcription keys found in Wennerstrom (2001). I believe it

was necessary to apply the mentioned combination in order to present all the registered conversational and intonational features of the corpus.

Table 1

TV talk show	No. of shows	Participants	Duration ²
<i>Replika</i>	1	Host and 4 guests	01:10:53
	2	Host and 4 guests	01:09:41
<i>Otvoreno</i>	1	Host and 3 guests	01:29:48
	2	Host and 4 guests	01:31:02
<i>Prizma</i>	1	Host and 3 guests	01:22:41
<i>Balkan Expres</i>	1	Host and 3 guests	00:49:24

The instrumental analysis was conducted by means of the computer program Praat, version 5.0.46 (Boersma and Weenink 2009). Thus, it was possible to monitor the F_0 contours as well as to track pitch till the syntactic completion points. Specific measurements of F_0 , intensity, speaking rate and pauses were done in the relevant contexts.

Autosegmental-metrical phonology (AMP) represents the theoretical basis of this paper. For more information and details on AMP see Pierrehumbert (1980), Goldsmith (1990), Pierrehumbert and Hirschberg (1990).

4. RESULTS AND DISCUSSION

4.1. The occurrence of L% boundary tone

The various conversational features were registered throughout the analysis of the Montenegrin material. Table 2 lists the number of turns.

Table 2

Turn-shift with no pause or with pause <0.5 sec	716
Turn-shift with longer pause >0.5 sec	190
Overlapping talk	615
Cooperative interruption	493
Intrusive interruption	122

² The total duration of each show excludes the minutes reserved for the commercial breaks as well as the parts referring to some form of the viewers' participation.

As noted in Table 2, the most frequent situations in the shows are those demonstrating the turn-shift with no pause or with the pauses shorter/longer than 5 seconds. Therefore, I will start from these instances.

The collected results indicate the high rate of smooth turn exchange in TV talk shows (906 times). The further analysis of the turn-shift points shows that in 96.1% of instances the exchange places are not only the syntactic completion points, but also the intonational and pragmatic completions as well. Thus, the places where the turns pass from one speaker to another in Montenegrin correspond to CTRP, defined by Ford and Thompson (1996). This means the turn exchange occurs at the point in which syntax, intonation and pragmatics jointly indicate the current speaker's turn is the completed unit. As far as the intonational morphemes are regarded, the L% and H% boundary tones dominate over the other prosodic units. In other words, these perform a prominent function in signaling turn end or continuation. Hence, the findings support the hypothesis regarding the relevance of the falling/rising intonation contours in turn-taking system. The following examples will be used as illustrations.

Extract 1

- 1 Guest³ Jer u heraldičkom smislu (0.45)
 %L H*+L %L L*+H L%
- Because in terms of heraldry
- 2 Mi zapravo nastavljamo i u pogledu naše zastave
 %L H*+L %L H*+L %L L*+H %L H*+L %LH*+L %LH*+L
- We actually follow with respect to our flag
- 3 I u pogledu grba
 %L H*+L %L H*+L H%
- And to our emblem
- 4 I mnogih drugih elemenata (0.27)
 %L H*+L %L H*+L %L L*+H
- And to many other elements
- 5 Ono što jeste zaostavština (0.1)
 %L L*+H %L H*+L %L H*+L %L L*+H
- Something that is the legacy
- 6 Zaostavština Crnojevića (0.37)
 %L L*+H %L L*+H Ø- L%
- The legacy of the Crnojević family

(Otvoreno, March 15, 2010)

In extract 1 I am focusing on the key elements in talk management. The anticipation of a possible turn end being in question, lines 5 and 6 are relevant. The first thing registered is lengthening and considerably slower speech rate as G approaches the end of line 6. To prove this, we can look at the pause used at the end of line 5 as well as the different pronunciation of the word *zaostavština*

³ The names of the guest and hosts will not be provided. Instead, in the analysis the symbols G (guest) and H (host) will be used.

‘legacy’ regarding the duration: G needs 0.6 seconds for the first pronunciation, while the second pronunciation of the word totals 0.87 seconds. In addition, the second pronunciation of the same word is marked by the decline of F_0 from 121.2 Hz to 76.5 Hz, which is the bottom of G’s pitch range. Simultaneously, not only does the end of line 6 demonstrate an intonational completion marked by L% boundary tone, but also the syntactic and pragmatic ones as well. Thereby, extract 1 shows that L% tone found at a syntactic completion point, final lengthening, slower speech rate and pause of 0.37 seconds at the very end serve as the cues to the interlocutors that G is ready to yield the turn. In sequence not included in extract 1, H interprets the mentioned signals correctly and takes the turn.

Extract 2

1 Host	Kasne li plate kod vas (0.5)	
	%L L*+H %L L*+H L%	
	Is your salary paid late	
2 Guest	Kod nas za sada je nema	
	%L H*+L %L H*+L %L H*+L %L H*+L	
	We haven’t experienced it so far	
3	Ove globalne ekonomske krize	
	%L L*+H %L L*+H %L L*+H %L H*+L	
	This global economic crisis	
4	Mi uspijevamo (0.5) da pratimo taj ritam (1.36)	
	%L H*+L %L L*+H %L H*+L %L H*+L %L L*+H Ø- L%	
	We succeed in following that rhythm	
5 Host	A ove finansijske injekcije kod vas (0.25)	
	%L L*+H %L L*+H %L L*+H H%	
	And what about these financial injections for you	
6	S koje strane dolaze (0.2)	
	%L L*+H %L L*+H %L L*+H Ø- L%	
	Where do they come from	
7 Guest	Nas Vlada ne podržavata kakav način još uvijek (0.13)	
	%L L*+H %LL*+H %LH*+L %L L*+H %LL*+H %LL*+H Ø- L%	
	The government hasn’t supported us in such a way yet	
8 Host	A ko vas podržava (0.5)	
	%L H*+L %L L*+H Ø- L%	
	And who supports you	
9 Guest	Samo članstvo (0.61)	
	%L H*+L %L L*+H Ø- L%	
	The very membership	
10 Host	Dobro (0.36) a i nešto što me interesuje	
	%L L*+HH% %L H*+L %L H*+L %L H*+L	
	Ok. And something I’m interested in	
11	Takođe vezano je za samu priču	
	%L L*+H %L H*+L %L H*+L %L H*+LL%	
	Is also connected to the very story	
12	Ima li zaposlenih na određeno u Uniji (1.35)	
	%L L*+H %L L*+H %L L*+H %L L*+H L%	

Are there fixed-term employees in the Union					
13 Guest	U Uniji	trenutno	imamo	jednu	koleginicu
	%L L*+H	%L H*+L	%L L*+H	%L L*+H	%L L*+H
In the Union there is one colleague					
14	Koja	radi	na određeno	vrijeme	
	%L L*+H	%L L*+H	%L L*+H	%L L*+H	
With fixed-term contract					
15	Svi su	ostali	na neodređeno (0.11)		
	%L H*+L	%L L*+H	%L L*+HØ- L%		
All the others are permanent employees					
16 Host	A zašto	ona	radi	naodređeno (1.79)	
	%L H*+L	%L L*+H	%L L*+H	%L L*+HØ- L%	
And why is she a fixed-term employee					
17 Guest	Zato	što	je takav	dogovor (0.58)	
	%L L*+H	%L H*+L	%L H*+L	%L H*+LØ- L%	
Because that's the deal					

(Prizma, April 13, 2011)

Extract 2 contains the frequent turn exchanges between H and G. The turn passes from one speaker to another in a regular and smooth manner, the interlocutors successfully managing to interpret the signals useful for projecting a possible turn end. Having been asked the question in line 1 with falling intonational contour (Figure 1), G takes his turn. On providing the answer (lines 2-4), he utilizes exactly the same cues as H in order to signal his turn is about to terminate. To the very end of extract 2, the cues are used recurrently by H and G. These refer to the downtrend in F_0 , the occurrence of L% boundary tone and pauses at the point of syntactic and pragmatic completion at the end of lines 1, 4, 6, 7, 8, 9, 12, 15, 16 and 17.

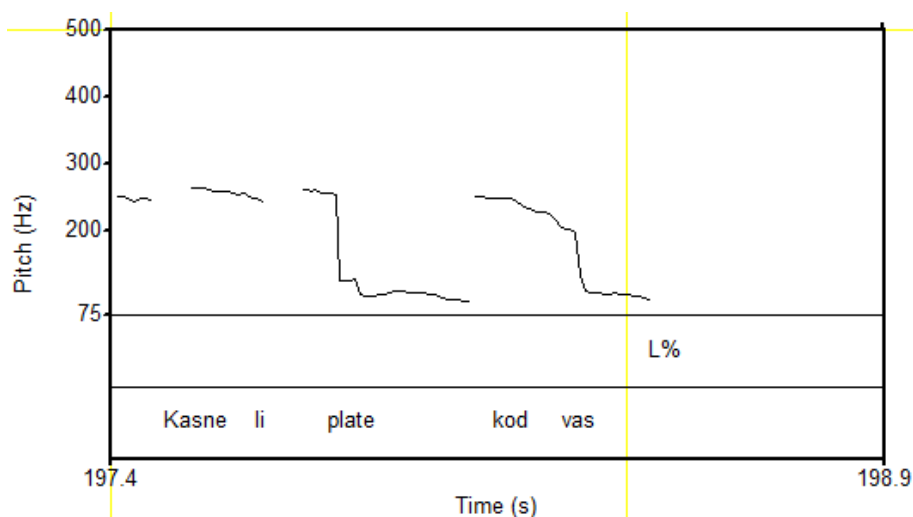


Figure 1. Praat picture for line 1

The frequent occurrence of low boundary tone at the end of the speakers' turn (Figure 2) supports Gođevac's finding regarding the functions of L% tone in turn-taking system.

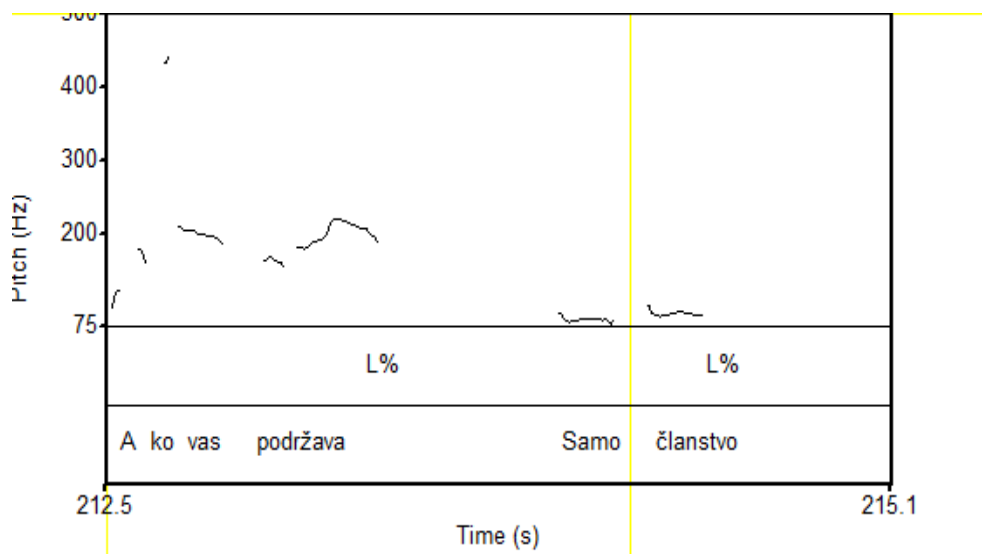


Figure 2. Praat picture for lines 8–9

Extracts 1 and 2 illustrate that the turn exchanges happen at CTRP, i.e. at point seen as syntactically, intonationally and pragmatically completed units. It has already been stated that in the analyzed material 96.1% of examples were determined as instances of smooth turn shift. How are the turn shifts accomplished in the case of 3.9% of examples remained? In an attempt to provide the answer, I will focus on two issues.

Firstly, in previous studies it has been observed that a correspondence between a pitch boundary and a syntactic completion point does not necessarily occur (Ford and Thompson 1996). This means that an intonational phrase (henceforth IP) may be composed of a single syntactically completed unit, but also of more than just one. In order to explain the statement, let's look at lines 13–16 from extract 2. Lines 13–15 contain only one IP ending in L% tone. Yet the IP contains two syntactically completed units (*U Uniji trenutno imamo jednu koleginicu koja radi na određeno / svi ostali su na neodređeno*). On investigating line 16, it is evident that one IP is made up of the syntactically marked question (*A zašto ona radi na određeno*). This comparison leads to the conclusion that intonation in Montenegrin plays an important role in signaling which syntactically complete unit will be a possible turn end.

Secondly, a symbolic number of examples that manifest the incompatibility between the intonation and syntactic component appear (a total of 37 examples or 3.9%). The incompatibility refers to their opposing functions in particular context. It is worth mentioning that intonation signals finality by the use of L% boundary tone, unlike syntax signaling non-finality or incompleteness. Extract 3 is used as an illustration.

Extract 3

1	Guest	U trenutku	kada je aaaa	kada se			
		%L L*+H	%L L*+H	%L L*+H			
		In the moment when aaa when					
2		Ta	informacija	pojavila u aaa	medijima		
		%L H*+L	%L L*+H	%L L*+H	%L H*+L	L%	
		The information appeared in the media					
3		Nismo	imali	ni formiran	koordinacioni	tim	
		%L L*+H	%L L*+H	%L L*+H	%L L*+H	%L H*+L	Ø- L%
		We didn't even have a coordination team formed					
4		Tako	da je ... (1.06)				
		%L L*+H	Ø- L%				
		So that's...					

(Otvoreno, March 15, 2010)

In extract 3 G ends her turn in line 4 I am focusing on. *Tako da je* ('So that's') is syntactically incomplete unit that by no means could signal the end of the turn. Yet G uses intonational elements for that purpose. By means of the falling F₀ contour in combination with longer pause and lower intensity, G indicates her intention to yield the turn. Recognizing the prosodic cues, H takes the turn. Apart from extract 3, the remaining 36 examples display more or less the same features, suggesting the dominant role of intonation over syntax as a turn-yielding signal.

In summary, all the examples, analyzed instrumentally, descriptively and statistically, indicate that intonation is an indispensable cue in turn-taking system. In particular, L% boundary tone, final lengthening, slower tempo, pause and lower intensity are the signals that must not be neglected in the analysis of predicting a possible turn end.

4.2. The occurrence of H% boundary tone

Further study of the collected data refers to the performance of intonation in anticipating a possible continuation point. The starting point is the result presented by Godevac (2005: 151), who states that H% tone signals "the absence of finality (continuation or questioning)". Applied to the context of turn-taking, this suggests the interlocutors will deploy the rising F₀ contour in an attempt to hold the turn. Unlike L% tone, whose function has been proved significant in anticipating a possible completion point, the investigation of less frequent H% tone in the corpus

leads to the conclusion that its role is prominent in signaling continuation. It is worth mentioning here that H% tone has been examined in relation to pause, as many linguists (Schegloff 1982; Wennerstrom 2001) perceive these elements as being relevant for turn-holding. Let's look at extract 4.

Extract 4

- 1 Guest 1 Mi gledamo strane utakmice (0.52)
 %L H*+L %L H*+L %L H*+L %L L*+H H%
 We watch foreign football matches
- 2 Mi navijamo za Real i Barcelonu (0.52) je l' de (0.64)
 %L H*+L %L L*+H %L H*+L H%
 We support Real and Barcelona don't we
- 3 A nekad smo navijaliza Sutjesku i Budućnost (0.49)
 %L L*+H %L L*+H %L H*+L %L L*+H Ø- L%
 And we used to support Sutjeska and Budućnost
- 4 Tu i tamo malo čarke Tuče (0.23) i takodalje
 %L H*+L %L H*+L %L H*+L %L H*+L %L H*+L
 Occasionally there would be some quarrel fight and so on
- 5 Ne naročito mnogo Znaš (0.24)
 %L L*+H %L H*+L %L H*+L Ø- L%
 Not that much you know
- 6 Slomi ovaj mali (0.29) prs' ili nos aaa
 %L H*+L %L L*+H %L H*+L %L H*+L %L H*+L
 The little finger broken or nose aaa
- 7 Dio nosa mislim ništa više
 %L H*+L %L H*+L %L H*+L %L H*+L %L H*+L H%
 I mean a part of nose nothing more
- 8 Tu neka katarza ide
 %L H*+L %L H*+L %L L*+H %L H*+L H%
 Then some catharsis starts
- 9 Znaš (1.3) akoeeee psihoterapija je aaa (0.14) jedna vrsta
 %L H*+L %L L*+H %L L*+H %L L*+H
 You know if aaa psychotherapy is aaa a sort of
- 10 Suptilnije katarze
 %L H*+L %L L*+H Ø- L%
 Subtle catharsis
- 11 Nije baš onosa razbijanjem nosa
 %L L*+H %L H*+L %L L*+H %L L*+H %L H*+L H%
 It doesn't really refer to breaking the nose
- 12 (smijeh)
 (laugh)
- 13 Guest 2 Za dušu poslastica
 %L L*+H %L L*+H
 A treat for the soul
- 14 Guest 1 Ako je nema ako je nema ako je nema
 %L H*+L %L H*+L %L H*+L
 If it lacks if it lacks if it lacks
- 15 Biće razbijenih nosova
 %L H*+L %L L*+H %L H*+L Ø- L%
 There will be broken noses

(Balkan ekspres, May 24, 2011)

G1 discusses the importance of catharsis for the mental health of people, as well as a strong need for the purification of the soul. Throughout lines 1–12 no participant intervenes, just carefully listening to G1. Partly, it is made possible due to the intonational cues. The end of IPs in lines 1, 2, 7 and 8 is characterized by a continuation cue, H% boundary tone. G1 exploits H% tone at syntactic completion points to clearly signal his intention to hold the turn (Figure 3).

Additionally, the analysis registers a frequent combination of H% tone and pause with the aim of keeping the turn. Such a situation is found in lines 2, 4, 6, 9 in extract 4. G1 uses the pause at non-intonation completion points and at points with no syntactic closure. As Wennerstrom (2000: 173) states, “it is ‘safer’ to pause in midphrase than at a phrase boundary if one wishes to avoid interruption”.

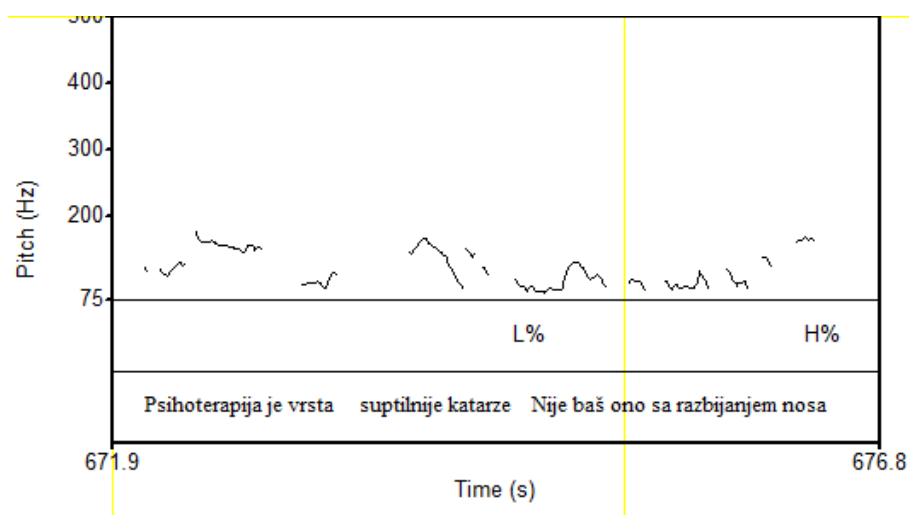


Figure 3. Praat picture for lines 9–11.

Extract 5 illustrates the same function of the H% tone, as well.

Extract 5

1 Guest	Poslodavac je strani investitor (0.45)
	%L L*+H %L H*+L %L L*+H
	The employer is a foreign investor
2	Koji je kupio neko aaa
	%L L*+H %L L*+H %L H*+L
	Who bought some aaa
3	Neku domicilnu kompaniju
	%L H*+L %L L*+H %L L*+H H%
	Some domicile company
4 Host	Sada smo na našem terenu
	%L H*+L %L H*+L %L L*+H L%
	Now we are at our ground

Table 4

Type of interrogative	Total number	Falling intonation	Rising intonation
Interrogatives with an interrogative word	312	284 (91%)	26 (9%)
Yes-no interrogatives	301	269 (89.3%)	32 (10.7%)

Though the prevailing contour in interrogatives in Montenegrin is a falling one, an exceedingly low percentage of rising interrogatives were registered. In an attempt to explain the occurrence of H% tone in interrogatives, I tested the following assumption: H% tone influences and modifies the meaning of the interrogatives. Having analyzed a few of rising interrogatives, the assumption was immediately rejected. Prior to further discussion, let's look at extract 6.

Extract 6

- 1 Host 'Oćemo li aaa Jelena da čujemo od Vas H%
 %L L*+H %L L*+H %L H*+L
 Will you tell us Jelena
- 2 Aaa kad govorimo o mentalnim poremećajima
 %L H*+L %L L*+H %L L*+H %L H*+L
 When we talk about mental disorders
- 3 Većina ljudi zapravo možda i ne zna tačno (0.34)
 %L H*+L %L L*+H %L H*+L %L L*+H %L H*+L %L H*+L
 The majority of people probably don't even know exactly
- 4 Na šta se misli H%
 %L H*+L %L H*+L
 What these refer to

(*Balkan ekspres*, May 24, 2011)

In line 1 in extract 6 H asks yes-no question characterized by rising F₀ contour, instead of by the anticipated falling one. The context-based examination of its semantic side points to nothing unusual, thus leading to the conclusion that the interrogative doesn't contain some specific purpose. As a matter of fact, it seems to display an introductory function. More examples have been extracted from the same show.

Extract 7

- 1 Host Koliko je psihologija (0.18)
 %L L*+H %L L*+H H%
 How much is psychology
- 2 Maločas ste rekli kakav je odnos države (0.4)
 %L H*+L %L H*+L %L L*+H %L L*+H %L H*+L Ø-L%
 A moment ago you mentioned the country's attitude
- 3 Ali koliko je psihologija (0.3) stvarno našla mjesto (0.24)
 %L L*+H %L L*+H %L H*+L %L H*+L %L H*+L
 But what is the real status of psychology
- 4 U samom zdravstvenom sistemu H%
 %L H*+L %L L*+H %L L*+H
 In the very healthcare system

- 5 Kad je riječ o centrima za mentalno zdravlje (0.26)
 %L H*+L %L H*+L %L H*+L %L L*+H %L H*+L Ø- L%
- 6 Guest When it comes to centres for mental health
 Aaa nemam tačan pregled a i nije posao moj
 %L H*+L %L H*+L %L L*+H %L L*+H %L L*+H %L H*+L
- 7 Nije posao da ga imam
 %L L*+H %L L*+H %L L*+H Ø- L%
- 8 Host Not my job to have one
 A znate li možda
 %L L*+H %L L*+H H%
- 9 But do you know that maybe
 Imate li neku
 %L L*+H %L H*+L
- 10 Guest Do you have some
 Ma prosto me ne zanima
 %L H*+L %L L*+H Ø- L%
- Well I'm just not interested
- (Balkan ekspres, May 24, 2011)

H% boundary tone appears twice in extract 7 (lines 1 and 8). Its occurrence at the end of line 1 is not surprising concerning the fact H utters the incomplete question, syntactically and pragmatically, so she uses H% tone in order to signal her turn hasn't ended yet. Having formulated the question of falling intonation (lines 3–5), G tries to answer it. Since H isn't completely satisfied with the answer, she interrupts G, asking two new questions, the first being of rising F_0 contour. In terms of its meaning, it can be defined as a typically information-eliciting one. Thus, I return to the original and primary function of H% tone. The questions in extracts 6 and 7 end in high boundary tone as H who asks them signals that there's more to come.

Both extracts being taken from the same TV talk show, I explored the assumption that the rising intonation at the end of questions might be simply the feature of H's speaking style. However, the assumption was eliminated since the spectrograph analysis isolated a symbolic number of interrogatives of the same intonational type in other TV talk shows.

Extract 8

- 1 Host Kako Vi vidite aaa poziciju jednih (0.45)
 %L L*+H %L H*+L %L H*+L %L L*+H %L L*+H
- 2 How do you define the position of ones
 A kako drugih
 %L L*+H %L H*+L
- 3 And of the others
 Dakle da li naše radno zakonodavstvo (0.6) aaa (0.3)
 %L H*+L %L H*+L %L L*+H %L H*+L %L L*+H
- 4 So, has our Work Law aaa
 Zaista odvoja radnika od neradnika do sada
 %L H*+L %L L*+H %L H*+L %L L*+H %L H*+L H%
- Really distinguished between a worker and a drone so far

- 5 Ili treba nešto mijenjati
 %L H*+L LH- %L H*+L %L L*+H L%
 Or is there something that should be changed
 (*Replika*, January 20, 2011)

In extract 8 H asks a set of questions. Of particular interest is the one in lines 3–4 which is information-seeking. Still, its end is characterized by the rising F_0 contour. Similar example is found in extract 9.

Extract 9

- 1 Guest from Da li planirate i vi
 the audience %L H*+L %L H*+L %L H*+L
 Do you also plan
 2 Neku kampanju
 %L H*+L %L L*+H
 Some campaign
 3 Sa nekom poznatom ličnošću
 %L H*+L %L H*+L %L H*+L H%
 With a famous person
 (*Replika*, April 8, 2010)

Extract 9 contains only the first out of three questions in a row, asked by the same speaker. A syntactically marked question is one IP with H% tone occurring at its last word (Figure 5). Again, as it was the case in previous extracts, G uses it in order to signal she intends to hold her turn. This claim is confirmed by the sequence not provided here.

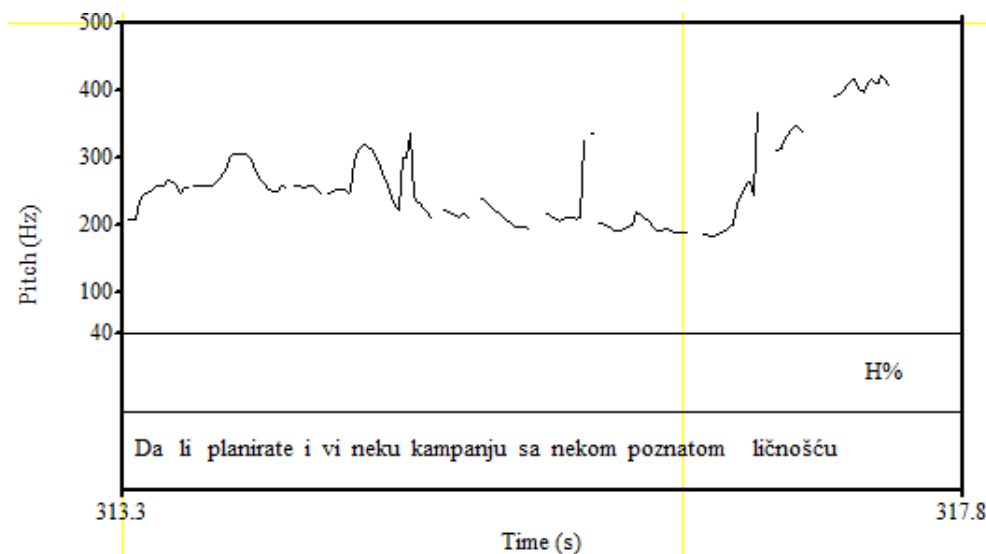


Figure 5. Praat picture for lines 1–3.

5. CONCLUSION

In this study I have explored the position of intonation in the turn-taking system in Montenegrin. The findings demonstrate a significant role of its morphemes, particularly of boundary tones, in signaling either yielding or maintaining the turn. The analysis of the data, made up of Montenegrin TV talk shows, indicates that low boundary tone L% usually occurs at syntactic and pragmatic completion points, signaling finality and a potential TRP. Normally, through the use of L% tone altogether with pause, lower intensity and slower tempo at points of syntactic and pragmatic completion, the current speaker shows he/she is ready to give up the floor. A small number of examples have been noted in which intonation is interpreted as a cue for yielding the turn, while syntax points to incompleteness. In such situations intonation is seen as being more dominant cue.

Moreover, intonation is of high importance when it comes to keeping the floor. Unlike L% boundary tone used for signaling turn end, H% boundary tone is used when indicating turn continuation. Participants in conversation often combine H% tone with pause as to secure the turn. Another observation has been made on the occurrence of H% tone. Although it has been shown that rising intonation is not a feature of interrogatives (Section 4.2.), a specific number of interrogative utterances are characterized by H% tone. The thorough analysis having been conducted, the conclusion is that H% tone performs no other function but signals continuation, i.e. the current speaker who asks the question with rising intonation indicates that there is more to come.

I must point out that the findings reported here are preliminary ones. As Montenegrin has been insufficiently explored from the aspect of turn-taking, a lot of investigation regarding the smooth turn shifts, overlapping talk and repair techniques must be carried out prior to providing the minute description of turn management. However, these results can be used as a starting point for further research.

REFERENCES

- Atkinson, J.M., P. Drew, 1979, *Order in Court: Verbal Interaction in Judicial Settings*, London, Macmillan.
- Auer, P., 1996, "On the prosody and syntax of turn-taking", in: E. Couper-Kuhlen, M. Selting (eds), *Prosody and Conversation*, Cambridge, Cambridge University Press, 57–100.
- Boersma, P., D. Weenink, 2009, "Praat: Doing Phonetics by Computer", available at <http://www.fon.hum.uva.nl/praat/>.
- Cutler, A., M. Pearson, 1986, "On the analysis of prosodic turn-taking cues", in: C. Johns-Lewis (ed.), *Intonation in Discourse*, San Diego, College-Hill Press, 139–156.
- Du Bois, J. W., S. Schuetze-Coburn, S. Cumming, D. Paolino, 1993, "Outline of discourse transcription", in: J. A. Edwards, M. D. Lampert (eds), *Talking Data: Transcription and Coding in Discourse Research*, Hillsdale, NJ, Lawrence Erlbaum, 45–89.

- Duncan, S.D., 1972, "Some signals and rules for taking speaking turns in conversations", *Journal of Personality and Social Psychology*, 23, 283–292.
- Ford, C., S. Thompson, 1996, "Interactional units in conversation: syntactic, intonational and pragmatic resources for management of turns", in: E. Ochs, E. A. Schegloff, S. A. Thompson (eds), *Interaction and Grammar*, Cambridge, UK, Cambridge University Press, 134–184.
- Godevac, S., 2005, "Transcribing Serbo-Croatian intonation", in: Sun-Ah Jun (ed), *Prosodic Typology: The Phonology of Intonation and Phrasing*, Oxford, Oxford University Press, 146–171.
- Goldsmith, J. A., 1990, *Autosegmental and Metrical phonology*, Oxford, Basil Blackwell.
- Goodwin, C., 1981, *Conversational Organization: Interaction between Speakers and Hearers*, New York, Academic Press.
- Gravano, A., 2009, *Turn-Taking and Affirmative Cue Words in Task-Oriented Dialogue* (Ph.D. Thesis), New York, Columbia University.
- Gravano, A., J. Hirschberg, 2009, "Turn-yielding cues in task-oriented dialogue", *Proceedings of Interspeech*, London, 253–261.
- Gravano, A., J. Hirschberg, 2012, "A corpus-based study of interruptions in spoken dialogue", *Proceedings of Interspeech*, Portland.
- Greatbatch, D., 1986, "Aspects of topical organization in news interview: the use of agenda shifting procedures by the interviewees", *Media, Culture and Society*, 8, 441–455.
- Greatbatch, D., 1988, "A turn-taking system for British news interviews", *Language in Society*, 17, 3, 401–430.
- Harris, S., 1989, "Defendant resistance to power and control in court", in: H. Coleman (ed.), *Working with Language: A Multidisciplinary Consideration of Language Use in Work Contexts*, Berlin, Mouton de Gruyter, 131–163.
- Heritage, J., 1998, "Conversation analysis and institutional talk: analyzing distinctive turn-taking systems", in: S. Cmejrková, J. Hoffmannová, O. Müllerová, J. Svetlá (eds), *Dialoganalyse VI*, Volume 2, *Proceedings of the 6th International Congress of IADA*, Tübingen, Niemeyer, 3–17.
- Ilie, C., 1994, *What else can I tell you? A pragmatic study of English rhetorical questions as discursive and argumentative acts*, Stockholm, Almqvist and Wiksell International.
- Ilie, C., 1999, "Question-response argumentation in talk show", *Journal of Pragmatics*, 31, 8, 975–999.
- Inkelas, S., D. Zec, 1988, "Serbo-Croatian pitch accent: the interaction of tone, stress, and intonation", *Language*, 64, 227–248.
- Ivić, P., I. Lehist, 1996, *Prozodija reči i rečenice u srpskohrvatskom jeziku*, Novi Sad, Izdavačka knjižarnica Zorana Stojanovića.
- Jokanović-Mihajlov, J., 2006, *Akcent i intonacija govora na radiju i televiziji*, Beograd, Društvo za srpski jezik i književost Srbije.
- Kurtić, E., G.J. Brown, B. Wells, 2009, "Fundamental frequency height as a resource for the management of overlap in talk-in-interaction", in: D. Barth-Weingarten, N. Dehé, A. Wichmann (eds), *Where Prosody Meets Pragmatics (Studies in Pragmatics 8)*, Bingley, Emerald Group Publishing Limited, 183–205.
- Local, J., 1986, "Projection and 'silences': notes on phonetic and conversational structure", *Human Studies*, 9, 185–204.
- Oreström, B., 1983, *Turn-Taking in English Conversation*, Lund, Liber Förlag.
- Pierrehumbert, J., 1980, *The Phonology and Phonetics of English Intonation* (Ph.D. Thesis), Cambridge, MA, MIT.
- Pierrehumbert, J., J. Hirschberg, 1990, "The meaning of intonational contours in the interpretation of discourse", in: P. R. Cohen, J. Morgan, M. Pollack (eds), *Intentions in Communication*, Cambridge, MIT Press, 271–311.
- Sacks, H., E. A. Schegloff, G. Jefferson, 1974, "A simplest systematics for the organization of turn taking for conversation", *Language*, 50, 696–735.
- Schaffer, D., 1983, "The role of intonation as a cue to turn taking in conversation", *Journal of Phonetics*, 11, 243–257.

- Schegloff, E., 1982, "Discourse as an interactional achievement: some uses of 'uh huh' and other things that come between sentences", in: D. Tannen (ed), *Analyzing Discourse: Text and Talk*, Georgetown University Round Table on Languages and Linguistics, Washington, DC, Georgetown University Press, 71–93.
- Schegloff, E., 2000, "Overlapping talk and the organization of turn-taking for conversation", *Language in Society*, 29/1, 1–63.
- Wennerstrom, A., 2001, *The Music of Everyday Speech: Prosody and Discourse Analysis*, New York, Oxford University Press.