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■ FUNCTIONAL HYBRIDIZATION IN DISCOURSE: TURNING IMPERATIVES INTO DISCOURSE MARKERS

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Autor se bavi diskursnim markerima (DM), sugerišući da su oni funkcionalne, ali ne i kategoričke jedinice. U radu se pokazuje da čitajući naglas, u specifičnim diskursnim uslovima, čitaoci pretvaraju imperative u jedinice koje podsećaju na uzvike, slične diskursnim markerima. Ova konverzija se sprovodi kroz obradu i prilagođavanje prozodijskih obeležja imperativnih iskaza, a prema funkciji koju obavljaju u diskursu, može se definisati kao „funkcionalna hibridizacija“. Rezultati ovog rada potvrđuju prethodna istraživanja u sledećem: 1) prema našim nalazima, prozodijska struktura „funkcionalno hibridizovanih“ imperativa čini ih bliskim uzvicima, a njihova funkcija u diskursu se menja kako bi privukla pažnju na nove informacije, ili izrazila „emfazu“; 2) „funkcionalno hibridizovani“ imperativi, poput DM-a, odlikuju se specifičnim formalnim karakteristikama: čini se da je početna pozicija preduslov za njihovu autonomiju, a osim početne pozicije „funkcionalno hibridizovani“ imperativi imaju tendenciju da budu enklitika prethodne reči. Faktori koji olakšavaju „funkcionalnu hibridizaciju“ imperativa su: 1) formulaična/ikonička struktura imperativa, 2) početna pozicija, 3) emfatička priroda iskaza.

Ključne reči: diskursni markeri, pragmatika, prozodija, imperativi, intonacijske konture.

1. BACKGROUND

Literature on discourse markers (DMs) (Schiffrin 1987, 2001; Fraser 2009; Maschler, Schiffrin 2015) basically focuses on the term “Discourse Markers” and on what falls under the term. One can find more reading on the topic in Schiffrin (1987, 2001), Fraser (2009), Maschler and Schiffrin (2015).

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1.1. DISCOURSE MARKERS: TERMINOLOGY, STRUCTURE, FUNCTIONS

We would point out some instances that appear significant to the present research. There is no agreement on the name itself; the researchers use different terms to label units with the pragmatic role, which signal some semantic relationship between components in discourse: Discourse Markers (Schiffrin 1987, 2001; Maschler/Schiffrin 2015), Discourse Particles (Aijmer 2002), Pragmatic Connectives (Van Dijk 1979), Pragmatic Markers (Brinton 1996: 30–31). Kaltenböck names units like “I think”, “I believe” “Comment Clauses” (2008, 2013), though structurally they are the same as units studied by Dehe and Wichmann. Dehe and Wichmann state that structurally the same units like “I think” can function as main clause, comment clause or discourse marker (Dehe/Wichmann 2010: 36). Dehe argues that the same structural units can perform different functions in discourse, and characteristics of these units can serve as cues to which particular function is employed in the discourse (Dehé 2014: 38, 65, 212).

Neither do the researchers agree on the role and functions of those units in discourse. There are four perspectives most frequently cited in current research on DMs. Those perspectives differ in the approach to the subject. Halliday and Hasan approached the DMs from the semantic perspective on cohesion and focused on the cohesive roles of the units that represent DMs (Halliday/Hasan 1976: 240–241, 267). Schiffrin employed discourse perspective with sociolinguistic approach, she looked at these units as means that do not only function as language units, but also as tools of social interaction. It conditioned the interdisciplinary character of her work: combination of quantitative and qualitative methods accounts for the distribution and frequency of these units in discourse as well as their formal, or structural characteristics and their role in social speech interaction (Schiffrin 2001: 55–58; Maschler/Schiffrin 2015: 190–192). According to Fraser, the pragmatic role played by these units is more significant. Thus, these units “do not contribute to the meaning of the proposition, *per se*. However, they do signal aspects of the message the speaker wishes to convey” (Fraser 2009: 295). Fraser states that he treats DMs as “potentially having both conceptual and procedural meaning, though not in equal proportions”, putting more significance on pragmatics. Inequality in question is conditioned by both linguistic context and pragmatic principles “to signal which of the uses of the DMs is occurring on a given occasion” (Fraser 2009: 307–308). The last approach to discuss is proposed by Maschler, who suggests that DMs must meet two requirements: semantically they must refer to the interpersonal relations between participants, and/or to their cognitive processes (Maschler 2009: 17).

Structural characteristics of these units, or classes to which they should be assigned, are not agreed upon either. Van Dijk puts conjunctions into this category (Van Dijk 1979: 449). Aijmer and Schiffrin include phrases like “you know”, “that’s right”, as well as words like “actually”, or “no”, or interjections (Schiffrin 1987: 37; Schiffrin 2001: 55; Aijmer 2002: 2; Maschler/Schiffrin 2015: 189). Fraser excludes interjections, attitudinal adverbs, evidential adverbs, focus particles, modal particles from the list of DMs (Fraser 2009: 299).

However, there is one thing all authors agree on, even though they concentrate on different aspects of how these units function in the text: the markers are devices that work at their full capacity on a discourse level. It proves that discourse analysis should be applied to understand how these units work. And, among other methods, corpus analysis appears to be the most informative, as it allows to explore great volumes of

texts to describe the distribution, frequency, positioning and co-occurrence of these units (Aijmer 2002; Maschler/Schiffrin 2015). This is significant for our research as it allows us to explore and compare two different corpora to answer the research questions we set further.

1.2. DEVELOPMENT OF DMS

Another thing the researchers agree on is the development of DMs. Wichmann, Simon-Vandenberg and Aijmer sum the evidence on the development of the DMs and state that as the DMs by definition are “lexical expressions” (Fraser 2009: 297), they follow the process of grammaticalization, typically developing into items that occur in defined syntactic positions. Within this process lexical units become fixed in the syntactic structure, the meaning of the unit is generalized (desemanticization), its pragmatic function increases (pragmaticalization), and its connection with the speaker attitude also grows (subjectification) (Wichmann *et al.* 2010: 105). Thus, the result is that DMs start indexing the utterances within which they are positioned to the surrounding discourse. It involves both structuring the discourse and sending signals to the addressee about ways to interpret the speaker’s position (Wichmann *et al.* 2010:106). In interpreting the term “utterance”, we follow Harris who defines utterance as “any stretch of talk by one person, before and after which there is silence on the part of that person” (Harris 1951: 14). By “silence” we mean pauses.

Kaltenböck mentions the position of DMs in the sentence and how it can influence the prosodic realization of the utterance (Kaltenböck 2013: 293–294; Kaltenböck 2008: 83). Pons Bordería Salvador states that grammaticalization happens within the boundaries of the utterance, so left (initial position) and right (final position) peripheries of the utterance become highlighted *which is enough for linear prosodic structure* (Pons Bordería Salvador 2018: 334). It is supported by Molinelli who states the following properties of DMs: 1) procedural, rather than propositional meaning – DMs are characterized by triggering and directing cognitive functions of utterance interpretation; 2) their position is variable, they appear on the periphery of an utterance, thus the position of the DM determines its pragmatic function; 3) they have specific prosodic form and appear between pauses (Molinelli 2018: 273–274). Therefore, DMs represent a specific heterogeneous group of language units which: 1) are lexical; 2) acquire specific functions in discourse; 3) typically are positioned on the periphery of the utterance; 4) have specific prosodic structure.

As DMs only function in discourse, and they make a highly heterogeneous group, we would like to quote an observation made by Schiffrin: “... how do we know that these are the only word classes from which discourse markers could be drawn, or if all the items from such a class are potential discourse markers?” (1987: 40).

1.3. PROSODY AND DMS

Schiffrin made another observation on DMs, which we consider important:

But intonation has not received nearly as much attention as two other factors in my analysis: the expression being used as a marker (its linguistic properties) and the conversational (textual, interactional, etc.) context of the expression. It is my

hope that an understanding of these two factors will act as a foundation for a more thorough analysis of the prosody of discourse markers (Schiffrin 2001: 9).

With all the abundance on information on DMs, the literature is rather scarce when it comes to prosody. It has not been until recently that the authors turned to this subject. Empirical research shows rich evidence that prosody is a significant tool, not only for production but also for comprehension of DMs in discourse. Aijmer states that prosody serves as the signal that helps to process the meaning of the marker itself and the whole utterance, she also mentions prosodic features, such as prosodic phrasing, tone, pausing, that serve as important clues to identify and distinguish between functions of markers (Aijmer 2002: 27). Dehe and Wichmann show that prosody reflects the speakers' choice of the function that is assigned to the unit (Dehe/Wichmann 2010: 64–65), which is supported by Wichmann, Simon-Vandenberg and Aijmer, who look upon the development of units into DMs and state that in this process “typically DMs move to the left periphery of the sentence and acquire new meanings, new syntactic constraints and new prosodic characteristics” (Wichmann *et al.* 2010: 105).

Findings state that there are consistent tendencies that characterize prosodic organization of studied units termed as DMs, and prosody demonstrates cognitive work readers perform to identify functions of DMs and reproduce their prosodic cues in spoken speech within specific discourse. With all the disagreement on the terminology, structure and functions of DMs, the researchers are rather unanimous on prosodic features of DMs, which features they deem to be essential, or at least frequent enough to be considered important. Even Fraser, while tagging prosodic features as “non-definitional properties”, still states that intonational contour is a frequent property of DMs, as DMs are prosodically separated from the rest of the utterance.

Often, a DM has an intonation contour which separates it prosodically from the rest of the segment, but this depends on the particular DM and the linguistic context. While every DM may occur in segment-initial position, some DMs may occur in the segment medial, and/or segment final position, depending on the particular DM. This is determined by the DM's syntactic analysis and what it specifically signals (Fraser 2009: 298).

So, by combining qualitative and quantitative analysis as suggested by Schiffrin (1987: 64), we attempt to answer the following research questions:

Research Question 1: Could words from word classes other than mentioned in previous research, or even bigger than word structures, function as DMs in discourse? Are there statistically supported tendencies to identify discourse environment in which words from these other classes, or even bigger structures, can acquire characteristics similar to those of DMs?

Research Question 2: Will these words belonging to other word classes, or even bigger than word structures, acquire prosodic features same or similar to the prosodic features of DMs mentioned in previous research? Will these prosodic features be different from standard prosody associated with these words belonging to other word classes, or even bigger than word structures?

2. METHODS AND DATA

As spontaneous speech appears to be produced under a complex of factors which influence the structure of spontaneous speech in a relatively unpredictable and variable ways, the best way to perform our research would be to use partially controlled discourse – reading aloud. When using the term “reading”, we follow Falé, Costa, Luegi in “by ‘reading speech’ we mean a planned speech instance, in which prosody is strongly constrained by punctuation and layout, resulting in a temporal organization most predictable than in spontaneous speech” (Falé *et al.* 2016: 826). Reading fiction falls within this definition, as the readers’ speech production is constrained by the written text with all its punctuation, authors’ remarks and other means of facilitating comprehension and further phonetic and prosodic reproduction. This reproduction is more predictable than spontaneous speech. When reproducing dialogue interaction between the fiction text characters, readers produce and comprehend prosodic structures as systematic patterns associated with linguistic meanings (Turnbull *et al.* 2017; Webman-Shafran 2018). Thus, the way they organize the utterance on all levels of discourse shows that different aspects of this organization make it possible to predict how discourse prosody will be produced, perceived and comprehended (Cangemi *et al.* 2015).

Another benefit for the researcher is the volume and variety of direct speech within the sample represented by fiction. Fiction provides ample opportunity to employ corpus analysis methods to study the frequency and distribution of the words comprising the discourse context that can condition the prosodic structure of read-aloud utterances (Kubryakova 2012:133). The above-mentioned suggests that if there is any specific discourse environment that may cause elements of discourse to develop into DMs, it should be revealed through analysis of reading speech with its constraints and predictability.

According to the information presented in the Introduction part of the present paper, we believe that another definition of DMs should be given to include all features that make DMs autonomous discursive units. According to this definition, DMs represent a specific heterogeneous group of language units which: 1) have specific prosodic structure; 2) are pragmatic, that is they acquire specific functions in discourse; 3) the meaning of these units is generalized (desemanticization), their main function becoming activating and directing cognitive functions of utterance interpretation; 4) are lexical, but undergo grammaticalization, thus typically are positioned on the periphery of the utterance. We address the topic of conversion of units, previously not associated with DMs into DMs/DM-like units in discourse. Prosodic adjustment accompanies this conversion. We suggest that while reading aloud the readers process prosodic features of imperatives and converting imperatives that meet requirements stated in our definition of DMs into interjection-like units (DMs).

To answer the research questions, we have applied methodology of Experimental Discourse Analysis (Fedorova 2014: 114–115). This methodology combines quantitative & qualitative methods of analyzing and evaluating the data. This methodology allows us to: 1) regulate and control the experiment by using partially controlled speech – reading aloud, which represents reproduced/imitated real-life discourse in direct speech interaction between the characters of a fiction text; 2) use the corpus analysis to identify and differentiate discourse conditions by identifying and categorizing words accompanying

direct speech and functioning as markers that indicate the specific discourse conditions and primers that activate the readers' cognitive processes. Direct speech passages with imperatives from fiction texts in written and spoken forms underwent corpus analysis for the written form (Kilgarriff *et al.* 2014) and acoustic analysis for the spoken form. Prosody of the spoken imperatives was evaluated against the discourse environment of the said imperatives to identify similar and distinctive features of imperatives functioning in different discursive conditions.

To answer our research questions, we have chosen specific type of syntactic structure – an imperative utterance, also known as “command” (Aikhenvald 2010, 2017). Premises for choosing this structure fall into two categories. The first premise can be named structural: imperatives as structures have never been associated with DMs in any previous research, though they are closely related to interjections etymologically (Kruchinina 1980: 618–619). As the research question is whether words from word classes other than mentioned in previous research/structures bigger than word can become DMs/DM-like units, we decided to use the utterance characterized by specific grammatical/syntactic structure (Mood) and linguistic meaning (illocution) – canonical imperative utterances/commands (Aikhenvald 2010: 5, 72; Aikhenvald 2017: 18, 56). The second, psychological premise that restricts the usage of canonical imperative utterances/commands, stipulated the choice of the utterances, the premise being: 1) the illocutionary power of the commands restricting their versatility in discourse. Even when the commands “do not command” (Aikhenvald 2010: 241, 248), their meanings fall into a specific category of iconic nature: greetings, curses, “dramatic imperative” (Isachenko 2003: 488–502); 2) the peculiar combination of structural simplicity/iconicity, frequency in speech supported by imperative strategy utility (Aikhenvald 2010: 329).

In present research we used the sample containing over 8000 canonical imperative utterances imitating direct speech from read-aloud texts. The sample was taken from 22 fiction texts by British authors (3 male/3 female) read by British voice actors (3 male/3 female). Texts were targeted at two groups of readers (Young Adult/Adult) and belonged to two genres (Fantasy/Mystery). The sample included canonical imperative sentences (direct speech) with verbs denoting the production of the direct speech/activity accompanying the production of the direct speech, and modifiers to these verbs (Examples 1–5).

- (1) “Look!”
- (2) “Listen,” I began, “this is an established, traditional form that...”
- (3) “Wait,” he said, “I want a guarantee that this creature won’t try to destroy my mind.”
- (4) “Stop it!”
- (5) “RUN!”

The spoken form of the utterances under analysis was analyzed with PRAAT (Prosogram script) (Mertens 2004, 2019; Boersma/Weenik 2022), which allows the researcher to receive stylized intonation contours with data on prosodically prominent phonetic syllables in semitones. The script also automatically divides sound continuum into syllables. Thus, the data used in corpus analysis included 22 texts containing over 2.1 million words, the data used in acoustic analysis included over 8000 utterances (direct speech, overall duration about 2 hours).

3. RESULTS

3.1. PROSODY OF IMPERATIVES

Findings show that imperative utterances/commands do not always behave prosodically according to what is expected of them. Specific prosodic behavior is found in a number of utterances under investigation (670 utterances) which makes 7.6% of the sample. Characteristic feature of these utterances is that they possess only one phonetic syllable as identified by Prosogram (Mertens 2019). This specific behavior is expressed through specific arrangement of prosodic characteristics and their quantitative characteristics. The research shows that not all prosodic features are found in the utterances under analysis.

All prosodic realizations of imperatives under analysis fall into three groups. The first group – the smallest in number (22 utterances, 3.2% of 670 utterances) – contains utterances that possess no tonal characteristics at all. These utterances possess only intensity as an acoustic characteristic and show much variation in minimum intensity.

	Mean	Std. Dev.	Std. Error	Max.	Min.	Median	K-S Dist.
Min. Intensity (dB)	27.064	14.336	3.128	62.820	6.160	26.760	0.111
Max. Intensity (dB)	72.643	6.722	1.467	84.080	59.610	70.920	0.151
Aver. Intensity (dB)	65.573	6.614	1.443	77.750	52.780	64.750	0.144

Table 1. Descriptive statistics of intensity (1st group of imperatives)

By having intensity as the only prosodic component these utterances are perceived as noises more than as actual utterances with identifiable meaningful syllables or words. Corpus analysis shows that 79% of utterances in the first group are marked as “emphatic”, the markers varying from punctuation (exclamation mark) to verbs/phrases denoting specific conditions of speech production (*shout, exclaim, scream*). Syntactically all utterances in the first group are represented by one-syllable imperatives detached from other discourse elements by pauses longer than 150 milliseconds. Absence of tonal characteristics shows that prosodic features of imperative utterances that are close to those of the 1st-type interjections (3.2% of the 670 utterances) (Kruchinina 1980) which are perceived as unusual noises/sounds/sequences of sounds.

The second group (8.3% of the 670 utterances) comprises 56 imperative utterances that preserve some, but not all, prosodic features. Syntactically these utterances are represented by one- or two-syllable imperatives detached from the rest of the discourse by pauses longer than 150 milliseconds. These imperatives have both dynamic (intensity) and tonal (pitch) properties, but there is no identifiable intonation contour (Mertens 2019; Boersma/Weenik 2022). These utterances show even more variation in show more variation in minimum intensity.

	Mean	Std. Dev.	Std. Error	Max.	Min.	Median	K-S Dist.
Min. Intensity (dB)	28.540	14.319	1.913	51.940	0.350	32.500	0.121
Max. Intensity (dB)	75.188	6.537	0.873	87.110	58.690	75.940	0.112
Aver. Intensity (dB)	67.530	6.421	0.858	79.930	52.880	67.830	0.0789

Table 2. Descriptive statistics of intensity (2nd group of imperatives)

Corpus analysis shows that 55% of utterances in the second group are marked “emphatic”, the markers varying from punctuation (exclamation mark) to verbs/phrases denoting specific conditions of speech production (*roar, cry (out), exclaim*).

The third group of imperative utterances (88.5% of the 670 utterances, that makes 591 utterances) preserves all prosodic features. Syntactically these utterances are represented by one- or two-syllable imperatives with short (one- or two-syllable words/word groups) accompanying subordinate members of the sentence. Imperatives of the third group are detached from the rest of the discourse by pauses longer than 150 milliseconds. Only 32.2% of the third group utterances are marked ‘emphatic’, the markers varying from punctuation (exclamation mark) to verbs/phrases denoting specific conditions of speech production.

Prosodic characteristics of imperative utterances in the second and the third groups demonstrate significant differences in the following table.

	Statistically significant differences		2 nd group imperatives (56 utterances). Median	3 rd group imperatives (591 utterances). Median
Aver. syllable duration (sec)	+	P = <0.001	0.04	0.07
Min. F ₀ (Hz)	+	P = 0.002	111.4	144.2
Min. F ₀ (semitones)	+	P = 0.002	1.87	6.41
Min. F ₀ (ERB)	+	P = 0.002	3.3	4.13
Max. F ₀ (Hz)	+	P = 0.001	175.7	254.2
Max. F ₀ (semitones)	+	P = 0.001	9.71	16.15
Max. F ₀ (ERB)	+	P = 0.001	4.83	6.44
Aver. F ₀ (Hz)	+	P = <0.001	145.3	208.6
Aver. F ₀ (semitones)	+	P = <0.001	6	12.4
Aver. F ₀ (ERB)	+	P = <0.001	4.1	5.5
Range F ₀ (Hz)	+	P = 0.034	49.5	81.9

Table 3. Statistically significant differences in the median values between the two groups of imperatives

Table 3 shows statistically significant differences in some F₀ measures, but not in all of them. There are no statistically significant differences for both groups in measures of mean absolute slope of F₀.

	Statistically significant differences		2 nd group imperatives (56 utterances). Median	3 rd group imperatives (591 utterances). Median
Absolute mean slope (Hz/sec)	-	P = 0.416	514	610
Absolute mean slope (semitones/sec)	-	P = 0.054	68.4	54.3
Absolute mean slope (ERB/sec)	-	P = 0.990	12.6	12.5
Absolute mean slope, no octave jumps (semitones/sec)	-	P = 0.650	45.7	46.7

Table 4. Statistically significant differences in absolute mean slope measures between the two groups of imperatives

Table 4 shows that pitch dynamics are similar in the utterances of the second and the third groups. Even though imperatives of the second group do not possess any identifiable intonation contour, pitch behavior within them is similar to that in the prosodic structure of the third group utterances.

Unlike utterances of the first and second groups, imperative utterances from the third group possess identifiable stylized intonation contours. However, stylized intonation contours of the imperative utterances in the third group are different from what is expected, according to the codified intonation standard (O'Connor 1973; Wells 2006; Ward, 2019). As over 30% of these utterances are marked as 'emphatic', one would expect to see High Fall, High Rise, or complex Fall-Rise or Rise-Fall tones in at least 30% of the intonation contours (O'Connor 1973: 170, 191, 214; Wells 2006: 61–64; Ward 2019: 189). However, the majority of the utterances in the third group have Level tone (67.8% of the group, 401 utterances), that is no tonal movement is found within the phonetic syllable. Among those utterances that have tonal movements (32.2% of the group, 190 utterances), 82% have Fall in their intonation contour, and the rest was equally distributed among Rise, Rise-Fall and Fall-Rise (6% each). Utterances with Level Tone (no tonal movement) display statistically significant differences in all F_0 features but average F_0 as shown in Table 5 below.

	Statistically significant differences		2 nd group imperatives (56 utterances). Median	3 rd group imperatives (591 utterances). Median
Absolute mean slope (Hz/sec)	-	P = 0.416	514	610
Absolute mean slope (semitones/sec)	-	P = 0.054	68.4	54.3
Absolute mean slope (ERB/sec)	-	P = 0.990	12.6	12.5
Absolute mean slope, no octave jumps (semitones/sec)	-	P = 0.650	45.7	46.7

Table 5. Statistically significant differences in F_0 median values within the third group of imperatives

Table 5 shows that there are statistically significant differences in all F_0 measures that make the range of tonal movement wider: minimum F_0 in utterances with tonal movement is lower, and maximum F_0 in them is higher. However, average F_0 does not

show statistically significant differences, which means that the tonal range expands proportionally on both extreme measures, leaving average F_0 similar in both subgroups. Therefore, this expansion has purely perfunctory value, allowing more space for tonal movement.

3.2. PROSODY INDICATING CHANGES IN SEMANTICS AND PRAGMATICS OF THE IMPERATIVES

As identified prosodic features do not correspond to what is expected of those belonging to imperatives, it was necessary to find whether those features are conditioned by specific discursive environment. As we have found before, 79% of the utterances in the first group are marked as “emphatic”. The same utterances possess specific prosodic structure – only some prosodic components are present, which makes these utterances prosodically close to interjections, elements traditionally included into DMs. Thus, utterances of the first group are produced by the readers as unusual noises, which makes it impossible for those imperatives to function as proper imperatives.

The percentage of utterances marked as ‘emphatic’ in the second and the third groups is lower – 55% of the utterances in the second group and 33.2% in the third group. As we have found before, F_0 measures of these two groups do not show statistically significant differences, so the pitch components behave similarly in prosodic structures of these utterances. We have studied the F_0 measures within the third group utterances (no tonal movement), which contains both marked and unmarked as ‘emphatic’ utterances. Table 6 shows statistically significant differences found within F_0 measures of marked and unmarked as “emphatic” utterances of the third group with no tonal movement.

	Statistically significant differences		3 rd group imperatives unmarked as ‘emphatic’ (no tonal movement, 170 utterances). Median	3 rd group imperatives marked as ‘emphatic’ (no tonal movement, 231 utterances). Median
Min. F_0 (Hz)	+	P = <0.001	129.61	182.05
Min. F_0 (semitones)	+	P = <0.001	4.48	10.37
Min. F_0 (ERB)	+	P = <0.001	3.76	4.97
Max. F_0 (Hz)	+	P = <0.001	214.99	267.99
Max. F_0 (semitones)	+	P = <0.001	13.25	17.06
Max. F_0 (ERB)	+	P = <0.001	5.67	6.70
Aver. F_0 (Hz)	+	P = <0.001	168.74	229.92
Aver. F_0 (semitones)	+	P = <0.001	8.54	13.97
Aver. F_0 (ERB)	+	P = <0.001	4.66	5.94
Range F_0 (Hz)	-	P = 0.889	62.76	64.52
Range F_0 (semitones)	-	P = 0.077	5.46	5.13
Range F_0 (ERB)	-	P = 0.606	1.24	1.31

Table 6. Statistically significant differences (F_0 measures of marked and unmarked as ‘emphatic’ utterances of the third group)

Table 6 shows that utterances of the third group, even when marked as “emphatic”, do not necessarily possess any relevant tonal movement that would be present in the stylized intonation contour. Unlike F_0 variations presented in Table 5, F_0 variations in Table 6 include statistically significant differences found within Average F_0 values, but not within Range F_0 values. It shows that F_0 variations and absence/presence of tonal movement within unmarked and marked as “emphatic” imperatives are conditioned by two discursive functions. F_0 variations are responsible for making the imperative sound “emphatic”, absence/presence of tonal movement are responsible for making the imperative sound as a DM, not like a proper imperative.

In intonation contours with relevant tonal movement this tonal movement is produced on lower than average/average pitch level.

Column	Mean	Median	25%	75%	Std Dev	Std. Error	K-S Prob.
Normalized Q2 F_0 , Hz	1.002	1.011	0.987	1.045	0.0976	0.00402	<0.001

Table 7. Descriptive statistics of normalized Q2 F_0 (3rd group of imperatives)

Intonation contours with tonal movement (190 utterances) contain 237 stylized tonal movements, that is, some contours contain more than one tonal movement within the intonation contour. Another significant F_0 property is that F_0 range in 68% of these movements is from 4 to 10 semitones, in 28% of these movements it is less than 4 semitones, in about 4% it is more than 10 semitones.

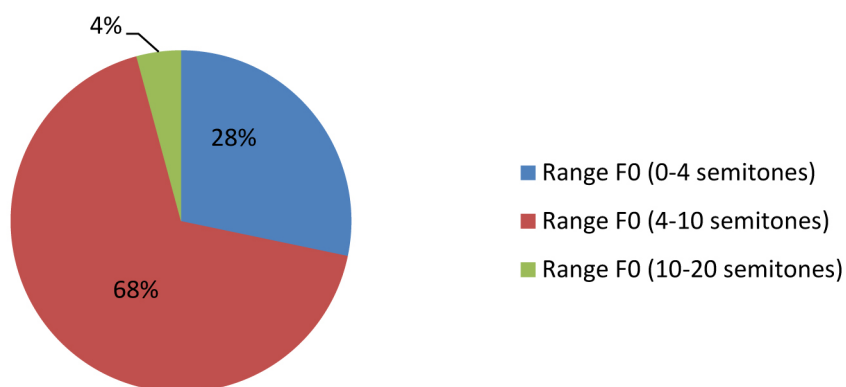


Figure 1. Range F_0 values

3.3. POSITIONING OF THE IMPERATIVES

It should be noted that utterances of the third group with Level Tone cannot be interpreted as the part of the previous intonation contour, as they are separated from the previous syntactic structures by long pauses. Actually, in the sample (8703 utterances) the percentage of imperative utterances that belong to a longer syntactic structure in the written text and are not separated from the previous part with pauses, is about 20% of the sample. Over 20% of utterances are separated from the bigger syntactical structure of the written text with pauses not shorter than 150 ms. 60% of utterances in the sample

are autonomous syntactic structures in written text. All utterances belonging to the three groups described in the present research are separated from the rest of the sound continuum with distinguishable pauses and contain only one phonetic syllable. It shows that the readers quite successfully identify utterances within the longer discourse and produce them according to their function in discourse.

It also appears that the position of the imperative structure within the bigger syntactic structure is important: the initial position is prerequisite for autonomy of the “hybridized” imperatives.

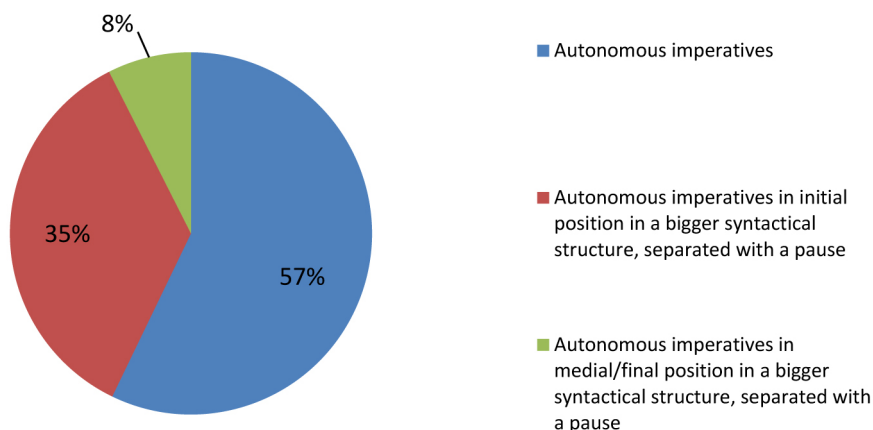


Figure 2. Position of the imperative

More than half of imperative utterances in all three groups (670 utterances) represent fully autonomous utterances in both their spoken form, where they are separated from previous and following discourse with a pause, and their written form, where they are separated from previous and following sentences with graphic means. 35% of the utterances are autonomous imperatives in initial position in a bigger syntactical structure, separated with a pause, and 8% are autonomous imperatives in medial/final position in a bigger syntactical structure, separated with a pause. All imperatives that appear in medial/final position in a bigger syntactical structure and are separated from the rest of this structure with a pause belong to compound sentences with two, or more, similar imperative structures (Examples 5–7).

(6) “...come on || , come and get me || ... **up you get** || , now...”

(7) “Get out, || **get out**, || I don’t want to see you in this office ever again!”

4. DISCUSSION

Research Question 1. Could words from word classes other than mentioned in previous research, or even bigger than word structures, function as DMs in discourse? Are there statistically supported tendencies to identify discourse environment in which words from these other classes, or even bigger structures, can acquire characteristics similar to those of DMs? The answers to the first research question appear to be “yes” and “yes”.

While studying the prosodic realizations of imperatives in partially controlled discourse, we found a though relatively small, but still clearly identifiable group of imperative utterances/commands that behave like DMs in specific discourse environment. Their behavior complies with all requirements put to DMs: these imperatives have specific prosodic structure, unlike that regular for imperatives; they are pragmatic, as they acquire specific functions in discourse – to indicate the emphatic state of the utterance and/or to give a signal to other participants in discourse; 3) their meanings are unidentifiable due to their prosodic realisation, are made redundant due to the structure of the bigger written sentence read aloud, or the readers desemanticize their meanings, according to their perception of the sentence; 4) these imperatives are lexical, but they undergo grammaticalization: they have specific prosodic form (only one phonetic syllable), one-word structure, and are typically are positioned on the periphery of the bigger syntactical structure of the written sentences. Thus, these discourse elements behave fully similar to DMs, even though they do not belong to any word classes that are included into DMs, as stated in previous research. Our research supports functional approach to DMs and states that it appears more informative in terms of, and not only words, but also units bigger than words may fulfill functions that traditionally are referred to DMs.

We suggest that discourse units that behave like DMs in discourse undergo a specific transformation, that we name “functional hybridization”. During this prosodic transformation in discourse, some imperatives partially lose their conventional characteristics and acquire those of DMs. “Functional hybridization” is a gradual process, the research shows that the degree of changes in the sample decreases as discourse environment becomes less specific. As this transformation is performed in specific discourse environment, “functional hybridization” appears in discourse as the result of the speakers’ adjustment to the discourse conditions. We have found three groups with different degrees of prosodic changes in the imperatives within the sample, these groups making 7.3% (670 autonomous utterances) of the sample (8703 utterances) The distribution of utterances in these groups is statistical. Prosodic transformation of imperatives is at its fullest degree in the first group, which is the smallest among the three – 3.2% of the imperative utterances with specific prosodic features. The second group constitutes 8.3% of the imperative utterances with specific prosodic features, and the third group takes up the rest 88.5%. This shows that modification of prosodic features does not happen to all imperatives equally; it occurs to imperative utterances in distinctive discursive contexts and exhibits to a certain degree. Thus, frequency of “functional hybridization” has probabilistic nature and is conditioned by the constraints put by the particular discursive context. The functional character of “functional hybridization” shows that it would be incorrect to speak about this transformation of imperative utterances/commands as a permanent change. Imperative utterances with the same syntactic structure function in their own capacity in different discourse environment.

We shall discuss discursive factors that facilitating “functional hybridization” and condition the degree of “functional hybridization”, accordingly. The first factor is the one-syllable structure of the imperative. It appears that the size of the discourse units matters: imperative utterances that undergo “functional hybridization” are autonomous separate utterances, small enough for PRAAT to find no more than one phonetic syllable

in them. It also appears to be a prerequisite that assists the “formulaicity” of imperatives that undergo “functional hybridization”. As defined by Hudson and Wiktorsson (2009: 81; Lin 2018), formulaic word sequences are “evidently more constrained in their usage together than usual”. The term “formulaic” itself implies desemanticization, thus, discourse units constrained in their usage more than usual, lose some of their conventionally identified semantic content, on the one hand. Formulaic words/phrases are associated with certain functions in specific communicative contexts (Lin 2018: 16), which supports the pragmatic character of the imperatives that underwent “functional hybridization”.

The second factor is pragmatic. As it has been mentioned above, “formulaicity” that the imperatives undergoing ‘functional hybridization’ acquire, implies that they, on the one hand, lose some of their conventional semantic content. On the other hand, they acquire pragmatic meaning, as they are associated with specific functions, those functions being “realizing functions” such as expressing emphasis, or “transacting specific information in a precise and understandable way” such as signaling about new information, attracting attention to the following words (Schmitt/Carter 2004: 3). Imperatives undergoing “functional hybridization” cannot fully perform their conventional illocutionary function, as they do not possess all or some prosodic features which makes it difficult for the listeners to perceive them as fully-fledged imperatives.

The third factor that conditions “functional hybridization” is formal: position of the imperative in relation to other discourse elements. Research shows that imperatives of the first and second groups always represent initial autonomous one-syllable utterances detached from other discourse elements with pauses. These imperatives either coincide with a single sentence in their written form, or with the initial part of a bigger syntactical structure – written sentence. Imperatives from the third group may also include one-syllable utterances detached from other discourse elements with pauses, which coincide with the medial or final part of a bigger syntactical structure – written sentence. But all such imperatives constitute only a small part of the third group (8%). When found in non-initial positions, the imperatives are rarely separated from the previous part of the sentence with a pause, more often they act as enclitics to the preceding discourse element. The degree of “functional hybridization” in such imperatives is lowest.

All of the above complies with requirements set for DMs (Maschler 2009): 1) “functional hybrids” – imperatives of the three described groups – have a metalingual interpretation in the context: they perform functions other than conventional imperatives, phonetically these imperatives can be no more than unusual sounds, which places them close to interjections; 2) “functional hybrids” manifest predominantly in initial structural position and change of the position affects the degree of ‘functional hybridization’, and 3) “functional hybrids” – imperatives of the three described groups – are always detached by pauses from other elements of discourse.

As we answer Research Question 2, we shall study “functional hybridization” from a different angle. Research Question 2: Will these words belonging to other word classes, or even bigger than word structures, acquire prosodic features same or similar to the prosodic features of DMs mentioned in previous research? Will these prosodic features be different from standard prosody associated with these words belonging to other word classes, or even bigger than word structures? And the answer is “yes, but partially”.

As we have identified and described three groups of imperatives that undergo the 'functional hybridization' in the sample, we have stated that prosodic transformation in those imperatives happens to different degrees as the imperatives occur in varying discursive environment. The closer discursive environment of the imperatives is to that of DMs, the higher degree of "functional hybridization" is. "Functional hybridization" concerns both semantic and pragmatic content of the imperatives and manifests in prosodic realization different from what is conventional for a proper imperative. So this appears to be double-sided: to be identified as having some specific function in discourse, imperatives are expected to be prosodically different from what is statistically frequent, and in speech production one has to use the imperatives with specific prosody appropriately to express a certain meaning. Lin (2018) raises an interesting question of how to evaluate prosodic cues. As found by the present study pausation only marks the modification of the discursive function of the utterance but it does not initiate it alone. To initiate prosodic modification a number of factors should be involved, and their interaction produces different degrees of change. Thus, "functional hybridization" is probabilistic in nature: whenever all the factors coincide in their full form, the "functional hybridization" is complete and the modification is full – the imperative turns into a sound/sound sequence, that includes imperatives from the first group. Otherwise, the change is partial, it concerns certain acoustic features and manifests in partial prosodic changes. When "functional hybridization" is at its lowest, the prosodic structure of the imperative has all its components, but its manifestation differs from what is traditionally expected of such utterances.

5. CONCLUSION

In conclusion, we should say that "functional hybridization" in discourse results from the readers' cognitive work. The readers comprehend information from the written text and reproduce it in accordance with their own understanding of the functions different elements perform in discourse. When doing this they transform different discourse elements so that they are better suited to perform needed functions. We call this transformation "functional hybridization" and demonstrate how it works on imperatives. Imperatives may acquire special pragmatic functions in discourse and they manifest those functions through transformation of prosodic realizations. We call this process "hybridization", because imperative do not change fully, their written forms remain the same, but their prosody changes either completely and the imperatives are perceived as unusual sounds/sound sequences, or partially and the imperatives sound different from what they are expected to sound. The imperatives lose part of their semantic content and acquire pragmatic content characteristic of other discourse elements, namely DMs, thus becoming somewhat "hybrid". Those "hybrids" can be described in accordance with their formal and structural features and organized into three groups according to the established features.

Probabilistic nature of "functional hybridization" predicts that DMs do not constitute a closed group, imperatives can become very close to DMs both in their spoken realizations and in their pragmatic function. However, not every imperative can become that close to a DM. "Functional hybridization" is predetermined by both structural features of the imperatives themselves and specific discursive context. In its

full form “functional hybridization” results in a complete transformation of all prosodic features of the imperative, in its least form “functional hybridization” manifests through transformation of the intonation contour, so that the intonation contour differs from its phonological equivalent. Further experimental research is to be done to investigate the character of “functional hybridization” concerning units other than imperatives to observe this dynamic discursive phenomenon predetermined by the interaction of numerous structural and contextual factors.

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SUMMARY

FUNCTIONAL HYBRIDIZATION IN DISCOURSE: TURNING IMPERATIVES INTO DISCOURSE MARKERS

The author addresses discourse markers (DMs), suggesting that DMs represent functional, but not categorical, units. The paper shows that in reading aloud, under specific discourse conditions the readers convert imperatives into interjection-like units similar to DMs. This conversion is carried out through processing and adjusting prosodic features of imperative utterances, according to the function they perform in discourse, and can be defined as “functional hybridization”. The findings of the present paper support previous research in that: 1) according to our findings, prosodic structure of “functionally hybridized” imperatives places them close to interjections, and their function in discourse changes to attract attention to new information, or express “emphasis”; 2) “functionally hybridized” imperatives, like DMs, are characterized by specific formal features: initial position appears prerequisite for their autonomy, in other than initial position “functionally hybridized” imperatives tend to act as an enclitic to the previous word. Factors facilitating “functional hybridization” of imperatives are: 1) the formulaic/iconic structure of the imperative, 2) initial position, 3) emphatic nature of the utterance.

KEYWORDS: discourse markers, pragmatics, prosody, imperatives, intonation contours.

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