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## INTONATION IN DISCOURSE: WHY DO CZECH SPEAKERS OF ENGLISH NOT ALWAYS USE IT TO ENHANCE THE MEANING?

### Abstract

This paper presents the results of a Ph.D. research project inspired by the observation that many Czech speakers of English, despite their proficiency in other areas, will still speak it with a clearly discernible foreign accent. A hypothesis was formulated that this might be due to certain intonation patterns transferred from the mother tongue rather than, for example, incorrect articulation of individual sounds. A large number of recorded English utterances of various Czech speakers have been subjected to a prosodic analysis with particular emphasis laid on the placement of the most prominent peak, i.e. the intonation centre (IC). The results provide ample evidence supporting the original hypothesis and lead to the conclusion that Czech speakers have a strong tendency to place the IC on the last item of an utterance, irrespective of the appropriateness of such a placement. Intonation plays a significant role in the information structure of utterances and as such has a role to play in discourse analysis too. In the present paper it is viewed with respect to the theory of functional sentence perspective (FSP), developed among others by Firbas, and is concerned with the distribution of information as determined by all meaningful elements, from intonation (for speech) to context.

### Key words

*Intonation centre; nucleus; theme; rheme; communicative dynamism*

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## 1. Introduction

“As a phenomenon, intonation is notoriously slippery” (Brazil 1995: 240). These words may well refer to the frustration shared by many an analyst but they will

probably not apply to native speakers of a given language. On the contrary, in the hands of a competent user, intonation becomes a powerful tool by means of which we can enhance the meaning of our words or possibly even overrule them, for sometimes it is not so much *what* we say but *how* we say it that matters.

The contradiction of *what* versus *how* was the starting point of a Ph.D. research project of several years; the aim was to find out whether Czech speakers of English were able to produce intonation in accordance with the actual message of the text (cf. Headlandová Kalischová 2009), and it went hand in hand with a long-term observation that many Czechs, no matter what their level of proficiency, would still maintain a clearly marked accent when speaking English. It was also evident that often this had more to do with an inappropriate use of certain intonation patterns, transferred from the mother tongue, rather than merely with incorrect articulation of individual sounds. A tentative hypothesis was put forward, suggesting that there is a general tendency for Czech speakers to place the intonation centre on the last item of an utterance, regardless of the congruence of such a placement with the semantic and contextual factors.

The current paper endeavours to answer the question in the title while presenting the results of a comparative study of intonation centre placement in English dialogues read by native English speakers and Czech speakers of English.

## 2. Common features of Czech and English intonation systems

The theoretical background of the study was pivoted on two basic concepts: firstly the intonation systems of the two languages, and secondly the theory of functional sentence perspective (see section 3).

A thorough survey of the characteristic features of the Czech and English phonological systems (cf. Halliday 1970, Crystal 1969, Underhill 1994, Gimson 1994, Petr 1986, Palková 1997, Krčmová 2007) revealed a number of similarities and correspondences, out of which three proved to be of major relevance:

- (i) Both systems recognize the same linear unit (i.e. *výpovědní úsek* [utterance unit] in Czech and *tone unit* in English<sup>1</sup>) as central to the investigation into intonation, and apply the same criteria for its delineation. This means that *usually* a tone unit is separated by a change of pitch and a pause, it may coincide with a syntactic structure, i.e. a clause, has one peak of prominence and is characterized by a complete tone. The point of divergence is the internal structure of the unit; while in Czech the main emphasis is on rhythmicity and consequently the utterance unit is subdivided into stress groups, in English the internal structure of the unit is related to the distribution of prosodic prominence which results in the establishment of individual constituents, i.e. prehead, head, nucleus and tail. However, this discrepancy did not bear any significance to the objective of the study.

- (ii) In terms of prosodic prominence, the same factors are taken into consideration when identifying the main peak in Czech (*intonační centrum* [*intonation centre*]) as well as in English (*nucleus*); specifically it is the interplay of three phonetic features, i.e. pitch, length and loudness.
- (iii) Analogical treatment could be traced even in cases of successive intonation centres (for Czech) and successive nuclei (for English) in that it tends to be the last one which is regarded the proper intonation centre/nucleus of the unit.

The above listed compatible concepts of the Czech and English systems proved indispensable in the course of the project; especially, it was the common view on the establishment of the most prominent peak which helped lay the foundation for the analysis of the research material (Headlandová Kalischová 2009: 25).

### 3. Theory of functional sentence perspective

The theory of functional sentence perspective (FSP), and namely the approach of Jan Firbas, a key figure of the ‘Brno school’, represented the other point of departure for the study. In Firbas’s conception, the basic unit of communication is represented by a sentence (simple or complex), and individual sentence elements are viewed as carriers of communicative dynamism (CD), a degree of which is “the relative extent to which a linguistic element contributes towards the further development of the communication” (1979: 31). A sentence is regarded as a basic field of distribution of CD determined by the interplay of several factors (three non-prosodic and one prosodic) operating on the level of both written and spoken language (cf. Firbas 1992).

#### 3.1. *Non-prosodic factors*

The first factor is concerned with word order and the way in which the presentation of information (known/unknown) is sequenced. The term used here is **linear modification** and it was developed, among others, by Bolinger (1952), who maintains that “gradation of position creates gradation of meaning when there are no interfering factors” (as cited in Firbas 1979: 30). This claim has been proved valid across all Indo-European languages; however, we must bear in mind that the sphere of competence will vary from language to language.

Firbas focused his inquiry on the word order systems in Czech and English and the outcome of his research confirms that while in Czech the main operating principle is the “FSP linearity principle”, allowing sentence elements to be ordered in accordance with a gradual rise in CD, in English the primary mission of a sentence is to satisfy the requirements of the syntactic functions of individual elements (1992: 118).

The highest rank in the FSP-factors hierarchy is occupied by **the contextual factor**, specifically the concept of immediately relevant context which represents only “a fraction of the complex phenomenon of context” (Firbas 1992: 21–40); a piece of information is regarded as old (context-dependent) or new (context-independent) in respect to its retrievability or irretrievability from the context.

The last non-prosodic factor is **the semantic factor**. It represents the semantic character of a linguistic element as well as its semantic relations to others, and the impact these have on the distribution of CD. When a sentence (simple or complex) is subjected to a syntactic analysis, the outcome is a set of sentence elements (i.e. non-clausal elements and subordinate clauses), which – in terms of a functional analysis – act as communicative units (there is a general tendency for a one-to-one correspondence). Units assigned a comparatively low degree of CD are thematic whereas elements developing the communication further are non-thematic.

**Thematic units** establish the foundation of the communication, and the non-thematic units (subdivided into **transitional** and **rhematic**) constitute the core, thus completing the message.<sup>2</sup> For better illustration of the classification of communicative units and the way they occur in text, the following examples have been analyzed (“RhPr” = rheme proper, the most dynamic of all units; “TrPr+” = transition proper, “Tr” = transition, “Th” = theme, and “DTh” = diatheme, the most dynamic of thematic units):

- (1) (What are your plans for tomorrow?) –  
 | My sister | is coming | tomorrow. |  
 RhPr TrPr+ Tr DTh
- (2) | I | would like to take | her | to the theatre. |  
 Th TrPr+ Tr Th RhPr

### 3.2. *The prosodic factor*

Unlike the previous non-prosodic factors, the last one – intonation – operates only on the level of spoken language. Generally speaking, intonation cannot operate independently of the other three factors; at the same time, it does not just mirror the distribution of communicative dynamism as determined by them but it can also boost the level of CD assigned to an element or clarify a potential ambiguity caused by the interplay.

Firbas’s systematic study of the two distributions (i.e. of CD and prosodic prominence) and the parallels between them concludes with the identification of two types of relationship (1992: 143–172):

- (i) perfect correspondence
- (ii) prosodic intensification

Examples (3) to (5) demonstrate each type, and the correspondence/difference between the two distributions is indicated in the two lines under each sentence: line 1 reflects the interplay of the non-prosodic factors, and line 2 provides the outcome of the interplay of all four factors. The following tonetic marks have been used: “\” and “\’” for nuclei (together with capitalization), “<sup>1</sup>” for head stress, and “<sup>o</sup>” for unaccented stress (based on O’Connor and Arnold 1973).

- (3) (What are your plans for tomorrow?) –  
 My \SISTER | is <sup>o</sup>coming | <sup>o</sup>tomorrow. |  
 RhPr TrPr+ Tr DTh  
 RhPr TrPr+ Tr DTh
- (4) | I | would <sup>1</sup> like to <sup>o</sup>take | her | to the \THEATRE. |  
 Th TrPr+ Tr Th RhPr  
 Th TrPr+ Tr Th RhPr

Both examples demonstrate perfect correspondence between the non-prosodic distribution of CD and the degrees of prosodic prominence. In (3) the nucleus falls on the most prominent element (intonation centre bearer), *my sister*, implementing the function of RhPr; equally in (4), *to the theatre* acts as RhPr and the headword bears the nuclear stress.

As for the case of prosodic intensification, Firbas distinguishes two subtypes, namely (i) selective non-re-evaluating intensification and (ii) re-evaluating intensification (1992: 156–172). The former kind does not affect the basic relationship between Th-Rh, it merely increases the degree of CD of one of the elements. The latter, however, results in a redistribution of CD so that an originally non-rhematic element becomes the intonation centre (IC) bearer while the original most dynamic element appears in the post-IC prosodic shade (Firbas 1992: 160).

- (5) | \THAT’ s | <sup>o</sup>good. |  
 DTh TrPr+Tr RhPr  
 RhPr TrPr+Tr DTh

The example above manifests the possible outcome of prosodic intensification. Following the transcription, this sentence is now highly emotive; consequently its perspective has changed and the Th-Rh relationship is reversed. The underlying motive for this shift of functions is the addition of ‘new’ information, the emotiveness, which is irretrievable from the immediately relevant context (cf. Chamonikolasová 2007: 35–37).

#### 4. Material and methodology

In the course of the project a number of Czech speakers were recorded reading out several scripted dialogues in English and these recordings were then subjected to a prosodic analysis concerning primarily the identification of the main peak of prominence (intonation centre). The selected texts come from various sources (general English textbooks, pronunciation practice books, etc.); special attention was paid to their topics and general impression, with the desire to make them sound as natural as possible. Altogether, the material analyzed constitutes a corpus of **4,649 sentences**; the total size is over **33,000** words. The entire database is divided into five parts, each covering one dialogue (see Table 1).

	№ of speakers	№ of sentences	№ of words
<b>Dialogue 1</b>	54	1,458	8,262
<b>Dialogue 2</b>	53	2,279	19,716
<b>Dialogue 3</b>	30	360	1,800
<b>Dialogue 4</b>	30	360	2,250
<b>Dialogue 5</b>	12	192	1,392
<b>Total</b>	<b>179</b>	<b>4,649</b>	<b>33,420</b>

**Table 1.** Description of the corpus

The speakers were recruited from among students of bachelor programs at the English department of the Pedagogical Faculty, Masaryk University, in the period from November 2005 till March 2008, and their level of English could generally be estimated as approaching C1 (according to the Common European Framework of Reference for Languages). The students, unaware of the true purpose of the recording sessions, were given time to prepare the dialogues in pairs and then recorded anonymously by means of the audio editor Audacity 1.2.6.

In order to obtain a sufficient amount of material to constitute the norm for comparison, several native speakers were approached on different occasions and recorded; the total number of native English/American versions ranges from four to six for each dialogue.

All the recordings were then analyzed on an auditory basis with focus on (i) segmentation of the text into basic distributional fields and (ii) IC placement; the analyses were rechecked several weeks later to ensure the validity of the original assessment. Finally, the Czech speakers' versions were compared against the norm and the results (i.e. correspondences, deviations, etc.) noted in a series of tables.

#### 5. Sample analysis

The following text (Dialogue 4) was chosen to demonstrate the individual steps of the procedure and to bring evidence in support of the final conclusions. First,

there are brief introductory notes on the text itself, followed by a transcript of the model version; then the analysis of the Czech speakers' recordings is presented in a synoptic table, accompanied by a more detailed commentary on selected items (based on Headlandová Kalischová 2009: 110–119).

### 5.1. Description of the text

Dialogue 4 is a modified version of a task from the pronunciation practice book *Sounds English* (O'Connor and Fletcher 1996), featuring the sound /ə/. This exercise, used in the author's Phonetics classes, demonstrated a high occurrence of students misplacing the peak of prosodic prominence in various sentences, both in solo utterances and chorus repetition. One could possibly assume that the speakers' attention was always fully drawn to the schwa phenomenon and anything beyond the segmental level was left "unguarded". This way though, a spontaneous choice of the IC placement (along with the choice of a nuclear tone) was made and the interfering influence of the mother tongue could reveal itself.

The text comprises 12 sentences and contains an equal number of distributional fields; the total size of this part of the database is 2,250 words. The dialogue was read out by 30 Czech speakers and the model recordings came from six native speakers: two speakers were recorded on the original audio-tape attached to the book while the remaining four were recordings made specially for the purpose of the project. In Table 2 there is a full transcript of the text, based on the native speakers' versions. It is divided into separate distributional fields with intonation centres marked by capitalization (in case of several possible placements, the most frequent one is introduced), including tonetic marks for nuclear tones.

Speaker	DF №	Distributional field with an identified IC bearer
A	1	What are your plans for \TOMORROW?
B	2	My \SISTER is coming /tomorrow.
	3	I'd like to take her to the \THEATRE.
	4	I wonder what's \ON.
A	5	Look in the \NEWSPAPER.
B	6	Oh yes, look, at the \PLAYERS Theatre.
	7	There's a \COMEDY there.
A	8	Tomorrow is a good night to \GO to the theatre.
	9	On Mondays, you can get two seats for the price of \ONE.
B	10	\THAT'S good.
	11	Usually, I sit at the \BACK.
	12	But tomorrow we can afford \BETTER seats.

**Table 2.** Dialogue 4

The results of the prosodic analysis of the Czech speakers' recordings are presented in the table below. Columns 1 and 2 deal with the native speakers' prosodic realizations; in case of alternative intonation centres, these are ordered from the most frequent one. Columns 3 to 6 refer to the Czech speakers in terms of appropriate IC placement (in agreement with the model IC), other possibilities of appropriate placement (not evidenced in the model recordings but assessed as appropriate), and inappropriate placement; the "X" symbol stands for unanalyzable utterances (usually due to various voice qualifications, not applicable here).

DF №	<i>Native speakers</i>		<i>Czech speakers</i>						
	Model IC	Appropriate placement	X	Other possibilities	Inappropriate placement				
1	TOMORROW	22	73%						
	PLANS	8	27%						
2	SISTER	18	60%				coming	8	27%
							tomorrow	4	13%
3	THEATRE	30	100%						
4	ON	30	100%						
5	NEWSPAPER	30	100%						
6	PLAYERS Theatre	12	40%						
	Players THEATRE	18	60%						
7	COMEDY	28	93%				there	2	7%
8	GO	3	10%				theatre	25	83%
	NIGHT	0	0%						
	GOOD	2	7%						
9	ONE	30	100%						
10	THAT'S	8	27%						
	GOOD	22	73%						
11	BACK	30	100%						
12	BETTER	10	33%				seats	20	67%

**Table 3.** Analysis of Dialogue 4

### 5.2. Commentary on cases of non-final IC placement

As can be seen, certain distributional fields attain a high level of appropriately assigned intonation centres (often 100%), while others demonstrate a very high percentage of inappropriate IC placement. Sentences (2), (8) and (12) are of the latter kind, with inappropriate IC placement ranging from 13% to 83%. To allow

closer examination, they will be listed separately together with the statistics, and supplemented with possible Czech translations (in italics) to enhance the comparison between both languages in terms of IC bearers (these are capitalized but devoid of tonetic marks).

DF (2)

Eng: My SISTER is coming tomorrow.

Cz: *Zítra přijede moje SESTRÁ.*

[Tomorrow is-coming my SISTER.]

DF №	Misplaced IC	№ of speakers	
2	coming	8	27%
	tomorrow	4	13%

**Table 4.** Distributional field 2

In terms of the dynamic semantic functions as distinguished by Firbas (1992: 69–74), this sentence is a perfect example of the Presentation Scale with full implementation of all constituents, i.e. *setting, presentation of phenomenon, and phenomenon*, see below:

(2a) English

| My sister | is coming | tomorrow |  
Ph            Pr            Set

(2b) Czech

| Zítra | přijede | moje sestra |  
Set      Pr      Ph

[Tomorrow is-coming my sister]

On comparing the English and Czech equivalents, it becomes obvious that although both languages display full implementation of the constituents, it is only in Czech that the linear arrangement agrees with the interpretative arrangement. In English, due to syntactic obligations, the phenomenon comes first; therefore the intonation centre, duly assigned to it, has to be placed initially. This is the point where 40% of the Czech students faulted and shifted the IC either to the very last item, *tomorrow* (13%), or to the verbal form *coming* (27%), positioned closer to the end of the utterance.

DF (8)

Eng: Tomorrow is a GOOD night to go to the theatre.

Tomorrow is a good NIGHT to go to the theatre.

Tomorrow is a good night to GO to the theatre.

Cz: *Zítra se VYPLATÍ jít do divadla.*

[Tomorrow (refl.) is-WORTH going to the-theatre.]

*Zítra se (fakt) vyplatí ZAJÍT do divadla.*

[Tomorrow (refl.) (really) is-worth GOING to the-theatre.]

DF №	Misplaced IC	№ of speakers	
8	theatre	25	83%

**Table 5.** Distributional field 8

Sentence (8) is of the kind that offers a range of candidates for the IC bearer, an occurrence termed here as ‘alternative IC placement’; in this particular case, the possible IC could be realized by the words *good*, *night* or *go*, all occupying non-final positions. Instead of assigning the most prominent stress to one of the three alternatives, as many as 83% of the Czech speakers chose the closing item of the distributional field, *theatre*; such a placement, however, comes across as rather conspicuous and cannot be considered appropriate in the given context. To justify the inappropriateness of the placement, it is necessary to look at a broader context with respect to the concept of co-referential strings (Firbas 1995: 20–23). It may be best illustrated by quoting the relevant part of the text:

Speaker B: (3) *I'd like to take her to the theatre.* (4) *I wonder what's on.*

Speaker A: (5) *Look in the newspaper.*

Speaker B: (6) *Oh yes, look at the Players Theatre.* (7) *There's a comedy there.*

Speaker A: (8) *Tomorrow is a good night to go to the theatre.*

The whole string (underlined) starts with *theatre* (double underlined) in distributional field (3) where it functions as RhPr (supplying irretrievable information required in sentence (1) *What are your plans for tomorrow?*); other internal members appear in sentences (6), (7) and (8). As the individual members of the string are no more than three distributional fields apart, the string may be regarded as compact. In case of *theatre* in sentence (8), repetition is the sole means of re-expressing the same referent, and since the element does not convey any additional irretrievable information it is classified as thematic. Firbas maintains that such an element “cannot express the high point of the message in its sentence” (1995: 20–23), therefore it cannot be justified to carry the prosodic peak of prominence.

DF (12)

Eng: *But tomorrow we can afford BETTER seats.*

Cz: *Ale zítra si můžeme dovolit LEPŠÍ místa.*

[But tomorrow (refl.) we-can afford BETTER seats.]

DF №	Misplaced IC	№ of speakers	
12	seats	20	67%

**Table 6.** Distributional field 12

A parallel situation may be found in sentence (12) where the appropriate IC bearer should be the element *better* (from the noun phrase *better seats*), which is used in contrast to the notion of *sitting at the back*, expressed in sentence (11). Despite the contrastive relationship between the two sentences, a majority of the Czech speakers assigned the IC to the head of the noun phrase, i.e. *seats*. This element, however, is a member of another co-referential string (underlined), starting in distributional field (9):

Speaker A: (9) *On Mondays, you can get two seats for the price of one.*

Speaker B: (10) *That's good.* (11) *Usually, I sit at the back.* (12) *But tomorrow we can afford better seats.*

Once again, it is a compact co-referential string, making use of close synonymy (11) and repetition (12) to refer to an identical referent. The closing member, *seats* in (12), cannot function as the most dynamic communicative unit and carry the IC as its informational value does not exceed that of the rhematic unit *better* (RhPr).

### 5.3. Commentary on cases of alternative IC placement

The distributional fields of sentences (1), (6) and (10) each allow alternative IC placement; unlike in the case of sentence (8), however, one of the IC bearers is always placed finally. The first example, sentence (1), displays a rather exceptional correspondence between the native speakers' versions and their counterparts recorded by the Czech speakers.

DF (1)

Eng: What are your plans for TOMORROW?	/	What are your PLANS for tomorrow?
Cz: <i>Jaké máš plány na ZÍTRA?</i> [What you-have plans for TOMORROW?]		<i>Jaké máš na zítra PLÁNY?</i> [What you-have for tomorrow PLANS?]

DF №	Appropriate IC	№ of speakers	
1	tomorrow	22	73%
	plans	8	27%

**Table 7.** Distributional field 1

Both groups of speakers displayed an equal preference for the most prominent peak to be assigned to the last lexical item, *tomorrow*, which implies that this element was interpreted as the most dynamic in the utterance. As this is the

opening line in the communication, it brings irretrievable information and all its communicative units are context-independent. The interplay of the non-prosodic factors determines the last unit to carry the highest degree of CD, which is confirmed by the distribution of prosodic prominence. The choice of the item *plans* (in a medial position) to carry the IC (much less frequent than the choice of *tomorrow*) conforms with a different distribution of CD where *plans* functions as RhPr, while the final element, *tomorrow*, is demoted to DTh (the most dynamic of thematic elements). This choice might be explained by the speakers' effort to imagine the context in which the conversation could take place and where the notion of *tomorrow* would already have been introduced.

## DF (6)

Eng: Oh yes, look, at the PLAYERS / Oh yes, look, at the Players  
Theatre. THEATRE.

Cz: *Hele, podívej, v ČINOHERÁKU.* / *Hele, podívej, v Činoherním  
KLUBU.*

[Oh yes, look, at the PLAYERS'.] [Oh yes, look, at the Players  
THEATRE.]

DF №	Appropriate IC	№ of speakers	
6	Players	12	40%
	Theatre	18	60%

**Table 8.** Distributional field 6

The situation in (6) is rather exceptional because even though it allows for two alternative IC bearers, they are both components of the same compound noun. In terms of stress assignment, the item *Players Theatre* ranks with the type of compounds employing proper names, such as *Narita Airport*, *Charles University*, etc., most typically with stress on the final noun (Carter and McCarthy 2006: 168b). This, however, is the way it was interpreted by just one of the native speakers, who accordingly assigned the intonation centre to the element *Theatre*. All the others decided for the item *Players* to bear the greatest peak of prominence; it is so on the grounds of added irretrievable information.

The preceding verbal context describes a situation where speaker A talks about his plans to go to the theatre, wondering what shows are on, and speaker B suggests checking the newspaper. At this point the situational context may be imagined as speaker A taking the advice and skimming the relevant page with listed theatres and shows. The following verbal reaction of A confirms the previous imaginary steps, for he says *Oh yes, look, at the Players Theatre* (8) *There's a comedy there* (9). It seems quite apparent that speaker A, having glanced at the specific page/section, chose one item of the set only; this is the piece of

irretrievable information (i.e. selection), which renders the item *Players* the most dynamic unit in the utterance. This interpretation, however, was not taken into consideration by most of the Czech speakers as 60% of them preferred the finally placed element, *Theatre*.

The last instance of alternative IC placement occurs in the distributional field of (10) *That's good*. The choice here is represented either by the initial *That's* (realized by all except one native speaker) or the final *good* (realized by one native speaker).

DF (10)

Eng: THAT'S good. / That's GOOD.  
 Cz: To je FAJN. / To je BEZVA. / To je SUPR.  
 [That is GOOD.]

DF №	Appropriate IC	№ of speakers	
10	that's	8	27%
	good	22	73%

**Table 9.** Distributional field 10

The distribution of the most prominent accent in the students' utterances is reverse: 27% for *That's* and 73% for *good*. It could be speculated that the reasons for the prevailing preference of the latter element are twofold. First, it is the sentence-final position, known from Czech as the automatized position of the IC bearer (Daneš 1957: 62; Krčmová 2007: 74). Second, it is the semantic factor that comes to play a part since if we try to translate the sentence with the two alternative intonation centres into Czech, we find that the distinction between the IC bearers fails to be maintained; only sentences with the IC placed on the nominal element will sound natural (consider the equivalents above).

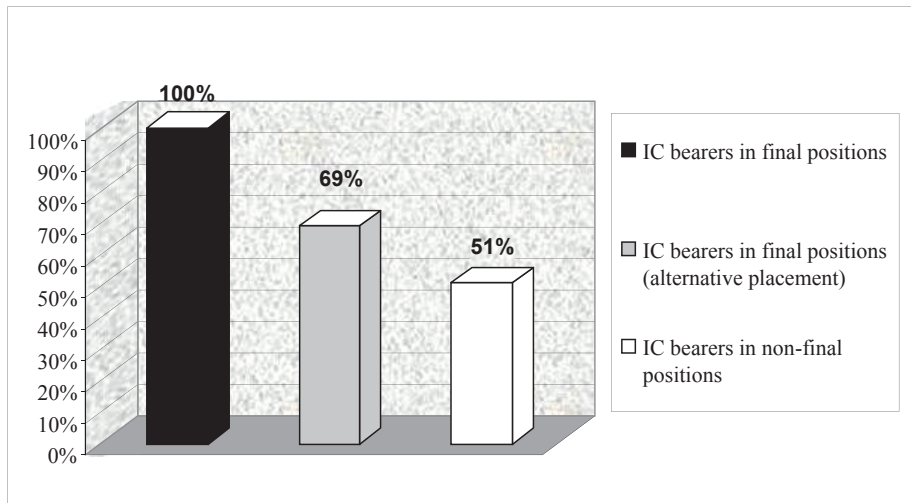
The case of the IC assigned in English to *That's* is a typical example of re-evaluating prosodic intensification which causes a discrepancy between the distribution of CD according to the non-prosodic factors and that determined by the prosodic factor. As observed by Chamonikolasová, who focused part of her research on communicative dynamism and prosodic prominence of English and Czech pronouns, the fact that English speakers often attach the highest degree of prosodic prominence to anaphoric demonstrative pronouns can be viewed as a regular occurrence. Having compared a large sample of Czech and English sentences, she arrives at the conclusion that the two languages choose different means to achieve emotive colouring: while in English it is the re-evaluating prosodic intensification of contextually-bound elements, Czech speakers indicate emotiveness mostly by resorting to lexical means (1991: 55–64). Going back to the sentence under discussion, it may then be assumed that a majority of the

speakers in the sample based their choice, albeit unwittingly, on a Czech model in (i) choosing a finally-positioned element, (ii) choosing an equivalent lexical unit (again placed finally) to carry the IC.

## 6. Conclusions

The aim of the research project was to test the hypothesis that there is a tendency for Czech users of English to place the intonation centre at the very end of an utterance, irrespective of meaning or context, which often leads to an inappropriate shift of the IC from a non-final element to a finally-placed one. The reason for this occurrence was suggested to be the interference of the speakers' mother tongue, where in unmarked utterances the IC is regularly assigned to elements in final positions.

The assessment procedure consisted in the prosodic analysis of the Czech speakers' recordings, i.e. identifying the peak of greatest prominence in each distributional field, and then checking them for appropriateness against the native-English models. Figure 1 below provides details concerning the results of the sample analysis from section 5, i.e. the assessment of the Czech speakers' performances in Dialogue 4.

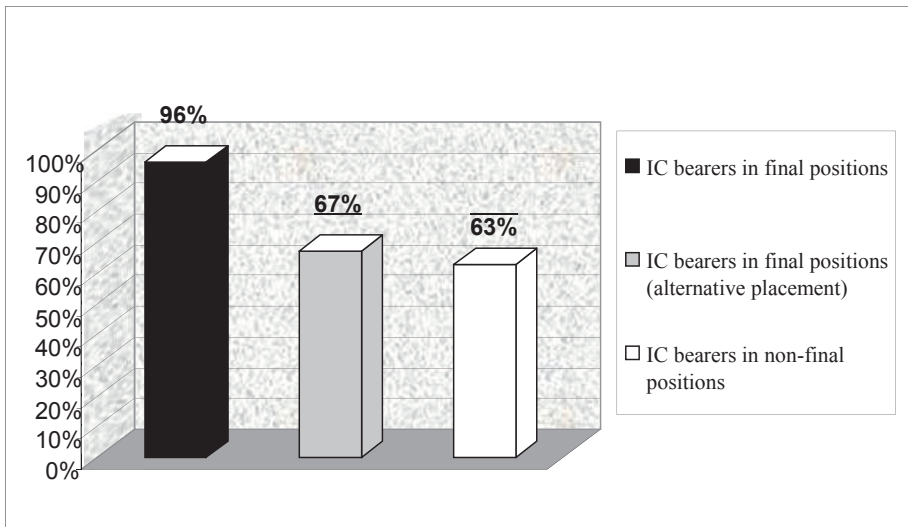


**Figure 1.** Appropriate IC placement (Dialogue 4)

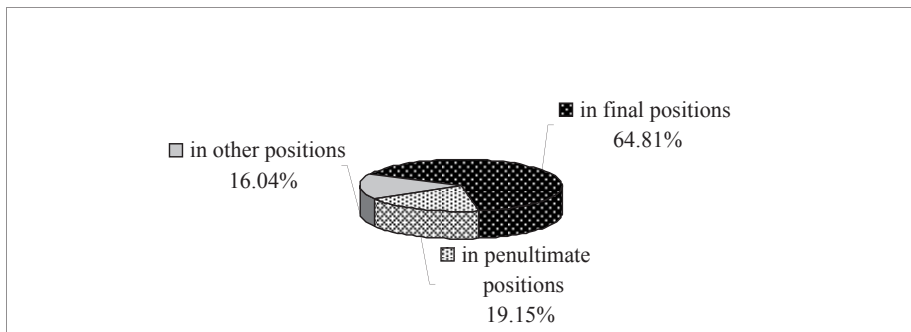
The data are clearly indicative of a major discrepancy between the two position-bound types of IC placement; while in distributional fields with a final IC bearer the speakers achieved a 100% success rate (see the first bar), the percentage of appropriately assigned intonation centres in sentences with non-final placement drops by almost a half (see the last bar). The middle bar reflects the circumstances

of alternative IC placement, and the figure indicates that the Czech speakers showed a strong tendency to choose an element in a sentence-final position to carry the IC even though there was a choice of two or three equivalent positions.

The following Figure 2 brings the statistics of the global results based on the analyses of all five parts of the database. A closer examination will reveal almost perfect correspondence especially between the first two types, i.e. final IC placement (100% in Dialogue 4 and 96% globally) and finally positioned IC in alternative placement (69% in Dialogue 4 and 67% globally). The final result of the appropriate prosodic treatment of non-final IC bearers (63%) is somewhat more favourable than the figure in Dialogue 4 (51%), yet it is greatly out of proportion compared to the rate of appropriately placed IC bearers in final positions.



**Figure 2.** Appropriate IC placement (general overview)



**Figure 3.** Inappropriate IC placement (general overview)

In order to fully map out the situation of IC placement in the analyzed distributional fields, it is also necessary to examine the occurrences of inappropriately placed intonation centres in terms of what kind of substitution the Czech speakers resorted to. Figure 3 presents an overview of the syntactic positions of the inappropriately shifted IC as evidenced in the entire database.

The proportion of individual positions of the misplaced intonation centres is in full agreement with the observations presented in the previous Figures 1 and 2; it confirms the unequivocal preference of the Czech speakers to place the IC at the end of an utterance (or as close to it as possible).

Supported by the evidence obtained from the analysis of the collected data, it may be concluded that the hypothesis is correct as it has been verified on three complementary levels (Headlandová Kalischová 2009: 134–135):

- (i) The Czech speakers showed best results in utterances with final IC placement, where they performed almost flawlessly (achieving 96% of appropriate realizations).
- (ii) The Czech speakers erred frequently in utterances with non-final IC placement, where in most cases they assigned the IC inappropriately to a final element, irrespective of the semantic and contextual factors.
- (iii) The Czech speakers demonstrated a strong preference of assigning the IC to a final element even in utterances allowing a number of alternative positions.

In the light of FSP, the tendency to misplace the intonation centre can be viewed as determined by the inappropriately foregrounded linear modification factor. As the two languages have their word order systems governed by different principles, to apply the Czech prosodic treatment (based on the FSP linearity principle) to an English text will often result in an utterance which despite its correct non-prosodic distribution of communicative dynamism is given incorrect prosodic realization. Consequently, intonation, although one of the FSP factors, is not allowed to enhance the interplay of the other three factors but contradicts them instead; in other words the *how* does not correspond to *what* we are saying.

## Notes

<sup>1</sup> Please note that the terminological diversity related to this field is great indeed (e.g. *promluvový úsek, taktová skupina*, etc. for Czech, and *tone group, intonation-group, intonational phrase*, etc. for English); however, for the sake of consistency, one representative term for each system had to be decided for.

<sup>2</sup> One mention should be made concerning the variety of linguistic concepts of *theme/rheme*. Halliday, for instance, views thematization as one of the main components of texture within

the sentence, concerned with the organization of the clause as a message (1976: 325). The structuring of such a message is carried out merely by the sequence of elements where “the theme is assigned initial position in the clause and all that follows is the rheme” (1967: 212). This theory allows for an association of the theme with the “given” (retrievable, old information) in unmarked cases, nonetheless it firmly maintains that the two are independent options.

## References

- Bolinger, Dwight L. (1952) *Linear Modification*. Publications of the Modern Language Association of America 67, 1117–44.
- Brazil, David (1985) *The Communicative Value of Intonation in English*. Birmingham: English Language Research.
- Carter, Ronald and Michael McCarthy (2006) *Cambridge Grammar of English*. CD-ROM. Cambridge: CUP.
- Chamonikolasová, Jana (1991) ‘Pronouns, functional sentence perspective and intonation’. *Brno Studies in English* 19, 55–64.
- Chamonikolasová, Jana (2007) *Intonation in English and Czech Dialogues*. Brno: Masarykova univerzita.
- Common European Framework of Reference for Languages*, retrieved 27 April 2009. [http://www.coe.int/T/DG4/Linguistic/CADRE\\_EN.asp](http://www.coe.int/T/DG4/Linguistic/CADRE_EN.asp)
- Crystal, David (1969) *Prosodic systems and intonation in English*. Cambridge: CUP.
- Daneš, František (1957) *Intonace a věta ve spisovné češtině*. Praha: Nakladatelství Československé akademie věd.
- Firbas, Jan (1979) ‘A functional view of “Ordo Naturalis”.’ *Brno Studies in English* 13, 29–59.
- Firbas, Jan (1992) *Functional Sentence Perspective in Written and Spoken Communication*. Cambridge: CUP.
- Firbas, Jan (1995) ‘Retrievability span in functional sentence perspective.’ *Brno Studies in English* 21, 17–45.
- Gimson, Alfred. C. (1994) *Gimson’s Pronunciation of English*. Revised by Alan Cruttenden. London: Arnold.
- Halliday, Michael A. K. (1970) *A Course in Spoken English: Intonation*. London: OUP.
- Halliday, Michael A. K. and Ruqaiya Hasan (1976) *Cohesion in English*. London: Longman.
- Headlandová Kalischová, Irena (2009) *Intonation Centre Placement in English Utterances of Czech Speakers*. Unpublished Ph.D. dissertation. Brno: Masaryk University.
- Krčmová, Marie (2007) *Úvod do fonetiky a fonologie pro bohemisty*. Ostrava: Ostravská univerzita, Filozofická fakulta.
- O’Connor, Joseph D. and Gordon F. Arnold (1973) *Intonation in Colloquial English*. 2<sup>nd</sup> ed. London: Longman.
- O’Connor, Joseph D. and Clare Fletcher (1996) *Sounds English*. London: Longman.
- Palková, Zdena (1997) *Fonetika a fonologie češtiny*. Praha: Karolinum, Univerzita Karlova.
- Petr Jan, Miloš Dokulil, Karel Horálek, and Miroslava Knappová (eds.) (1986) *Mluvnice češtiny I*. Praha: Academia.
- Underhill, Adrian (1994) *Sound Foundations*. Oxford: Heinemann.

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