SOME NOTES ON THE INTERFACE OF COMMUNICATIVE DYNAMISM AND PROSODIC PROMINENCE AS CONSTITUENTS OF AUCTORIAL COMMUNICATIVE STRATEGY

Martin Adam

Abstract

With a few honourable exceptions (most recently Chamonikolasová 2007, 2009 and Headlandová Kalischová 2009, 2010), within the research in the field of the Firbasian theory of functional sentence perspective (FSP), the interplay of factors operating in spoken discourse seems to play a somewhat marginal role. It is its written counterpart that wins the scholars' attention most of the time. The present paper deals with a functional comparison of the distribution of the degrees of communicative dynamism (CD) and that of the degrees of prosodic prominence (PP) in spoken discourse, their interplay, and its possible (aesthetic) effects. Drawing above all on the findings presented by Firbas, the author discusses the results of his own investigation into the area of FSP based on an authentic short text sample. Research has shown (Firbas 1995, Svoboda 2006, Adam 2009, Hurtová 2009) that the author's communicative purpose is typically related to the aesthetic function carried by the text and determines the communicative strategies employed.

Key words

FSP, communicative dynamism, prosodic prominence, communicative strategy, aesthetic function

1 Introductory remarks

It has been generally accepted that from the point of view of information processing, the sentence is the field of syntactic semantic relations, and – as such – is co-governed by the degrees of communicative dynamism (CD) distributed over its individual elements (see Firbas 1992, 1995, Svoboda 1989, Halliday & Matthiessen 2004 [1985], Adam 2007). Combining the approaches adopted both by formalists and functionalists, the theory of functional sentence perspective (FSP) draws on the findings presented by the scholars of the Prague Circle. The founder of FSP, Jan Firbas, drew on the findings of his predecessor, Vilém Mathesius. Being tentatively inspired by the research presented e.g. by Weil (1844), Marty (1884) or Gabelentz (1891), Mathesius noticed the language universal of every utterance as having a theme (topic) and a rheme (focus/ comment), and formulated the basic principles of what was to be labelled FSP only later.

The theory of functional sentence perspective represents one of the branches of linguistics dealing with information processing. In consequence, it explores how a piece of information is produced in the act of communication, and also how different elements are given different communicative prominence, i.e. are emphasised (foregrounded) or made less significant (backgrounded) to achieve the author's communicative intention. In any type of discourse, the sender chooses something that is highlighted (in speech it is the intonation centre (IC), while in writing there are different ways such as end-focus principle, cleft sentences etc.). Firbas (1992), later practically amended by Chamonikolasová (2007) or Headlandová Kalischová (2010), observed tight – and manifold – connections between the basic distribution of the degrees of CD, and the prosodic prominence (PP) of individual communicative units.

The present paper sets out to throw some light on the relationship between degrees of CD and PP in spoken discourse, and their potential interface with the overall aesthetic function of the text. Recent FSP research has shown that there seems to be a deeper, underlining effect that derives from the communicative intention of the author and determines the writer's communicative strategies (Firbas 1995, Svoboda 2006, Adam 2009, Hurtová 2009). This paper is going to deal with an analysis of a short text, carried out in the light of FSP on the one hand, and from the intonation point of view on the other. The goal of the paper is to compare the distribution of the degrees of CD and the distribution of degrees of PP and the communicative effect based on their interplay.

2 FSP and communicative dynamism

First, it will be necessary to outline the basic fundaments and terminological *terminus a quo* of the theory of FSP. As has been hinted above, the core of Firbas' theory of FSP lies in the functional approach towards sentences; they are viewed as phenomena operating at the very moment of utterance (Firbas 1994). Firbas claims that every meaningful element of communication is a carrier of communicative dynamism and hence pushes the communication forwards (Firbas 1986: 47). By a degree of communicative dynamism of an element, he understands its relative communicative value within the utterance in the act of communication.

In other words, the sentence is a field of semantic and syntactic relations that in its turn provides a distributional field of degrees of communicative dynamism (CD) (Firbas 1992: 14-16). According to FSP, sentence elements serve as communicative units with different degrees of CD. The degrees of CD are determined by the interplay of FSP factors involved in the distribution of

degrees of CD. The FSP factors (formative forces) are (1) linear modification, (2) context, and (3) semantics. In spoken language, the interplay of these factors is logically joined by a fourth factor – intonation (Firbas 1992: 14-16).

Sentence elements serve as communicative units of different degrees of communicative dynamism – the most prominent part of information is the high point of the message, i.e. the most dynamic element; other components of communication are less dynamic and thus have lower degrees of CD. According to the different degrees of CD, one may divide a distributional field into two basic parts: theme and non-theme (which is subdivided into transition and rheme); the theme is not necessarily associated with the initial position in the sentence. However, Mathesius' two-fold functional division of the utterance (theme – rheme) was extended by Firbas into a structure of the tripartition of theme (Th) – transition (Tr) – rheme (Rh).

2.1 Linear modification

It will be important to note that the non-prosodic FSP factors are hierarchically ordered. In this hierarchy, the linear modification factor has the lowest rank. It operates on the basis of word order and, at the same time, within the framework of FSP – together with context and semantics.

In the sentence – as communication develops – individual meanings continually move closer to the high point of the communication. In this stepby-step development, moving closer to this point, which signals the completion of the message and thus fulfils the language user's communicative purpose, the meanings gradually gain in communicative value. In doing so, the elements differ in the extent to which they contribute to the development of communication and show different degrees of CD (Firbas 1992: 118). If fully implemented, linear modification induces the sentence elements to manifest a gradual rise in CD in the direction from the beginning to the end of the sentence.

2.2 Context

In the hierarchy, the most powerful FSP factor is the contextual factor (superior to both semantics and linear modification). Context is a complex phenomenon related to the concepts of given information and new information. Generally speaking, given information (context-dependent) represents what the sender considers shared knowledge, something clearly known by both sender and receiver, whereas new information (context-independent) is what has not been introduced to the discourse and is not clear from the situational or verbal context.

In the theory of FSP, Firbas (1992: 21-40) introduces the concept of retrievability from the immediately relevant context, which plays a crucial role in the process of the distribution of the degrees of CD over the sentence elements. The immediately relevant context represents only a fraction of the entire verbal and situational context at the very moment of communication. The actual, physical presence of the piece of the information in the immediately relevant context is emphasised, as opposed to the condition when the speaker assumes that the information is present in the addressee's consciousness (Firbas 1992: 37). In FSP, it is not enough if the piece of information is present in the experiential context only – such a piece of information would then be merely deducible from the wider context, although not retrievable.

2.3 Semantics

In the hierarchy of FSP factors, the semantic factor stands between context and linear modification. The degree of CD of an element is co-determined by its semantic character and the character of its semantic relations to other elements. Having explored this issue in numerous cases. Firbas came up with the idea of so-called dynamic semantic scales, which functionally reflect the distribution of CD and operate irrespective of word order. In contrast to a static approach towards semantic functions of sentence constituents (e.g. affected participant, agent, instrument etc.), the dynamic semantic functions may change in the course of the act of communication; the same element may thus perform different functions in different contexts and under different conditions. In principle, Firbas distinguishes two types of dynamic-semantic scales: the Presentation Scale and the Quality Scale. In the scales, each element is ascribed one of the dynamicsemantic functions (DSFs) (Firbas 1992: 66-67). The items of both the scales are arranged in accordance with a gradual rise in CD from the beginning to the end of the sentence reflecting the interpretative arrangement (for details, see Adam 2007: 33).

The *Presentation Scale* (Pr-Scale) includes three basic dynamic semantic functions (DSFs): firstly, there is a scene (Setting – abbreviated Set) of the action, usually temporal and spatial items of when and where the action takes place. Secondly, the existence or appearance on the scene is typically conveyed by a verb (Presentation of Phenomenon – Pr) and, thirdly, the major, most dynamic element (Phenomenon – Ph) is literally ushered onto the scene.

The *Quality Scale* (Q-Scale) represents, in principle, an opposite in comparison with the Presentation Scale. Something new (Specification – Sp) is said about the subject (Bearer of Quality – B). The verb usually performs the transitory DSF of

Quality - Q. Naturally, all the action typically has a scene as well as everything is going on in some time and at some place (Setting - Set).

2.4 Intonation

It has become clear that intonation operates – as the only prosodic factor of FSP – only in spoken discourse. It actually comprises a set of prosodic features in its broad sense: pitch, rhythm, stress, etc. It follows that a sentence is perspectived towards its most dynamic element (rheme proper) and "it is this element that almost invariably becomes the intonation centre bearer (i.e. the element with the highest degree of prosodic prominence)" (Headlandová Kalischová 2009: 66-67). Consequently, under favourable circumstances, intonation can disambiguate and affect the interplay of non-prosodic factors, or even change the overall distribution of CD and so even theme can bear the highest degree of CD.

As has been stated above, major studies on prosodic features (e.g. O'Connor and Arnold 1973, Cruttenden 1986, or Crystal 1969) claim that there is a connection between the theme-rheme articulation (the distribution of the degrees of CD over individual communicative units) and the degrees of PP. In his key monograph (Firbas 1992), Firbas examined the relation between the operation of non-prosodic FSP factors (linear modification, context and semantics) and the features affecting degrees of PP. Even if the relationship of the two concepts in question is rather close, one cannot say, however, that these two always coincide. Basically, there are four¹ types of the relationship between CD and PP:

A Perfect correspondence

In perfect correspondence between CD and PP, the intonation reflects exactly the information structure as determined by the non-prosodic factors; in other words, the nuclear stress (underlined element in the examples below) falls on the rhematic element. In the sentence below, the intonation exactly reflects the distribution of the degrees of CD: *George* is the carrier of the most dynamic piece of information and, at the same time, carries the nuclear stress (symbolised by the prosodic mark of a fall – *George*).

His name	is	George.
B, Th	AofQ, Tr	Sp, Rh

B Non-selective non-re-evaluating intensification

Originally, Firbas understood this category merely as a sub-case of perfect correspondence between degrees of CD and PP (cf. Firbas 1992: 154-156). Later, nevertheless, he himself considered it to be a separate type of correspondence (see also endnote 1). The core of non-selective non-reevaluating intensification consists in employment of a marked tune. In other words, though perfect correspondence between CD and PP is retained, different (marked, unusual) intonation (e.g. pitch range) is present and an overall intensification takes place. In effect, also the degree of CD of the element in question is increased. In the example below, "the prosodic intensification of perfect correspondence between the two distributions consists in the use of an evidently marked tune, in other words, an evidently marked configuration of prosodic features" (Firbas 1992: 155).

(,Even ^Andrew was p	bleased. And ,he's ^difficult to please.)
He' s	'such <u>a per^fectionist</u> .
ThPr+;Tr	^RhPr.

In the example adduced, the nucleus (*perfectionist*) is clearly marked out by the interplay of non-prosodic factors of FSP as the rheme proper. But, as Firbas says, the chosen tune, namely the rise-fall pattern of the so-called jack-knife, conveys in addition "that the speaker is impressed by another person's reaction (see O'Connor and Arnold 1973: 78, 274), that he resentfully contradicts the interlocutor's statement and voices his protest, respectively" (Firbas 1992: 155-156).

C Selective non-reevaluating intensification

The selective non-reevaluating intensification (as well as the reevaluating intensification) represents deviations from the perfect correspondence of the two distributions (CD and PP). The point is that the selective non-reevaluating intensification does not affect the theme-rheme relationship; an element determined by the non-prosodic CD distribution as thematic is prosodically intensified but remains within the thematic sphere of the distributional field (Chamonikolasová 2007). In the example sentence below, the theme-rheme relationship remains untouched again but the Bearer of Quality (*he*) is prosodically intensified (see the nuclear stress, a fall-rise in this case, which is symbolised by $^{\circ}$).

(She is OK)	but	<i>∨</i> he	seems to have	troubles!
		B, Th	Q, Tr	Sp, Rh

The personal pronoun *he* is then – due to the contrastive prosodic intensification – more dynamic than the transitional element *seems to have*. The rhematic section is occupied by the item *troubles* carrying the most prominent prosody.

D Reevaluating intensification

Sometimes, on the other hand, the intensification produces a stronger deviation from the perfect correspondence between the distribution of the degrees of CD and PP. The point is that the intonation can reevaluate the information structure (affects the theme-rheme articulation) and thus backgrounds the non-prosodic factors. In the example sentence, the element *she* represents the only nucleus and thus the most prominent prosodic item in the distributional field; it is reevaluated from a classically thematic unit into a rhematic one. As a result of reevaluating prosodic intensification, the sentence is emotionally marked. Such markedness may be regarded as an irretrievable piece of information that enables the otherwise dynamically weak element to become the rheme of the sentence.

(I think she is wrong.) –	Well, but	<i>∼<u>she</u></i>	doesn't.
		Ph, Rh	Pr, Tr

3 Sample text analysis

To illustrate the principles discussed above, I decided to analyse an extract of an authentic sample text taken from a corpus of spoken English compiled by O'Connor and Arnold (1973). The text will be first presented in full, with marked basic distributional fields (see numbers in parentheses; individual distributional fields are separated by ||), and tagged with conventional intonation marks².

(1) \neg D'you 'seriously think 'English'll be a 'world language 'one 'day? || (2) – I think so, 'yes. || (3) Of course, one 'can't say 'certainly. || (4) There are 'too many 'factors in volved. || (5) But at 'least it seems 'likely. || (6) – But what about the 'spelling? || (7) It is rso ap'palling. || (8) rNo-one in their 'senses, 'surely, would want to learn English 'spelling, if they could a void it. || (9) – It's not very good, 'certainly. || (10) But in 'time, it'll be 'altered. || (11) – 'Who 'by, I should like to know? || (12) – By 'circumstances, in my o 'pinion. || (13) I 'think it'll become 'obvious, 'even to 'English people, that the 'spelling 'simply 'must be improved. || (14) – I should have 'thought if that were 'going to happen it would have 'happened al'ready. || (15) – No. || (16) There are 'certain things 'coming a'long that'll make 'simplified >spelling 'even 'more de sirable. || (17) 'Such as? || (18) – Such as a 'speech ^orecogniser, for ^oinstance. || (19) $-^{-}A$ what? || (20) -A 'speech ^oorecogniser. || (21) A ma'chine that'll 'take dic tation, as it 'were and im'mediately pro'duce a 'typescript. || (22) - 'Is that feasible? || (23) - 'Oh, I think so. || (24) It's [∞]certainly being ^worked ^oon. || (25) And e^vventually, it'll be a 'fact. (O'Connor and Arnold 1973: 277-278)

For the sake of space limitation, the whole CD-PP juxtaposition analysis will not be presented here; each of the types of CD-PP correspondence will be represented by two illustrative examples extracted from the sample text. In the case of types B and C, the relevant sections of the utterances containing the crucial prosodic intensification are shaded in grey colour.

A Example of perfect correspondence:

(6)	But what about	the \spelling?
	Q, Tr	Ph, Rh

(18) Such as a 'speech orecogniser, for oinstance. Ph, Rh Set, Th

B Example of non-selective non-reevaluating intensification

(7)	It B, Th	is AofQ, Tr	_⊿ so ap\palling Q, Rh	
(24)	It	's	[⊾] certainly	being <mark>[™]worked ₀on.</mark>
	B, Th	AofQ, Tr	Set, Th	Q, Rh

C Example of selective non-reevaluating intensification:

(10)	But in [∨] time,	it	'll be	\altered.
	Set, Th	B, Th	AofQ, Tr	Q, Rh
(25)	And e [∨] ventually,	it	'll be	a [\] fact.
	Set, Th	B, Th	AofQ, Tr	Q, Rh

D Example of reevaluating intensification

No examples detected in the sample text.

The total number of occurrences of individual CD-PP types is summarised in Table 1:

CD-PP Correspondence	Occurrence	%
A Perfect Correspondence	18	72
B Non-Selective Non-Reevaluating Intensification	2	8
C Selective Non-Reevaluating Intensification	5	20
D Reevaluating Intensification	0	0
Total	25	100

Table 1: Types of CD-PP correspondence in the sample text

As the table suggests, the most frequent type of correspondence between the distribution of the degrees of CD and PP is represented by A (perfect correspondence). It clearly reflects the close relationship between intonation and the dynamic semantic structure of the sentence. For instance, in the distributional field (6), the IC (signalled clearly by the final fall is placed – in harmony with the distribution of the degrees of CD – on *the 'spelling?*). In other words, syntax does not operate on its own but is obviously related to the prosodic features embodied by intonation in spoken discourse.

The next place is taken by the selective non-reevaluating intensification (C). This relatively high percentage (observed typically also in the larger corpus of the author's FSP analyses) is apparently caused by the strong tendency of the English verb (operating in the transitional sphere) to recede to the background at the expense of the Q-element (theme) (cf. also Firbas 1986: 61-62). In the distributional field (25), for example, we may observe a fall-rise intonation pattern ($^{\vee}$), which typically co-signals an additional – and subsidiary – emotive flavour ascribed to an item even if it is not made rhematic (*e^{\nu}ventually*). At first sight, this seemingly striking deviation might be considered as breaking the system; this deviation, however, supports the idea of FSP and intonation correspondence – the deviations are highly functional and can do so only against the background of perfect correspondence.

As to the occurrence, the third place is taken by the non-selective non-reevaluating intensification (B). Here, we may readily speak of an overall sentence intensification by means of intonation, while the Th-Rh articulation is maintained. In (7), $_{\pi}so$ appalling is given a somewhat modified (untypical) intonation (its pitch range is intensified by a rising head of $_{\pi}so$) and, as a result,

an overall intensification takes place here. The determiner *so* is then – due to the contrastive prosodic intensification – more dynamic than the adjectival element *appalling* itself. The Th-Rh articulation of the distributional field remains, nonetheless, unaffected. The relative rarity of this type – and the same holds true in the case of re-evaluating intensification (D) – obviously corroborates the idea of these deviations being functional as they are not so frequent. On the contrary, the author makes use of these just occasionally, when in need of an emphatic intensification and/or emotionally significant flavour.

At this point it is vital to recall that such functional deviations emerging on the basis of CD-PP correspondence actually represent merely a fraction of the whole language system. They operate only against the background of perfect correspondence between the distributions of CD and PP, which is to be understood as a solid – though not indefensible – fundament for further tingeing of an utterance. As a result, intonation provides information, expressing the attitude and emotive tinges of the speaker given to the semantic content of the utterance.

Firbas himself likened intonation to running attitudinal commentary which is capable of "(de)shading" and significant modulation of meaning of utterances (1992: 155-157, 160); in concordance with this Firbasian claim, also our short CD-PP analysis proves that intonation keeps effectively commenting on the content of utterances and, thus, carries meaning. In other words, intonation attached to the verbal expression of ideas (especially in the case of prosodic intensification) "offers information *sui generis*" (Chamonikolasová 2007: 35; cf. Daneš 1987: 19-20). Consequently, prosodic intensification provides emotive markedness to sentences. As this emotive load is irretrievable from the immediately relevant context, it is capable of enabling "an otherwise dynamically weak element to become the RhPr of the sentence" (Chamonikolasová 2007: 37; cf. Firbas 1992: 159-172).

4 Conclusions

Obviously, the employment of special prosodic intensification in one's spoken performance has to do with the author's communicative strategy. Firbas' far-reaching observations made in his paper on the dynamic semantic layers of the text (Firbas 1995) indicated that the communicative purpose expressed by the writer is, as a rule, closely related to the aesthetic function carried by the text. As such, they tend to determine the writer's communicative strategy and such an artistic input forms then a vital part of the author's communicative intention as well as the reader's (cf. Svoboda 2006, Adam 2009, Hurtová 2009). Svoboda

concludes that the dynamic nature of dynamic semantic functions thus allows the writer to implement specific communicative purposes – according to the relative degree of CD of individual elements of the sentence. In Svoboda's opinion, "it is exactly the point of perspectivising the sentence, (...) which determines the communicative purpose of the speaker" (Svoboda 2006: 219; translation M.A.).

At this point, in the context of the aesthetic function discussed, let me recall another Prague School representative - Roman Jakobson and his elaboration of the functions of language. The point is that what has been described above (possibility of prosodic intensification against the background of FSP principles in spoken discourse) is undoubtedly related to Jakobson's understanding of the poetic function of language (Jakobson 1960). In other words, the mere existence of deviations that "violate" the language system corroborates their functional character. Klinkenberg even claims that "the poetic function in particular can operate (...) as the beneficiary of certain transformations in the functional balance, especially if they are marked" (Klinkenberg 1996: 58). Also Hébert views the poetic function of particular language items in the context of its interface with other language functions; he holds that the poetic function is linked to the other functions by a non-symmetrical relation. In his opinion, "the poetic function is intensified as a result of (...) weakening of any other function" (Hébert 2007: 99) - in our case of prosodic intensification we may readily speak of the poetic function of language being strengthened at the expense of the referential function of utterances.3

This paper demonstrated and exemplified that intonation serves as a powerful tool in the realm of FSP in spoken discourse, providing a running attitudinal commentary to what is yielded by non-prosodic factors of FSP (context, linearity and semantics). In addition, it was trying to illustrate that both intonation and the syntactic structure of sentences represent a crucial part of the language system - and that only such a complex approach can lead to proper realisation of the communicative purpose of the author. Firbas, examining the applicability in FSP of a spoken sentence structure, said that "the PP distribution narrows the contextual applicability of the structure" and "frequently restricts the operation of the structure to one instance level" (Firbas 1992: 214-215). The present paper also showed how intonation, actually fulfilling the Jakobsonian poetic function of language, could reduce the frequency of potentiality, achieve special communicative effect and thus disambiguate the meaning of the utterance. Thus, in harmony with the teaching of the Prague School after all, it follows that such a complex approach towards FSP study of language may be viewed as context- and speaker-oriented and functional.

Notes

¹ In his monograph of 1992, Firbas actually distinguishes three types of correspondence between degrees of CD and PP (perfect correspondence, selective non-reevaluating intensification, and reevaluating intensification), whereas the fourth type referred to in this paper as category B – non-selective non-reevaluating intensification – is distinguished only as a sub-category of category A perfect correspondence). Based on his personal notes from Firbas' lectures and private conversations with Jan Firbas in 1998-2000, however, the author decided to view this sub-category as an autonomous category *sui generis*. Not only can such an approach better reflect the functional picture of sentences, but as such, it can also make the CD-PP analysis more subtle and detailed.

² For the full list of tone marks with commentaries, the reader is referred to O'Connor and Arnold (1973). Here, I list only the basic marks, deriving from Firbas' concept of PP: 1 $_{om}$, 2 $_{m}$, 3 $_{m}$, 4 $_{m}$, 5 $_{\pi}$ m, 6 $_{m}$, 7 $_{m}$, 8 $_{m}$, 9 $_{m}$, 10 $_{m}$, 11 $_{m}$, 12 $_{m}$, 13 $_{m}$, 14 /. "Stressed syllables occurring within the pre-head or within the tail are preceded by a small circle placed high or low in accordance with the pitch movement (see no. 1). The first syllable of the head, which is regarded as accented, is marked by one of the following symbols: no. 2, indicating a high head; no. 3, a low head; no. 4, a falling head; and no. 5, a rising head. Like stressed syllables within the pre-head and the tail, even the stressed syllables within the head are marked by the small circle (see no. 1); but as they occur within the head, they are to be regarded as accented. A nucleus is marked by one of the following symbols: no. 6, indicating a low fall; no. 7, a high fall; no. 8, a rise-fall; no. 9, a low rise; no. 10, a high rise; no. 11, a fall-rise; and no. 12, a mid-level tone. The exception mentioned under (i) is no. 13, indicating a high pre-head, which is unstressed. Instead of the vertical stroke used by O'Connor and Arnold, I use a slanting one (no. 14)" (Firbas 1992: 144).

³In this connection it will be interesting to recall Firbas' treatment of special cases of prosodic intensification dealing with the so-called re-evaluative "deshading", resulting especially in the summarising effect or recapitulation effect (see especially Firbas 1992: 173-174, 215-223).

References

- Adam, M. (2007) A Handbook of Functional Sentence Perspective (FSP in Theory and Practice). Brno: Masaryk University.
- Adam, M. (2009) Functional Macrofield Perspective (A Religious Discourse Analysis Based on FSP). Brno: Masaryk University.
- Chamonikolasová, J. (2007) Intonation in English and Czech Dialogues. Brno: Masaryk University.
- Chamonikolasová, J. (2009) 'Communicative dynamism and prosodic prominence of English and Czech pronouns.' In: Procházka, M., Šaldová, P. and Malá, M. (eds) *The Prague School and Theories of Structure*. Göttingen: V&R Unipress. 143-159.
- Cruttenden, A. (1986) Intonation. Cambridge: Cambridge University Press.
- Crystal, D. and Davy, D. (1969) Investigating English Style. London: Longman.
- Daneš, F. (1987) 'On Prague School functionalism in linguistics.' In: Driven, R. and Fried, V. (eds) Functionalism in Linguistics. Amsterdam: John Benjamins. 3-38.
- Firbas, J. (1986) 'On the dynamics of written communication in the light of the theory of functional sentence perspective.' In: Cooper, C. R. and Greenbaum, S. (eds) *Studying Writing: Linguistic Approaches*. Beverly Hills: Sage. 40-71.

- Firbas, J. (1992) Functional Sentence Perspective in Written and Spoken Communication. Cambridge: Cambridge University Press.
- Firbas, J. (1995) 'On the thematic and the rhematic layers of a text.' In: Wårvik, B., Tanskanen, S.-K. and Hiltunen, R. (eds) Organization in Discourse: Proceedings from the Turku Conference, Anglicana Turkuensia 14. Turku: University of Turku. 59-72.
- Gabelentz, G. von der (1891) Die Sprachwissenschaft, ihre Aufgaben, Methoden und bisherigen Ergebnisse. Leipzig: Weigel.
- Halliday, M. A. K. and Matthiessen, C. M. I. M. (2004 [1985]) An Introduction to Functional Grammar. London: Arnold.
- Headlandová Kalischová, I. (2010) Intonation in Discourse: English Intonation as (Mis)used by Czech Speakers. Brno: Masaryk University.
- Headlandová Kalischová, I. (2009) 'Tendencies in intonation centre placement in utterances of Czech users of English and the possible effect on discourse coherence.' In: Hůlková, I. and Jančaříková, R. (eds) *Exploring Cohesion and Coherence in English Discourse*. Brno: Masaryk University. 65-73.
- Hébert, L. (2007) *Dispositifs pour l'analyse des textes et des images*. Limoges: Presses de l'Université de Limoges.
- Hurtová, Z. (2009) Firbasian Non-thematic Layers in Paragraphs and Beyond. Ostrava: Ostravská univerzita.
- Jakobson, R. (1960) 'Linguistics and poetics.' In: Sebeok, T. A. (ed.) *Style in Language*. Cambridge: MIT Press. 350-377.
- Klinkenberg, J.-M. (1996) Précis de sémiotique générale. Paris: Seuil.
- Marty, A. (1884) 'Über subjektlose Sätze und das Verhältnis der Grammatik zur Logik und Psychologie.' *Vierteljahrsschrift für wissenschaftliche Philosophie* 8, 56-94.
- O'Connor, J. D. and Arnold, G. F. (1973) Intonation of Colloquial English. London: Longman.
- Svoboda, A. (1989) Kapitoly z funkční syntaxe. Prague: SPN.
- Svoboda, A. (2006) 'Firbasovy sémantické škály a komunikační strategie.' In: Hubáček, J., Dokoupil, L., Holý, P. and Vašutová, M. (eds) *Pocta Evě Mrhačové*. Ostrava: Ostravská univerzita. 215-227.
- Weil, H. (1844 [1978]) De l'ordre des mots dans les langues anciennes comparees aux langues modernes. [The Order of Words in the ancient languages compared with that of the modern languages]. Amsterdam: John Benjamins.