Information Structure in Slavic

Katja Jasinskaja

The Slavic (or Slavonic) languages are traditionally divided into three groups: East Slavic, which includes Russian (Ru), Ukrainian (Uk) and Belarusian (Bel); West Slavic, which includes Polish (Pl), Czech (Cz), and Slovak (Slk), as well as Kashubian and Upper and Lower Sorbian, minority languages spoken in Baltic coast Poland and southeastern Germany, respectively; South Slavic, which includes Bosnian/Croatian/Serbian (or BCS), Slovenian (or Slovene, Sln), Macedonian (Mac) and Bulgarian (Bg). Slavic languages are notoriously rich in linguistic means expressing or sensitive to categories of information structure. This chapter will give a concise overview of these phenomena, concentrating mainly on descriptive generalisations and only touching upon theoretical issues that are more controversial.

The first two sections, *Intonation* (section 37.1) and *Syntax* (section 37.2), focus on the two most widely discussed means of marking information structure (IS). Section 37.1 is concerned with position and shape of pitch accents, whereas section 37.2 deals, first and foremost, with the phenomenon of "free word order", as well as with processes such as ellipsis, clefting, and doubling. Both sections are divided into two subsections: one describing the expression of focus, and the other dealing with the IS categories background, given, topic and delimitation. These categories are grouped together because they tend to share the same patterns of expression. For reasons of space, the coverage of related issues will not be as comprehensive as would be desirable. The discussion of focus will be mainly limited to the issue of broad vs. narrow focus distinction, at the cost of information focus vs. contrastive focus, also prominent in IS literature on Slavic languages (see e.g. Mehlhorn, 2002; Bošković, 2002; Stjepanovic, 2003, for recent empirical and theoretical studies around the notion of contrastive focus). I will concentrate mostly on IS in simple SVO sentences, although intransitive sentences, as well as sentences with more complex structure surely deserve separate attention (see esp. Zybatow and Junghanns, 1998, and Bailyn, 2012, pp. 254–266, on intransitives). Finally, the section on *Intonation* is based almost exclusively on Russian data (on intonation of other Slavic languages see e.g. Dogil 1980 on Polish, Palková 1994 on Czech, Misheva and Nikov 1998 on Bulgarian, Godjevac 2000 on BCS, Féry et al. 2007 on Ukrainian). These cuts were made in favour of the discussion of issues that figure less frequently in the literature on Slavic IS. This includes broader coverage of different syntactic means other than plain word order permutations clefts of various kinds, as well as so-called "predicate clefts" (Abels, 2001; Bondaruk, 2009). A separate section (section 37.3) discusses ways in which IS interacts with Slavic clitic systems (Franks and King, 2000)—an intriguing, but badly understudied issue. Finally, section 37.4 gives examples of IS-sensitive behaviour of Slavic discourse particles.

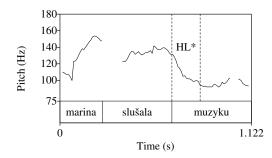
37.1 Intonation

37.1.1 Focus

In Slavic languages as in many others, focus is expressed intonationally by the *primary*, or *nuclear*, i.e. the *most prominent* pitch accent of an intonational phrase: The nuclear accent must be realised on one of the words of the focused constituent (see Zubizarreta, this volume; Myrberg and Riad, this volume). That word is called the *focus exponent* (indicated by small caps in the examples). Normally, the most prominent accent is the *last* accent in the intonational phrase, which means that any word that follows the focus exponent bears no accent. This may be different in (dialects of) BCS and Slovenian where pitch accents are assigned lexically (see e.g. Smiljanić and Hualde, 2000; Jurgec, 2007). However, also in those dialects one word in a sentence tends to be more prominent than the others. According to Godjevac

	"neutral"	"non-neutral"
alignment of the nuclear fall	early (HL*, IK-1)	late (H*L, IK-2)
position of the nuclear accent	on the last word	on any word
prenuclear pitch accents	on all other words	few if any
downstep	yes	no
nuclear fall excursion	low	high
intensity of the accented syllable	low	high

Table 37.1: Prosodic features of "neutral" and "non-neutral" intonation in Russian



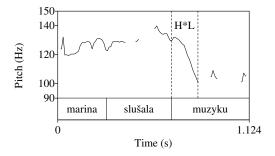


Figure 37.1: "neutral" intonation

Figure 37.2: "non-neutral" intonation

(2006), this is achieved in BCS by association of the L- phrase tone with that word. When I use the term 'focus exponent' with reference to those languages, I mean a word made prosodically prominent in some such way.

This section is concerned with the relationship between the focus exponent and the focused constituent: when the focused constituent is longer than one word, which word of that constituent is the focus exponent, or conversely, given the focus exponent, how big the constituent in focus is, also known as the *focus projection* problem (see Arregi, this volume). In traditional descriptions, as well as in the bulk of theoretical work on Slavic IS, a distinction is made between "neutral" and "non-neutral" (also emphatic, emotive, expressive, etc.) intonation in declarative utterances (see e.g. Svetozarova, 1998, on Russian; Godjevac, 2006, on BCS). A common assumption is that in sentences with canonical word order (SVO, cf. section 37.2), "neutral" intonation is ambiguous between broad and narrow focus, whereas "non-neutral" intonation indicates narrow focus on the minimal constituent on which it is realised (see e.g. Bailyn, 2012). This view, though widely adopted, raises a number of hard questions, which I will discuss with reference to Russian.

Figs. 37.1 and 37.2 illustrate the two intonation patterns for a simple Russian SVO sentence (1) (the dashed vertical lines indicate the boundaries of the syllable "mu" bearing the nuclear accent).

(1) Marina slušala muzyku. Ru
Marina:NOM listen:IMPERF:PAST music:ACC
'Marina listened to music.'

Table 37.1 summarises the prosodic features attributed to "neutral" vs. "non-neutral" intonation by different authors. The nuclear accents differ in the alignment of the falling pitch movement. In the "neutral" pattern, the high (H) tone is aligned with the pretonic syllable or earlier, the low (L) tone is usually realised on the stressed syllable, the pitch movement on the stressed syllable shows a characteristic concave shape. In the "non-neutral" pattern, the H is realised at the onset of the stressed syllable with a subsequent sharp (convex-shaped) fall to L. The two intonation contours are labelled as HL* and H*L, respectively, by Alter (1997), or as IK-1 and IK-2, in Bryzgunova's (1980) influential classification of Russian *intonational constructions* (*intonacionnye konstrukcii*).

These two nuclear accent types typically go together with other features listed in Table 37.1. Most importantly, the nuclear accent in the "neutral" pattern is assumed to always occur on the last phonological word (the last fully stressed word plus its clitics). The standard view is that HL* (IK-1) is assigned by a rule such as the *Nuclear Stress Rule à la* Chomsky and Halle (1968) (see also Bailyn, 2012, p. 252, for an application to Russian; Myrberg and Riad, this volume, and Zubizarreta, this volume, for discussion of more recent developments):

(2) Nuclear Stress Rule (NSR):
Assign nuclear stress/accent to the rightmost lexical category in S.

Besides, HL* (IK-1) is usually preceded by prenuclear pitch accents on every fully stressed word. The accents form a downstep pattern, i.e. the H tone of each accent is realised lower than the H tone of the previous accent (cf. the pitch movements on *marina* and *slušala* in Fig. 37.1), which means that the H tone of HL* (IK-1) itself, being the last in the sequence, is realised lowest and has a relatively low excursion. In contrast, H*L (IK-2) can occur on any word in the utterance, tends to have higher excursion and a low number of prenuclear accents.

According to this view, (1) would have the accentuation options shown in (3) and (4). The "neutral" pattern in (3) is ambiguous between focus on the direct object 'music' (narrow focus), VP focus, and sentence focus (broad focus), i.e. (3) can be an appropriate answer to all the questions listed in (5). The "non-neutral" patterns in (4) indicate narrow focus on the accented constituent, i.e. (4-a) is only appropriate as an answer to (5-c), (4-b) answers the question *What did Marina do to the music?*, whereas (4-c) answers the question *Who listened to the music?*

- (3) Marina slušala MUZYKU. ¹ Ru LH* !H* !HL*
- (4) a. Marina slušala MUZYKU. Ru H*L
 - b. Marina SLUŠALA muzyku. H*L
 - c. Marina slušala muzyku. H*L
- (5) a. What happened?
 - b. What did Marina do?
 - c. What did Marina listen to?

Notice that for (4-b) and (4-c) the generalisation is the same as in English or German: In an SVO sentence, nuclear accent on S or V does not "project" focus to VP or the whole sentence. Only in (4-a) there is an apparent difference. While in English and German the direct object can generally serve as the focus exponent of VP and S focus, in (4-a) these options are not available.

However, this generalisation is not empirically correct. On the one hand, yes, there seems to exist a tendency for narrow focus interpretation in sentences like (4-a) in contrast to broad focus in (3) (see e.g. Mehlhorn, 2002). On the other hand, it is far from a categorical requirement (as also argued by Yanko, 2001, p. 71, pp. 93–94). As a matter of fact, the pitch contour shown in Fig. 37.2, which corresponds to (4-a), was produced in response to a VP question *What did Marina do last night after dinner?*², implying VP focus. But even if this realisation might be considered unusual in answers to questions (as suggested by previous production studies, e.g. Alter, 1997, and Mehlhorn, 2002, cf. p. 151), there are other contexts in which the choice of H*L (IK-2) over HL* (IK-1) to express VP or whole sentence focus is quite natural.

For instance, it is often pointed out that H*L (IK-2) in Russian can also signal *contrastive* focus, which can be both narrow and broad. For example, (4-a) can be uttered as a denial of *Marina čitala gazetu* 'Marina was reading a newspaper', so the whole VP *slušala muzyku* 'was listening to music' in

(4-a) constitutes the correction and the focus of the sentence (again, see Mehlhorn, 2002). Furthermore, H*L (IK-2) is also typical in sentences that express *explanation* (Yanko, 2001, pp. 93–94), very much in the sense of the discourse relation *explanation* in theories of discourse coherence such as Kehler (2002) and Asher and Lascarides (2003). That is, (4-a) would be a natural answer to a question like *Why did no one pick up the phone?*, which induces focus on the whole sentence. In other words, both HL* (IK-1) and H*L (IK-2) show the standard broad-narrow focus ambiguity when realised on a sentence-final direct object.

Moreover, a closer consideration of other pitch accent types suggests that they follow the same pattern. For instance, LH*L (IK-3) is a typical nuclear accent in *yes/no*-questions. The question in (6) has three possible interpretations: (a) 'Is it music that Marina listened to?' (object focus); (b) 'Is it listen to music that Marina did?' (VP focus); and (c) 'Is it the event of Marina listening to music that happened?' (all focus).³

In other words, accents of different types seem to be able to project focus to VP or the whole sentence if the nuclear accent is in a "projecting position" (i.e. on O in SVO sentences).

The other generalisation—that HL^* (IK-1) can only be realised on the last phonological word of a sentence—is also questionable. Again, there might be a tendency to this effect. However, Bryzgunova (1980) gives lots of examples to the contrary, and what is more, IK-1 in non-final positions seems to be subject to the same restrictions on focus projection as IK-2 in (4-b) and (4-c). In (7), the nuclear HL^* (IK-1) is on a demonstrative adverbial at the left periphery of the sentence, i.e. in a non-projecting position. The sentence has narrow focus on the adverbial, which is clear from the association with focus effect of the additive particle i 'also'.

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(7) Bryzgunova (1980, p. 100):

I TOGDA on uexal
HL*
and/also then he left
'He left also then. [He had left on a number of other occasions.]'
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In other words, it is the position rather than the shape of the nuclear accent (or the intonation pattern as a whole) that seems to be primarily responsible for restricting the possibilities of broad vs. narrow focus interpretation in Russian, just like in English or German. The ubiquitous fixation on the traditional opposition of "neutral" vs. "non-neutral" intonation (also criticised a lot by Yokoyama, 2001, 2009b) has obscured this similarity. This is not to say that other characteristics of "neutral" and "non-neutral" intonation listed in table 37.1 play no role at all. One thing to be said of downstep is that step by step lowering of the topline on which high tones are realised makes the last accent "stick out" less than it does otherwise, so all the accents in the utterance are perceived as almost equally prominent. This could be used as one of the means to indicate broad focus in contrast to narrow focus.⁴ In other words, the distinction between broad and narrow focus might be signalled by a complex combination of features, in which, however, the position of the nuclear accent plays the leading role.

37.1.2 Background, given, topic, and delimitation

This section discusses intonational realisation of various information-structural categories other than focus with reference to Russian. But first, a general remark on secondary accents.

The primary, or the nuclear accent is the last and most prominent accent in the intonational phrase (Pierrehumbert, 1980; Ladd, 1996). It may or may not be preceded by one or more secondary, or prenuclear accents. The number and the shape of prenuclear accents depend on a number of factors, among which IS is only one. Crucially, prenuclear accents can be realised, in principle, on any word in the

sentence that precedes the focus exponent. It can be both a contrastive topic and a continuing aboutness topic (as noted by Mehlhorn and Zybatow, 2000, and Yanko, 2001). But it can also be a non-topical element of the background, a non-topical delimitation phrase, or part of the focus other than the focus exponent. As for post-nuclear accents, according to the standard view they do not exist (the nuclear accent is the last). Anything that follows the focus exponent has no accent, regardless of its IS function (see e.g. Yanko, 2001, on post-focal vs. pre-focal themes).⁵ This raises the question whether categories such as given, topic, or delimitation have any specific intonational marking, that is, whether there is such a thing as "deaccentuation of given material" or the "topic accent" in Russian.

Givenness-driven deaccentuation surely exists in Russian in the sense that given material avoids nuclear accent. When given material is outside focus it is "out of reach" for the nuclear accent, which has to be realised inside the focused constituent. If given material is a proper part of the focused constituent, the nuclear accent will be realised on some other part that is not given. If given material is realised after the focus exponent, as in (8), it receives no accent at all.⁶ If it precedes the focus exponent, it may or may not bear a prenuclear accent.

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(8) A: 'Who is the American ambassador talking to?' B: [S] NEMECKIM poslom_{Given}. ]_F Ru with german ambassador 'To the GERMAN ambassador.'
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This also means that if the focused constituent only consists of given material, the nuclear accent has nowhere to go and must be realised on given material. One of the consequences is that nuclear accent on personal, anaphoric and demonstrative pronouns, which are inherently given, indicates narrow focus on the pronoun (cf. discussion of the Slovenian example (27-b) in section 37.2.1).

As far as prenuclear accents are concerned, the picture emerging from the existing literature and some of my own observations is that the role of IS in their distribution and shape is rather limited, whereas other factors often play a more significant role. Perhaps, the most influential factors are the shape of the nuclear accent and the communicative force of the utterance. In declarative utterances, if the nuclear accent is (!)HL* (IK-1), the prenuclear accents have rising shape (LH*) and rather high excursion, cf. Fig. 37.1. If the nuclear accent is LH*L (IK-3) expressing continuation, the prenuclear accent (usually only one) also has a high starred tone (H* or LH*), but is realised much lower than the high that precedes (!)HL* (IK-1). Both patterns are reflected in (9) from Mehlhorn and Zybatow (2000): The contrastive topic of the first clause *Andrej* bears a low rise before LH*L, whereas the other contrastive topic *Vova* bears a high rise, cf. Fig. 37.3.

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(9) Andrej učitsja v universitete, a Vova v gimnazii. Ru LH* LH*L LH* !HL* Andrej studies in university and Vova in gymnasium
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In *yes/no*-interrogatives, where the nuclear accent is also LH*L (IK-3), there are two options. Non-topical elements, esp. parts of broad focus, realise the same secondary accent as before the continuation uses of LH*L (IK-3). Contrastive topics and delimitation phrases bear an HL* (IK-1) or an H*L (IK-2), i.e. a fall rather than a rise (Kodzasov, 1996, pp. 96–97; Yanko, 2001, pp. 105–110).

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(10) A: 'Who was doing what?' B: 'Alena was reading a newspaper.' A: A MARINA_{CT} [ slušala MUZYKU? ]_F Ru HL* LH*L and Marina:NOM listen:PST music:ACC 'And Marina, was she listening to music?'
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In other words, only interrogatives seem to have a special kind of contrastive topic accent. For the rest, the accents often referred to in the literature as the "topic" or "theme" accents, are probably just prenuclear accents that happen to be realised on a "topic" or "theme". In those cases, IS plays a role only

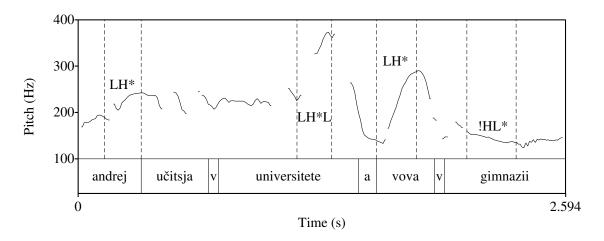


Figure 37.3: Pitch track for example (9)

in so far as some IS functions tend to be associated with greater prosodic prominence (contrastive topic, delimitation), which means that they are more likely to receive prenuclear accent and the accent will be realised higher and/or with a greater excursion, while other IS functions (given, continuing topic) tend to lack prosodic prominence, are less likely to receive prenuclear accent, and if they do, the accent will be relatively less expressed. However, the shape of the accents is determined by other factors, and even their excursion/height is more strongly influenced by the overall characteristics of the intonation contour than by IS.

37.2 Syntax

Syntactic means that are involved in encoding the categories of information structure include, first and foremost, constituent order, as well as a number of specific constructions and processes such as ellipsis, clefting and doubling.

Slavic languages were among the first that attracted the linguists' attention to the phenomenon of "free word order," i.e. constituent order dependent on the discourse status of the constituent rather than on its grammatical function. One could say that Slavic word order created the case for information structure in linguistics, promoted in the works of the Prague School (Mathesius, 1932; Daneš, 1960; Adamec, 1966; Sgall et al., 1980; Firbas, 1992). The topic gave rise to an enormous amount of literature both within the traditional Prague School approach and in generative linguistics, as well as in other theoretical frameworks. More or less recent overview articles on Slavic word order include Siewierska and Uhlířová (1998); Junghanns and Zybatow (2009); Kosta and Schürcks (2009); Bošković (2009); Yokoyama (2009a). Some recent dissertations and books on the subject are Van Gelderen (2003), Kallestinova (2007), Slioussar (2007), Dyakonova (2009), Titov (2012), Bailyn (2012) on Russian, Mykhaylyk (2010) on Ukrainian, Godjevac (2006) on BCS, Lambova (2004) on Bulgarian, Kučerová (2007) and Sturgeon (2008) on Czech, to name just a few. It will not be possible to give an adequate summary of all this work in this section. I will therefore only give a brief survey of the main generalisations and concentrate on issues that are controversial or have received less attention than they should have.

37.2.1 Focus

Word order: The focus of this section will be on the distinction between broad and narrow focus and the way it is signalled (or not) by the constituent order of sentences. According to the standard view, Slavic languages have an underlying canonical (neutral, basic) word order determined by syntax, whereas the full variety of observed word orders is derived from the basic one by means of movement

operations that are triggered by information-structural features of syntactic constituents. It is generally acknowledged that (even if not sufficiently well studied how) word order interacts with intonation in the expression of information structure, i.e. these two phenomena cannot be studied independently. The most common assumption is that broad/narrow focus ambiguity is only present in sentences that combine neutral word order with neutral intonation (cf. section 37.1). Virtually all Slavic languages are standardly assumed to have the SVO basic word order (Siewierska and Uhlířová, 1998). In combination with a rule like NSR (2) or the more traditional notion of the "neutral intonation" discussed in section 37.1, according to which the focus exponent is the last word of the sentence, this implies prosodic prominence on the object under broad focus. For instance, the following sentence in BCS can be an answer to questions *What happened?* (all-focus), *What did Jelena do?* (VP focus) and *What did Jelena buy?* (narrow focus on the object), cf. Godjevac (2006, pp. 110–111).

(11) Jelena je kupila KOMPJUTER Jelena:NOM AUX buy:PST computer:ACC **BCS**

Another order that is said to have all-focus interpretations is VSO. It is characterised by the movement of the verb to the left periphery of the clause, ¹⁰ and only occurs in narrative discourse, particularly at the beginning of a story or a new episode—a phenomenon often referred to as *narrative inversion* (Erechko, 2002; Dyakonova, 2009). This phenomenon exists in many if not all Slavic languages including BCS, Czech, Polish, Russian and Ukrainian. ¹¹ VSO has been claimed to recede in Russian, reflecting an older grammatical system and an older narrative style that survives mostly in fairy tales (Restan, 1981, Bailyn, 2012, p. 264, fn. 25, p. 337). However, this order is fully productive in jokes/anecdotes, and is also used in some other contexts (Yokoyama, 1986, pp. 284–285). (12) is a typical beginning of a joke in Russian:

(12) Privodit mužik domoj DEVICU.
bring:PRS:3SG guy:NOM home girl:ACC
'A guy brings a girl to his home.'
http://live4fun.ru/joke/248378 last accessed on 27.09.2013

Ru

Unlike SVO, VSO seems to be restricted to broad focus thetic sentences.¹² Zybatow and Junghanns (1998, pp. 41–43) argue that in such sentences the verb raises from the VP and adjoins to TP to mark the situation time as the topic of the sentence (see also Junghanns and Zybatow, 2009, pp. 697–698).

Other word orders are generally believed to signal narrow focus. One should distinguish between (at least) two kinds of information-structurally relevant constituent reordering. One is when constituents move away from the right periphery of the clause "to evade nuclear accent". A common view is that constituents are reordered according to a principle like (13) (as presented by Dyakonova, 2009, p. 55, going back to the works of the Prague School), and then a rule like NSR (2) applies. ¹³ This gives rise to sentences with non-canonical word order, but "neutral" intonation.

(13) IS Ordering Rule
Topic > (Discourse Neutral Material) > Focus

The following Czech example (from Lenertová and Junghanns, 2006, p. 350) illustrates the result of applying this principle: the narrowly focused subject appears in sentence-final position:

[Talking about situations where somebody names objects.] Cz Tentokrát vyjmenovávala předměty [jeho ŽENA] $_F$ this time name:PST:F:SG objects:ACC his wife:NOM 'This time, his WIFE named the objects.'

The other kind of reordering is represented by cases where a constituent moves "together with its nuclear accent". This gives rise to non-neutral intonation patterns. The standard view is that sentence-non-final foci are always narrow and/or contrastive (see e.g. Kondrashova, 1996, Junghanns and Zybatow,

1997, on Russian; Arnaudova, 2001, on Bulgarian). However, more recent literature discusses a number of exceptions to this generalisation, in particular, the possibility of broad focus in O(S)V and (S)OV structures with nuclear accent on O. Lenertová and Junghanns (2006) and Fanselow et al. (2008) show that Czech sentences like (15) can serve as answers to *What happened?* and *What's new?*-type, as well as *Why?* questions. This possibility is largely restricted to sentences with null subjects, but is also available if the subject is contextually or inherently unaccented (e.g. indefinite pronouns like *někdo* 'someone'). Fanselow and Lenertová (2011) analyse this phenomenon as fronting of the focus exponent (i.e. only a subpart of a broad focus) and observe the same phenomenon in Polish, Russian, Slovenian and BCS.

(15) [MARTU jsem potkala] $_F$ Cz Martha: ACC AUX:1SG meet:PST:F:SG 'I met Martha'

The ability of fronted accented objects to project focus to the level of the VP is also observed by Dyakonova (2009, pp. 64–82) for Russian and by Godjevac (2006) for BCS. Concentrating on sentences with overt subjects, both authors reject the possibility of broadest sentence focus for OSV orders, but allow it for SOV. Dyakonova argues that object preposing to V, which is very common in colloquial Russian, is triggered by D-linking of the object or a bigger constituent, in particular the whole focused constituent. D-linking is defined as in (16) (Dyakonova, 2009, p. 73, with reference to Pesetsky, 1987) is supposed to be orthogonal to categories of focus and background.

(16) D-linking:

A constituent is D-linked if it has been explicitly mentioned in the previous discourse, is situationally given by being physically present at the moment of communication, or can be easily inferred from the context by being in the set relation with some other entity or event figuring in the preceding discourse.

However, examples like (17), which is an attested first sentence of a joke (accent marking is mine), shed doubt on this generalisation. ¹⁴ This is obviously an all-focus sentence (note the narrative inversion) in a null context. It is not clear in what sense the direct object or any part of this sentence could be D-linked.

(17) Rešil mužik ŽENU ubit' Ru decide:PST:M:SG guy:NOM wife:ACC kill:INF
'A guy decided to kill his wife.'
http://joyreactor.cc/post/332475, last accessed on 2012-12-19

In this light, it is worth investigating the hypothesis that Dyakonova's object preposing is related to Lenertová and colleagues' movement of the focus exponent. Another possible approach is to assume that the basic order of V and O is not specified as long as the nuclear accent remains on O. This view is consistent with some ideas circulating in Russian linguistics (Kodzasov, 1996, p. 183–184), as well as with what we know about SOV languages like German, where accent on O projects broad focus regardless of whether the clause shows the base-generated SOV or the derived SVO. Slioussar (2007, pp. 188–191) suggests that colloquial Russian is developing into an SOV basic word order language, which would imply that VO and OV basic orders co-exist in the current stage of Russian.

Clefts: Cleft constructions express an information-structural partition, typically a partition into background and focus, of what is underlyingly a single predication, by realising the background and the focus part of that predication as two different clauses. Usually, the focus is realised in a main clause, whereas the background in a subordinate relative clause, and the construction expresses identificational, or exhaustive, focus. Cleft constructions in Slavic languages are not very well studied. Close counterparts of English *it*-clefts have been reported in Bulgarian and Czech (Reeve, 2012, p. 167):

(18) To beše Maria kojato Ivan vidja that was Maria who Ivan saw 'It was Maria that Ivan saw.' Bg

The so called *èto*-cleft construction in Russian (19) has the same function of expressing identificational focus (King, 1993). However, its clefthood, i.e. its biclausal analysis is much debated (Junghanns, 1997; Reeve, 2008, 2012; but see Markman, 2008 for a biclausal view). For one thing, the construction involves no relative clause in the standard sense. The demonstrative pronoun *èto* is followed by what superficially is a full main clause, where the focused constituent is often fronted and immediately follows the demonstrative (but even that is not generally required). The construction also exists in other Slavic languages (with the demonstrative *to* rather than *èto*), for instance in BCS (Reeve, 2008, 2012) and Polish (Tabakowska, 1989). See also Progovac (1998), Paducheva (1980) and Kimmelman (2009) on the semantics of this construction.

(19) Èto VODKU Ivan vypil this vodka:ACC Ivan:NOM drink:PRF:PST 'It was the vodka that Ivan drank.'

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Finally, one should mention *wh*-clefts, like the Russian (20). In contrast to English *wh*-clefts, focus in (20) is not identificational, but scalar: Oleg is the one of whom it is least justified to doubt that he works (properly, hard, etc.). Slavic *wh*-clefts have hardly been investigated so far.

(20) Už kto rabotaet tak èto OLEG PRT who works so this Oleg 'Oleg works if anyone.'

Ru

37.2.2 Background, given, topic, and delimitation

Ellipsis: Ellipsis is essentially a process of deletion of material that is backgrounded (not focused) and given (highly activated in the common ground), see Winkler (this volume). The pragmatic function of ellipsis in Slavic languages has received little attention as a research issue in its own right, though some interesting findings are reported by McShane (2005) on Russian and Polish: Besides backgroundedness and givenness, ellipsis depends on discourse relations (in the sense of Asher and Lascarides 2003, and similar approaches; see also Hirschberg, this volume). Syntactic constraints on ellipsis are much better studied.

Word order: Constituents referred to in various terminological traditions as "topics" and "themes" tend to appear leftward of their canonical position. What is meant by "topic" or "theme" is not always an aboutness topic, but can be a delimitation phrase, as well as a given or a background constituent. In Slavic languages, one can distinguish between several types of such leftward movement according to the landing site of the constituent, the presence vs. absence, and kind of resumptive element, as well as the degree of syntactic integration of the "topic" in the clause.

Middle (object) scrambling (Mykhaylyk, 2011), or middle-field topicalisation (Bailyn, 2012) is movement of a constituent canonically realised after the verb (esp. the direct object) to a position before the verb but after the subject (SVO \rightarrow SOV). According to Mykhaylyk (2011), in Ukrainian, an object has to be definite, specific indefinite or member of a contextually evoked set in order to undergo such movement, cf. (21), nuclear accent marking is mine. This is also a typical position for pronominal objects in both Ukrainian and Russian. 15

(21) a. Divčynka dviči kynula M'JAČYK.
girl twice threw ball
'The girl threw a(ny)/the/a certain ball twice.'

Uk

b. Divčynka dviči m'jačyk KYNULA.
 girl twice ball threw
 'The girl threw the/a certain ball twice.'

Mykhaylyk (2011) only considers word order permutations under preservation of the "neutral" intonation, i.e. with the final position of the nuclear accent, which means that the object loses nuclear accent by moving to the left of the verb. This could also be seen as another instance of givenness-driven deaccentuation followed by word order optimisation so as to realise the nuclear accent in sentence-final position (see also Kučerová, 2007; Šimík and Wierzba, in revision, on Czech).

(*Left-Edge*) *Topicalisation* is movement of a constituent to the left periphery of the clause (without resumptive elements), present probably in all Slavic languages. Topicalisation can affect continuing aboutness topics (topics that have already been established as topics in the previous context), new or shifted topics, contrastive topics, as in (22) from Arnaudova (2005, p. 16), as well as non-topical delimitation phrases. The question whether all these functions can/must be expressed by topicalisation in all Slavic languages is largely open since much of related previous work did not sufficiently differentiate between these notions.

(22) Šapka kupi Marija, a čanta (kupi) Milena. Bg hat bought Marija and bag bought Milena 'Marija bought a hat, and Milena bought a bag'

Left dislocation involves fronting with resumptive elements where the fronted constituent is integrated in the syntactic structure of the clause (see López, this volume). The resumptive element can have different forms: a clitic personal pronoun as in Bulgarian and Macedonian (hence the more broadly familiar terms *clitic left dislocation* and *clitic doubling*), cf. (23) from Arnaudova (2005, p. 18, see also Kochovska, 2010, on Macedonian); or a non-clitic demonstrative as in Czech, cf. (24) from Sturgeon (2008, p. 81). Left dislocation usually requires case matching between the dislocated DP and the resumptive pronoun.

- (23) Knigite Ivan včera gi vârna. Bg the.books Ivan yesterday them:ACC returned 'Ivan returned the books yesterday.'
- (24) Tu tašku, tu sí koupila Hana. Cz that:ACC bag:ACC that:ACC REFL bought Hana:NOM 'That bag, Hana bought it [and that wallet, Jana bought it.]

Finally, *hanging topics* (also *external topics* in Zybatow and Junghanns, 1998, Junghanns and Zybatow, 2009, and, somewhat misleadingly, *left dislocation* in Bailyn, 2012) are constituents left-adjoined to a clause and external to it. In Slavic languages they usually require a coreferential resumptive element inside the clause. In contrast to left dislocation, hanging topics do not require case matching (and have a number of other distinctive properties, see e.g. Krapova and Cinque, 2008 on Bulgarian clitic left dislocation vs. "hanging topic left dislocation").

(25) [Anička?] $_T$ Té se nic nestalo. Cz Anička:NOM that:DAT REFL nothing:NOM not.happened 'Anička? Nothing happened to her.'

Concerning functional distinctions between different kinds of leftward movement, Arnaudova (2005) argues that topicalisation in Bulgarian expresses contrastive topic in, roughly, Büring's (2003, and this volume) sense, which corresponds to Krifka's (2008) delimitation, i.e. the most appropriate context for (22) is answering the subquestions *Who bought a hat?*, *Who bought a bag?* of a question like *Who bought what?* In contrast, (23) is a natural answer to a question like *What happened?* with salient Ivan and books. Arnaudova points out that the fronted constituent in left dislocation must be specific, generic or referential, which are the standard restrictions on aboutness topics (Reinhart, 1981). Czech draws the

line differently. According to Sturgeon (2008), left dislocation signals delimitation, i.e. (24) in Czech appears in the same type of context as (22) in Bulgarian, whereas hanging topics like (25) express what Sturgeon calls *topic promotion* (following Gregory and Michaelis, 2001), i.e. a familiar discourse referent that was not topical in the previous context becomes the aboutness topic of the current and the subsequent sentences.

A special variety of fronting with a resumptive element is *predicate fronting with doubling*, alias *predicate cleft*, available in Russian (Paillard and Plungjan, 1993; Abels, 2001; McCoy, 2002; Aboh and Dyakonova, 2009), Polish (Bondaruk, 2009), Bulgarian (Karagjosova and Jasinskaja, 2015), and possibly in some other Slavic languages. The construction typically involves V- or VP-fronting leaving behind an overt copy of the verb. Normally, the fronted copy of the verb is infinitival, whereas the lower copy is finite:

```
(26) Wypić HERBATĘ (to) Marek WYPIJE, ... Pl drink:INF tea PRT Marek will.drink
'As for drinking tea, Mark will drink it, [but he will not drink coffee.]'
```

The fronted VP is usually characterised as (Büring-style) contrastive topic, which corresponds to delimitation in our terminology: (26) realises the discourse strategy *Will Marek drink tea?*, *Will Marek drink coffee?*, etc. (see Abels, 2001). Interestingly, this construction shows a strong tendency (if no categorical requirement) for *polarity focus* (Dyakonova, 2009, p. 62), so the fronted verb copy realises the delimitation function of the VP, whereas the lower finite copy serves as the polarity focus exponent. This is probably the reason why the whole propositional content of such sentences normally has to be given (Bondaruk, 2009), with only the truth value being the issue under discussion.

37.3 Full forms, clitics, and zeroes

South and West Slavic languages with the exception of Sorbian (a) are strong pro-drop languages; and (b) possess elaborate systems of auxiliary and pronominal clitics (Franks and King, 2000; Franks, 2005). Pronominal clitics are available in the accusative, dative, and often also genitive and are paralleled by segmentally distinct full pronoun forms.¹⁷ In this section, I give a brief survey of how the pro-drop property and the clitic systems of these languages interact with IS.

When a discourse referent is given and highly activated in the common ground, it will normally be realised as zero (if it is a subject) or as a clitic pronoun. Overt nominative pronouns and full forms of other pronouns will be used only if they occur in a position or carry a function that requires a certain degree of prosodic prominence. This includes, in particular, the cases where the pronoun is focused or is the contrastive topic (or delimitation phrase). In the Slovenian example below, the full pronoun $nj\hat{e}ga$ is required for the realisation of the nuclear stress, which in turn unambiguously indicates narrow focus on the pronoun.

```
(27) a. [ Vsak teden ga OBISKUJEM. ]<sub>F</sub> Sln every week him:CL visit.1SG
'I visit him every week'
b. Vsak teden obiskujem [ NJÊGA. ]<sub>F</sub> every week visit.1SG him:FULL
'I visit HIM every week'
```

Another place where IS interacts with Slavic clitic systems in interesting and intricate ways is the phenomenon of polarity focus, including both positive polarity, or *verum* focus, and narrow focus on the negation. According to the pattern familiar from Germanic languages, one expects negative polarity focus to be realised as nuclear accent on the negative particle, whereas verum focus typically surfaces as nuclear accent on the finite verb, i.e. in analytic forms it is the finite auxiliary rather than the main verb (Höhle, 1992; Lohnstein, this volume). However, the negative particle is a clitic or a bound morpheme in all Slavic languages, whereas most of the finite auxiliaries are clitics everywhere except the East Slavic,

which means that these elements cannot form independent prosodic domains and normally do not bear stress. ¹⁸ Different Slavic languages resolve this conflict in different and sometimes quite unexpected ways.

Focus on the negation can be realised as accent on the finite verb (main or auxiliary) if the finite verb is not a clitic (e.g. in Russian). More generally, it can be realised on the word that normally bears stress under negation. For instance, in Bulgarian, stress is realised on whatever happens to immediately follow the negative particle (Franks and King, 2000). If negation is followed by, for instance, a pronominal clitic as in (28), the latter is stressed and will serve as the negative polarity focus exponent.

(28) [A truck came around the corner.]

Marin go VIDJA, no Ljudmil ne GO vidja M. it saw but L. not it saw Marin saw it, but Ludmil DIDN'T see it.

Bg

Positive polarity focus can be realised as accent on a non-finite form of the main verb if the finite auxiliary is a clitic, e.g. in Czech:

(29) A: 'Everyone is running around you as if you've just won a million pounds.'

Cz

B: Ale já jsem právě VYHRÁLA milion liber. but I AUX:1SG just win:PTCP:F:SG million pounds 'But I HAVE just won a million pounds.'

This is different in BCS and Slovenian. BCS has a complete paradigm of segmentally distinct clitic and full forms of auxiliary verbs and the copula. Just like narrow focus on pronouns, verum focus will require the use of a non-clitic auxiliary or copula instead of the clitic (Ivić, 2004):

(30) On je direktor.

BCS

he is:CL director 'He is the director.'

(31) A: 'Everyone is rushing around him as if he is the director, [...]'

B: On JESTE direktor.

BCS

he is:FULL director 'He IS the director.'

Slovenian presents the most unusual case: Polarity focus is realised as accent on the rightmost clitic in the clitic cluster, which can be the negation, a finite auxiliary, or even a pronominal clitic, if no other clitic follows it (see Priestly, 1993; Franks and King, 2000; Dvořák, 2003; Dvořák and Gergel, 2004).

(32) Vsak teden GA obiskujem. every week him:CL visit.1sG 'I DO visit him every week.'

Sln

Crucially, it is accent on the pronominal *clitic*, e.g. *ga* in (32), that expresses polarity focus, rather than replacement by a non-clitic pronoun, e.g. *njêga* in (27-b), which expresses narrow focus on the pronoun (see discussion above). Furthermore, Slovenian clitics are famous for their ability to get stranded under VP ellipsis, and to be used as short answers to *yes/no*-questions (see Priestly, 1993; Franks and King, 2000; Dvořák, 2003; Dvořák and Gergel, 2004). The possibility to realise polarity focus as accent on a pronominal clitic in Slovenian is typologically rare.

37.4 Particles

Slavic languages possess a wealth of particles, among which most major kinds of focus-sensitive particles (see also Beck, this volume) and topic particles are represented. This section gives several examples of

their IS-sensitive behaviour.

Focus particles: The standard classes of particles that associate with focus include exclusive particles like the English only, just, or merely (Ru: tol'ko, liš'; Pl: tylko, dopiero; BCS: samo, tek), identificational particles like English exactly or German gerade and eben (BCS: baš; Bg, Ru: imenno), plain additive particles such as also and too (Ru: takže; Cz: taky; BCS: takođe(r)), as well as scalar additive particles like even (Bg, Ru: daže; Pl: nawet; Bg: dori; Mac: duri), cf. König (1991). The particle i functions in most Slavic languages as a general additive operator covering both scalar and non-scalar uses (Gast and van der Auwera, 2011). Among scalar additives, we find an impressive variety of polarity-sensitive items: positive polarity even (celo in Sln), negative polarity even restricted to clause-mate negation contexts (ni in BCS, Ru, Uk, Bel; niti in Sln and BCS, nitu in Mac, nito in Bg, and ani in Pl, Cz, Slk, Uk, and Bel), concessive scalar particles (see esp. Crnič, 2011), i.e. kinds of negative polarity even that occur in downward-entailing, non-monotonic and non-veridical contexts excluding clause-mate negation (Sln: magari; BCS: makar; Ru: xot'). Gast and van der Auwera (2011) point out a group of scalar additive particles that occur both in positive polarity and in clause-mate negation contexts, but not in typical contexts for concessive scalar additives (Cz: dokonce; Slk: dokonca; BCS: čak). Finally, an interesting and so far less well studied kind of focus particle is represented by the Polish, Czech, Slovak, Ukrainian, Belarusian and Russian $a\ddot{z}$ ($a\dot{z}$) and Bulgarian $\check{c}ak$, which are scalar, but not additive, and can be translated into English both as even and only depending on the context (Tomaszewicz, 2013).

The distinction between stressed and unstressed additive particles manifests itself in Slavic languages in the way familiar from English *also* and German *auch*. Unstressed additive particles associate with focus and usually precede it; under stress they associate with contrastive topic and follow it (Krifka, 1999). This is attested, for instance, for the Russian *takže* (Paducheva, 1977), Polish *też*, Czech *taky* (Bogusławski, 1986), and BCS *takođe(r)*. For example, the unstressed *takže* in (33-a) requires a context in which Oleg congratulated someone else besides Marina; the stressed *takže* in (33-b) associates with the contrastive topic *Oleg* and is appropriate in a context where someone other than Oleg congratulated Marina. Sometimes the functions of the stressed and the unstressed *also* or *auch* are divided between two different particles. For instance, Russian *tože* 'too' can only associate with contrastive topics and corresponds to the German stressed *AUCH* (Gundel, 1975; Paducheva, 1977; Girke, 1981), cf. (33-a) vs. (33-b). In contrast, the particle *i* is a pure association-with-focus additive. As a proclitic, it is never stressed and always immediately precedes the focus, cf. (33-c).

```
(33) a. Oleg takže / #tože / *i pozdravil [MARINU]<sub>F</sub> Ru Oleg also congratulated Marina
b. [Oleg]<sub>CT</sub> TAKŽE / TOŽE / *I pozdravil Marinu Oleg too congratulated Marina
c. Oleg pozdravil i [MARINU]<sub>F</sub>
Oleg congratulated also Marina
```

Markers of contrast and delimitation: Another group of particles that we will briefly discuss could be roughly described as markers of contrastive topic. In fact, it would be more correct to say that these particles mark various kinds of contrast, which can go together with a more or less strong requirement of the presence of a contrastive topic (or more generally, a delimitation phrase).

First of all one should mention Slavic conjunction systems. Where English makes a two-way distinction between connectives *and* and *but*, most Slavic languages have three, four or even five connectives, which in addition to their basic function of logical conjunction, encode different pragmatic restrictions on the relationship between their conjuncts. Leaving aside corrective conjunctions (that correspond to the German *sondern* or the Spanish *sino*), the following three functions usually have distinct encoding in Slavic: (a) general phrasal coordination and non-contrastive clausal coordination (Ru, Uk, Pl, Bg, BCS: *i*); (b) opposition, contrastive comparison, "weak" or "mild" contrast (Ru, Uk, Pl, Bg, BCS: *ali*), (c) counterargument, denial of expectation, or "strong" contrast (Ru, Bg: *no*; Uk, Pl: *ale*; BCS: *ali*),

see e.g. Mauri (2008). From the point of view of IS, the most interesting distinction is between (a) and (b). Jasinskaja and Zeevat (2008, 2009) argue (with reference to Russian) that this distinction is best characterised in terms of types of questions under discussion answered by the conjuncts. The conjuncts of i must give distinct answers to a question with a single wh-variable, e.g.: What is the weather like? It is snowing and (Ru: i) the wind is blowing. In contrast, the conjuncts of a answer questions with multiple variables, e.g.: Who likes what? John likes football, and/but (Ru: a) Bill likes basketball. 19 Each conjunct, in turn, can be seen as an answer to a subquestion: What does John like?, What does Bill like?, etc., where one of the variables (who?) of the multiple-variable question is instantiated to elements of the contextually relevant domain (John, Bill). In other words, conjunction a is systematically used in contexts which also license contrastive topics (Büring, 2003) and delimitation phrases (Krifka, 2008). Since contrastive topic phrases and delimitation phrases tend to move to the left periphery of the clause (cf. section 37.2.2), conjunction a is normally immediately followed by such a phrase. 20 Conversely, if a delimitation phrase is present, conjunction i cannot be used, so i turns out to function as a negative cue to delimitation in Russian. Other Slavic languages show similar distributions,²¹ though minor differences also exist. On the expression of contrast in West Slavic coordinate structures see also Adamíková (2004) and Fehrmann (2004, 2008).

Further examples of Russian contrastive topic particles are $\underline{z}e$ and to. In one of its uses, $\underline{z}e$ is interchangeable with a, except it sounds more bookish (Paducheva, 1988). In contrast to a, $\underline{z}e$ is a second position clitic that follows the first phonological word of the clause. Since contrastive topics always appear clause-initially in sentences with $\underline{z}e$, the particle follows the first phonological word of the topic constituent. The analysis of the particle to given by McCoy (2001) is virtually identical to Jasinskaja and Zeevat's analysis of a: it is a marker of discourse strategy dominated by a question with two variables and split into single-variable subquestions. In addition, McCoy characterises to as a marker of known but not necessarily activated information. More specifically, to can indicate that the question under discussion is somehow familiar to the communication participants, i.e. that it has been or should have been addressed before (on Russian to see also Rathmayr, 1985; Bonnot, 1986, 1987; Bolden, 2008). The position of to in a clause is rather flexible. It will encliticise to the contrastive topic or the delimitation phrase even if the latter is not in clause-initial position. to also functions as a topic/delimitation particle in Polish (Tabakowska, 1989). Interestingly, the enclitic to in Czech is a focus particle (Šimík, 2009), but the proclitic to has uses in which it marks contrastive topics or delimitation (Radek Šimík, p.c.).

37.5 Concluding remarks

In this chapter I have tried to give a concise, but broad survey of the linguistic means available in Slavic languages for the expression of information structure, which include intonational means, word order permutations of different kinds, cleft constructions, ellipsis, the choice between clitic and non-clitic forms, and various focus and topic particles. In the sections on intonation and syntax, I have paid particular attention to critical discussion of some traditional notions and widely accepted generalisations, such as the distinction between the "neutral" and the "non-neutral" intonation, the "theme accent", and the projection behaviour of fronted foci. Furthermore, unlike most previous overviews, this chapter includes less widely discussed phenomena such as clefts, predicate doubling, clitics and IS-sensitive particles.

Obviously, this survey ended up being not as balanced between different Slavic languages and relevant phenomena as would have been desirable. This is primarily related to the extent to which different languages and phenomena are represented in linguistic research. While the phenomenon of "free" word order has been by far the most popular research topic among the topics discussed in this chapter, other phenomena have received less, and some of them hardly any attention in the literature. Slavic cleft constructions, with the exception of relatively famous *èto/to*-clefts, are basically undescribed. The behaviour of clitics in sentences with polarity focus still awaits proper theoretical analysis. There is a lot to be done in the area of formal description of truth-conditional and presuppositional effects of Slavic IS-sensitive particles and other IS devices. The study of Slavic IS would also profit from comparative research with

reference to non-Slavic languages. Especially the study of intonation has been too isolated within the local academic traditions.

Finally, one should note that among Slavic languages, Russian is by far the best researched language both in the domain of IS and in other areas of linguistics, which has inevitably led to a certain bias towards Russian data in this survey. On the other extreme are Belarusian and Upper and Lower Sorbian, listed by the UNESCO as 'vulnerable' and 'definitely endangered', respectively, and languages that have only recently gained dominant status in their regions, such as Macedonian, Slovenian, and Ukrainian. By comparison, very little is known about IS in these languages, and it is wrong to assume that they are just like their better studied neighbours in all respects. For instance, the unique behaviour of Slovenian clitics under polarity focus (section 37.3) shows most clearly that these languages deserve the attention of linguists in their own right.

In sum, in this chapter I have summarised the main findings about information structure in Slavic languages and have pointed out a number of gaps in our knowledge in this domain. My hope is that this survey will instigate new research in this area.

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Notes

¹The '!' symbol before H indicates that the high tone is downstepped.

²The pitch contours in Figs. 37.1 and 37.2 were produced by two different speakers in response to the same stimulus in a small pilot study, where participants had to read aloud answers to questions asked by the experimenter.

³All these questions are "non-neutral" in the sense that they presuppose that (a) Marina listened to something; (b) Marina did something; or (c) something happened. A neutral *yes/no*-question without these presuppositions (*Did Marina listen to music?*) is expressed in Russian by the combination of LH*L with verum focus, i.e. the accent is realised on the finite verb (see also Ladd, 1996; Meyer and Mleinek, 2006, on Russian *yes/no*-questions).

⁴The presence of downstep has also been associated with other functional distinctions, such as the distant vs. close mode of communication (Yokoyama, 2001), as well as the narrative discourse mode (Kodzasov, 1996, pp. 196–197; Bolinger, 1978, p. 490).

⁵Some authors writing on Russian intonation (e.g. Meyer and Mleinek, 2006) have characterised certain intonational phenomena as post-nuclear accents. I will not take a stand on this issue here.

⁶Same holds for elements of the focus other than the focus exponent, and would also hold for topics and delimitation phrases, except that they tend to front, cf. section 37.2.2, and are less likely to be realised after the focus.

⁷In fact, contrastive topics and delimitation phrases receive an accent almost obligatorily, perhaps with the exception of very short, one syllable expressions. One could argue that they obligatorily form a separate prosodic phrase, and the presence of accent is the consequence of phrasing. This view makes a lot of sense, but I prefer to talk in terms of distribution of secondary accents because of the noted dependency of secondary accents on the global characteristics of the utterance.

⁸For instance, *Marina* in (3) is a given, highly activated continuing topic, not contrastive (the sentence was read in the context of the question *What did Marina do last night after dinner?*). It is nevertheless realised with a very high rising accent by the speaker in Fig. 37.1, which arguably has to do with the requirements of the overall intonation pattern ending in (!)HL*. This is the same accent as the rise on the contrastive topic *Vova* in Fig. 37.3.

⁹With the exception of Upper and Lower Sorbian, which have basic SOV, presumably under the influence of German.

 10 King (1993) argued that this order is basic in Russian, but see Bailyn (1995, 2012) for extended criticism.

¹¹Narrative inversion is also found, for instance, in Germanic languages (Platzack, 1987; Önnerfors, 1997) and Modern Greek (Skopeteas, this volume).

¹² Godjevac (2006, p. 113) claims that VSO structures like (34) in BCS show the same broad/narrow focus ambiguity as SVO (11), and can answer both *What happened?*, *What did Jelena do?* and *What did Jelena buy?* type questions.

BCS

If this is true, then BCS differs in this respect from other Slavic languages, e.g. Russian. However, VSO structures (in Russian) can also result from contrastive topicalisation of V. This can go together with narrow focus on O, but in addition V must be a delimitation phrase. Such cases should not be confused with cases of narrative inversion.

¹³An alternative view advocated by Šimík and Wierzba (in revision): Constituents that otherwise would bear nuclear accent are deaccented due to givenness or narrow focus (cf. section 37.1), and move away from the right periphery to create the optimal order with sentence final accent.

¹⁴The accented object is preposed to an infinitival head here, but there is no reason to assume different basic orders for infinitival vs. finite VPs (see e.g. Bailyn, 2012). That is, object preposing to the finite verb studied by Dyakonova (2009) and example (17) are probably manifestations of the same phenomenon.

¹⁵West and South Slavic languages have elaborate systems of pronominal clitics whose ordering with respect to each other and other elements in the clause obeys its own laws driven by grammar rather than information structure (see esp. Franks and King, 2000, and section 37.3 below). In East Slavic languages such as Russian and Ukrainian, positioning of pronominal objects is more flexible and resembles that of given/topical full DPs.

¹⁶Sometimes a distinction is made between clitic doubling that results from left or right dislocation (well-known from Romance languages, cf. López, this volume) and *genuine* clitic doubling, which is independent of dislocation. The latter view is advocated by e.g. Radeva-Bork (2012) for Bulgarian and by Marušič and Žaucer (2009) for a dialect of Slovenian.

¹⁷The pro-drop characteristic of East Slavic languages (Russian) is debated, and even if these languages are pro-drop, the contextual conditions under which null subjects are appropriate are considerably more restricted than in West and South Slavic languages (Lindseth, 1998). East Slavic languages have also lost their auxiliary and pronominal clitics (Zalizniak, 2008).

¹⁸Of course, unstressed morphs can sometimes be accented precisely for the purposes of focusing, as in the famous example: *This wine was not exported, it was DEported.* However, at least in the case of Slavic clitics, this is perhaps a possible, but not the most common or unmarked way of expressing narrow focus. As in the wine example, it seems to focus the expression rather than its content.

¹⁹It is enough for the conjuncts to be just different along at least two dimensions (John \neq Bill, football \neq basketball) for the conditions for "mild" contrast to be met. There may but need not be any kind of antonymy or incompatibility relation between the contrasted terms.

 20 There are a number of exceptions to this generalisation. As I argued in Jasinskaja (2010), when one of the variables of the question is a polarity variable and that variable is instantiated in the subquestion, delimitation need not and sometimes cannot be expressed overtly. This situation arises mainly in corrective uses, and a small subset of mirative argumentative uses (cf. Kreidlin and Paducheva, 1974; Jasinskaja and Zeevat, 2008). For the rest, conjunction a shows a strong tendency to co-occur with contrastive topic or delimitation.

²¹Notable exceptions are Czech and Slovak, where i has a more limited distribution, while a is a rough equivalent of the English *and* covering both the "no contrast" and the "mild contrast" domain. The Slovenian system is also quite different.

References

- Abels, K., 2001. The predicate cleft construction in Russian. In: Franks, S., Holloway King, T., Yadroff, M. (Eds.), Formal Approaches to Slavic Linguistics. Michigan Slavic Publications, Ann Arbor, pp. 1–18.
- Aboh, E. O., Dyakonova, M., 2009. Predicate doubling and parallel chains. Lingua 119 (7), 1035–1065. Adamec, P., 1966. Porjadok slov v sovremennom russkom jazyke. Academia.
- Adamíková, M., 2004. Kontrast oder Korrektur? Prosodische Disambiguierung bei negationshaltigen Adversativ-Konstruktionen in den Westslavinen. Vol. 82 of Linguistische Arbeitsberichte. Institut für Linguistik, Universität Leipzig.
- Alter, K., 1997. Fokusprosodie im Russischen: Phonologische und akustische Korrelate von Informationsstrukturierung. In: Junghanns, U., Zybatow, G. (Eds.), Formale Slavistik. Vervuert, Frankfurt a. M., pp. 399–414.
- Arnaudova, O., 2001. Prosodic movement and information focus in Bulgarian. In: Franks, S., King, T. H., Yadroff, M. (Eds.), Formal Approaches to Slavic Linguistics 9. Michigan Slavic Publications, Ann Arbor, pp. 19–37.
- Arnaudova, O., 2005. Contrastive features, clitic doubling and the left periphery of the Bulgarian clause. In: Franks, S. (Ed.), Formal Approaches to Slavic Linguistics 13, The South Carolina Meeting 2004. Michigan Slavic Publications, Ann Arbor, Michigan, pp. 13–26.
- Asher, N., Lascarides, A., 2003. Logics of Conversation. Studies in Natural Language Processing. Cambridge University Press.
- Bailyn, J. F., 1995. A configurational approach to Russian "free" word order. Ph.D. thesis, Cornell University.
- Bailyn, J. F., 2012. The Syntax of Russian. Cambridge University Press.
- Bogusławski, A., 1986. *Also* from *all so*: On a set of particles in service of efficient communication. Journal of Pragmatics 10 (5), 615–633.
- Bolden, G. B., 2008. Reopening Russian conversations: The discourse particle *-to* and the negotiation of interpersonal accountability in closings. Human Communication Research 34 (1), 99–136.
- Bolinger, D., 1978. Intonation across languages. In: Greenberg, J. H. (Ed.), Universals of Human Language. Vol. 2. Phonology. Stanford University Press, Stanford, pp. 471–524.
- Bondaruk, A., 2009. Constraints on predicate clefting in Polish. In: Zybatow et al. (2009), pp. 65–78.
- Bonnot, C., 1986. Emplois de la particule *-to*. Les Particules Enonciatives en Russe Contemporain 1, 21–30.
- Bonnot, C., 1987. -*To* particule de rappel et de thématisation. Les particules énonciatives en russe contemporain 2, 113–171.
- Bošković, Ž., 2002. On multiple wh-fronting. Linguistic Inquiry 33 (3), 351–383.
- Bošković, Ž., 2009. Scrambling. In: Kempgen et al. (2009), pp. 714–725.
- Bryzgunova, E. A., 1980. Intonacija. In: Švedova, N. J. (Ed.), Russkaja grammatika. Tom 1. Nauka, Moskva.
- Büring, D., 2003. On D-trees, beans and B-accents. Linguistics and Philosophy 26, 511–545.
- Chomsky, N., Halle, M., 1968. The Sound Pattern of English. Harper and Row, New York.
- Crnič, L., 2011. Getting even. Ph.D. thesis, Massachusetts Institute of Technology.
- Daneš, F., 1960. Sentence intonation from a functional point of view. Word 16 (1), 34–54.
- Dogil, G., 1980. Focus marking in Polish. Linguistic Analysis Seattle, Wash. 6 (3), 221–245.
- Dvořák, B., 2003. Elliptische Prädikatisierung enklitischer Personalpronomina im Slowenischen. Philologie im Netz 26, 37–61.
- Dvořák, B., Gergel, R., 2004. Slovenian clitics: VP ellipsis in yes/no questions and beyond. In: Comorovski, I., Krifka, M. (Eds.), Proceedings: Workshop on the Syntax, Semantics and Pragmatics of Questions. pp. 85–91.
- Dyakonova, M., 2009. A phase-based approach to Russian free word order. Ph.D. thesis, University of Amsterdam.
- Erechko, A., 2002. Subject-verb inversion in Russian. In: Proceedings of the Eleventh Meeting of the

- Students of Linguistics in Europe (ConSOLE XI). University of Padua, Italy.
- Fanselow, G., Lenertová, D., 2011. Left peripheral focus: Mismatches between syntax and information structure. Natural Language & Linguistic Theory 29 (1), 169–209.
- Fanselow, G., Lenertová, D., Weskott, T., 2008. Studies on the acceptability of object movement to Spec, CP. In: Steube (2008), pp. 413–438.
- Fehrmann, D., 2004. Prosody in contrast: Prosodic distinction of contrast and correction readings of Polish adversative coordinate structures. In: Steube, A. (Ed.), Information structure: Theoretical and empirical aspects. Walter de Gruyter, pp. 307–343.
- Fehrmann, D., 2008. The syntax of contrast and correction readings of Polish adversative coordinate structures. In: Steube (2008), pp. 321–358.
- Féry, C., Paslawska, A., Fanselow, G., 2007. Nominal split constructions in ukrainian. Journal of Slavic Linguistics 15 (1), 3–48.
- Firbas, J., 1992. Functional sentence perspective in written and spoken communication. Cambridge University Press.
- Franks, S., 2005. Slavic languages. In: Cinque, G., Kayne, R. S. (Eds.), Handbook of Comparative Syntax. Oxford University Press, pp. 373–419.
- Franks, S., King, T. H., 2000. A Handbook of Slavic Clitics. Oxford University Press.
- Gast, V., van der Auwera, J., 2011. Scalar additive operators in the languages of Europe. Language 87 (1), 2–54.
- Girke, W., 1981. Zur Funktion von *i*, *takže* und *tože*. In: Hill, P., Lehmann, V. (Eds.), Slavistische Linguistik 1980. München, pp. 7–26.
- Godjevac, S., 2000. Intonation, word order, and focus projection in Serbo-Croatian. Ph.D. thesis, Ohio State University.
- Godjevac, S., 2006. Focus Projection in Serbo-Croatian. CSLI Publications.
- Gregory, M. L., Michaelis, L. A., 2001. Topicalization and left-dislocation: A functional opposition revisited. Journal of Pragmatics 33 (11), 1665–1706.
- Gundel, J. K., 1975. Topic-comment structure and the use of *tože* and *takže*. The Slavic and East European Journal 19 (2), 174–181.
- Hirst, D., Di Christo, A. (Eds.), 1998. Intonation Systems: A Survey of Twenty Languages. Cambridge University Press.
- Höhle, T., 1992. Über Verum-Fokus im Deutschen. In: Jacobs, J. (Ed.), Informationsstruktur und Grammatik. Westdeutscher Verlag, pp. 112–142.
- Ivić, M., 2004. The notion *verum focus* and its signalization in contemporary standard Serbian. Naš jezik 35, 1–5.
- Jasinskaja, K., 2010. Corrective contrast in Russian, in contrast. Oslo Studies in Language 2 (2), 433–466.
- Jasinskaja, K., Zeevat, H., 2008. Explaining additive, adversative and contrast marking in Russian and English. Revue de Sémantique et Pragmatique 24, 65–91.
- Jasinskaja, K., Zeevat, H., 2009. Explaining conjunction systems: Russian, English, German. In: Riester, A., Solstad, T. (Eds.), Proceedings of Sinn und Bedeutung 13. Vol. 5 of SinSpeC. Working Papers of the SFB 732. University of Stuttgart, pp. 231–245.
- Junghanns, U., 1997. On the so-called èto-cleft construction. In: Lindseth, M., Franks, S. (Eds.), Annual Workshop on Formal Approaches to Slavic Linguistics. The Indiana Meeting of 1996. Michigan Slavic Publications, Ann Arbor, pp. 166–190.
- Junghanns, U., Zybatow, G., 1997. Syntax and information structure of russian clauses. In: Browne,W. (Ed.), Annual Workshop on Formal Approaches to Slavic Linguistics. The Cornell Meeting 1995.Michigan Slavic Publications. Michigan, pp. 289–319.
- Junghanns, U., Zybatow, G., 2009. Grammatik und Informationsstruktur. In: Kempgen et al. (2009), pp. 684–707.
- Jurgec, P., 2007. Acoustic analysis of lexical tones in contemporary standard Slovenian. In: Proceedings of the 16th International Congress of Phonetic Sciences. pp. 1089–1092.

- Kallestinova, E. D., 2007. Aspects of word order in Russian. Ph.D. thesis, University of Iowa.
- Karagjosova, E., Jasinskaja, K., 2015. Predicate clefts in Bulgarian. In: Zybatow, G., Biskup, P., Guhl, M., Hurtig, C., Mueller-Reichau, O., Yastrebova, M. (Eds.), Slavic grammar from a formal perspective. Peter Lang, Frankfurt am Main, pp. 231–244.
- Kehler, A., 2002. Coherence, Reference, and the Theory of Grammar. CSLI Publications.
- Kempgen, S., Kosta, P., Berger, T., Gutschmidt, K. (Eds.), 2009. Die Slavischen Sprachen / The Slavic Languages: Halbband 1. Handbücher zur Sprach- und Kommunikationswissenschaft. De Gruyter.
- Kimmelman, V., 2009. On the interpretation of *èto* in so-called *èto*-clefts. In: Zybatow et al. (2009), pp. 319–328.
- King, T. H., 1993. Configuring topic and focus in Russian. Ph.D. thesis, Stanford University.
- Kochovska, S., 2010. Macedonian direct objects, clitics and the left periphery. Ph.D. thesis, Rutgers University, New Brunswick.
- Kodzasov, S. V., 1996. Zakony frazovoj akcentuacii. In: Nikolaeva, T. M. (Ed.), Prosodičeskij stroj russkoj reči. Institut russkogo jazyka Rossijskoj akademii nauk, Moskva, pp. 181–204.
- Kondrashova, N., 1996. The syntax of existential quantification. Ph.D. thesis, University of Wisconsin.
- König, E., 1991. The meaning of focus particles: A comparative perspective. Routledge.
- Kosta, P., Schürcks, L., 2009. Word order in Slavic. In: Kempgen et al. (2009), pp. 654–684.
- Krapova, I., Cinque, G., 2008. Clitic reduplication constructions in Bulgarian. In: Kallulli, D. (Ed.), Clitic doubling in the Balkan languages. John Benjamins Publishing Company, pp. 257–286.
- Kreidlin, G. E., Paducheva, E. V., 1974. Značenie i sintaksičeskie svojstva sojuza *a.* Naučno-texničeskaja informacija 1974 (9), 31–37, ser. 2, Avtomatizacija obrabotki tekstov.
- Krifka, M., 1999. Additive particles under stress. In: Proceedings of SALT 8. pp. 111–128.
- Krifka, M., 2008. Basic notions of information structure. Acta Linguistica Hungarica 55 (3), 243–276.
- Kučerová, I., 2007. The syntax of givenness. Ph.D. thesis, Massachusetts Institute of Technology.
- Ladd, D. R., 1996. Intonational Phonology. Cambridge University Press.
- Lambova, M. D., 2004. On information structure and clausal architecture: Evidence from Bulgarian. Ph.D. thesis, University of Connecticut.
- Lenertová, D., Junghanns, U., 2006. Fronted focus exponents with maximal focus interpretation in Czech. In: Schwabe, K., Winkler, S. (Eds.), On Information Structure, Meaning and Form. Benjamins, Amsterdam/Philadelphia, pp. 347–363.
- Lindseth, M., 1998. Null-subject properties of Slavic languages: with special reference to Russian, Czech and Sorbian. Sagner.
- Markman, V. G., 2008. Pronominal copula constructions are what? Reduced specificational pseudoclefts. In: Proceedings of the West Coast Conference on Formal Linguistics. Vol. 26.
- Marušič, F., Žaucer, R., 2009. On clitic doubling in Gorica Slovenian. In: Franks, S., Joseph, B. D., Chidambaram, V. (Eds.), A linguist's linguist: Studies in South Slavic linguistics in honor of E. Wayles Browne. Slavica Publishers, pp. 281–295.
- Mathesius, V., 1932. O požadavku stability ve spisovném jazyce (âĂŸon the requirement of stability for the standard languageâĂŹ). In: Havránek, B., Weingart, M. (Eds.), Spisovná čeština a jazyková kultura. Melantrich, Praha, pp. 14–31.
- Mauri, C., 2008. Coordination Relations in the Languages of Europe and Beyond. Mouton de Gruyter.
- McCoy, S., 2001. Colloquial Russian particles *-to*, že, and *ved'* as set-generating ("kontrastive") markers: A unifying analysis. Ph.D. thesis, University of New Hampshire.
- McCoy, S., 2002. Semantic and discourse properties of colloquial Russian construction of the form "X-to X, a...". Glossos 3.
- McShane, M. J., 2005. A theory of Ellipsis. Oxford University Press, USA.
- Mehlhorn, G., 2002. Kontrastierte Konstituenten im Russischen: Experimentelle Untersuchungen zur Informationsstruktur. Europäische Hochschulschriften. Peter Lang.
- Mehlhorn, G., Zybatow, G., 2000. Alte und neue Hüte der russischen Informationsstruktur. In: Linguistische Arbeitsberichte. Vol. 74. Institut für Linguistik, Universität Leipzig.
- Meyer, R., Mleinek, I., 2006. How prosody signals force and focus—a study of pitch accents in Russian

- yes-no questions. Journal of Pragmatics 38 (10), 1615–1635.
- Misheva, A., Nikov, M., 1998. Intonation in Bulgarian. In: Hirst and Di Christo (1998), pp. 275–287.
- Mykhaylyk, R., 2010. Optional object scrambling in child and adult Ukrainian. Ph.D. thesis, Stony Brook University.
- Mykhaylyk, R., 2011. Middle object scrambling. Journal of Slavic Linguistics 19 (2), 231–272.
- Önnerfors, O., 1997. On narrative declarative V1 sentences in German. In: Swan, T. (Ed.), Modality in Germanic Languages. De Gruyter, pp. 293–319.
- Paducheva, E. V., 1977. *Tože* i *takže*: vzaimootnošenie aktual'nogo členenija i associativnyx svjazej. Istitut russkogo jazyka AN SSSR. Problemnaja gruppa po èksperimental'noj i prikladnoj lingvistike. Predvaritel'nye publikacii (55), 3–13.
- Paducheva, E. V., 1980. Značenie i sintaksičeskie funkcii slova *èto*. In: Problemy strukturnoj lingvistiki. pp. 76–91.
- Paducheva, E. V., 1988. La particule *že*: Semantique, syntaxe et prosodie. Les Particules Enonciatives en Russe Contemporain 3, 11–44.
- Paillard, D., Plungjan, V. A., 1993. Ob odnom tipe konstrukcij s povtorom glagola v russkom jazyke. Russian Linguistics 17 (3), 263–277.
- Palková, Z., 1994. Fonetika a fonologie češtiny. Karolinum.
- Pesetsky, D. M., 1987. Paths and categories. Ph.D. thesis, Massachusetts Institute of Technology.
- Pierrehumbert, J., 1980. The phonology and phonetics of English intonation. Ph.D. thesis, MIT.
- Platzack, C., 1987. The case of narrative inversion in Swedish and Icelandic. Working Papers in Scandinavian Syntax (31), 9–14.
- Priestly, T. M. S., 1993. Slovene. In: Comrie, B., Corbett, G. G. (Eds.), The Slavonic Languages. Routledge, pp. 388–454.
- Progovac, L., 1998. Event pronominal to. Journal of Slavic Linguistics 6 (1), 3-40.
- Radeva-Bork, T., 2012. Single and Double Clitics in Adult and Child Grammar. Peter Lang.
- Rathmayr, R., 1985. Die russischen Partikeln als Pragmalexeme. Sagner.
- Reeve, M., 2008. A pseudo-biclausal analysis of Slavonic clefts. UCL Working Papers in Linguistics, 63–85.
- Reeve, M., 2012. Clefts and Their Relatives. John Benjamins Publishing Company.
- Reinhart, T., 1981. Pragmatics and linguistics: An analysis of sentence topics. Philosophica 27, 53–94.
- Restan, P., 1981. The position of the finite verb in some elementary declarative sentences in modern Russian. In: Jacobsen, P., Krag, H. L. (Eds.), The Slavic Verb: An Anthology Presented to Hans Christian Sørenson. Rosenkilde and Bagger, Copenhagen, pp. 147–160.
- Sgall, P., Hajičová, E., Buráňová, E., 1980. Aktuální členění věty v češtině. Academia.
- Siewierska, A., Uhlířová, L., 1998. An overview of word order in Slavic languages. In: Siewierska, A. (Ed.), Constituent order in the languages of Europe. Mouton de Gruyter, pp. 105–149.
- Slioussar, N., 2007. Grammar and information structure. A study with reference to Russian. Ph.D. thesis, Utrecht University, LOT publications.
- Smiljanić, R., Hualde, J. I., 2000. Lexical and pragmatic functions of tonal alignment in two Serbo-Croatian dialects. In: Okrent, A., Boyle, J. P. (Eds.), Proceedings from the Main Session of the 36th Regional Meeting of the Chicago Linguistic Society. Vol. 36. pp. 469–482.
- Steube, A. (Ed.), 2008. The Discourse Potential of Underspecified Structures. Vol. 8. De Gruyter.
- Stjepanovic, S., 2003. Multiple wh-fronting in Serbo-Croatian matrix questions and the matrix sluicing construction. In: Multiple wh-fronting. John Benjamins, pp. 255–284.
- Sturgeon, A., 2008. The Left Periphery: The interaction of syntax, pragmatics and prosody in Czech. John Benjamins.
- Svetozarova, N., 1998. Intonation in Russian. In: Hirst and Di Christo (1998), pp. 261–274.
- Tabakowska, E., 1989. On pragmatic functions of the particle *to* in Polish. In: Weydt, H. (Ed.), Sprechen mit Partikeln. Walter de Gruyter, pp. 535–545.
- Titov, E., 2012. Information structure of argument order alternations. Ph.D. thesis, UCL (University College London).

Tomaszewicz, B., 2013. *Aż/čak*—the scalar opposite of scalar *only*. In: Junghanns, U., Fehrmann, D., Lenertová, D., Pitsch, H. (Eds.), Formal Description of Slavic Languages: The Ninth Conference. Peter Lang, Frankfurt am Main [etc.], pp. 301–324.

Van Gelderen, V., 2003. Scrambling unscrambled. LOT, Utrecht.

Šimík, R., 2009. The syntax, semantics, and pragmatics of the focus particle *to* in Czech. In: Zybatow et al. (2009), pp. 329–342.

Šimík, R., Wierzba, M., in revision. The role of givenness, presupposition, and prosody in Czech word order: An experimental study, ms. University of Postdam, SFB 632.

Yanko, T. E., 2001. Kommunikativnye strategii russkoj reči. Jazyki slavjanskoj kul'tury.

Yokoyama, O. T., 1986. Discourse and Word Order. John Benjamins Publishing Company.

Yokoyama, O. T., 2001. Neutral and non-neutral intonation in Russian: a reinterpretation of the IK-system. Die Welt der Slaven 46, 1–26.

Yokoyama, O. T., 2009a. Discourse, sentence intonation, and word order. In: Kempgen et al. (2009), pp. 707–714.

Yokoyama, O. T., 2009b. Sentence and phrase intonation. In: Kempgen et al. (2009), pp. 115–128.

Zalizniak, A. A., 2008. Drevnerusskie enklitiki. Jazyki Slavjanskix Kul'tur, Moskva.

Zybatow, G., Junghanns, U., 1998. Topiks im Russischen. Sprache und Pragmatik 47.

Zybatow, G., Junghanns, U., Lenertová, D., Biskup, P. (Eds.), 2009. Studies in Formal Slavic Phonology, Morphology, Syntax, Semantics and Information Structure: Proceedings of FDSL 7, Leipzig 2007. Peter Lang.