Slavic clitics: A typology

2 authors:

Anton Zimmerling
Pushkin State Russian Language Institute

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Peter Kosta
Universität Potsdam

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Anton Zimmerling (Moscow) & Peter Kosta (Potsdam)

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Abstract

The paper offers a description of Slavic word order systems from the viewpoint of formal typology based on notions such as syntactic type, parametric settings, basic and derived order, linearization constraints, constituency, movement, spell-out, cliticity, clitic clusters, syntax-prosody interface, and grammaticalization. The aim is to classify Slavic word order systems with clitics on the basis of syntactic constraints without dependence on hypotheses about language-specific properties of prosodically deficient elements and to provide a viable typological classification, which can be verified by data from other world's languages.

Keywords: Clitics, clitic clusters, word order, linearization, parametric typology, constituency, Barrier Theory, minimality condition

1. Aims and framework

There is a line of research based on Zwicky's hypothesis that prosodically deficient elements, proclitics and enclitics, are also syntactically deficient and constitute a natural class definable in UG (Zwicky 1977). Along this line, the placement of clitics is determined by their intrinsic properties. Many linguists have worked out the insight that some of the mechanisms of clitic linearization work post-syntactically and are motivated by the need to resolve a mismatch between the output of the syntax and prosodic and/or morphological requirements (cf. Halpern 1966; Sadock 1995; Franks 2008: 95; Zalizniak 2008: 8). Recent studies of the syntax-prosody interface show an increase of the emphasis made on the prosodic component at the expense of syntax. The progress in the description of clitics is considerable. However, some constraints on the placement of clitics directly or indirectly entail constraints on the placement of non-clitic sentence categories. If constraints of the latter type are explained as an outcome of the allegedly purely prosodic or merely morphological ordering of clitics, there is a risk of overlooking syntactic mechanisms relevant for clausal architecture. Furthermore, formal theories often define the scope of syntax differently: in some accounts word order is excluded from the narrow syntax, while in other accounts ordered and re-ordered strings are generated in syntax. It is evident

that typology should not rely on only one of the competing versions of UG. Empirically oriented studies of clitics have shown that elements labeled "clitics" in the description of the world's languages are morphologically heterogeneous and may lack general taxonomic characteristics even within one and the same language, cf. surveys made by AIKHENVALD (2002) and ZIMMERLING (2012a).

Consistent prosodic approaches to Slavic clitics have shown that clitics sharing the same overt syntactic position at PF, may have different phonetic properties in the same language. A salient illustration is provided by the Vassiliev-Dolobko's law. In a group of Old Slavic dialects including Old Russian (henceforth OR), Slavic clitics from one subclass, the so-called dominant clitics, took over stress from a subclass of non-clitic words forms, the so-called enclinomina, cf. Russ *voz* 'carriage'. If a phonetic word consisted of an enclino-menon hosting enclitics, the stress fell on the rightmost enclitic: {*I ne na voz žé*} 'and not on the carriage THEN'. If no enclitics were present, the stress fell on the left-most proclitics: cf. {*Í ne na voz že*} 'AND not on the carriage' (DYBO 1975). Clitics from a different subclass (non-dominant clitics) did not take the stress from enclinominal hosts.

These state-of-the-art observations indicate that the borderline between the syntax and the prosody of clitics remains unclear and the set of non-syntactic features of clitics {prosodic features $P^1, P^2… P^n$ and morphological features $M^1, M^2… M^n$} is hardly a more secure basis for the analysis of word order systems with clitics than the set of constraints on word order. Therefore, in this paper we opt for a syntactic approach to Slavic word order systems with clause-level clitics. The paper has the following structure: in section 2, we analyze properties of cliticization and clitic clusters in Slavic languages; in section 3, we present the so-called Barrier Theory which explains both the late placement of clitic clusters and the splitting of clusters in syntactic terms; in section 4, Slavic word order systems are classified in four types; in section 5, we argue in favor of a unified syntactic analysis of Slavic clitic systems; in section 6, we concentrate on the phenomenon of Possessor Raising and outline a possible solution to this phenomenon; section 7 closes the paper with brief conclusions.

2. Clitic cluster

A prominent feature of Slavic word order systems is the existence of grammaticalized constraints on the placement of clause-level clitics. In a class of modern and old Slavic languages clause-level clitics form ordered clusters (or "clitic groups"). Clitic clusters are contiguous strings of clitics arranged in a rigid order according to language-specific rules called "Clitic Templates" in FRANKS & KING (2000), BROWNE (2008) or "Ranking Rules" in ZALIZNJAK (1993, 2008), ZIMMERLING (2006; 2012a), TOLSTAJA (2012).

2.1. The internal structure of Slavic NPs/DPs and cliticization

Our contribution highlights the fact that until now not many scholars have investigated the fact that clitics can appear in domains smaller than the clause. Languages seem to differ dramatically with respect to the possibility of deploying pronominal clitics in NPs/DPs. Whereas this is not generally tolerated in Romance, Slavic displays considerable variation. The facts are discussed in depth in FRANKS (2001). In his article, FRANKS shows some of the puzzles presented by Noun Phrases (NPs) in Slavic, and focuses in particular on the

distribution of clitics inside Determiner Phrases (DPs) in Bulgarian (Bg). One of the most striking facts about the use of pronominal clitics inside NPs is that they are not as free as one would expect – under the erroneous assumption that they are simply more laconic versions of full NPs. Their distribution ranges from relatively unrestricted, as in Polish (Pol), to completely disallowed, as in Czech (Cz) and Serbian/Croatian (SC). Most telling, however, is Bg, where pronominal clitics are employed inside NPs, but with restrictions peculiar to this particular domain.

FRANKS turns to the systems in which NP-internal clitics either appear as regular arguments or are completely unacceptable. Polish represents the former extreme.

(1)   Pol

(1a)   *zrozumienie*   ***cię***
        understanding.SG.N   you.CL.GEN
        'Informing you'.

(1b)   *moje   pomaganie   mu*
        my.SG.N   helping.SG.N   he.CL.DAT
        lit. 'my helping to him'.

(1c)   *ich zaproszenie   go   na obiad*
        they.GEN.inviting.SG.N   he.CL.GEN.M   to lunch.ACC
        lit. 'their inviting of him to lunch'.

The opposite extreme is represented by Second position clitics languages (2P clitic languages) such as SC, Slovene (henceforth Slv), Cz and Slovak (henceforth Svk), which tolerate no NP-internal clitics. Consider the SC example in (2) and the Cz example in (3):

(2)   SC   [*predstavljanje   njega/**ga**   Mariji*]
              [introduction.NOM.N   he.GEN/*he.CL.GEN   Maria.DAT.F.3SG]
              je   iznenadilo   svakoga.
              be.AUX.3SG   surprise.PRF.3SG.N   anyone.ACC.M
              'Introducing him to Maria surprised everybody'.

(3)   Cz   [*potupa   jeho/**ho**]   zahanbila*
              [disgrace.NOM.SG.F he.GEN/*he.CL.GEN   embarrass.PRF.SG.F
              celý   národ
              entire.ACC.SG.M   nation.ACC.SG.M
              'His disgrace embarrassed the whole nation'.

Only the full pronominal *njega*, *jeho* can appear inside NP, never a clitic, such as *ga*, *ho*. In Macedonian (Mac) and Bg, on the other hand, pronominal clitics are common in the nominal domain, although with various restrictions (especially in Mac). Thus, the formally dative clitic *ni* 'our' in Bg (4) is acceptable only in a definite DP, and only in the position indicated:

(4)   Bg

(4a)   *stolicata   ni   // [*stolica ni*]
        capital.DEF   our.DAT
        'our capital'.

(4b) *mladata   ni   stolica*   // [*mlada ni stolica*]
     young.DEF   our.DAT   capital
     'our young capital'.

(4c) *večno   mladata   ni   stolica*
     eternally   young.DEF   our.DAT   capital
     'our eternally young capital'

(4d) [*večno mlada ni stolica*]

Furthermore, as FRANKS (2001) and FRANKS et al. (2005: 32) point out, *mu* in (5) can potentially refer to the AGENT or to the THEME of *predstavjaneto* 'introducing' but never the GOAL:

(5) Bg *predstavjaneto*   **mu**
       introducing.DEF   he.DAT
       'his introducing (he introduces so)'
       'the introducing of him'
       '*the introducing to him (so. by so else)'

These and related issues are examined in detail in FRANKS (2001; 2008) and also in CINQUE & KRAPOVA (2009) and we only refer the reader to them taking up the topic of NP/DP internal clitics in section 6. Finally, there remains the overarching question with far reaching typological consequences of why DP-internal clitics exist in Bg and Mac in the first place, since they are inadmissible in the other Slavic languages. If we take the arguments in RUTKOWSKI (2002) for granted, the noun/pronoun asymmetries and the distinction of qualifying vs. classifying adjectives seem to confirm the hypothesis that both Bg/Mac and Pol allow for cliticization inside the DP domain as consequence of the greater functional structure available in these particular languages or of the fact that they employ a Verb-Adjacent (VA) rather than 2P clitic placement strategy. Answering this question involves both further typological research and a more carefully articulated theory of cliticization in which to interpret this research. In the section 6 below, we try to go more deeply into this problem turning first to the more general problem of Clitic Cluster and the Template Principle.

2.2. Clusters and the template principle

Let us use the sign "=" as a marker for a clitic boundary. The notation $X = a°$ reads "clitic a is attached to category X from the right" and a notation like $a°= X$ reads "clitic a is attached to category X from the left". A cluster is by definition a string of clitics that neither allows insertion of non-clitic elements nor permutation of clitics, when they are contiguous. Therefore, Ranking Rules/Template Principles predict that for each two clitics a°, b° belonging to a ordered cluster [$_{CliticP}$ a°, b°, c°… n°] a linear relation of the type 'a° > b°' ('a° precedes b°') can be established and no alternative ordering is permitted if a° and b° are contiguous. If the clitics take a distant position and do not form a single string, this requirement does not hold. That is, if *a°, b°, c°* are clitic heads belonging to a cluster [$_{CliticP}$ a°, b°, c°… n°], sequences like *X=b° (2)=c° (3)= a° (1) are excluded, if all these clitics are attached to one and the same sentence category X, but if *b°, c°* attach to X, while *a°* attaches to Y, sequences like X=b° (2)=c° (3) Y= a° (1) are possible. Contrary to

Bošković (2001: 21), disjoint placement of clusterizing clitics does not by itself defy the existence of clusters if the Template Principle is not violated and syntactic configurations with cluster splitting can be proved to be derived from configurations without splitting. Rules triggering cluster splitting are called "Barrier Rules" in the tradition based on Zaliznjak (1993: 288) (cf. also Zimmerling 2009b). It is plausible to assume that the same mechanism – Barrier Rules – also triggers configurations with so-called late clitic placement, where the whole cluster attaches not to the first sentence category X but to some category Y to the right of X: $[X]… Y = a° (1) = b° (2) = c° (3)$. We address this issue later in this paper in section 3.

2.3. *Clause-level clitics and clusterization in Slavic*

Slavic languages only have clause-level clusterizing clitics and lack clusterization in non-predicative phrases. This feature is typologically common but not quite trivial. Some other languages allow clusterization of clitics both at the clause-level and at the phrase-level. E.g., the Arawak languages Warekena (Aikhenvald 1998: 259) and Tarjana (Aikhenvald 2002: 59–60) use clitic clusters both in VP and NP, and the Wakashan languages Makah and Ditidaht, according to Werle (2007), have both clausal 2P clusterizing clitics and NP-level clusterizing clitics. In Slavic languages this is strictly prohibited: the clusterizing capacity of a Slavic clitic indicates that it is a clause-level element; in the standard case it is hosted by the first syntactic element.[1]

The positioning of Slavic clitic clusters/clusterizing clitics is subject to two relevant syntactic conditions:

(i)   Clusterizing clitics must have a slot in a Clitic Template, available only for this particular clitic or for this type of clitic (e.g., all argument dative clitics if they take the same slot in this language). Other clitics and non-clitic words do not have slots in Clitic Templates.

(ii)   Clitic clusters/clusterizing clitics have a fixed position in the clause, they attach to the clause-initial element and form Clitic-Second orders in communicatively unmarked sentences.[2]

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[1]   It is not clear whether those Slavic complementizers that originated as combinations <u>proclitic</u> + <u>enclitic</u> and include bound enclitics, cf. OR *ašče=li* 'if' should be analyzed as phrases in Old Slavic texts or just as clitic words. In most cases bound enclitics do not clusterize but there can be ambiguous situations. E.g., OR had a rule of adding an affirmative clitic particle *že* to the first phonetic word of the final clause of a period, and *že* in this function does not seem to behave as a bound element since it can attach to all-kinds of clause-initial elements. The same clitic *že* as a free clause-level element was part of a clitic cluster where it took the left-most slot. Therefore, one can interpret sequences like =*že*=*s'ǫ* in OR No=li kŭ starosti, to=*že*=*s'ǫ* <u>postrigou</u> 'But when I approach my old age, then I'll make a monk' as clusters, i.e. to treat the particle =*že* and the accusative reflexive =*s'ǫ* as clitics of the same syntactic level. An alternative possibility is to postulate a special projection, Complementizer Phrase, serving as a host for free clitics: [CompP to=*že*]= *s'ǫ*. The problem of automatic recognition of clusters is discussed in Zimmerling (2012c).

[2]   Clitic-Second orders may also occur in communicatively marked sentences, as. e.g. in colloquial Cz: {Contr. Topic [XP [NP Petra] [PP do Francie]]} (1) = *bych* (2) *ještě poslal, ale Martina do Maďarska ani náhodou* 'I would send Petr to France, but never Martin to Hungary' – the example is from Hana (2008). But this is due to a special parameter setting – in Cz main clauses, multi-word initial constituents serve as possible hosts for clusterizing clitics, and Cz seldom if ever makes use of derived Clitic-Third orders like * [XP [NP Petra] [PP do Francie]] (1) <u>poslal</u> (2) = *bych* (3) ještě.

Clusterizing clitics conforming both to (i) and (ii) will be referred to as (clausal) 2P clitics. Clusterizing 2P clitics are not selective and can be inserted into different syntactic environments. In Slavic main clauses and embedded clauses without an overt complementizer, they freely attach to different kinds of initial elements. At the same time, word order systems with 2P clitics are restrictive and allow only one constituent before the clitic position: Comp/XP–CL (cf. Progovac 1996, Ćavar & Wilder 1999). This constraint is of special importance to Slavic languages, since they allow discontinuous constituents and exhibit many types of scrambling: arguments belonging to the same verbal head or even to different verbal heads often may be scrambled in their domain without yielding ungrammaticality (cf. Kosta & Schürcks 2009: 655–658). The fixed position of Slavic clitic clusters in a clause imposes a constraint on scrambling. Clitic-second orders are permitted only if syntax licenses the material before the clitics and recognizes it as a single constituent.

2.4. Syntactic clitics and prosodic clitics

Most surveys of word order systems with clitics start with a detailed discussion about general criteria of cliticity in UG. We will skip this discussion, since for the aims of our paper, it is irrelevant whether Slavic 2P clitics share all taxonomic properties with elements labeled 'clitics' in the descriptions of the other languages of the world. However, we specify that our approach involves analysis of syntactic, not prosodic, clitics. Prosodic clitics are elements that cannot make a phonetic word when used in isolation and must combine with other elements (both non-clitics and clitics if a language allows allclitic words). Prosodic clitics form one phonetic word with their host. Syntactic clitics are elements taking positions that are reserved for prosodically and/or syntactically deficient expressions. It is clear that not all combinations of Slavic 2P clitics with their syntactic host – the category standing in Comp/XP – are phonetic words, since in most Slavic languages the initial group may consist of two or more stressed word forms. Furthermore, there may be a mismatch of prosodic vs. syntactic properties of 2P clitics. For instance, Bg 2P pronominal and auxiliary elements, from a syntactic point of view, are strict enclitics since they cannot be fronted and require a spelled-out host in XP. At the same time, they may occur after a pause under certain conditions as mentioned, e.g., in Franks (2008: 100) and Kosta (2009c: 353). In a similar way, Slv 2P pronouns and BE-auxiliaries lack stress and are true prosodic clitics: they can be fronted in communicatively marked contexts, but the markedness of these contexts suggests that their canonical position is 2P and from a syntactic viewpoint they are mild enclitics. Slv also has 2P modal auxiliaries like *mora* 'must' which seldom leave clausal 2P and are almost never fronted (Golden & Milojević Sheppard 2000). The paradox is that strict encliticity of Slv *mora* cannot be explained by prosody, since *mora* is a stressed word. A similar observation on a different kind of syntactic 2P clitics in the Ukrainian dialect of Sinevir is made by Tolstaja (2012).

Consistent prosodic theories of Slavic clitics, cf. Dybo (1975), account for the fact that clitics are a phonetically heterogeneous class and that combinatory features of deficient elements may differ: a subclass of Common Slavic clitics used to take stress from a subclass of non-clitic words, while another subclass of clitics did not possess this capacity. For a consistent syntactic theory all purely phonetic/prosodic features of a subclass of clitics are irrelevant – it does not matter, whether e.g. all 2P clitics are stressed or unstressed, high tonal or low tonal etc., if all of them exhibit a uniform syntactic behavior. At the same time, it is reasonable to assume that if a language grammaticalizes a sequence of 5–7 elements

with weak stress/without stress and arranges them in a rigid order, such sequences do not violate prosodic conditions of this language.

We will advance a view that a Clitic Phrase (CliticP), i.e. a sequence of clusterizing clitics generated by some clitic template, should be analyzed as a syntactic unit. A single clusterizing clitic taking 2P is interpreted as a manifestation of CliticP. We do not stipulate, whether all clitics in languages with clitic clusters should invariably be analyzed as heads (X°) or left-branching elements (X°/XP), cf. Bošković (2001), but we hope that our analysis is compatible with either approach.

For the sake of explicitness we render two state-of-the-art generalizations:

(iii)   Slavic clusterizing clitics can only be clause-level clitics and take clausal 2P with the basic word order.
(iv)   Slavic languages do not have any other type of clusterizing elements, except for clausal 2P clitics. Clausal 2P elements do not clusterize with non-clitic words.

In the light of (iii) and (iv), the object of our analysis may be defined as "clusterizing clausal 2P elements, which behave as syntactic clitics and impose constraints on the placement of other sentence categories".

2.5. Areal Slavic types of a clitic template

Originally, all Slavic languages had clusterizing clause-level clitics: according to the prediction (ii), they took clausal 2P in sentences with the basic word order Comp/XP–CL, without Barrier Rules. This is attested by the Old Novgorod Russian (ONR) system (11th–15th centuries) thoroughly investigated by Zaliznjak (1993: 280–308). The Old South Russian (OSR) word order system and, to a somewhat lesser extent, Old Church Slavonic (OCS) Russian system with clausal clitics are derivable from the ONR system but have an increased number of Barrier Rules shifting clause-level clitics to the right from 2P, which is proven in Zaliznjak (2008). This gives the impression that the principle of 2P placement did not hold for OR and OCS clitics, or at least for some categories of clausal clitics, notably for short pronouns which regularly showed up in the VP in these languages. However, if one analyzes the order Comp/XP… [Y]–CL as derived, not as basic, and explains it with Barrier Rules, the late placement of OSC and OCS clusterizing clitics is no longer a valid argument against the theory that their canonical position is 2P. Nevertheless, neither OSC nor OCS are standard representatives of their syntactic type, since the percentage of clauses, where all clusterizing clitics assume a contiguous position and take clausal 2P are considerably lower than in other Slavic languages such as ONR, Cz, SC, Slv, or Bg.[3]

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[3]   There is a trend in Slavic studies to exclude Bg and Mac from the list of languages with 2P pronominal and auxiliary clitics and to analyze them as verb-adjacent elements, typically left-adjoined to V or VP, cf. Rå Hauge (1976), Halpern (1996), or even as "agreement morphemes" located in the verbal complex, cf. Franks (2008). Nevertheless, no analysis of the Bg word order system can ignore the fact that there is a constraint on the number of groups preceding pronominal and auxiliary clitics. Cf. Bg [Kupil bih]=ja knigata 'I would rather buy this book', lit. '[bought would-1sg] = it the book', *[knigata] [kupil bih]=ja, *[Kupil-bih] [knigata]=ja. This is a reason enough to state that from a viewpoint of linearization constraints, the principle of 2P placement is not violated in Bg, whatever the reason may be. The analysis of Bg as a language with 2P clitics has a long tradition going back to Jakobson (1971) and Gălăbov (1950), cf. also Dimitrova-Vulchanova (1999). Speaking of Mac,

As for Modern Slavic languages, the presence/absence of constraints on the placement of clitics divides them into two groups. All present-day Slavic idioms have clitics, but clusterizing clitics are only attested in South and West Slavic areas. East Slavic languages – standard Russian (Ru), standard Belorussian (Blr) and standard Ukrainian (Ukr) – lack clusterizing clitics[4] and grammaticalized constraints on the placement of 2P clitics and on the licensing of their hosts. Such constraints are found elsewhere in South and East Slavic. Historically, the absence of clusterizing clitics in the East Slavic area results from the decline of short pronouns, but for synchronic typology this detail is irrelevant.

DIMITROVA-VULCHANOVA (1999: 83) in her survey of Slavic word order systems classifies them according to the presence/absence of *pronominal* clusterizing clitics. A salient feature of this type of clitic is the presence of two series of forms: short forms behave as clitics and are generally excluded from contexts involving contrast, emphasis and coordination (ZALIZNJAK 2008: 130), while long forms are stressed, emphatic, and pattern with NPs in syntax.[5] Historically, a majority of Slavic object and reflexive clitics was inherited from Proto-Indo-European,[6] while the minority was built on the basis of Slavic long forms within the written history of Slavic languages, e. g., late contractions **jemu > mu*, **jega > ga*. The presence of short pronouns is helpful for tagging Old Slavic texts, since already the morphology of such elements suggests that they are clitics, while the procedure of checking the status of clitics homonymous to their stressed correlates is complicated and involves analysis of the syntactic configuration.[7] This technical aspect notwithstanding, the presence of clusterizing particles and clustering auxiliaries is just as salient for West Slavic, South Slavic and Old East Slavic languages as the presence of clusterizing pronominal clitics. We therefore extend DIMITROVA-VULCHANOVA's generalization to all clusterizing elements:

a straightforward analysis of this language as a word-order system without a 2P-constraint is problematic since in non-verbal clauses Mac pronominal and auxiliary clitic behave as strict 2P-clitics and cannot be fronted (MIŠESKA TOMIĆ 2004: 226; MIŠESKA TOMIĆ 2012).

[4] Clusterizing clitics are still characteristic of some Carpatian Ukrainian dialects (TOLSTAJA 2012), but the word order systems of these dialects are rooted in the previous stage of Old Ukr/OSR: there is no way to derive them directly from the word order system of standard Modern Ukr.

[5] We are abstracting from the analysis of CARDINALETTI & STARKE (1999), who divide syntactically deficient pronominal elements into two groups: clitics in the proper sense of the term (both prosodically and syntactically deficient, often morphologically different from the corresponding stressed form) and so-called weak pronouns (syntactically deficient, but not necessarily prosodically deficient; are often morphologically homonymous to the corresponding strong (i.e. emphatic) form and sometimes show up in the same surface positions as strong forms). This theory may turn useful for some other kinds of Slavic clitics but for Slavic pronominal clitics it is redundant, since short pronominal forms, with few exceptions, make a complementary distribution with the corresponding long forms, i.e. strong pronouns in terms of CARDINALETTI & STARKE.

[6] Common Slavic inherited two series of pronominal and reflexive clitics and the mapping: short form = clitic, long form = non-clitic word. The paradigms of short pronouns were at the beginning defective: ONR and OSR lacked 3rd person clitic pronouns in the dative case, ZALIZNJAK (1993: 290), but in Modern Slavic languages they are more or less symmetrical to the paradigms of long pronouns, except for the nominative forms.

[7] Somewhere medieval Slavic texts, however, give us some cues about the pronunciation of clitics homographous to non-clitic elements. E.g. the author of 'Voprošanije Kyrikovo' (OR, mid 12th century) used to insert parenthetical verb forms *reče* 'he said' and *rěxъ* 'I said' after clitics and clitic clusters but never split sequences host word + enclitic with a parenthetical. Therefore, the insertion of the parenthetical *reče* 'he said' after the auxiliary *jesmy* AUX.1PL but not in between the clitic =*bo* and the auxiliary *jesmy* in a sentence like OR dŭlžny=*bo*= *jesmy*, #**reče**#, vsjakogo xrest'janina, jako svąta mněti 'we must but – **he said** – to treat each Christian as a saint' indicates that =*bo*= *jesmy* make up a cluster and confirms that the sequence dŭlžny=*bo*= *jesmy* is a single phonetic word.

(v)   Slavic languages with clusterizing pronominal clitics always have other types of clusterizing clitics. (Modern East) Slavic languages lacking clusterizing pronominal clitics lack other types of clusterizing clitics as well.

Given that all clusterizing Slavic elements are clause-level 2P clitics (see above) the generalization (v) predicts that pronominal 2P clitics always clusterize with other types of clausal 2P clitics. This prediction is correct. As early as 1935, Roman Jakobson observed that Slavic clitic clusters typically consist of two main blocks: clusterizing particles and clusterizing pronouns as well as auxiliaries. More recent and more elaborate approaches to Slavic clitic templates show that the distinction of clitic pronouns and clitic auxiliaries is relevant. There are three areal types of Slavic clitic template: they are distinguished by the location of a slot for present tense indicative BE-auxiliaries. The West Slavic type of clitic template locates 1–2 person present tense indicative BE-auxiliaries immediately before the block of clitic pronouns [REFL + DAT + ACC]. Let us refer to this slot as AUX1.

(6)   West Slavic type of a clitic template
        [Clitic Phrase [Clitic Phrase AUX1] [Clitic Phrase Pronouns: REFL – DAT – ACC]][8]

The Old Novgorod/East Slavic type of a clitic template locates 1–2 p. present tense indicative BE-auxiliaries immediately after the block of clitic pronouns: [Clitic Phrase … [DAT + ACC]…]. We refer to this slot as AUX2.

(7)   ONR/East Slavic type of a clitic template
        [Clitic Phrase … [Clitic Phrase Pronouns: DAT – ACC] [Clitic Phrase AUX2]][9]

Finally, South Slavic languages make use of both AUX1 and AUX2. All 1–2 p. present tense indicative BE-auxiliaries and all 3 p. present tense indicative BE-auxiliaries except for 3SG =*je* take AUX1, while 3SG =*je* takes AUX2. This peculiar split-auxiliary placement is due to the fact that 3SG =*je* was made part of the clitic template considerably later than other forms from the present tense indicative BE-paradigm (Zimmerling 2002: 82; 2012b).[10]

(8)   Balkan Slavic type of a clitic template
        [Clitic Phrase … [Clitic Phrase AUX1] [Clitic Phrase Pronouns: REFL + DAT + ACC + GEN] [Clitic Phrase AUX2]]

AUX1 and AUX2 may attract new layers of auxiliary clitics, but Slavic languages exploit this resource to different degrees. In the ONR type AUX2 is not available for later layers of clitics. In the West Slavic type AUX1 hosts conditional BE-auxiliaries (they cannot co-occur here with present tense BE-auxiliaries). In the Balkan type both AUX1 and AUX2 are available for later layers of auxiliary clitics: AUX1 hosts conditional BE-auxiliaries (SC), future tense auxiliaries from the *hotěti stem (SC), while AUX2 may host future tense BE-auxiliaries (only in Slv). In Bg, neither AUX1 nor AUX2 are available for later layers of clitics.[11]

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[8] In the West Slavic languages AUX1 also hosts conditional forms of BE, cf. Cz *bych*, *bys*, *by* etc.
[9] In the ONR/East Slavic type of a clitic template the slot AUX2 does not host any other auxiliaries except for the 1–2 p. present tense indicative BE-forms.
[10] Note that neither West nor East Slavic languages had 3rd person present tense indicative BE-auxiliaries at all.
[11] The future tense operator *šte* is not part of the Bg clitic cluster, although it may assume a contact position with it. *Šte* can be fronted, while Bg clusterizing clitics cannot. *Šte* also takes effect on the place-

If neither AUX1 nor AUX2 are available, Slavic languages may open new slots for new types of auxiliaries. This strategy is attested at least twice. Late OR (16th–17th centuries) locates past tense BE-auxiliaries (used in the pluperfect construction) after AUX2. Let us refer to this slot as AUX4.

(9) Late OR subtype of a clitic template
[Clitic Phrase ··· [Clitic Phrase Pronouns: DAT + ACC] [Clitic Phrase AUX2] [Clitic Phrase AUX4]]

(10) OR A čto=*ti*=*s'ǫ*=*jesmŭ*=***byl*** otstupil dani (1388 AC)[12]
and that CL._{DAT} REFL.CL._{ACC} BE.CL._{AUX.PRS.1SG} BE.CL._{AUX.PST.1SG} give.up.PRF.3SG.M contribution GEN.SG.F
'that I **had** given up the contribution in your favour.'

The Carpatian Ukrainian dialect of Sinevir locates past tense BE-auxiliaries (in the same pluperfect construction) in AUX2: here, this slot remains available for past tense BE-auxiliaries, while present tense BE-auxiliaries take AUX1 in the Sinevir template. This West Slavic feature in the East Slavic area is likely due to the Polish influence. At the same time, the Sinevir system, unlike pure West Slavic and Balkan Slavic systems, does not put BE-conditionals in the AUX1 slot but opens a new slot for them to the left of AUX1. This feature suggests that the Sinevir system initially belonged to the ONR/East Slavic type [Clitic Phrase [Pronouns [AUX2]] but at some moment was rearranged according to the West Slavic type [Clitic Phrase [AUX1] [Pronouns]]. As a result, the Sinevir dialect displays a rare combination of three AUX slots associated with three different kinds of auxiliaries.

(11) Carpatian Ukrainian subtype of a clitic template
[Clitic Phrase ··· [Clitic Phrase AUX3] [Clitic Phrase AUX1] [Clitic Phrase Pronouns] [Clitic Phrase AUX2]]

(12) Ukr. Dial. Ja=*s'a* [ščós'] [use] yr'ixuju, [CP ščo može vűn des'=***s'a=boow*** [ɪ] napıw][13]
I REFL.CL._{ACC} now all.this blame.PRS.1SG [that maybe he here REFL.CL._{ACC} BE.CL._{AUX.PST.3sg.m} drink.PRF.3SG.M]
'I am still blaming him for that he probably got drunk right here', lit. 'that he here=***himself=had*** drunk'

The entire clitic template of the Sinevir dialect is shown below in Figure 1: we rely on the description given by TOLSTAJA (2012).[14]

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ment of *li* and acts as a Barrier: * *šte=li xodil?* → *šte xodil=li?* Such effects were impossible if both *šte* and *li* belonged to the same clitic template. In Mac, the future tense operator *ḱe* has the same prosodic features as Mac clusterizing clitics (except for *li*), so a decisive test for *ḱe* is whether *ḱe* can be a Barrier for any clusterizing clitics, for instance *ḱe=li* in **ḱe=li=xodil tam.*

[12] The OR examples are quoted here in a simplified form: we disclose the tittles and diacritics and spell out the superscript letters.

[13] In the Sinevir dialect clusterizing clitics are not verb-adjacent. Cf. stressed elements [ščós'] and [use] intervening between a 2P clitic =*s'a* and the verb yr'ixuju in the first clause, the proclitic [ɪ] intervening between a string of 2P clitics ***=s'a=boow*** and the verb napıw in the first second clause. The clitic basis in the second clause is the group [vűn des'] 'he here'.

[14] TOLSTAJA does not use a uniform templatic notation for the sentences in the indicative and in the conditional moods.

In Slavic clitic templates, 2P particles normally precede the block of pronouns and auxiliaries, irrespective of the fact, whether the auxiliaries take AUX1, AUX2 or both slots.[15] In the most transparent case, the blocks of 2P particles, 2P pronouns and 2P auxiliaries do not intersect in a template: clitic strings consisting of 2P particles cannot be intervened by any 2P auxiliaries and vice versa. This condition is shown in (vi): the capital letters A, B, C are for different categories of clusterizing clitics, the lowercase letters with indexes a^1, b^1, c^n are for particular clitics representing categories A, B, C.

AUX3		AUX1	Pronouns			AUX2
1	2	3	4	5	6	7
byti, Optative 1–2 p.	Particle	*byti* 1–2 P. Present Tense	DAT	ACC	REFL	AUX *bool-/boow* in the Pluperfect
bɪm (*boom*), *bɪs'*, *bɪsme*, *bɪste*	*Boo*	(*ė*)*m*, (*ė*)*s'*, *sme*, *ste*	I. – noncorrelative: *mi, ti, si, mu, ji* (*juj*) II – correlative: *nam, vam, jim, nim*	I. – noncorrelative: *n'a, t'a, s'a, go, ji*; II – correlative: *nas, vas, jix, nix,* III. – preposition ACC.: *na n'a, u t'a*, etc.	*s'a*	*Boow, boola, boolo, booli*

Figure 1: The clitic template of the Sinevir dialect[16]

(vi) $[_{\text{CliticPhrase}} [_A a^1, a^2..a^n] [_B b^1, b^2… b^n] [_C c^1, c^2…c^n]]$.

The ONR clitic template is a close approximation to the ideal pattern (vi), except for the fact that it has only one slot for the auxiliary clitics. In this system, all 2P particles precede all 2P pronouns, and all 2P pronouns precede all 2P auxiliaries.

A					B		C
Particles					Pronouns		Present tense indicative BE-auxiliary
1	2	3	4	5	6	7	8 = AUX1
Affirm	Quest	Cause	Evid	Opt	Dative 1–2 p. (incl. DAT.REFL)	Accusative 1–3 p. (incl. ACC. REFL)	1–2 p. SG.DU.PL
že	*li*	*bo*	*ti₁*	*by*	*mi, ti₂, si, ny, vy, na, va*	*m'ą, t'ą, s'ą, ny, vy, na, va, i, ju, je, ě, ja*	*jesm', jesi, jesme, jeste, jesvě, jesta*

Figure 2: ONR clitic template

[15]   The deviation from this principle of particle placement is possible in only one situation: where Slavic languages lost old clusterizing 2P particles and then inserted some of them into different slots or added new particles. Cf. 2P particles *pa* and *že* in Slv: the first of them stands at the left margin of the Slv clitic template, while Slv *že* stands at the right margin.

[16]   Figure 1 accounts for Sinevir clitic clusters in sentences in the indicative mood. In sentences in the conditional mood, pluperfect clitics take AUX3. A typologically rare feature of the Sinevir clitic system is that preposition accusative clitics clusterize and take the same slot as prepositionless accusative clitics.

SC, Bg and Mac clitic templates include a clusterizing particle *li* (a°), a block of pronouns (b°) and two distant slots for auxiliaries (c°). One slot (AUX1) precedes the pronouns, while another slot (AUX2) is located after them, but since elements filling AUX1 and AUX2 do not co-occur the condition (vi) is not violated in (vii).

(vii) $[_{\text{CliticPhrase}} [_A a^1] [_C c^1] [_B b^1, b^2 \dots b^n] [_C c^2] \sim *[_C \sim^1 [_B b^n] _C c^2]]$.

The conditions (vi) and (vii) reveal a basic principle of Slavic templates: wherever the AUX slots are located, clitic templates do not generate strings of three or more 2P clitics, where two pronouns are separated by an auxiliary or two auxiliary clitics are intervened by a pronoun.[17] Old Slavic languages had a block of 2P particles (cf. Figure 2): here, the same principle excluded insertion of 2P auxiliaries and 2P pronouns into strings of two or more 2P particles. The conditions (vi) and (vii) are rendered in form of an empiric generalization in (viii):

(viii)   In Slavic languages, strings generated by clitic templates conform to the Categorial Principle: a sequence of two 2P clitics a^1, a^n representing the same category A cannot be interrupted by any clitic b^n representing category B.

Generalization (viii) implies that Slavic CliticPs with clause-level 2P clitics are not just casual combinations of prosodically deficient elements on some reason arranged in a rigid order. They look like syntactic units and exhibit some (language-particular or universal) hierarchy of sentence categories. This leads to the next generalization:

(ix)   Slavic clitic templates are assembled according to the Categorial Principle: clitics are grouped according to their taxonomic category: Particle ∨ Pronoun ∨ Auxiliary. The order of non-intersecting blocks in a clitic template embodies some relevant hierarchy of sentence categories.

One can interpret the whole template from the leftmost slot to the rightmost slot as cartography of the sentence. Nothing prevents us from assuming that, say, the order of 2P particles =*že*(1)=*li* (2) =*bo* (3) =*ti* (4) =*by* (5) in the ONR system (see Figure 2) embodies a functional hierarchy like this: Illocutionary Force (1) > Focus (2) > Cause (3) > Evidentiality (4) > Mood (5). The problem with this assumption is that it has no independent verification. But then, the ordering of particles is predicted by a simple hypothesis based not on functional hierarchies but on the chronology of cliticization:

(x)   The order of clitics inside each block of 2P clitics in a clitic template is set out by the Diachronical Principle predicting that most recent clitics adjoin to the already existing clitics of the same category from the right.

The Diachronical Principle implies that each block of clitics is ordered strictly from left to the right and that templates can attract new elements and make them clusterizing 2P clitics. The history of Slavic languages validates this prediction. Both the left and the right

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[17]   The so-called *li*-inversion in Bg, where the particle *li* moves one step back and may surface between two clusterizing pronouns, is not a counterexample, since this mechanism does not represent the basic order generated by the clitic template. Cf. Bg <u>Dade</u>=*mu*=*ga*. 'He/she gave it to him', <u>Dade</u>=*li*=*mu*=*ga*? 'Did he/she give it to him?' (Basic clitic order generated by the Bg clitic template, where *li* precedes other clusterizing clitics), but Ne=*mu*=*li*=*ga* dade? 'Did not he/she give it to him?' (Derived word order generated by a Barrier Rule: the Negation $[_{\text{NegP}}$ ne] acts as a Barrier for *li* and changes the ill-formed sequence *Ne=*li*=*mu*=*ga* <u>dade</u>).

part of the ONR template conform to the Diachronical Principle. The rightmost element in the block of 2P particles *že* (1), *li* (2), *bo* (3), *ti* (4), *by* (5) is the most recent particle *by*, originally a 3p. optative aorist form of **byti*: it was not fully dissociated from the aorist paradigm in the beginning of the written period.

The immediately preceding evidential particle =*ti* is Common Slavic, but it is a fossilized form of the 2p. pronoun used as "dativus ethicus". Since the particle *ti* results from a lexicalization process, it must be younger than the first three particles *že* (1), *li* (2), *bo* (3) inherited from Proto-Indo-European as lexical items.[18] Hence, the stages of cliticization are clear: [$_\text{Clitic Phrase}$ [Particles: že, li, **bo**…]] → [$_\text{Clitic Phrase}$ [Particles: že, li, bo, **ti** …]] → [$_\text{Clitic Phrase}$ [Particles: že, li, bo, ti, **by** …]]. As shown by Zimmerling (2002: 82) and Zaliznjak (2008: 47), the right part of the ONR template may be explained by the Diachronical Principle too. Both dative and accusative clitics are Common Slavic, but short accusative pronouns retained a capacity atypical for enclitics and could adjoin to prepositions, cf. OR *Na=m'q, za=s'q, na=n', po=n'* etc. This feature implies that short accusative pronouns were made part of 2P-clusters later than short dative pronouns which lack this capacity. Indeed, dative pronouns, with few exceptions discussed in Browne (2008), precede accusative pronouns in Slavic templates. The present tense BE-auxiliaries located immediately after accusative pronouns represent the most recent layer of clitics: it cannot be Common Slavic because of considerable divergences in the placement of auxiliary slots. Again, the stages of cliticization are transparent: [$_\text{Clitic Phrase}$ [Pronouns: DAT…]] → [$_\text{Clitic Phrase}$ [Pronouns: DAT ACC…] […]] → [$_\text{Clitic Phrase}$ [Pronouns: DAT ACC] [Auxiliaries: **1–2 presense tense indicative BE-forms** …].

The Diachronical Principle is subordinated to the Categorial Principle. In Slavic languages, the Diachronical Principle may add a new category to the template if there is no suitable slot in the already existing blocks: exactly this option was chosen for the auxiliary clitics in the ONR system. But it does not generate a cluster as a unit and normally does not show the relative age of clitics taking adjacent slots yet located in different blocks. E.g. we know that particle *ti$_1$* (slot 4) is older than particle *by* (slot 5), while dative clitics (slot 6) are older than accusative clitics (slot 7) but we cannot establish, whether accusative clitics (slot 7) are younger than *ti$_1$* (slot 4): the assumption that *by* (slot 5) is older than dative clitics (slot 6) is obviously wrong.

Apart from the Categorial and the Diachronical Principle, languages with clitic clusters occasionally apply to the Prosodic Principle. It predicts that light (e.g. monosyllabic) clitics precede heavy (e.g. disyllabic) clitics irrespective of their category. The Prosodic Principle may be both applied in blocks of clitics (a more common option) or throughout the whole template (a rarer option). Both options are attested in the Central Philippine languages (Peng & Billings 2006). In the Slavic languages the Prosodic Principle is not applied: there are no proven cases, where prosodic ordering might override the Categorial Principle.

In a survey of Slavic clitics, Franks (2009: 733–736) following Bošković (2001) lists four arguments for why Slavic clusters may not actually be syntactic units and might be better

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[18] Zaliznjak (1993: 298–304) proved that in ONR the clitic particle =*ti* on the synchronic level must be separated from the homophonous dative clitic pronoun of the 2$^\text{nd}$ person, singular. The clitic particle =ti$_1$ is placed before the particle =*by*, while the pronoun =*ti$_2$* is placed after =*by:* t. Zimmerling (2012b) argues that in Old Cz texts clitic particle=ti$_1$ took a different slot than the dative clitic pronoun of the 2$^\text{nd}$ person. In both ONR and Old Cz the particle =ti$_1$ could co-occur with dative clitics of the 1$^\text{st}$ and 3$^\text{rd}$ person which is of course impossible for the dative pronoun =ti$_2$: the ONR data are briefly discussed in Zaliznjak (2008: 32).

analyzed as prosodic or morphological units: a) disjoint placement of clitics; b) insertion of floating particles into strings of clusterizing pronouns and auxiliaries (sporadically attested in Cz and Bg); c) selective climbing of clitics (sporadically attested in SC); d) ellipsis of segments including clusterizing clitics. We cannot discuss c) and d) here, but the argument a) is not sufficient by itself, since disjoint placement of clusterizing clitics is triggered by Barrier Rules and occurs in marked sentences with the derived order. The phenomenon of b) needs further investigation: it is plausible that clitic particles like Cz *už* 'already' are on the brink of clusterizing, but they didn't get a fixed slot in the template by now.[19] Furthermore, alternative prosodic and morphological approaches to clusters are problematic. On reasons specified above, Slavic clitic clusters generated by a Template cannot be analyzed as purely superficial prosodic string lacking categorial ordering. A morphological cartographic approach to clusters is more promising, but the cartography of a cluster is often destroyed in configurations with cluster splitting of the type $X = b°$ (2)$= c°$ (3) $Y = a°$ (1), where clitic $a°$ preceding $b°$ and $c°$ in the Template, ends up to the right of it, cf. examples (20), (21) below. Such behavior of clitics does not seem compatible with standard assumptions on the nature of morphological elements.

2.6. 2P Clitics and non-clusterizing clitics

Slavic languages with clusterizing clitics always have non-clusterizing clitics. The reverse implication is false: all Slavic clusterizing clitics are clause-level clitics, while non-clusterizing clitics may both be clause-level and phrase-level elements. This distribution is not lexically driven: one and the same clitic may be clusterizing as a clause-level element and non-clusterizing as a phrase-level element. For instance, Slavic pronominal clitics in the dative case clusterize when used as predicate arguments but do not clusterize when used as possessive markers in NP/DPs – an option attested in Bg, Mac, OCS and OR (ZALIZNJAK 2008: 35). An exact typological parallel is found in Ossetic, an Iranian language with clausal 2P-clitics. If an accusative/genitive clitic is used in Ossetic as a predicate argument, it clusterizes with other 2P-clitics. If it is used as a possessive marker in NPs, it does not clusterize (BELYAEV 2010; ZIMMERLING 2012a: 11).[20] Slavic pronominal clitics in the accusative case reveal the same duality but in a slightly different configuration. If they are used as predicate arguments, they clusterize in 2P. If they adjoin to preposition heads and produce special series of bound pronouns, cf. SC *na=me, na=te, na=nj* and similar forms in OCS and OR, they do not clusterize. ĆAVAR & WILDER (1999: 445) aptly observe that even there, where bound preposition-accusative forms are morphologically identical to free accusative clitics, they retain different properties. Free accusative clitics can climb, if the language has this option, bound accusative clitics do not leave their phrase and do not climb:

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[19] A similar condition is characteristic of some Ancient Greek particles.

[20] In Ossetic, clusterizing accusative/genitive forms are enclitics, cf. (i). while NP/DP level accusative/genitive forms are proclitics, cf. (ii).

(i) [NP žawər-ə   fšəmær]   =mæ   fed-t-a
     Zaur-GEN   brother   =1SG.ENCL.GEN/ACC see.PFV-TR-PST.3SG
     'Zaur's brother saw me'

(ii) *mæ=*   fəd-ə
      1SG.POSS   father-GEN
      'my father'.

We are thankful to OLEG BELYAEV for the assessment of the Ossetic examples.

For instance, Slavic pronominal clitics in the dative case clusterize when used as predicate arguments but do not clusterize when used as possessive markers in NP/DPs – an option attested for Bg, Mac, OCS and OR (Zaliznjak 2008: 35). An exact typological parallel is found in Ossetic, an Iranian language with clausal 2P-clitics. If a dative/genitive clitic is used in Ossetic as a predicate argument, it clusterizes with other 2P-clitics. If it is used as a possessive marker in NPs, it does not clusterize. Slavic pronominal clitics in the accusative case reveal the same duality but in a slightly different configuration. If they are used as predicate arguments, they clusterize in 2P. If they adjoin to preposition heads and produce special series of bound pronouns, e.g., SC *na=me, na=te, na=nj* and similar forms in OCS and OR, they do not clusterize. Ćavar & Wilder (1999: 445) aptly observe that even when bound preposition-accusative forms are morphologically identical to free accusative clitics they retain different properties. Free accusative clitics can climb, if the language has this option, while bound accusative clitics do not leave their phrase and do not climb:

(13)   SC

(13a)   da=*je* Ivan računao [$_{PP}$ na=*me*]
        that= BE.aux.prs.3sg Ivan counted [on me]

(13b)   *Da=*me*$_i$=*je* Ivan računao [$_{PP}$ na t$_i$].

Slavic 2P clusters may include 4 different categories of clitics. A) Sentential 2P particles: from 0 up to 6 slots in a template. B) Argument Dative, Accusative and Genetive pronominal clitics: from 2 to 3 slots in a template (Browne 2008), but only two argument clitics may co-occur in a string. C) Reflexive clitics in Accusative and Dative case: from 0 to 1 slot in a template. D) Auxiliary clitics: from 1 up to 3 slots in a template, maximum 2 auxiliaries in a string. The extremum of 6 particles in a template is reached in late OR (16t^h–17th centuries) which used clusterizing particles =*li*=*že*=*bo*=*ti*=*by*=*dě(i)*[21]. Most modern Slavic languages retain only *li* in the template or eliminate all particles. East Slavic shows a trend towards elimination of reflexive clitics from the template. The extremum of 3 AUX slots in a template is reached in the Ukrainian Sinevir system (see Figure 1 above).

2.7. Comp/XP as a universal clitic basis and constituency conditions

We adopt the hypothesis of Comp/XP as a universal clitic basis, since it predicts the placement of Slavic clausal 2P elements in the best possible way and is typologically more reliable than the alternative hypothesis of 2P as a primarily phonetic phenomenon (cf. Halpern 1996 for a different approach). In the trivial case, the clitic basis is manifested by a single stressed word form ([$_{XP}$ W^1] – CL), which gives rise to non-syntactic explanations. The apparent deviations from the trivial case of 2P clitic placement classify with two groups: 1) initial multi-word constituents in XP, with the basic word order [$_{XP}$ W^1 W^2…W^n] – CL; 2) several constituents preceding clusterizing clitics, with the derived word order [XP] Y CL. The first option depends on conditions that license some multi-word constituents in XP and block other ones: we will refer to them as Constituency Conditions. Constituency conditions in the Slavic languages are subject to parametric

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[21]   See Zaliznjak (2008: 44) for details.

variation: for instance, ONR blocks all multi-word constituents consisting of two or more stressed word forms (ZALIZNJAK 1993: 285), while modern Slv licenses clitic placement after a sentential constituent (IP or CP). The second option depends on Barrier Rules that map basic word order with clitics in 2P onto derived word orders with late placement of clitics/cluster splitting. As demonstrated by ZALIZNJAK (1993: 287), ĆAVAR & WILDER (1999)[22] and ZIMMERLING (2012a) for various languages with 2P-clitics, the main mechanism of a Barrier Rule is strikingly uniform and involves verb raising resulting in a configuration #$[^{\text{BARRIER}}$ [XP]] V_i CL… t_i.

By and large, Slavic languages possess six options for the placement of 2P clausal clitics:

A   After the first stressed word form: obligatory in ONR, optional in OCS, OR, Svk, SC.
B   After the first spelled-out constituent: optional in OCS, OR, SC, obligatory in other languages.
C   After the initial proclitic: a rare option, marginally attested in OR, Bg, Slv.
D   After the complementizer in subordinate clauses: all languages.
E   After a quotation phrase: Cz, Slv.
F   After a sentential constituent: only Slv.

Slv seems to be the only Slavic language to use all six options A–F.[23] All languages apply to D and A/B, which is basically the same option in syntax. The parametric variation in the Slavic area is due to the fact that one group of languages (cf. ONR) requires splitting of a multi-word initial constituent – $[_{XP} W^1 = $ CL $W^2 W^n]$, *$[_{XP} W^1 W^2 W^n]=$ CL, a different group of languages (Cf. Cz and Bg) ban splitting – $_{XP} W^1 W^2 W^n =$ CL, *$[_{XP} W^1 =$ CL $W^2 W^n]$, whereas a third group of languages (Cf. SC and OR) allow both options – $[_{XP} W^1 =$ CL $W^2 W^n]$ ~ $[_{XP} W^1 W^2 W^n]$. The variation of the type A ~ B is found only in the main clause. Contrary to ĆAVAR & WILDER (1999), we take orders Comp [….] CL with some category intervening between a complementizer and clusterizing clitics to be derived, not basic. Consequently, we do not need to postulate a special projection CompP hosting the complementizer and the next category in order to license sentences like (14). Sentence (14) shows the basic word order Comp – CL, while the order Comp – [XP] – CL – V in (15) is triggered by a Barrier Rule fronting a topicalized element and locating it before the clitics.

(14)   Bg   Toj kaza, [$_{CP}$ če (1)=*šum=mu=ja* (2) <u>bil dal</u> knigata].
               he said that BE.AUX.PRS.1SG him.DAT.3SG.M it.ACC.3SG.F BE.AUX.PST. 3SG.M. given.-PRF.book-the.
               He said that he had already given him the book'.

(15   Bg   Toj kaza, [$_{CP}$ če (1){$_{TopicP}$[$_{NP}$ **knigata**]$_i$} (2)=*šum=mu=ja* (3) <u>bil dal</u> t_i].

The degree of acceptability of the order Comp — [XP] — CL — V varies across Slavic languages, often within one and the same language; for the discussion of the situation in Cz see VESELOVSKÁ (1995) and HANA (2008). In most cases sentences like (15) are communicatively marked and can be explained in terms of fronting: topicalized or focused constituents undergo XP-movement.

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[22]   Although ĆAVAR & WILDER do not apply the notion of Barrier, their analysis of verb raising in Croatian is largely equivalent to ZALIZNJAK's and ZIMMERLING's approaches.
[23]   However Slv, unlike SC and ONR, does not allow splitting of the first multi-word constituent.

Most Slavic languages do not allow multiple XP-fronting in main clauses, but colloquial Cz (Avgustinova & Oliva 1997: 45, Hana 2008) and standard Bg (Dimitrova-Vulchanova 1999: 92) do. In these languages, the fronted elements must make up a single communicative constituent – contrastive topic (in Cz) or non-contrastive topic (in Bg). Bg is the only Slavic language, where main clauses with long topicalized constituents before the clitics can be communicatively neutral[24], cf. (16) and (17).

(16) Bg $\{_{TopicP}$ $[_{XP}$ $[_{PP}$ Na Ivan] $[_{DP}$ knigata]]= *sŭm=mu=ja* <u>vŭrnal.</u>[25]
    to Ivan kniga-the BE.AUX.PRS.1SG him.DAT.3SG.M it.ACC.3SG.F return.PRF.1SG.M
    'I returned the book to Ivan'.

(17) Bg $\{_{TopicP}$ $[_{XP}$ $[_{AdvP}$ Sled po-malko ot dva meseca] $[_{NP}$ na Topalov]]}=*mu* <u>predstoi</u> da <u>igrae</u> mač za koronata sreštu svetonija šampion Anand.
    'In less than two months, Topalov has to play a match for the chess title against the world champion Anand'.

All Slavic languages with clusterizing clitics, including Bg and Cz, ban multiple fronting of the following groups: *$[V_{fin}$ + O]=CL, *$[S + Vf_{fin}]$=CL, *$[V_{fin}$ + Adv]=CL, *$[S+O]$=CL. The constraint on fronting finite verbs with their complements extends to Slavic *l*-participle in the perfect construction: neither fronted finite verbs nor fronted *l*-participles may pied-pipe their complements to XP. In a similar way, a combination of a subject NP and an object NP is banned under XP-fronting. This provides good grounds to assume that the constraint on a single constituent in XP is not violated in Bg and Cz: multiple XP-fronting is just an additional resource that allows merging two maximal projections of the licensed type into a single topical constituent.

2.8. Tobler-Musaffia's Law, 2P-clitics and VA-clitics revisited

We put forward a claim that the description of word order systems of clausal clitics should base on syntactic constraints and be maximally independent from conjectures about restrictions imposed by allegedly purely phonetic or lexical properties of clitics. Such "phonetic" or "lexicalist" hypotheses often introduce syntactic information in a disguised shape. The notion of strict encliticity is just one issue. A strict enclitic is an element that cannot be fronted and does not appear at the left margin of its domain. For clausal strict enclitics such a domain is a clause. In Romance and Slavic studies strict encliticity effects are described as resulting from Tobler-Mussafia's law (TM Law). TM Law is usually explained as a PF requirement excluding strict enclitics from the clause-initial position, cf. Franks (2008: 93). It is desirable to explain the presence of overt PF material before Slavic clausal clitics non-syntactically since it is a simpler explanation than the alternative hypothesis about XP-movement. However, virtually all Slavic languages that impose a constraint on the number of constituents preceding 2P pronouns and auxiliaries occasionally allow the placement of these clitics after a prosodic break – clause-initially or after

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[24] As pointed out by Zimmerling (2009b), an exact parallel to Bg is furnished by Modern Faroese and Middle Swedish – two Germanic V2 languages, which allow multiple XP-fronting on the condition that all fronted elements represent a single topical constituent.

[25] On reasons specified below in the text, we gloss Bg pronominal and auxiliary clitics as clausal enclitics, not as verbal proclitics.

a parenthetic insertion: this is attested, e.g. in Bg (Mišeska Tomić 2004: 214, Franks 2008: 100), Slv (Kosta 2009c) and Cz (Avgustinova & Oliva 1997: 33, Ćavar & Wilder 1999: 438). SC seems to be the only one Slavic language, where this is strictly impossible (Rada-nović-Kocić 1996: 439). Therefore, one needs to postulate two kinds of TM-clitics – allegedly phonetic (SC) and allegedly syntactic (Cz, Bg, Slv and other languages) – obviously not a desirable result.

Another controversial issue is the nature of the Verb-adjacent clitics (VA-clitics). This category has been postulated to explain the properties of Bg and Mac pronominal and auxiliary clitics which take a position adjacent to verbal forms/lexical heads of a nominal predicate, cf. examples (9)–(12). But Bg and Mac pronominal and auxiliary clitics also have a fixed position in a clause: all Bg clitics stand in clausal 2P (with the basic word order without Barriers), while Mac pronominal and auxiliary clitics take 1P/2P in verbal clauses[26]. Therefore, Bg and Mac pronominal and auxiliary clitics are at once VA-elements and 2P ~ 1P/2P elements. This gives rise to different theories. Dimitrova-Vulchanova (1999) assumes that Bg and Mac are just modified systems with 2P ~ 1P/2P clitics with a su-perimposed constraint on clitic-and-verb adjacency.[27] Franks & King (2000: 48–67) argue that Bg pronominal and auxiliary clitics are phonetic enclitics but syntactic proclitics, while Mac pronominal and auxiliary clitics are both phonetic and syntactic proclitics: syntactic proclitics are elements left-adjoined to V° or VP.[28] It is indeed desirable to pattern Bg and Mac together, since the Mac system looks like a variant of the Bg system with a canceled TM requirement: one can also claim that the Bg system is a variant of the Mac system with an added TM requirement. Whatever analysis is chosen, the differences between Bg and Mac word orders can be explained by the hypothesis that these languages operate with different types of clitics. However, the relation of the Bg/Mac subtype to the main Slavic subtype without clitic-and-verb adjacency is obscured: it is unclear what is deviating in the Bg and Mac word order – the behavior of clusterizing clitics allegedly excluded from 2P and located in the verbal complex or the behavior of verbal heads right-adjoined or left-adjoined to clusterizing clitics obtaining a fixed position in the clause. Consequently, we see no grounds to ascribe beforehand visible differences in syntactic structure to tentative differences in phonetic and/or morphological status of Bg/Mac vs. Common Slavic 2P clitics.

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[26] In clauses with predicate nouns the same Mac pronominal and auxiliary clitics behave as strict 2P-enclitics (Mišeska Tomić 2004: 226). The clauses with predicate adjectives and past participles accord-ing to the same author allow both 1P and 2P-clitic placement i.e. behave as universal clitics, cf. (i) and (ii).

(i) #*Mu*   =*e*   =<u>dojden</u>   vo poseta.
     cl.dat.3sg.m   cl.aux.3sg   come.prtII.sg.n   in visit
     'He is paying him a visit.'

(ii) <u>Dojden</u>   =*mu*   =*e*   vo poseta.
     come.prtII.sg.n   cl.dat.3sg.m   cl.aux.3sg   in visit
     'the same.'

These facts indicate that in Mac the clusterizing pronouns and auxiliaries do not have a uniform prosodic characteristics in all types of clauses.

[27] A similar description has been proposed for Tagalog and other Central Philippine clitic systems in Peng & Billings (2006).

[28] One can also postulate other sites as base generation positions for VA-clitics or even treat them not as standard clitics subject to head movement, but as agreement markers incorporated in the verbal complex.

From a syntactic viewpoint Slavic clusterizing clitics can be classified with four types. We ignore purely prosodic factors as (im)possibility of clitic placement after a prosodic break and account only for orientation of clitics towards their hosts and for the possibility of clitic fronting.

A   Strict enclitics = TM clitics. Fronting of clusterizing clitics is impossible in any context: SC, Bg, Cz, Svk, ONR, Sinevir dialect.
B   Mild enclitics. Fronting of clusterizing clitics is only possible in communicatively marked contexts, otherwise it is excluded: Slv.
C   Mild proclitics or universal clitics. Fronting of clusterizing clitics is possible or obligatory in communicatively neutral contexts: Mac.
D   Strict proclitics. Procliticization to finite verbs is generalized, enclisis configurations are excluded: (?) Moliselav (Kosta 2009b).

The hypothesis of special properties of VA-clitics is strengthened by the observation that Bg and Mac are the only two modern Slavic languages with possessive dative clitics in DP. These languages also developed an article system, so the distinction of VA-clitics vs. 2P-clitics may correlate with the DP/NP distinction. However, the patterning of verb-adjacency, DP/NP distinction and possessive dative clitics is unclear: OCS and OR lacked verb-adjacency but had possessive dative clitics.[29]

3. Barrier theory and derived word orders with clitics

The basic word order in Slavic sentences with clusterizing clitics is not realized automatically. There are two main deviations from the basic order #XP – CL that must be classified with derived orders – a) late placement of clusters, b) splitting. Under a), the whole clitic cluster ends up to the right of clausal 2P. Under b), some clusterizing clitics remain in clausal 2P, while other clusterizing clitics end up to the right of it. These two configurations are not restricted to Slavic languages and are widely attested in other world's languages with 2P clitics, cf. Halpern (1996). Numerous explanations of a) and b) exist, but Barrier Theory introduced by Zaliznjak (1993: 287) and modified in Zimmerling (2002: 88) and Zimmerling (2009b) is the only theory, which explains late placement of clusters and splitting by one and the same underlying mechanism. The main hypothesis is that the sentence-initial group/lexical head hosting the clitics may have properties of a Barrier and move all or some clusterizing clitics to the right of clausal 2P. The first option is referred to as "blind" or "indiscriminating" Barrier, the second option is referred to as 'selective' Barrier (Zimmerling 2009b). Barrier effects or "Barrier Rules", in terms of Zaliznjak (2008), are also attested in languages with VP-internal clitics, where they map configurations with verbal enclitics onto configurations with verbal proclitics or vice versa: Rouveret (1999) argues that it is the case in European Portuguese main and embedded declaratives. In languages with clausal 2P clitics Barrier Rules do not change the orienta-

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[29] The reviewer observes that Rumanian, a language lying geographically close to Bg and Mac has NP/DP-level clitics in the dative/genitive case mostly used as markers of alienable possession. We likely deal with an areal Balkan feature spreading over Modern Greek, Albanian, selected Romance and Slavic languages. The convergence of Rumanian and Balkan Slavic clitic systems needs a special investigation.

tion of clitics but invariably shift all or selected clitics to the right of clausal 2P. In a general form, the notion of a Barrier is rendered in (xi) and (xii)

(xi) A Barrier is a syntactic category (a lexical head or a phrase) taking effect on the position of clitics. It can change the orientation of a clitic towards the clitic host or move a clitic in a given direction *n* steps to the right /left of the clitic host.

(xii) In 2P languages sentence-initial Barriers are either blind and move all clusterizing clitics *n* steps to the right of clausal 2P or selective and split the clusters by moving some clusterizing clitics *n* steps to the right of clausal 2P.

3.1. Blind and selective barriers

The late placement of the entire cluster caused by a blind Barrier is shown below in (18a–c) and (19), the splitting of a cluster is shown below in (20) and (21). We specify the lowercase/uppercase indexes for selective Barriers in order to show, which clitics they take effect on, and use curly brackets to specify the communicative status of the Barrier category.

(18a) ONR #[$^{\text{BARRIER}}${$_{\text{TopicP}}$ [$_{\text{PP}}$ **V nedoborexъ**]}] <u>plati</u>=*mi*=*s'ą* životinoju (463, 14$^{\text{th}}$ century).
in shortage. LOC.PL pay.IMP.SG me. DAT.1SG REFL.ACC livestock.INSTR.SG
'In case of shortages, you must pay me with livestock'.

(18b) # [$^{\text{BARRIER}}${$_{\text{TopicP}}$ **A** [$_{\text{NP}}$ **svątьe varvarъ тьlicą**]}] <u>storova</u> =*li* ? (657, 12$^{\text{th}}$ century)
and saint.GEN.SG.F Barbara.GEN.SG.F heifer.NOM.SG.F healthy. ADJ.SG.F.CL.Q
'Concerning the heifer belonging to <the convent of> St. Barbara: is it healthy?'

(18c) [$^{\text{BARRIER}}$ {$_{\text{TopicP}}$ [$_{\text{PP}}$ **Na molodogъ**] }] <u>dalъ</u> (2) =*jesemь* rubelь (689).
On malt. ACC.SG give.PRT. 3SG.M be.CL. PRS.IND.1SG. rouble. ACC.SG.
'Concerning malt: I gave a rouble for it.'

(18′) Common Slavic *{$_{\text{TopicP}}$ [XP]} – CL $\Rightarrow$ #[$^{\text{BARRIER}}$ {$_{\text{TopicP}}$ [XP]} –Y – **CL**

(19) Svk #[$^{\text{BARRIER}}${$_{\text{TopicP}}$ [$_{\text{NP}}$ **Husté čierne vlasy**]}] <u>kaderili</u> =*sa*=*mu* za ušami.
thick.NOM.PL. black.NOM.PL hair.NOM.PL curl.PRF.3PL REFL.ACC him.DAT.3SG.M.
'His thick black hair curled behind the ears'.

(20) ORs [$^{\text{BARRIER}}_{\text{a}}$ {$_{\text{TopicP}}$ **A** [$_{\text{PP}}$ **ou koroleva**]}]=*esi*$^{\text{b}}$ muža <u>slyšalъ</u>=*li*$^{\text{a}}$ o тomъ čstnomъ krstě? (Ipat., under 1152 AC, list 166 rev.).
and from king's.GEN.SG BE.AUX.PRES.2SG man.GEN.SG hear.PRF.2SG.M Q about that.LOC.SG.M worthy.LOC.SG.M cross.LOC.SG.M
'Haven't you heard about that worthy cross from the king's man?'

(20′) Common Slavic *{$_{\text{TopicP}}$ [XP]} – CL$^{\text{a+b}}$ → #[$^{\text{BARRIER}}_{\text{a}}$ {$_{\text{TopicP}}$ [XP]}– CL$^{\text{b}}$ – Y – **CL**$^{\text{a}}$

(21) Bg [$^{\text{BARRIER1}}_{\text{a}}$ {$_{\text{TopicP}}$ [$_{\text{NP}}$ **Knigata**]}] [$^{\text{BARRIER2}}_{\text{a}}$[$_{\text{FutP}}$ **šte**]]=*si*$^{\text{b}}$=*ja*$^{\text{c}}$ <u>pročel</u>=*li*$^{\text{a}}$ do utre?
book-the FUTURE.PRCL BE.AUX.PRS.2SG it.3ACC.SG.F read.PRF.3SG.M Q tomorrow
'Won't you read the book by tomorrow?'

(21′) Bg *{$_{\text{TopicP}}$ [XP]} – [$_{\text{FutP}}$ **šte**] – CL$^{\text{a+b+c}}$ ⇒ #[$^{\text{BARRIER1}}_{\text{a}}$ {$_{\text{TopicP}}$ [XP]} [$^{\text{BARRIER2}}_{\text{a}}$[$_{\text{FutP}}$ **šte**]] – CL$^{\text{b}}$ CL$^{\text{c}}$ – Y – **CL**$^{\text{a}}$

3.2. Communicative and grammaticalized barriers

Both blind and selective Barriers can be optional and obligatory. Another distinction relevant for the typology of Barriers is that of communicative vs. grammaticalized Barriers. Communicative Barriers are phrases that take effect on the position of clitics due to the communicative status they acquire in a given sentence, e.g., initial NPs and PPs in (18)–(21) are topics. Grammaticalized Barriers are particular lexical heads or formal parameters of phrases that affect the position of clitics irrespective of the communicative semantics of the sentence, wherever they occur. E.g. in the ONR system each initial multi-word group consisting of two or more stressed word forms was an obligatory grammaticalized Barrier: $*\#[_{XP} W^1W^2] - CL \Rightarrow \#[^{\text{BARRIER}} [_{XP} W^1W^2]] - Y - CL$. In the Croatian variety of modern SC the initial multi-group consisting of three stressed word forms is an optional grammaticalized Barrier, cf. (22a–b).

(22a) $^?[_{NP}$ Tu   novu   pojedinost]
       [this.ACC.SG.F   new.ACC.SG.F   detail.ACC.SG.F]
       =*sam*   saznao
       BE.AUX.PRS.1SG   discovered.PRF.3SG.M
       četvrtog   dana   ujutro
       fourth.GEN.SG.M   day.GEN.SG.M   in-morning
       'This new detail I discovered on the fourth day in the morning.'

(22b) $[^{\text{BARRIER}}[_{NP}$**Tu novu pojedinost**] saznao=*sam* četvrtog dana ujutro.

Bg *šte* in (21) or Bg negation *ne* are obligatory grammaticalized selective Barriers for the particle *li* but not for other clusterizing clitics.[30] Mac negation *ne* is a selective grammaticalized Barrier too: it moves pronominal clitics to the right and leaves them outside the cluster but does not take effect on the position of auxiliary clitics (DIMITROVA-VULCHANOVA 1999: 103).

3.3. Barriers and verb movement

Splitting of a cluster usually cannot be accounted for in non-syntactic terms – it is not conceivable that a contact string of prosodically uniform clusterizing clitics, which is preserved intact in one group of contexts, has been split in other contexts on purely phonetic reasons. Some cases of late placement can be explained both syntactically and phonetically – one could e.g. claim that in (18), (19), (20), (21) there is a prosodic break after the initial topical phrase and that be the actual reason that Slavic clitics in (18), (19) do not adjoin to the first constituent and "skip" it as a bad clitic host.[31] However, the hypothesis about prosodic break as a driving force of late placement fails to explain the fact that in

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[30] Bg is the only Slavic language where grammaticalized selective Barriers (*ne* and *šte*) allow the clitic they take effect on (Bg *li*) to remain in the same phonetic word by inverting its position in it: Bg $*[^{\text{BARRIER}}_a [_{XP}X]] = $**a** b c $\rightarrow [^{\text{BARRIER}}_a [_{XP}X]]$ =b **a** c. Cf. Bg $*$Ne=*li*=*si* <u>xodil</u> tam? $\rightarrow [^{\text{BARRIER}}_a[_{NegP}$**Ne**]] =*si*^{b} =*li*^{a} <u>xodil</u> tam?

[31] Note that "skipping" analysis in the spirit of ANDERSON (2005) fails to explain the phenomenon of cluster splitting in (20) and (21): some clusterizing clitics skip the allegedly "bad" host, whereas other clusterizing clitics adjoin directly to it.

Slavic examples with late placement (18), (19), and also in the examples (20), (21) exhibiting cluster splitting those clusterizing clitics, which are found to the right of clausal 2P, are immediately preceded by Slavic verbal forms. In other words, clause-initial communicative Barriers both prevent clusterizing clitics from taking their canonical position, clausal 2P, and attract Slavic verbs to 2P or to a position resembling 2P. With the basic word order XP — CL, Slavic verbs lack a fixed position in a clause (with the exception of Bg and Mac which constitute a special subclass of Slavic word order systems – see below). In derived word orders with an initial communicative Barrier the position of Slavic verbs is fixed. This mechanism is shown in (xiii).

(xiii) $\{_{\text{TopicP}}\,[\,\text{XP}\,]\} - \text{CL}....\text{V} \Rightarrow [^{\text{BARRIER}}\,\{_{\text{TopicP}}\,[\,\text{XP}\,]\}\,\,[\,\text{V}_i - \textbf{CL}\,]...\text{t}_i\textbf{.}$

ĆAVAR & WILDER (1999) state that the generalization (xiii) holds for Croatian root declaratives and argue that (xiii) instantiates verb raising to clausal 2P. This mechanism cannot be explained prosodically.[32] ZIMMERLING (2002: 88) demonstrates the same on a sample of Slavic languages, both modern and old ones. Although ĆAVAR & WILDER do not apply to the notion of Barrier, their analysis of "clitic-third" configurations is largely equivalent to the approach outlined here. With this analysis, the initial constituents acting as Barriers are not extraclausal: consequently, the target of the verb movement in (xiii) is not the clause-initial position, but clausal 2P or some sentence-internal position overtly looking as 2P, with a single constituent preceding it. In contrast, ZALIZNJAK's version of the Barrier theory (ZALIZNJAK 1993: 286, ZALIZNJAK 2008) patterns with ANDERSON (1993) and HALPERN (1996) in treating initial Barriers as extraclausal material located outside the clitic domain: consequently, the clitics are declared to remain in 2P in all cases, and no hypotheses on verb movement and clitic movement are needed. This straightforward analysis does not capture the fact that no Slavic language including Bg and Mac has grammaticalized constraints on the verb placement in sentences without clitics: such constraints arise (with the exception of Bg and Mac, where the verb must take a position adjacent to the clitics under the basic order XP – CL) only in derived structures with a Barrier.

The main clause Barrier Rule shown in (xiii) is uniform across Slavic languages which differ however in the type of Barriers allowed in a given type of clauses. E.g. Bg allows initial topical Barriers only in interrogative clauses like (21) but not in main clause declaratives, where the basic word order #XP – CL – V ~ #V – CL is obligatory.

3.4. Barriers and clitic movement

From the viewpoint of formal typology, the hypothesis of clitic movement in derived structures with a Barrier proceeds from the hypothesis of verb movement in these structures. Since the latter hypothesis is probable, the assumption that Slavic clusterizing clitics move and change their position in the derivation of structures with a Barrier is justified. For the sake of space, we will skip the discussion, whether tentative clitic movement in structures like $[\text{XP}] - \text{CL}....\text{V} \Rightarrow [^{\text{BARRIER}}\,[\text{XP}] - [\text{V}_i - \textbf{CL}]...\text{t}_i$ should be analyzed as non-canonical left-to-right movement, i.e. clitic lowering in the derived structures with a Barrier, or as

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[32]   The hypothesis of Prosodic Inversion as a last resort verb movement, its only motivation being the need to host 2P enclitics and remove them from the clausal left margin, is not applicable here, since there is an initial topicalized phrase before the verb.

canonical right-to-left movement, clitic raising in the basic structures without a Barrier. Whatever variant is chosen, we deal with overt PF-movement: the clitic(s) effected by a Barrier leaves the first phonetic word[33] and ends up in the second/nth phonetic word, where it adjoins to a verbal head. There is one deviation from this pattern, namely, the behavior of the Bg particle *li* which is the leftmost clitic in the cluster: *li* cannot adjoin to the negation *ne* and the future operator *šte,* but does not leave the first phonetic word and invert its position in it instead, see the underlying order generated by the Template Principle in (23b) vs. the derived order in (23c).

(23)   Bg

(23a)   <u>jade</u>=*im*=*se.*
        eat.PRS.3SG they.DAT.PL REFL.ACC
        'They are hungry'.

(23b)   <u>Jade</u>   =*li* (1)   =*im* (2)   =*se* (3)?
        eat.PRS.3SG   Q   they.DAT.PL   REFL.ACC
        'Are they hungry?'

(23c)   [^{BARRIER}_a [_{NegP} **Ne**]]=*im*^{b} (2)   =*li*^{a} (1) =*se*^{c} (3)   <u>jade</u>?
        not.PRCL   they.DAT.PL   Q   REFL.ACC   eat.PRS.3SG
        'Aren't they hungry?'

(23d)   ***Ne**=*li*^{a} (1)=*im*^{b} (2) =*se*^{c} (3) <u>jade</u>?

(xiv)   Bg   *[^{BARRIER}_a [_{XP}X]] = CL $^{a+b+c}$ $\Rightarrow$ [^{BARRIER}_a [_{XP}X]] = CL $^{b+a+c}$

There are numerous accounts of this typologically rare behavior of Bg *li*, cf. the analysis in terms of Prosodic Inversion in King (1997) and Franks (2008: 97). We still think that an explanation in terms of Barriers is possible: *ne* and *šte* are selective Barriers for Bg *li*, but not for other clusterizing clitics.[34] If a syntactic analysis of the interaction of *li* with *ne/šte* is chosen, we however must admit a mismatch of the syntactic and prosodic side of the clitic movement: *li* leaves its canonical slot in the template, cf. (23b), which is a proof for clitic movement[35], but does not reach the postverbal position in the next phonetic word, which suggests that verb movement did not take place. We will make an attempt to reconcile this puzzle with movement analysis in the section 5 below.

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[33]   Under the copy-and-delete approach, this initial position/entry of the clitic is identified as a "higher copy", while the target position in the VP is identified as a "lower copy".

[34]   Bg *ne* and *šte* are clitics too, though of a different kind than *li*: they can be both sentence-initial and sentence-internal. They can be identified as proclitics or universal clitics. Note that if one clitic, e.g. Bg *ne* or *šte* has Barrier properties and takes effect on the surface position of a different clitic, e.g. Bg *li*, this proves that they do not belong to the same cluster. The same analysis may be extended to Mac negation *ne* and, arguably, future operator *će*, if these operators take effect on the placement of Mac pronominal clitics, cf. Mac *Ne=*se* bespokojte 'Do not worry!' → [^{BARRIER} [_{NegP}Ne]] bespokojte=*se*. This syntactic test is important, since Mac *ne* and *će* have nearly the same prosodic properties as Mac pronominal and auxiliary clitics.

[35]   Unless Bg *li* is denied a slot in the cluster – a solution that lacks independent justification.

3.5. Multiple barriers and blocking of the barrier effects

At least three modern Slavic languages – SC, Svk and Bg – developed a constraint on the combination of Barriers. In these languages the effect of a single initial Barrier with clitic movement may be cancelled if a second phrase with Barrier properties is added. We cannot go into details here but just state that this mechanism is language-specific and may not appear in some Slavic languages. For the data, see in ĆAVAR & WILDER (1999: 452–453) and ZIMMERLING (2002: 88). Typological parallels from languages with VP-internal clitics can be found in ROUVERET (1999: 641).

4. Slavic word order systems

Following ZIMMERLING (2006; 2012a), we classify all Slavic word order systems in 4 types. They are tagged W-systems, W⁺-systems, W*-systems and C-systems. The definitions follow below. The symbol "W" stands for "Word" or "Wackernagel", "W⁺" stands for "modified Wackernagel system", "W*" stands for "degraded Wackernagel system", "C" stands for "communicative".

4.1. Standard W-systems

- Language L is a standard W-system if the placement of clusterizing clitics to clausal 2P is the most grammaticalized constraint on word order.

Slavic languages from this type are SC, Burgenland Croatian (BROWNE 2007), Slv, Vojvodina Rusinsky (BROWNE 2008), Cz, Svk, ONR, Sinevir dialect. W-systems are found in various areas in different language families. The first W-system discovered was Old Greek; its first explicit description was given by JACOB WACKERNAGEL (1892).[36] Other W-systems in the Indo-European family are Avestan, Sanskrit (HOCK 1996), Hittite and Luwian (Anatolian), Ossetic and Pashto (Iranian), cf. ABAYEV (1959) and ROBERTS (1997). W-systems in non-Indo-European languages are, e.g. Kabile Berber (Afro-Asiatic), Warlpiri and Djaru (Pama-Nyungan), cf. NASH (1986) and TSUNODA (1988). Lummi (Salish), cf. JELINEK (1996), Makah and Ditidaht (Wakashan), cf. WERLE (2007), Quiavini Zapotec (Otomangean), cf. LEE (2000), Cavineña (Tacanan), cf. GUILLAUME (2008), Kashibo-Kakataibo (Panoan), cf. ZARIQUEY BIONDI (2011), Luiseño, Mayo and South-Eastern Tepehuan (Uto-Aztecan), cf. KAISSE (1981), FREEZE (1989) and WILLET (1991).

[36] The validity of WACKERNAGEL's analysis of Old Greek and other Ancient Indo-European languages has recently been challenged by AGBAYANI & GOLSTON (2010) who claim that Old Greek 2P-clitics lie clause-external to their hosts. AGBAYANI & GOLSTON's analysis is applicable to connective particles like Lat. – que 'Additive' but does not hold for clitic clusters since clitic clusters include argument pronouns and auxiliary clitics that belong to the same clause as their hosts. Cf. ZIMMERLING (2012c) clitics for discussion.

4.2. W⁺-systems

- Language L is a W⁺ system if its most grammaticalized constraints on word order put clusterizing clitics into a fixed position and locate verbal forms in positions adjacent to the positions of clusterizing clitics.

Slavic languages from this type are Bg and Mac. In W⁺-systems of the Bg/Mac subtype the position of the verb/nominal predicate is fixed if clusterizing clitics are present and not fixed otherwise. The clitics take 2P (Bg) or 1P/2P (Mac) and attract verbal forms to adjacent positions. The Bg W⁺-system conforms to the formula (xv):

(xv)   Bg # XP — [CL — V] ~ #[V — CL]; #…..V….#

The Mac W⁺ -system conforms to the formula (xvi).

(xvi)   Mac # XP — [CL — V] ~ #[V — CL] ~#[CL−V]; #…..V….#

An exact parallel to the Bg W⁺-system is furnished by Central Philippine languages Tagalog, Bikol, Cebuano and Masbatenyo: all of them conform to the formula (xv), as demonstrated in Peng & Billings (2006). It is plausible that Ancient Romance languages including Old Spanish, Old Catalan, Old Portuguese, Old Portugal, Old Italian were W⁺-systems of the "Bulgarian" type and conformed to the formula (xv), cf. the discussion of data in (Wanner 1996).

W⁺-systems of a different subtype combine the constraint on the placement of clitic cluster with the Verb-second constraint or the V2/V1 constraint. Such word order systems are attested in Old Nordic and Middle Norwegian (Zimmerling 2012a). The word order in such systems conforms to the formula (xvii):

(xvii)   Germanic-type W⁺-system: # XP – [V – CL]~ #[V – CL]

No Slavic language with the formula (xvii) is attested. According to the description given by Mathieu (2006), Old French was a W⁺-system of the "Germanic" type and conformed to the formula (xvii).

4.3. W*-systems

- Language L is a W*-system, if the principle for placement of clusterizing clitics in clausal 2P is not absolutely restrictive and co-occurs with alternative linearization strategies, which may eventually lead to placement of different types of clusterizing clitics according to different principles.

Typical Slavic W*-systems are OCS and OSR. Here clusterizing particles take 2P, clusterizing auxiliaries tend to adjoin to V or VP, while clusterizing pronouns may both pattern with particles and with auxiliaries (Zaliznjak 2008: 87–168). One more W*-system is Pol, a language where BE-auxiliary normally right-adjoin to V but can clusterize with pronominal clitics in verb-initial clauses. Some clitics, as Pol particle *by,* occur only in subordinate clauses and almost invariably take complementizers as their hosts.[37]

[37] Cf. Pol (i)   [CP   Gdy *=by*   *=m*   miał   czas]
                           if   COND   BE.AUX.prs.1sg   have.prf.3.sg.m   time
                           'if I had time'.
                  (ii)   *Gdy [miał] *=by=m* czas.

The most famous subtype of a W*-system is found in Romance and Balkan languages (cf. French, Italian, Spanish, Catalan, European Portuguese, Modern Greek, Albanian). Here clusterizing clitics (object pronouns and auxiliaries) are located in VP and neither the clitics nor their verbal hosts get a fixed position in the clause (CARDINALETTI 1999). We refer to this subtype as V-systems ("V" = "Verb"). The only Slavic V-system is Moliseslav (Slavisano), a Croatian variety spoken in Italy (KOSTA 2009b). Among Non-Indo-European languages that can be analyzed as V-systems are Guelavia Zapotec (Otomangean), cf. (JONES & CHURCH 1985), Kugu-nganhcara (Pama-Nyungan), Warekena and Tarjana (Arawak).

4.4. C-systems

• Language L is a C-system, if it lacks grammaticalized constraints on the placement of sentence categories that realize automatically with every communicative structure.

Slavic C-systems are Ru, Blr and Ukr. In a diachronic perspective, Slavic C-systems evolve from W-systems (Old Novgorod dialect) or W*-systems (OSR). This evolution trend is instructive, since it shows that removal of the 2P condition for clitics does not necessarily involve grammaticalization of other constraints on word order. The 2P condition on the placement of clitic clusters can hold both in languages with constraints on the placement of verbs (Bg, Mac and other W$^+$-systems) and in languages without such constraints (Slavic W-systems and W*-systems).

4.5. The unity and diversity of Slavic word order systems

On a purely descriptive level the terms "VA-clitics" vs. "2P-clitics" are just as good as the terms "W, W$^+$, W*-systems" introduced here, since they are conventional and telling. Empirically, "Slavic W$^+$-systems" = "Slavic word order systems with VA-clitics", "Slavic W-systems" = "Slavic systems with consistent 2P-clitics" and "Slavic W*-systems" = "Systems with inconsistent 2P-clitics". One advantage of our decision to parameterize word order systems with clitics, not clitic properties, is that Slavic languages with clausal clitics can be put into an appropriate typological context, since almost identical systems are attested in other languages of the world. Another advantage[38] is that Slavic systems with clitics can be described solely on the basis of syntactic constraints without sticking to assumptions about PF and LF features of clitics: all one needs to know is that a subclass of clausal elements clusterize and conform to three types of conditions/principles – a) the Template Principle; b) Constituency Conditions predicting the choice of Comp/XP as the clitic host under the basic word order and licensing well-formed strings in XP; c) Barrier Rules generating derived word orders with clusterizing clitics.

The underlying unity of W, W$^+$ and W*-systems is revealed by the fact that all of them apply the Template Principle, when clusterizing clitics come into contact. Historically, Slavic W*-systems evolved from standard W-systems as proven for Old East Slavic by ZALIZNJAK (2008). The skeptics would say that this detail does not clarify the status of clitics in the UG. However, the observed facts suggest that the development of all word

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[38]   The polemists will probably claim it a disadvantage.

order systems with clitic clusters in the world's languages conforms to the Principle of Domain Shrinking. It predicts that if a language has clitic clusters in (Spec, CP) or (Spec, IP), at some later stage these clusters can migrate downwards, in terms of McConvell (1996) and end up in VP. This amounts to the syntactic shift: standard W-systems → W*-systems.[39] The shift in the opposite direction, i.e. W*-systems/V-systems of the Romance type → standard W-systems, is problematic, since clusters of clause-level clitics do not seem to migrate upwards: if a cluster as a unit is in its entirety generated in the VP or some projection above the VP but below IP[40], it is unlikely that it will raise to any higher projection, be it (Spec, CP) or a different node. Raising of isolated clitics and other clause-level elements to 2P (whatever the exact definition of this position in UG is), where they adjoin to the already existing clitic clusters is certainly possible – otherwise Slavic clitic templates could not be expanded with new kinds of auxiliaries, pronouns and particles. But raising of a complete cluster to a hierarchically higher position in the same clause lacks motivation.

The unity of W, W⁺-systems vs. W*-systems is confirmed by the fact that they apply the same Constituency Conditions for all 2P clitics.[41] A further difference is that W*-systems show a statistically relevant increase of cases, where some or all clusterizing clitics stand to the right of 2P.[42]

The crucial question is what type of rules oppose W⁺-systems with VA-clitics to standard W-systems lacking constraints on verb-and-clitic adjacency. King (1997: 75) and Franks (2008: 93) claim that it is multiple XP-fronting attested in Bg and banned in other Slavic languages, cf. examples (16) and (17) above. But since Cz exhibits multiple XP-fronting without verb-adjacency, albeit in communicatively marked sentences (Avgustinova & Oliva 1997: 45, Hana 2008), whereas Bg bans several types of multiple XP-movement, notably movement of groups $*[V_{fin} + O]$, $*[S + Vf_{fin}]$, $*[V_{fin} + \text{adv}]$, $*[S+O]$ to XP, cf. (Dimitrova-Vulchanova 1999: 92), the presence/absence of multiple XP-movement cannot be diagnostic for the distinction of W-systems vs. W⁺-systems. Our solution is that W-systems and W⁺-systems differ in the use of Barrier Rules. In standard W-systems (SC, ONR, Svk etc.) non-initial [V – CL] sequences in the main clauses only arise in sentences with derived word orders: such orders are triggered by a combination of a Barrier Rule and verb movement. A Barrier Rule has effect on the position of clusterizing clitics and removes them from 2P: if XP is filled by an initial group acting as a Barrier, clusterizing clitics do not reach clausal 2P (Ćavar & Wilder 1999) or, under different assumptions,

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[39] Cf. the transition from the Common Slavic and Old Polish type of a W-system to the Modern Polish type of a W*-system. Cf. also the transition from a W-system characteristic for Ancient Greek to a W*-system in the early Greek *koine* (Kissilier 2011).

[40] Rouveret (1999) argues this is the case in the European Portuguese V-system with pronominal object clitics.

[41] With the exception of SC particle *li* which cannot stand after the initial multi-word constituent and has to adjoin to the first phonetic word, while other clusterizing clitics in SC are placed both after the first phonetic word and after the first spelled-out constituent. In contrast, in the Bg W⁺-system *li* normally stands after the first spelled-out constituent. In the ONR W-system all clusterizing clitics including *li* adjoined to the first phonetic word. Therefore, the placement of *li* does not help opposing the Bg W⁺-system to standard Slavic W-systems.

[42] The statistical figures for a W*-system in early Greek koine are given in (Kissilier 2011: 113–121). A survey of the OSR W*-system is given by (Zaliznjak 2008: 127–128). Zaliznjak argues that OSR auxiliary clitics and the reflexive accusative clitic *s'q* stood to the right of 2P most regularly. This conclusion is justified. However, it should be mentioned that the reflexive accusative clitic *s'q* from the beginning of the written period had a higher frequency in East Slavonic language than some of the clusterizing clitics that seldom moved out of clausal 2P.

move out from 2P (Zaliznjak 1993: 287), (Zimmerling 2012a) and make it available for the moved verbs. This gives rise to the configuration [$^{\text{BARRIER}}$ [XP]] – V – CL: this mechanism is uniform in all Slavic languages, cf. examples (18), (19), (22) showing Verb-second orders in ONR, Svk and SC main clause declaratives.

In the Bg W$^+$-system, the sequences [CL – V] ~ [V – CL] arise already with the basic word order. In contrast, the structure *[$^{\text{BARRIER}}$ [XP]] – V – CL is severely ungrammatical in Bg main clause declaratives, cf. (24).

(24) Bg   *{$_{\text{TopicP}}$ [$_{\text{XP}}$ [$_{\text{PP}}$ Na Ivan] [$_{\text{NP}}$ knigata]} <u>vŭrnal</u> = *sŭm=mu=ja*.
            [to Ivan.m] [Book.f] def.f <u>return</u>.prf.3sg.m BE.AUX.1sg he dat.m she.acc.f
            Intended meaning: 'I returned the book to Ivan'.

Therefore, the derived order in standard W-systems – [$^{\text{BARRIER}}$ [XP]] –V – CL – is a mirror image of the basic word order in the Bg W$^+$-system – XP – CL – V ~ [$_{\text{XP}}$ V] – CL. The fundamental difference is that Bg clusterizing clitics do not give up 2P in main clause declaratives but attract the verbs to clitic-adjacent positions: the verbs cannot take 2P in this type of a W$^+$-system, it is reserved only for clitics. Let us parameterize the 2P properties of Slavic clitics and analyze them in terms of feature strength. Then one can say that Bg 2P clitics are strong 2P clitics, since they never leave clausal 2P and attract Bg verbs to adjacent positions. Standard Slavic 2P clitics are weak, since they do not reach clausal 2P in derived word orders with a Barrier and give up 2P for the verb: as a result, Verb-second orders arise.

Finally, the unity of all three types of Slavic systems with clausal clitics and the East Slavic C-systems is revealed by the fact that none of the four systems has grammaticalized constraints on the placement of verbal forms in sentences with the basic word order. There-fore, the absence of constraints on the placement of finite verbal heads/l-participles (i.e. past participles used in the complex perfect and pluperfect tenses) in sentences with the basic word order seems to be the most general characteristics of the Slavic syntactic type.

5. Slavic VA clitics as strong 2P clitics: the VA vs. 2P distinction revisited

The Barrier Theory and the notion of strong/weak 2P make it possible to view the distinction of VA-clitics vs. 2P clitics in a new light. The previous approaches worked out the insight that Bg and Mac VA-clitics are not 2P (en-) clitics adjoining to XP, but verbal (pro)clitics lacking a fixed syntactic position in a clause, cf. King (1997), Franks & King (2000), Franks (2008). We argue that Bg VA-clitics are at the same time 2P clitics sharing with 2P clitics in the remaining Slavic languages (SC, Cz, Svk, ONR etc.) not only prosodic but also syntactically relevant aspects of clausal 2P, including XP-movement and licensing of the initial constituents in XP. At the same time, strong Bg 2P clitics differ from weak Common Slavic 2P clitics that they are firmly attached to clausal 2P: the Bg word order system blocks or reduces the possibilities of removing the clitics from 2P and imposes stricter constraints on clitic movement and verb movement than other Slavic systems. These constraints have at least four diagnostic features:

1)   In sentences with the basic word order #XP – CL – V ~ #V – CL strong Bg 2P clitics attract verbal forms to clitic-adjacent positions, the distant orders #…CL […] V, #V […] CL are banned.

2)   Strong Bg 2P clitics do not leave its clause: clitic climbing is impossible in Bg.[43]

3)   Strong Bg 2P clitics do not leave clausal 2P and do not make it available for verbal forms in the main clause declaratives, cf. the ill-formedness of (24).

4)   The mechanism of *li*-inversion may be triggered by the requirement to retain all clusterizing clitics in 2P, cf. (23b–d) and avoid cluster splitting.

The puzzling behavior of Bg *li* is likely triggered by a conflict of two mechanisms involved in the Barrier Rule. On the one hand, the fact that *li* in sentences with Bg *ne/šte* leaves its slot in the clitic template confirms that $[_{NegP} \text{ne}]$ and $[_{FutP} \text{šte}]$ are selective Barriers and indicates that clitic movement and cluster splitting in (23c) have taken place. On the other hand, the moved clitic does not reach its target position (right-adjunction to the verb) predicted by the Common Slavic pattern (20') repeated here as (xviii). This apparently indicates that verb movement in (23c) did not take place – a logical result, if the analysis, where Bg verbs move to clitic-adjacent positions already with the basic word order $XP – CL – V_i…t_i$ is on the right track.

(xviii) Common Slavic $*[^{\textbf{BARRIER}}{}_a [\, XP\,] – CL^{a+b+c} …V \Rightarrow [^{\textbf{BARRIER}}{}_a [\, XP\,] – CL^{b+c} – V_i – \textbf{CL}^a \, t_i$

It is well-known that Bg retains the Common Slavic pattern (xviii), cf. (21) above, but its uses are marginalized and require special pragmatic contexts. While example (25b) with *li*-inversion is a real question, example (25c) is permitted only as an echo-question (Schürcks, p.c.).[44]

(25)   Bg

(25a)   *Ti ne=$[_{CliticP}$ *li=si=mu*] <u>dal</u> pari?
        Intended meaning: 'Did you give him money?'

(25b)   Ti $[^{\textbf{BARRIER}}{}_a [_{NegP} \textbf{ne}]]$ __a =si^b=***li**^a*=mu^c <u>dal</u> pari?
        'Did you give him money?'

(25c)   ?Ti $[^{\textbf{BARRIER}}{}_a [_{NegP} \textbf{ne}]]$ __a =si^b =mu^c <u>dal</u>=***li**^a* pari?
        '(Did you really say that) you gave him money?!'

In a similar way, blind communicative Barriers of the Common Slavic type (20'), where the whole cluster is shifted to the post-verbal position are banned in Bg main declaratives, cf. (26a–b) but permitted in Bg yes-no questions, cf. (27a–b).

XP – CL – V

(26)   Bg

(26a) $[_{PP} \textbf{V} [_{NP} \textbf{drobovete na umrelija}]]$ =*je* <u>imalo</u> voda.
        in lungs-the of the deceased have.PRF.3SG.N BE.AUX.PRS.3SG water
        'There was water in the lungs of the deceased person'.
        $*[^{\textbf{BARRIER}} [XP]] – V – CL$

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[43] Note that instances of Bg Possessor Raising discussed by Schürcks & Wunderlich (2003) do not falsify the conclusion that Bg clausal 2P clitics do not climb. Under Possessor Raising, DP-level dative possessive clitics optionally raise, leave DP and take clausal 2P. Cf. Bg Pročete=*li* $[_{DP}$ statja-ta=*i*] 'Did you read her article?' → Pročete=*li=i* $[_{DP}$ statja-ta *t*] 'the same'. Clitic climbing out of IPs/CPs is impossible in Bg.

[44] We are grateful to Lilia Schürcks for the assessment of the Bg examples.

(26b) *[**BARRIER** {$_{TopicP}$ [$_{PP}$ **V** [$_{NP}$ **drobovete na umrelija**]]} <u>imalo</u>= *je* voda.
       Intended meaning: 'As for the lungs of the deceased man, there was water'.

Bg questions with a fronted topical Barrier are well-formed, cf. the order #V — CL in (26a), where the PP *v drobovete na umrelija* apparently is part of the focus, and the derived order [**BARRIER** {[$_{TopicP}$ XP]]} – V – CL in (27b), where this PP is topicalized and fronted.

(27)   Bg

(27a) <u>Imalo</u> =*li=je* voda [$_{PP}$ v [$_{NP}$ drobovete na umrelija]]?
       have.PRF.3SG.N Q BE.AUX.PRS.3SG water in lungs-the of the deceased
       'Was there water in the lungs of the deceased person?'

(27b) [**BARRIER** {$_{TopicP}$ [$_{PP}$ **V** [$_{NP}$ **drobovete na umrelija**]]} $_i$] <u>imalo</u> =*li=je* voda t$_i$?
       'As for the lungs of the deceased man, was there water?'

In Bg interrogative clauses construed with an initial topic the Barrier Rule is almost obligatory. FRANKS (2008: 98) compares the well-formed sentence Bg {$_{TopicP}$ *Kolata*} *prodade=li Petko včera?* 'Did Peter sell the car yesterday?' with the ill-formed *{$_{TopicP}$ *Kolata*}=li prodade Petko včera?* and concludes that *li* "…must be prosodified and linearized before topics are merged". However, the example (27b), where not only *li*, but the whole string of clitics =*li=je* headed by *li* takes postverbal position, indicates that the clitic cluster with *li* is linearized after the topics are merged. Hence, the Barrier effect observed in (27b) is not fake or epiphenomenal. The clitic *li* takes 2P, if the initial constituent is focal, cf. (23b), (27a), but cannot follow a topical constituent and must move to the postverbal position. The auxiliary clitic =*je* which takes 2P after initial topics in main clause declaratives, cf. (27a), in yes-no questions patterns with *li* and takes the postverbal position too.[45]

   To sum up: the constraint on clitic-and-verb adjacency grammaticalized by Slavic W$^+$-systems (Bg, Mac) in the basic word order XP – CL –V ~ V – CL reduces the number of derived structures, where verb movement and overt PF-clitic movement invert the relative order of CL and V in sequences like XP – CL… V → XP – [V – CL]. As a compensation for the lack of initial communicative Barriers in the main clause declaratives, cf. (19), (24), Bg developed a special parameter licensing multiple XP-movement on the condition that all fronted groups make up a single topical constituent, cf. (16), (17), (26b).

6. Further problems and perspectives: possessor raising and NP/DP internal clitics

   In the majority of Slavic languages the dative case has possessive uses: these uses are not restricted with pronouns and clitics, but in languages with pronominal clitics productive possessive constructions without HAVE are generally linked with dative clitic pronouns. Dative possessive clitics do not appear in the North-West Slavic area (ONR and probably other related North-West Russian dialects), where the dative possessive construction from

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[45] It can be stipulated that the Bg clitics right-adjoin to the verb in yes-no-questions before the topic is fronted, but this way one could not account for the fact that in Bg main clause declaratives extra-clausal topics are not permitted at all, cf. the ill-formed (26b). Hence, the order {$_{TopicP}$ [XP]} – V – CL in yes-no-questions, cf. (27b), is unequivocally linked to verb movement, and verb movement has to be triggered by a Barrier Rule, in this case – by the Spell-Out of the initial topic.

the beginning of the written period is replaced by the preposition genitive construction, cf. Modern Ru *u menja estj Y/u menja Y,* lit 'by-me is Y'. Across Slavic languages, dative possessive clitics have two typical positions – inside DP/NP, where they do not clusterize, and clausal 2P, where they clusterize. Slavic clausal 2P possessives seemingly take the same slot as dative argument clitics, but it is unclear whether they should be described as the same underlying dative elements, or as syntactic homonyms. Schürcks & Wunderlich (2003) argue for the first solution for Bg, while Zaliznjak (2008: 35) opts for the first solution for OR. Bg is one of the few Slavic languages, where dative possessives may show up both on the DP/NP level and on the clausal level. If one assumes that *si* in (28a) and (28b) is the same underlying case form, the Raising analysis is necessary, since Bg phrase-level clitics may not appear at the left margin of DP:

(28)   Bg

(28a)   Tja nameri=*li*   [_DP užasni-te=***si*** greški]?
        she found.PST3.SG Q   horrible-the REFL.DAT mistakes
        'Did she find **her** horrible mistakes?'

(28b)   Tja nameri=*li*=***si***   [_DP užasni-te ___ greški]?
        she found.PST3.SG Q REFL.DAT   horrible-the mistakes
        'Did she find **her** horrible mistakes?'[46]

Schürcks & Wunderlich (2003) argue that in (28b) the possessive *si* is raised, while in (29b) the dative possessive *i* is base-generated, since Bg does not have possessive clitics in indefinite NPs, cf. (29a):

(29)   Bg

(29a)   *Pročetox   statja=***i***.
        read.PST.1SG   article her.DAT.3SG.F

(29b)   Pročetox   ***=i***   statja.
        read.PST.1SG   her.DAT.3SG.F   article
        'I read one of **her** articles'.

However, Possessor Raising out of an indefinite NP is attested in OR, cf. the phrase-level clitic *ti* 'your'/'to you' in (30) with the clause-level clitic *ti* 'your'/'to you' in (31):

(30)   OR čto vozdamъ=*ti* [_PP protivou [_NP blagodějaniju=***ti***]?
            (Ipat. [1199], list 244).
            What render.PRS.1SG you.DAT.2SG for benefaction you.DAT.2SG
            'What shall I render you for **your** benefaction?'

(31)   OR brata=***ti*** Romana Bogъ pojalъ (Ipat. [1180], list 217).
            brother.ACC.SG you.DAT.2SG Roman.ACC.SG God took.PRF.3SG.M
            'God took **from you** (your) brother Roman' OR 'God took **your** brother Roman (from you)'.

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[46] Examples (28ab) and (29ab) are from Schürcks & Wunderlich (2003).

In most Slavic languages the situation is less clear than in Bg or OR. Clause-level posses-sive clitics may reach clausal 2P, cf. Svk example (19) repeated here, but the alleged base-generated position of dative possessive clitics in PPs/NPs is seldom filled. Therefore, one lacks an independent verification that Possessive Raising out of PP/NP took place.

(19)　　Svk　#[**BARRIER**{$_{\text{TopicP}}$ [$_{\text{NP}}$ Husté čierne vlasy]}] <u>kaderili</u> =*sa*=*mu* [$_{\text{PP}}$ za [$_{\text{NP}}$ ušami ___].
　　　　　　 thick.NOM.PL black.NOM.PL hair. NOM.PL curl.PRF.3PL REFL.ACC him.DAT.3SG.M.
　　　　　　 '**His** thick black hair curled behind the ears'.

In Modern SC, according to a recent study by PENNINGTON (2010) dative possessives in clausal 2P are marginally acceptable, but phrase-level dative possessives in SC are ungram-matical. A similar result can be shown for Modern Ru, a language lacking short pronominal clitics. Here, clause-level dative possessive pronouns are marginally acceptable, cf. (32a), while phrase-level dative possessives are ungrammatical, cf. (32b).

(32)　　Ru

(32a)　Ja　**sebe**　　　　ne　　vrag.
　　　　 I　REFL.DAT　not　enemy
　　　　 'I am not an enemy **for myself**'.

(32b)　*Ja　vstretil　vraga　**sebe**.
　　　　 I　met　　enemy　REFL.DAT
　　　　 Intended meaning: 'I met **my own** enemy'.

The two oldest Slavic idioms – OCS and ONR – exemplify two extremes: ONR completely lacked dative possessives, while in OCS they were common both in clausal 2P and on the phrase-level. OR had phrase-level dative clitics only in clerical and bookish texts, which suggests an OCS influence. These facts seem to indicate that phrase-level possessive clitics are only characteristic for a small group of Modern and Old Slavic dialects: OCS and Bg should be classified within this group. The majority of Slavic languages, i.e. standard W-systems, in terms of this paper, retain only clause-level possessives and pattern them with argument dative clitics. For this group, a Raising analysis of clausal possessive forms remains controversial.

　　CINQUE & KRAPOVA (2009) advanced a theory that Possessive Raising is a not a homoge-neous phenomenon in Bg either. While examples like (28a/b) may show clitic movement, in example (33), the clitics seem to be base-generated, since Bg PPs are islands for extraction, cf. the ungrammatical example (34):

(33)　　Bg Toj=*mi*　　=*se*　　　　<u>izkrjaska</u>　[$_{\text{PP}}$ **v** [$_{\text{DP}}$ **uxoto**]]
　　　　　　 he　me.DAT.SG REFL.ACC　shouted.PST.3SG　in ear.the
　　　　　　 'He shouted in **my** ear'.

(34) Bg　　*Az=*i*　　　　<u>mislja</u>　　　[$_{\text{PP}}$ **za** [$_{\text{DP}}$ **očite** __]]
　　　　　　 I　her.DAT.3SG.F.　think.PRS.1SG　for　eyes.the
　　　　　　 Intended: 'I think of **her** eyes'.

CINQUE & KRAPOVA argue that the crucial difference of (33) vs. (34) is due to the fact that (33) is confined to inalienable possession and available only for predicates imposing a benefactive/malefactive interpretation. (34) is excluded on formal reasons, while well-formed examples like (28b) may express all types of possession and do not impose a bene-

factive/malefactive interpretation on the possessor.[47] This analysis seems to be compatible with the approach outlined here. It is tempting to extend it to other Slavic languages without phrase-level possessive clitics: in this case, sentences like Svk example (19) can be classified as inalienable possession.

7. Conclusions

The most general characteristics of the Slavic syntactic type is the absence of the constraint on the placement of verbal forms in sentences with the basic word order. Slavic word order systems with clusterizing clitics may be described on the basis of syntactic constraints without sticking to hypotheses about language-specific features of clitics. In the Slavic area, only clause-level clitics clusterize. The patterning of Slavic languages into subtypes – standard W-systems, W⁺-systems and W*-systems finds external parallels in other languages of the world. No Slavic language grammaticalized constraints on the placement of verbal forms in sentences without clitics, but two languages, Bg and Mac, identified as W⁺-systems in this paper, grammaticalized constraints on clitic-and-verb adjacency in the basic word order. In all other Slavic languages non-initial [V – CL] sequences arise in derived structures due to a syntactic mechanism defined here as Barrier.

The underlying unity of W, W⁺ and W*-systems is confirmed by the fact that all of them share three types of constraints: the Template Principle, Constituency Conditions and Barrier Rules. The Template Principle predicts that clusterizing clitics take a contiguous position in a rigid order, according to the type of sentence categories they represent; it makes a syntactic unit out of the clusterizing clitics and puts it into a fixed position defined in relation to the left margin of the clitic domain, i.e. clause. Constituency Conditions require XP-movement to the pre-clitic/clause-initial position and license the groups hosting XP. Most Slavic languages allow only one maximal projection in XP but Bg and colloquial Cz also allow multiple XP-fronting on the condition that the fronted elements make up a single topical constituent. Barrier Rules generate derived word orders with late placement of clitics or cluster splitting. In the most important case, the Barrier mechanism involves verb movement in root clauses and attracts the verb to clausal 2P generating verb-second and clitic-third order XP – [V – CL]. This option is not available in Bg main clause declaratives.

The traditional distinction of Bg/Mac VA-clitics vs. Common Slavic 2P clitics is justified, but the assumption that Bg VA-clitics lack syntactically relevant features of 2P clitics is dubious. The type-specific features of Bg VA-clitics can be better captured if one parameterizes 2P properties. Bg VA-clitics are strong 2P clitics: they do not leave 2P and do not make this position available for verbal forms, which blocks for derived structures with verb movement. Common Slavic clitics are weak 2P clitics, they move out of clausal 2P and attract verbal forms to it, which triggers the verb-second and clitic-third order XP – [V – CL] in communicatively marked sentences.

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[47] Cinque & Krapova argue that raised possessive clitics that can be extracted out of Bg DPs are underlying Genitives, while base-generated clitic markers of inalienable possession are underlying Datives or Benefactors/Malefactors. This hypothesis needs to be further considered and tested on the basis of other Slavic languages.

Abbreviations

ACC	accusative	NP	noun phrase
AUX	auxiliary	PL	plural
Bg	Bulgarian	POSS	possessive
Blr	Belarussian	OCS	Old Church Slavonic
CL	clitic	ONR	Old Novgorod Russian
COND	conditional	OR	Old Russian
Cz	Czech	OSC	Old South Russian
DAT	dative	Pol	Polish
DEF	definit	PRCL	particle
DP	determiner phrase	PRF	perfective
DU	dual	PRS	present tense
ENCL	enclitic	PST	past tense
F	feminine	Q	question
FUT	future	REFL	reflexive
GEN	genitive	SC	Serbian/Croatian
IMP	imperative	SG	singular
INSTR	instrumental	Slv	Slovene
LOC	locative	Svk	Slovak
M	masculine	TR	transitive
Mac	Macedonian	UG	Universal Grammar
N	neuter	Ukr	Ukrainian
NOM	nominative	VA	Verb-adjacent

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Anton Zimmerling   Peter Kosta
Sholokhov Moscow University for the Humanities   Universität Potsdam
Institute for Modern Linguistic Research   Institut für Slavistik
Verkhnya Raditschevskaya 16–18   Am Neuen Palais 10
109420 Moscow   D - 14469 Potsdam
RUSSIA   GERMANY
fagraey64@hotmail.com   peter.kosta@uni.potsdam.de