Chapter 18

Extraordinary second-position effects

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Thanks to Roberts (2010), the second-position (2P) effect is given a natural explanation using narrow-syntactic utilities alone, resting on his notion of defectivity. In this paper, I review and extend a narrow-syntactic approach to some other types of 2P effects that have, as far as I know, not been studied in tandem; particularly extraordinary 2P effects involving a combination of 2P placement and left branch extraction (LBE).

1 Introduction

Thanks to Roberts (2010), the second-position (2P) effect is given a natural explanation using narrow-syntactic utilities alone, resting on his notion of defectivity. In this paper, I review and extend a narrow-syntactic approach to some other types of 2P effects that have, as far as I know, not been studied in tandem; particularly extraordinary 2P effects involving a combination of 2P placement and left branch extraction (LBE).

There is no single treatment and theory of all 2P effects: 2P typology comprises at least three classes, based on the categorial *size* properties of the 1P prima facie "hosting" element. The first is the one where the host is a maximal category – these constructions are exemplified by verb-second (V2) or LBE phenomena. The second type involves a host of minimal category and are demonstrated by V-fronted constructions (e.g., long head movement in Breton, V-topicalisation in Slavonic, etc.). Both these types are discussed on a par and given a uniform treatment in Roberts (2010). The last type features non-constituent hosts comprising of a head, say a preposition, and a maximal category, say an AP. This last type is incarnated by what Bošković (2005) calls extraordinary LBE (XLBE). It is this last

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type that is most resistant to narrow-syntactic explanation and, as far as I can gather from the literature, no definitive and purely syntactic account has been proposed.

I aim to derive the last type of 2P effect using Chomsky's (2001) triadic characterisation movement that Roberts (2010: 208) restated in parametric format (1):

(1)	Move	Agree	Pied-pipe	
a.	+	+	+	A-movement
b.	+	+	−	incorporation
c.	+	−	+	Ā-movement
d.	−	+	−	Agree
e.	−	−	−	∅
f.	−	+	+	*
g.	−	−	+	*
h.	+	−	−	Ā-incorporation

If all three operations apply in tandem, A-movement obtains, while a combination of Move and Pied-piping along yield Ā-movement (with the absence of an Agree operation in Ā-processes being highly problematic). Head movement, on the other hand, can be seen as deriving from a combination of Agree and Move. While options (f) and (g) are impossible, by virtue of the axioms of Minimalist syntax (Collins & Stabler 2016), Roberts (2010) takes the last option as corresponding to predicate clefting or Ā-incorporation.[1] This paper shows that this last movement operation derives XLBE.

Roberts (2010: 421) defines intrinsic formal features (IFFs) on terminals in the clausal spine, which are provided in Table 18.1 along with corresponding IFFs in the nominal domain.

Table 18.1: Intrinsic formal features (IFFs)

in the verbal domain				in the nominal domain		
C^{min}	[*i*C]	[*i*T]	[*i*V]	P^{min}	[*i*D]	[*i*N]
T^{min}		[*i*T]	[*i*V]	D^{min}	[*i*D]	[*i*N]
v^{min}			[*i*V]	n^{min}		[*i*N]
V^{min}			∅	N^{min}		∅

[1]For further empirical evidence of Ā-incorporation, see Mitrović (2017b) and those he cites.

I assume that prepositions have no IFF other than N and D. By adopting the view that the presence of the (phasal) D head is subject to cross-linguistic parametrisation, languages lacking the D-structure will correspondingly have prepositions with only one IFF, i.e. N.

The remainder of this section is devoted to explicating some background assumptions and introducing the relevant discussion within which the analysis is couched. After a brief survey of explananda for 2P effects (§1.1), the preliminary details of the N/D parameter of Bošković (2005; 2008), which I am going to assume, are given in §1.2. Finally, in §1.3, I outline the defectivity system of Roberts (2010) that underlies the account proposed here. §1.4 provides the reader with directions I take in the following sections.

1.1 The 2P effect and its explananda

There are two general stances to explaining cliticisation phenomena. By the end of this subsection, I hope to demonstrate that one of these approaches should be preferred on both theoretical and empirical grounds.

One of the foundational questions concerning 2P cliticisation phenomena is: Where does cliticisation take place? At least two answers have been around for decades: either cliticisation configurations are established and derived in narrow syntax (NS) or, otherwise, they are epiphenomenal and reflective of post-syntactic (or more precisely phonological or prosodic) displacement and rearrangement. Let me briefly lay out a two-tiered motivation for preferring the former over the latter.

A phonological/prosodic (i.e., "anti-syntactic") motivation for second-position (2P) cliticisation is most notably and influentially characterised by the theory of prosodic inversion (PI) as advocated by Halpern (1992; 1995). As Roberts (2012: 422) notes, there are three ingredients to this theory as given in (2).

(2) i. 2P clitics are prosodically subcategorised to appear right-adjacent to a prosodic word;
ii. clitics adjoin to IP;
iii. where no element with a phonological matrix appears to the left of the IP-adjoined clitic, then PI must apply, in line with (3).

(3) CLITIC $> X > Y \longrightarrow X >$ CLITIC $> Y$

Given a relevant prosodic domain, the clitic and the rightmost element thus prosodically flip and the second-position effect obtains (3), in line with the principles in (2). Note, however, that (3) is a sketch and there are certainly works

within this approach where 2P clitics are located in positions other than IP. (For a detailed overview and a summary of all relevant arguments, I refer the reader to Bošković 2001: 75ff and citations therein.)

Let me now review some arguments that undermine the nature of such principles.[2] Firstly, with respect to (2i), the 2P order may be derived using more general syntactic principles, as I will demonstrate. Additionally, categorising an element as, and assigning it a descriptively arbitrary label of, a clitic is extraneous insofar as the "clitic effect" may arise from the configuration of the clitic with respect to other elements, especially its "host". Secondly, and in connection to (2ii), it is not only stipulative but also counter-theoretical to assume that clitics adjoin to IP. On the one hand, the current minimalist model of phasal syntax demonstrably takes the C^0, and not the T^0, head to be a phase head and, as such, the locus of clitic-clustering should be on phase heads, i.e. C^0 and v^0 (I demonstrate the conceptual and empirical connection between cliticisation target sites and the phasal nature of such sites below but see Roberts (2010; 2012) for a detailed account and motivation). An additionally problematic conception of (2ii) concerns the nature of "adjunction" which cannot be maintained in line with the standard assumptions of syntax. This proviso of PI predicts all clitics to either be base generated at IP-level or internally moved to an IP-level adjunct position. Consider empirical instances of DP-level conjunction clitics in Indo-European (e.g. Latin *-que*, or Hittite *-a*) or, say, object clitics in Romance or South Slavonic in relation to this proviso. The amount of stipulation that would ensue if I assume there exists movement of a DP conjunction in the former example or object DP in the latter in order to render the syntactic conditions for PI to apply, in line with (2ii), would be too great for a theory of syntax to remain consistent.

On a more general level, the existence of a structure-tampering operation, such as PI as formulated above, breaches the basic tenets of the minimalist linguistic theory or, at least, cannot be defined in accordance with the general minimalist assumptions. Since the Merge operation derives syntactic structures and the nature of movement operations, it has to be confined to the core syntactic module of grammar. I thus cannot maintain this theoretical principle and expect to find displacement operations, derived by Merge, outside the modular confines of syntax.

A less general and more damaging evidence against PI is empirical. I briefly provide an argument coming from Ser-Bo-Croatian LBEs. Bošković (2009), among others, convincingly shows that PI cannot account for the following morphosyntactically conditioned violations of the left branch condition (LBC). While

[2] In doing so, I also adopt the rationale of Roberts (2012: 422).

non-extracted DPs containing both forenames and last names allow the forename to be unmarked for case, a left-branch extracted forename must obligatorily be case-marked; in the case of (4), as an accusative.

(4) Ser-Bo-Croatian

a. i. Lav-a Tolstoj-a sam čitao
Leo-ACC Tolstoy-ACC AUX.1SG read.PPL.SG.M
'I'm reading Leo Tolstoy.'

ii. Lav Tolstoj-a sam čitao
Leo-NOM/∅ Tolstoy-ACC AUX.1SG read.PPL.SG.M
'I'm reading Leo Tolstoy.'

b. i. Lav-a sam Tolstoj-a čitao
Leo-ACC AUX.1SG Tolstoy-ACC read.PPL.SG.M
'I was reading Leo Tolstoy.'

ii. * Lav sam Tolstoj-a čitao
Leo-NOM/∅ AUX.1SG Tolstoy-ACC read.PPL.SG.M
'I was reading Leo Tolstoy.'

If some post-syntactic algorithm did in fact derive PI, it is nearly impossible to account for the empirical facts stated above without having the phonological-prosodic module of grammar be sensitive to narrow morphosyntactic properties or features such as case marking.

Also consider the fact that it is not clitics alone that may interrupt a complex DP, such as the "Leo Tolstoy"-type compounds names above. As Bošković (2009) observes, a non-clitic item, such as a full finite lexical verb *čitam* 'read.1SG.PRS', may also break up the name (5). In line with Roberts (2012), I assume that the first-name D^{max} Ā-moves to the position of Spec(Force^{max}) with the full verb remaining in T^{min}. Note further the obligatory case-marking on the extracted forename DP.

(5) Ser-Bo-Croatian
Lava čitam Tolstoja
Leo.ACC read.1SG.PRS Tolstoy.ACC
'I'm reading Leo Tolstoy.'

Furthermore, the following is also well-formed, which lends empirical support to Roberts's (2010) motivation that Ā-movement of minimal categories should exist. The continued range of cases of clitic interruptions of the first-last-name DP should amplify empirically this argument.

(6) Ser-Bo-Croatian

a. (?) Lava sam čitao Tolstoja
Leo.ACC AUX.1SG read.PPT.SG.M Tolstoy.ACC
'I (have) read Leo Tolstoy.'

b. (?) Lava čitao sam Tolstoja
Leo.ACC read.PPT.SG.M AUX.1SG Tolstoy.ACC
'I (have) read Leo Tolstoy.'

(7) Ser-Bo-Croatian

a. Lava mi je Tolstoja dao da čitam
Leo me.DAT is Tolstoy gave that read.1SG.PRS
'He gave me Leo Tolstoy to read.'

b. Lava sam joj Tolstoja dao da čita
Leo am her.DAT Tolstoy gave that read.2SG.PRS
'I gave her Leo Tolstoy to read.'

c. Lav si je Tolstoj (sam) doručak pravio
Leo self.DAT is Tolstoy (himself) breakfast made
'Leo Tolstoy (himself) made himself breakfast.'

Note that some speakers concede that (6b) is degraded without a pause following *Lava*. The requirement for the pause is captured prosodically by a generalisation that Ser-Bo-Croatian 2P clitics must be second within their intonational phrase (Bošković 2001: 65, n. 120). The account I provide is consistent with this generalisation as I advocate a view that NS movement coincides with intonational phrasing.

If the theory of PI cannot account for the contemporary LBE phenomena found in Ser-Bo-Croatian, I inductively find it untenable to entertain this theory as general explanandum applicable to a cross-linguistic patterns of cliticisation which also display LBC violations. On grounds of both theoretical and empirical motivation, I thus pursue a NS aetiology of cliticisation, also for reasons of more general parsimony, as noted by Roberts (2010: 73–74); namely I choose, and logically prefer, not to accord extra-syntactic factors too prominent a role in order to maintain the approach in full generality. It is thus, ceteris paribus, more theoretically consistent to adhere to the central syntactic account and derive a maximally possible account of the distribution of facts from that.

More specifically, since a NS account of cliticisation does not suffer from the two drawbacks stated above, I am lead to maintain this assumption in the analysis.

1.2 The N/D parameter

With background notions in place, I discuss in the remainder of the paper how the relation between the N/D parameter and the system of defectivity can be married in an analysis of XLBE.

Assuming that D^{max} constitutes a phase, Bošković (2005) provides an account of why some languages allow and others disallow LBE.[3] Given that D^{min} is a phase head, it prohibits movement of its complement with only its edge being accessible as per the PIC. His first assumption is that languages like Ser-Bo-Croatian lack the D-layer in their nominal spine and, due to this, lack a nominal phase, making their interior accessible. His second assumption is that adjunction structures come in two parametric options: either the adjective takes an NP complement (AP-over-NP) or the AP is adjoined to NP (NP-over-AP).

Consider a scenario of AP-extraction in English which is barred due to the presence of the phasal D. In order for AP to extract, it must pass through D's edge, i.e. Spec(D^{max}). This, however, is an anti-local move and thus prohibited by the independently motivated principles of grammar. Thus, the combination of the PIC and anti-Locality bans LBE in D-containing language like English.

By contrast, Bošković (2005; 2008) contends that Ser-Bo-Croatian is a D-less language in which nominals are not phasal, hence the PIC is inapplicable. Consequently, there is no need for anti-local moves of the AP since the AP may immediately and directly extract to the final position. This is the line of reasoning I will adopt on both empirical and theoretical grounds.

1.3 Defectivity

The second and more foundational is the assumption surrounding triggers of head-movement. Roberts's (2010) system predicts incorporation to take place where an Agree relation holds between a probe and a goal such that the formal features of the goal form a proper subset of the features specified on the probe. This constitutes the goal as defective and such goals incorporate. The concept of defectivity thus regulates movement of the minimal category.

(8) DEFECTIVITY (Roberts 2010)
A goal G is defective iff G's formal features are a proper subset of those of G's probe P.

Thus, in more formal terms, a set of formal features (F) on a minimal category that enters an Agree relation as a Probe (P) will incorporate the Goal (G) iff (9) is met.

[3] See Bošković (2013) for a more recent and phase-based discussion of LBE.

(9) $F_G \subset F_P$

For instance, Romance pronominal objects clitics are taken to correspond to $\varphi^{min/max}$, lacking a D feature. The v^{min}, bearing an IFF [*i*V] (Table 18.1), probes for valuing its [*u*φ]. Upon valuation, $F_G \subset F_P$ holds and the object $\varphi^{min/max}$ incorporates into v^{min}. As Roberts (2012: 391) further notes, "[t]his means that the Match relation holding in virtue of Agree causes the host to become a featural copy of the probing features of the host." The chain reducing algorithm that applies post-syntactically, and which ensures economical assignment of phonological indices, will treat the host-probe and the defective clitic-goal as a single feature bundle. Thus, for a chain

$$\langle [G+P], t_G \rangle$$

the algorithm will pronounce the head of the chain only, giving the effect of movement.

By contrast to Romance, Slavonic clitics are not *v*-oriented but cluster in the C-domain. Roberts (2010) derives the C-orientation by positing that Slavonic clitics are not $\varphi^{min/max}$ elements (since they would be *v* incorporating otherwise) but $D^{min/max}$. Since v^{min} has no uninterpretable D-feature, these clitics can thus escape incorporating into *v*.[4] By virtue of C's bearing an uninterpretable D-feature, pronominal $D^{min/max}$ elements (as well as D-bearing auxiliaries sitting in T^{min}) cliticise onto C.

In conclusion to this section, consider the apparent contradiction that arises in our assuming the systems of Roberts (2010) and Bošković (2005). For Roberts (2010), it is critical that pronominal clitics in Ser-Bo-Croatian be $D^{min/max}$. For Bošković (2005), on the other hand, Ser-Bo-Croatian has no D category. I propose to reconcile the two approaches, in their assumptions and conclusions, by treating Ser-Bo-Croatian pronominal clitics not as D elements but as making up $N^{min/max}$. To maintain the defectivity approach of Roberts (2010), I take the C^{min}, conversely, as being specified with a [*u*N].

This view of subsuming the N/D parameter alongside a defectivity-based system of explananda which require me to adjust some of the basic assumptions and tenets of Roberts (2010). As preliminarily discussed in the following subsection, this is a fully compatible view which expands the explanatory adequacy of the defectivity approach and helps resolve XLBE.

[4] On the escape system, see Roberts (2012: 391–392) and references there.

1.4 Desiderata and roadmap

In the previous two subsections, two seemingly orthogonal ideas were laid out: a parametric and a presumably universal one. The former concerns the choice between encoding arguments as N- or D-elements. The latter concerns defectivity conditions defined on an Agree operation between objects bearing formal features which, when met, legislate incorporation of the goal into the probe.

The two views, while appealing to different derivational devices and conditions, are seemingly incompatible as one assumes that clitics are D-elements (Roberts 2010) while another opposes this view (Bošković 2009).

The primary desideratum is to derive a narrow-syntactic analysis of the word-first 2P effect by suggesting that the effect derives from constituent-only consideration, as opposed to (linearity-based) word-level "counting" which phonological explananda suppose.

Secondarily, I will restate the N/D parameter in terms of the defectivity technology that applies to a pair in an Agree relation, rather than general structural edge- or barrier-based restrictions on extraction domains. This will show that the N/D split theory is compatible with the defectivity approach to head movement.

The scope of this paper is largely restricted to achieving the first desideratum, with the second one requiring apparent abandonment of the assumptions made in the previous subsection, especially in connection to defectivity. §5, however, outlines a resolution for the question of how the defectivity approach may be integrated with the N/D parameter.

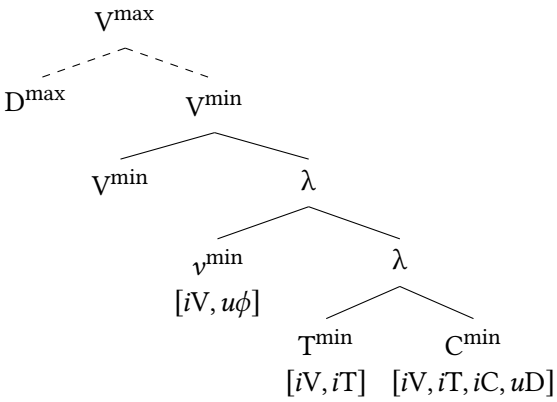
In §2 I outline a technical assumption which will allow me to combine the N/D and cliticisation parameters. In §3, a second position typology is presented with the empirical core of XLBE, which is analysed in §4. §5 provides a programmatic post hoc outlook on rectifying the counterintuitive assumption on the internal structure of clitics in South Slavonic. I essentially appeal to a parametric recasting of the nature of the relevant IFF in pronominal clitics which would yield the two core taxonomies, C- and *v*-oriented clitics, while retaining the view that South Slavonic pronominal clitics are not D-elements, in line with the tenets of Bošković (2001; 2004; 2005; 2009). The following section first provides another crucial piece of technology I rely on in order to derive a narrow-syntactic analysis of XLBE.

2 The unrolling spine: Shimada (2007)

While my account rests on the notion of defectivity as underlying narrow-syntactic incorporation as per Roberts (2010), I add another theoretical ingredient.

I follow Shimada (2007) in assuming that the clausal spine in fact results from a successive unrolling or excorporation of a head verbal complex that contains the entire clausal extended projection (cf. Saito 2012). I assume that the label every branching non-root node in the head-complex lacks the label (λ). I define on the clausal terminals their IFFs along with the [*u*φ] and [*u*D] at phasal levels of v^{min} and C^{min}, respectively (in line with Roberts 2010).

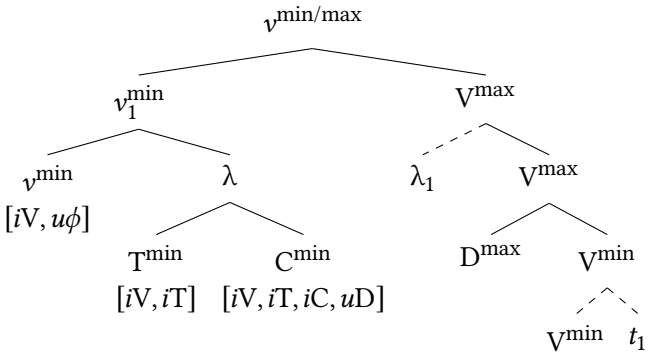
(10)



Note that prior to excorporation of Compl(V^{min}) in (10), there is only one pair of terminals satisfying the defectivity condition on incorporation: T^{min} and C^{min}. However, the *linear correspondence axiom* (LCA) prohibits such movement, making incorporation inapplicable at this stage.

Once the V has combined with an argument, say D^{max} (which has undergone spine-unrolling), its complement, headed by v^{max}, excorporates to the root for two reasons: semantically, there is a type-mismatch (hence the λ) and, perhaps more importantly for our syntactic purposes, Complement(V^{min}) is lacking a label. Once it excorporates, the c-selecting head, v^{min} projects the label (11).

(11)



Given the strong cycle, V^{min}-incorporation takes place as well as External Merge of the argument, checking [*u*φ] on v^{min}. In the next derivational step, the remaining λ-complex containing T^{min} and C^{min} excorporates for the same reasons I gave earlier. The result, after subject raising (SBJ) and final excorporation of C^{min} from the T-complex, viz. the structure in Figure 18.1.

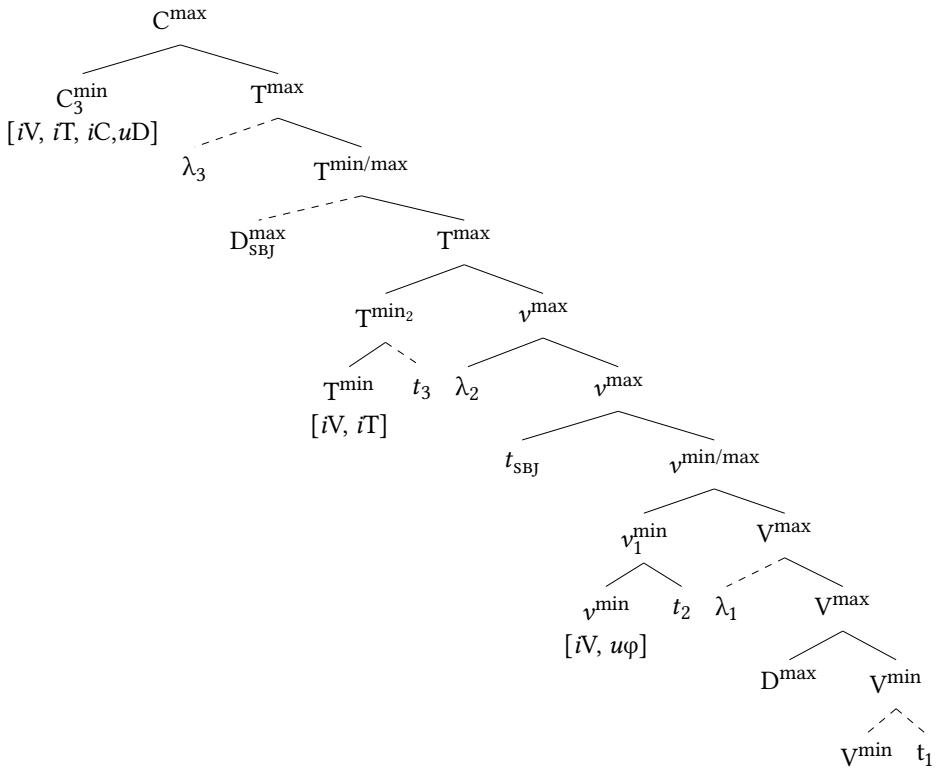


Figure 18.1: A clause-unfolding analysis utilising successive excorporation (Shimada 2007)

The resulting derivation is identical to the standardly assumed one, hence standard operations, including A- and Ā-processes, apply. I will tacitly assume in the remainder of the paper that the spine unrolls along the lines just sketched and, therefore, use a traditional and simplistic drawing of the trees. In §4, the details of the assumptions concerning the excorporational onset of derivations will become clear.

3 Deriving the phrase-/head-first 2P effect

In this section, I provide a derivational account of constituent-first 2P effects. In §3.1, I sketch an account of Wackernagel effects found across old IE conjunction structures which feature a minimal category as the host of enclisis. I turn to hosts of maximal categories in §3.2, and, lastly, to a phenomenon which seems to alternate between phrase/head-first in Slavonic in §3.3.

Note however, that the empirical locus of paper lies in XLBE (§3.3). While other phenomena, including v2 and V-topicalisation may well be analysed using the same principles of the derivation I adopt and propose, these fall outside of the scope of the present paper.[5]

3.1 X-first

Word-first constructions are a wide-spread phenomenon in old IE coordination structures and were first described by Wackernagel (1892). I cite below three examples from Old Irish (12), Gothic (13) and Old Avestan (14). [6]

(12) Old Irish; *Laws*, 4.179 (Thurneysen 2003)
... ba **ċ** ri Temrach
COP and king Tara.GEN
'And he was king of Tara.'

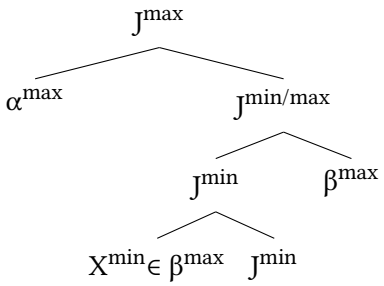
(13) Gothic; *Codex Argenteus*, Jn. 18:33
wopida Iesu qaþ **uh** imma.
called.PRT.3SG J.ACC said.PRT.3SG and him.M.DAT.SG
'(Then Pilate entered into the judgment hall again, and) called Jesus, and said unto him.'

(14) Old Avestan; *Yasna Haptanghāiti*, 29.10
yūžəəm aēibiiō ahurā aogō
you.2.SG.NOM them.PL.DAT lord.M.SG.VOC strength.N.SG.ACC
dātā aṣā xṣaϑrəm **cā**
give.2.PL.AOR.IMP truth.N.SG.INST power.N.SG.ACC and
'O Lord, may you give strength to them through truth and that power [...]'

[5]For an analysis of v2, compatible with the spine-unrolling tenets, see Shimada (2007: Ch. 2). For an analysis of V-topicalisation, see Ćavar & Wilder (1994), Mitrović (2017a), among others.
[6]For a detailed view, see Mitrović (2014; 2021), and references therein.

The common pattern that emerges in these coordinate constructions is that there is exactly one word preceding the conjunction maker. Assuming a J(unction) structure, I take this one-word precedence to derive from head-movement from within the internal (second) conjunct:

(15)



Coordination structures of this type are semantically unmarked across all old IE languages. Since incorporation into the coordinator is consistently blind to the category of the incorporee, Ā-incorporation would appear as the best candidate for an explanandum. This would require positing some Ā-feature such as [edge feature (EF)] on J^{min}, making it phasal in nature. Assuming that it lacks a categorial label (see Chomsky 2013, inter alia), J^{min} has some IFF and an uninterpretable categorial feature which is checked via c-selection. Note that its bearing an uninterpretable feature makes J^{min} potentially phasal in nature.[7]

An alternative view to Ā-incorporation would be to adopt an Agree-based account of incorporation. Assume J has no [EF] specified, but does have a category feature without a value, as per standard assumptions. Once valued, every accessible minimal category in Compl(J^{max}) is a defective goal and the closest one undergoes incorporation. (For a synchronic and diachronic account of the syntax of coordination in IE, see Mitrović 2014; 2018; 2021.)

Similar 2P effect with a minimal category can be observed in Slavonic. Unlike the Wackernagel data above, it is the pronominal clitics that undergo movement by virtue of their being defective goals. In Slavonic, pronominal clitics are treated as $D^{min/max}$ which are probed by a [*u*D]-carrying C (more precisely, Fin^{min}). Once incorporated, the C's [EF], specified presumably on $Force^{min}$, is checked via Ā-movement to its edge (see Roberts 2012: 386–399 and citations there for details).

[7] Mitrović (2014) provides semantic arguments for information-related properties of 2P in IE, lending support to the Ā-incorporation analysis.

3.2 XP-first

The phrase-first 2P effect is elegantly parallel to the head-first 2P effect. One difference is that in XP-first constructions, the phasal [EF] is checked by phrasal movement.

The Germanic v2-type falls into this category and differs minimally from the Slavonic type in that, as Roberts (2012: 401) writes, while Slavonic 2P "require[s] fronting of just one element – *either* a head *or* an XP – the latter require fronting of *both* a *head* and an XP."

3.3 XP/X-first

What follows is the core of this section: there are configurations which seemingly alternate between X-first and XP-first. The constructions in question concern Ser-Bo-Croatian subject conjunctions (SCS).

The empirical focus of this section lies on the following pair of data:

(16) Ser-Bo-Croatian
[Ja i Mujo] smo otišli na pivo.
I and M will.PL go.PTCP on beer
'Mujo and I are going for a beer.'

(17) Ser-Bo-Croatian
[Ja smo i Mujo] otišli na pivo.
I will.PL and M go.PTCP on beer
'Mujo and I are going for a beer.'

While (16) shows a plain vanilla subject conjunction structure, the availability of (17) does not readily follow, prima facie, from Roberts's (2010) tenets. With regards to the conjunction subject, the plural auxiliary verb *ćemo*, once raised from Aux^{min} to T^{min}, is in 2P with respect to the *maximal* category linearly to its left. What (17) shows, however, is that the Aux may be placed in a 2P with respect to the *minimal* category – I refer to this construction as SECOND-WORD (2W) effect. This very oscillation between word- and constituent-second configurations raises the core question on how a narrow-syntactic explanandum for seemingly string-related, and linearity-based, behaviour may obtain.[8]

On independent empirical grounds, then, we are led once more to reconsider the 2P effect with regards to the structural size of the first-position host.

[8]For independent arguments against the view that second-position effects derive from phonological processes, see Bošković (2001: 11–36, 75–93), Roberts (2010: Ch. 3), and further references therein.

While nominal clitics in Ser-Bo-Croatian are D^{min} elements that obligatorily incorporate into (some) C^{min} by virtue of defectivity, there is no defective relation constituted by an Agree chain between a clausal head and the verb, or Aux. Roberts (2012: 391) takes the auxiliary clitics to also bear D-features, just like nominal clitics, and assumes they are first-merged in T^{min}. Hence they are specified with [*i*D, *i*T]. Since Fin also bears [*i*T], auxiliaries are further assumed to incorporate to Fin^{min}, presumably after its [*u*ϕ/D] is valued. By contrast, full main verbs do not raise to Fin since they lack the relevant [*i*T] feature. If the Aux/T moved, accordingly, to Fin, wrong word order would ensue, assuming the subject conjunction is in Spec(TP). I exploit this seemingly wrong prediction to derive the 2w effect.

We take a slight excursus to discuss Ser-Bo-Croatian auxiliary clitics. While auxiliaries are in T^{min}, by being first-merged there Roberts (2012) or moving there from, say, Aux^{min}, there is one auxiliary clitic, *je* 'is.3SG', displaying different distribution. I take this auxiliary to be first-merged in C, specifically as the Fin category.[9]

(18)

φ	SG	PL
1	sam	smo
2	si	ste
3	*je*	su

To maintain the special syntactic status of *je* as a C-occupying clitic with its morphology, I take its form to be an allomorphic default. Hence, at C-level, its ϕ/D-features are not only irrelevant but non-existent:

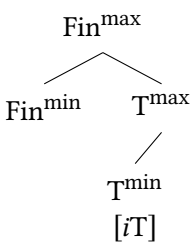
(19) a. /je/ ⇔ Aux

b. /sam/ ⇔ Aux / [1SG]

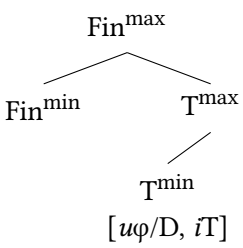
c. /smo/ ⇔ Aux / [1PL]

d. …

(20) [3SG] Aux:



(21) non-[3SG] Aux:

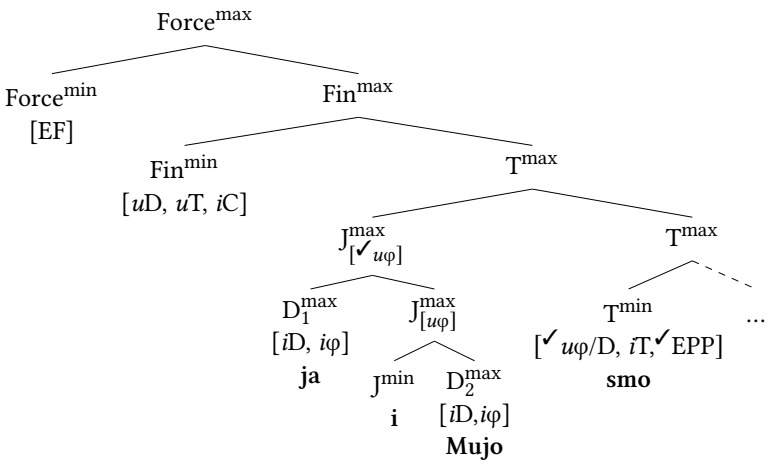


[9] Bošković (2004) in fact provides evidence that *je* is generated in the same position in the syntax as other auxiliaries.

This leads me to assume that Fin, where *je* is first-merged, does not carry a probing feature [*u*φ] but, as Roberts (2010; 2012) contends on independent grounds, the probe [*u*D].

A standard 2P clitic construction with a conjoined subject is then the one in which Aux is *in situ* in T^{min}.[10]

(22)



Note that the [1SG.NOM] pronoun *ja* is not a clitic but truly a D^{max}. This is confirmed by the fact that *ja* may coordinate and a pronominal clitic like *me* 'me.ACC' may not, since only maximal categories coordinate (Kayne 1994).

As for the position of the Aux/T^{min}, I take it to raise to Fin^{min}, as per Roberts (2012: 396) and references therein. Full main verbs or long/non-clitic auxiliaries, are taken to originate as V^{min} and raise to T^{min}, presumably via v^{min} and any other relevant aspect/mood head on the way to T^{min}. Once there, however, full verbs and full auxiliaries are not assumed to be able to raise to Fin^{min} as Fin^{min} lacks the V-feature specified on the complex T^{min}. As such, they are fronted by virtue of [EF] on $Force^{min}$. This, then, constitutes an instance of Ā-movement of a minimal category to the Spec(ForceP) position, as Roberts (2012: 396) contends.[11]

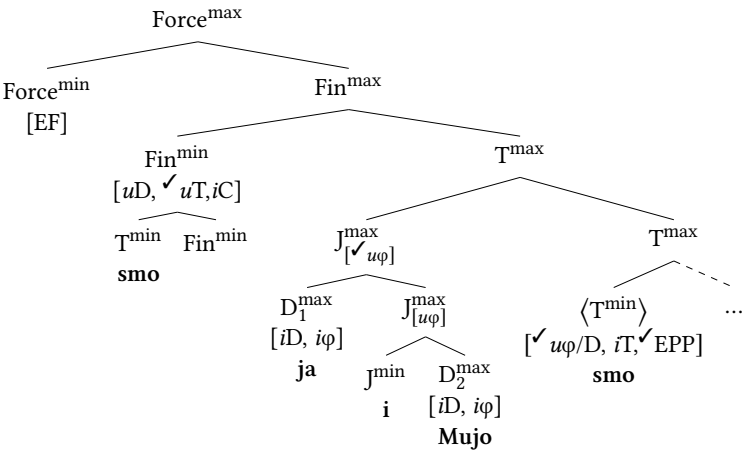
The set of probing features [*u*D, *u*T] on Fin^{min} in (22) are valued with the raising or incorporation of T^{min} which carries the corresponding values for [*u*D, *u*T]

[10] Since the system resting on defectivity we are adopting requires valued uninterpretable features to not undergo deletion upon valuation, I represent checked [*u*F]s with a superscripted ✓ next to the [*u*F]. Equally parsimoniously, if [*u*F] do not delete once checked, neither should discourse-related [EF] or [EPP] delete by the same token.

[11] Another view would be to maintain head-to-head movement and assume that Force's EF may be checked by incorporation of T^{min}, as Roberts (2012) proposes for European Portuguese. If this is desirable, then incorporation is extendable to Ā-processes, as well as prima facie potentially non-defective goals.

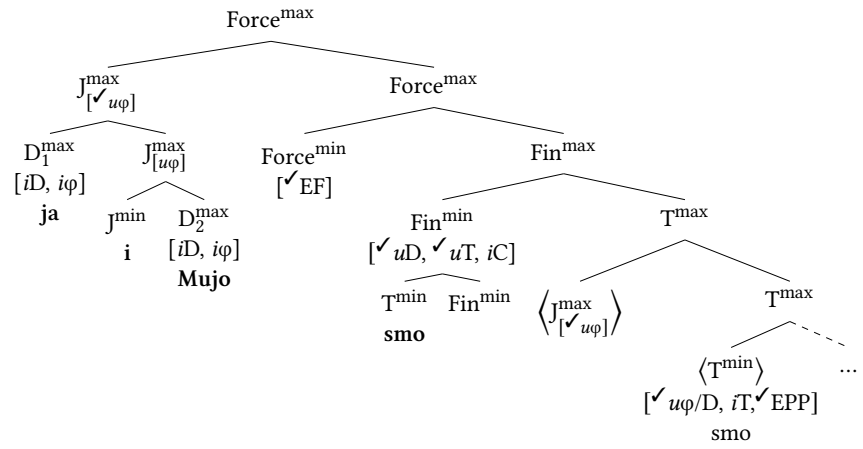
and which constitutes a defective goal with regard to Fin^{min} which, aside from the two uninterpretable features, bears some intrinsic C-feature.

(23)



Upon raising to Fin^{min}, the subject, independently of its internal (non/conjunctional) structure, moves to Spec(ForceP) to check the relevant [EF]. The subject may well move to, say, Spec(TopP) and check the clausal [EF] there; nothing hinges on the precise location of the subject.

(24)



The derivational step involved movement of the maximal category for purposes of [EF]-valuation. How do I then derive the 2w configuration using the exact set of narrow-syntactic devices?

The most obvious option, given the analysis thus far, is to focus methodologically on the derivational steps motivated thus far and maintain as much as possible for the 2w configuration. In this view, I solely restrict or modify the application of a rule that operates anyway. Since a coordinate structure (CS) should not introduce any special restrictions on phrase structure, it is untenable on conceptual grounds to assume that a presence of a subject CS would tamper with the rules operating independently of it. What I would like to maintain, ceteris paribus, is the raising of the defective T^{min} as probed by Fin^{min}'s [*u*D, *u*T], and the raising of the subject to check locally the [EF].

Two narrow-syntactic options make themselves available and amenable to an analysis that bears out the desired word order. The first is methodologically parsimonious insofar as it maintains both of the movement steps. One entails *movement out* of a CS, violating Ross's (1967) coordinate structure constraint (CSC).[12] Another option violated anti-locality involving movement *movement into* the CS. In what follows, I consider each of the analyses in turn concluding with a note on theoretical risk management and appeal to some wider economy considerations. Let me repeat the relevant 2w configuration I focus on: in the two subexamples, I make reference to the base/trace option underlying the 2w configuration by assuming that either the D^{max} conjunct moves from the CS in (25a) or that the T-auxiliary moves into the CS and cliticises onto, or incorporates into, J^{min}.

(25) Ser-Bo-Croatian
[Ja smo i Mujo] otišli na pivo.
I will.PL and M. go.PTCP on beer
'Mujo and I are going for a beer.'

a. D-movement from the CS:
Ja_1 [t_1 smo i Mujo] otišli na pivo.
I will.PL and M. go.PTCP on beer

b. Aux/T-movement into the CS:
[Ja smo_1 i Mujo] t_1 otišli na pivo.
I will.PL and M. go.PTCP on beer

Let us start with the latter idea exemplified by (25b) involving the movement of Aux in T^{min} to J^{min}. While incorporation into the conjunction maker, for which I use the category J^{min}, is a well-attested phenomenon across old Indo-

[12] For other analyses of CSC violations in Ser-Bo-Croatian, see also Stjepanović (2014), Oda (2017), or Bošković (2017).

European languages,[13] movement of a head (T^{min}) into its own specifier, i.e., J^{max} in Spec(T^{max}), is both anti-local[14] and is ruled out by extension. The idea that a Probe and a Goal constitute two separate syntactic objects seems to be an axiomatic foundation of the Agree-based Minimalism I assume. Attraction, resulting from Agree, is, as Roberts (2012: 397) succinctly notes, an irreflexive relation. Even if such strong evidence is suppressed, it remains untenable to motivate movement of T^{min} into J^{min} which by feature-absorption acquires the label [D], since (con)junction inherently lacks categorial features. Therefore, if the categorial label of J^{max} in Spec(T^{max}) is [D], setting aside the anti-locality and extension issues, it is still untenable to motivate incorporation of T^{min} into what may essentially be D^{min}. Such a D/J^{min} object lacks neither the ϕ/D-features which T^{min} could (even more) locally check – hence any variant of A-movement is dispelled. It is also unnatural to ascribe the CS subject with any [EF] which could be checked by movement of T^{min}. Lastly, the formal feature specifications on T^{min} do not in any way constitute a proper subset of the features on D/J^{min}, hence the defectivity of T^{min} and its subsequent incorporation cannot be motivated.

By unsuccessfully exhausting the theoretical space that the first analysis of T-to-J movement would entail, we are led to abandon this view and turn to the second view.

The second analysis appeals to the Ā-movement of the maximal D category *ja* 'I' from within the coordinate J^{max} to the clausal subject position, maintaining both T-raising and subject movement. This approach in fact parallels, and falls within, the well-observed pattern of left branch condition (LBC) violations, a.k.a. left branch extraction (LBE), see Figure 18.2.

Ignore temporarily the fact that this analysis rests on a violation of CSC. Once ignored, the question concerns the computational preference, or indeed availability, of the conjunct D^{max} for extraction. In this regard, I appeal to the A-over-A condition as formulated in Rackowski & Richards (2005) and applied in Roberts (2010).

What derives the 2w configuration is Rackowski & Richards's (2005) definition of the CLOSEST AVAILABLE GOAL (26):

[13] Such constructions derive from the well-known Wackernagel's (1892) law and give rise to the 2P effect. For an extensive overview of this phenomenon, see Mitrović (2014) and references therein.

[14] For overwhelming evidence that movement of a head into its own specifier is anti-local, see Saito & Murasugi (1999); Abels (2003); Grohmann (2003); Doggett (2004); Bošković (2005); Boeckx (2007), among others. As a reviewer reminds me, the ban on movement that is too short was first stated in Bošković (1994).

(26) A goal α is the closest one to a given probe if there is no distinct goal β such that for some X (X a head or maximal projection), X c-commands α but does not c-command β. (Rackowski & Richards 2005: 579)

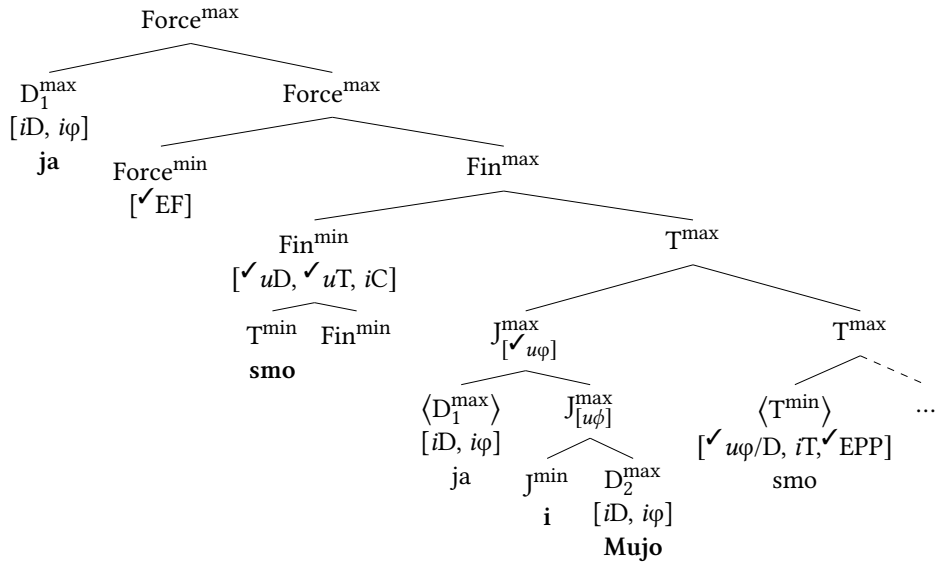


Figure 18.2: Deriving clitic placement using Ā-incorporation in the clausal edge

4 XLBE and non-constituent-first

Roberts (2010; 2012) has convincingly demonstrated not only that an exclusively syntactic approach to cliticisation phenomena is possible but that such an account is elegantly couched within some primitive theorems of syntax. If all cliticisation phenomena find a natural explanation, then it seems objectively odd, and subjectively disturbing, that one type of 2P effect should be afforded an extra-syntactic explanation. In fact, as it turns out, such an explanation is intractable. Hence, if narrow syntax cannot generate the XLBE string, which post-syntactic operations cannot derive (to which I turn), then the phenomenon of non-constituent-first (XLBE) constructions is even more intriguing.

What I aim to explain is the derivational nature of the strings such as the following, involving movement of a non-constituent.

(27) Ser-Bo-Croatian
U veliku on uđe sobu.
in big.LOC he.NOM entered.AOR room.LOC
'He went into a big room.' (Bošković 2005: 30n78)

As Bošković (2005: 30) notes, "under no approach to the internal structure of PP and the traditional NP do the preposition and the following adjective form a constituent to the exclusion of the noun modified by the adjective." This seeming fact potentially devastates an exclusively syntactic approach to XLBE. To maintain such an approach, for reasons of generality just given, one must logically invalidate Bošković's assertion. What I will develop is an approach that utilises the unrolling view of the spine that allows for a constituency structure of the preposition and the adjective. In concert with Roberts's (2010) approach to defectivity, a perfectly syntactic view of XLBE will be demonstrated. Before proceeding, I review the failed analyses. In doing so, I follow Bošković (2005: 30ff.) and cite two syntactic approaches first, and then a post-syntactic analysis.

The first possible analysis is syntactic. One way of deriving constituency of P and A is to posit remnant movement, as Franks & Progovac (1994) assume, namely movement of the NP to the edge of PP, followed by PP-fronting.

(28) $[_{\text{PP}}$ U veliku t_i $]_j$ on uđe t_j sobu_i. (Bošković 2005: 30, n. 79)

Bošković (2005) gives evidence against the remnant PP analysis. If the phrasal movement of the noun is what the remnant PP analysis rests on, it is predicted that the noun would be able to move on to the clausal edge, which is not the case.

(29) Ser-Bo-Croatian
* Sobu on uđe u veliku.
room he entered in big

The remnant PP analysis supposes PP extraction which precedes remnant fronting. Among other arguments, Bošković (2005) shows that, given the evidence from adjunct extraction (30), the analysis predicts movement of the noun *studenata* out of an adjunct, which should be barred on independent grounds.

(30) Ser-Bo-Croatian (Bošković 2005: 32)
Zbog čijih je došao studenata?
because-of whose is arrived students
'He arrived because of whose students?'

The second syntactic approach is that of Borsley & Jaworska (1988), who assume XLBE instantiates ordinary adjectival LBE. By invoking a restructuring operation, Borsley & Jaworska (1988) analyse XLBE as involving P-adjunction to the adjective. In a similar vein, both Corver (1992) and Franks & Progovac (1994) assume XLBE is derived from lowering, resulting in procliticisation of the preposition. Recall that the system we are assuming, most notably the LCA, prohibits rightward movement, qua lowering, and is both methodologically and conceptually reluctant to making reference to phonological operations if we are not forced to so independently. Note, however, that the preposition indeed shows phonological and prosodic evidence of proclisis (Talić 2013; 2015). Our account should, therefore, provide means for these post-syntactic facts to obtain without positing post-syntactic movement. I revisit this at the end of the section.

The third final possible alternative that Bošković (2005) entertains is to assume post-syntactic processes of *scattered deletion* or *copy and delete* (CD) that manipulate the linear configuration of the PP containing a modified noun and pronounce, in one segment, the P and the A strings in a moved constituent, while pronouncing the N in the base/trace position. This approach is sketched in (31).

(31) [U veliku ~~sobu~~] on uđe [~~u veliku~~ sobu] (Bošković 2005: 32n85)

A serious impediment to the CD account is the fact that it cannot predict the elements that may and may not undergo "deletion", since it is not the case that "anything" goes, as long as it is split. (See Bošković 2005 et seq. for more arguments against the CD account.)

(32) Ser-Bo-Croatian
* [Pravo u veliku ~~sobu~~] on uđe [~~pravo u veliku~~ sobu]
straight in big he entered room

Now let us turn to explicating the proposal. Given that the structural spine is taken to enter the derivation in the form of a head-complex, I take the following unfolding steps in the derivational course of a PP.[15]

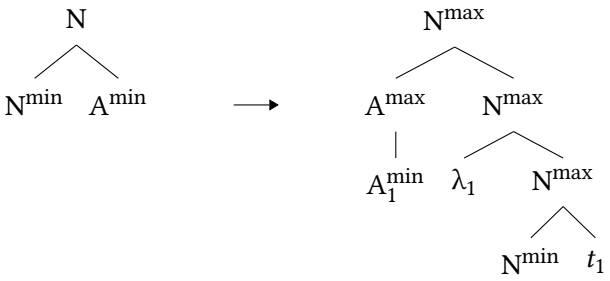
Bošković's (2005) phase-based account of LBE rests on Ser-Bo-Croatian being an NP-over-AP language (33a), unlike English which is AP-over-NP (33b).[16] I take the sole derivational difference between the NP-over-AP versus AP-over-NP structure to lie in the resulting label.[17]

[15]Since adjectives in Slavonic display morphological definiteness (via so-called short/long form), I take them to bear an IFF [*i*DEF].

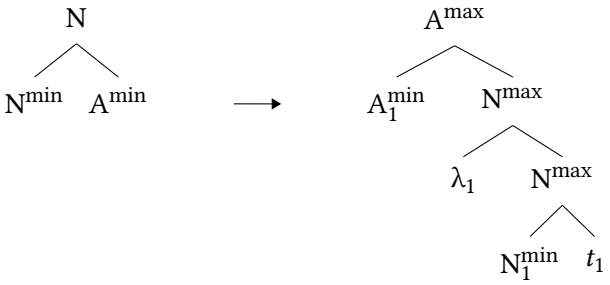
[16]The NP-over-AP vs. AP-over-NP difference/parameter is also entertained as an alternative to the phase account in Bošković (2005).

[17]For a conceptually parallel approach, see Donati & Cecchetto (2011).

(33) a. NP-over-AP:

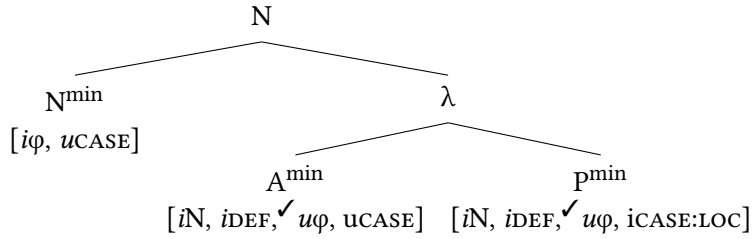


b. AP-over-NP:



In what follows, I provide a stepwise derivation of the PP and derive the availability of XLBE in line with the assumptions with which I started. At the onset, the c-commanding relations are in place for N^{min} to check the [*u*φ] probes on A^{min} and P^{min}.

(34)



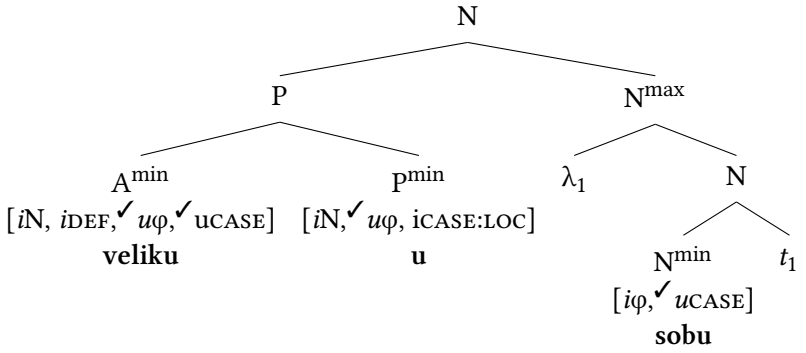
Note that the present proposal actually strengthens Bošković's (2005) proposal regarding the NP-over-AP structure, which amounts to stating that the A category is too weak to label in Ser-Bo-Croatian, a theoretical possibility argued for in Chomsky (2013).

Following the tenets laid out in §2, while N^{min} projects, its complement excorporates, as shown in (35). Since APs in Ser-Bo-Croatian do not project a label, P

projects upon excorporation (nothing hinges on this, as far as I can tell, but cf. the adjunction possibility discussed below).

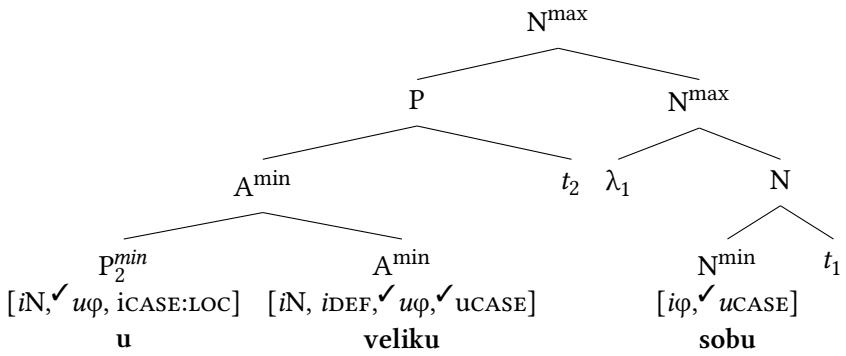
Upon raising, the case-features are checked as the c-commanding relation is established between the case-probe P and the case-seeking N^{min} and A^{min}.

(35)



By virtue of the DEF feature on the A^{min}, P^{min} under sisterhood constitutes a defective goal which gives rise to incorporation under defectivity.[18]

(36)



Upon final movement, the adjective is a maximal category via a mechanism of reprojection or Self Merge, see Figure 18.3 (I remain agnostic or rather apathetic with regards to this issue).

Note that even if I were to adopt a view according to which the A-adjunction is external to the unrolling of the nominal spine, I would arrive at a critically similar configuration. Since A^{max} adjoining the N-complex would not project, due to the nature of the NP-over-AP status of Ser-Bo-Croatian, P^{min}, contained in

[18]The fact that XLBE material is in focus testifies to the definiteness of the AP. Unlike ordinary LBE, XLBE obligatorily displays a definiteness effect.

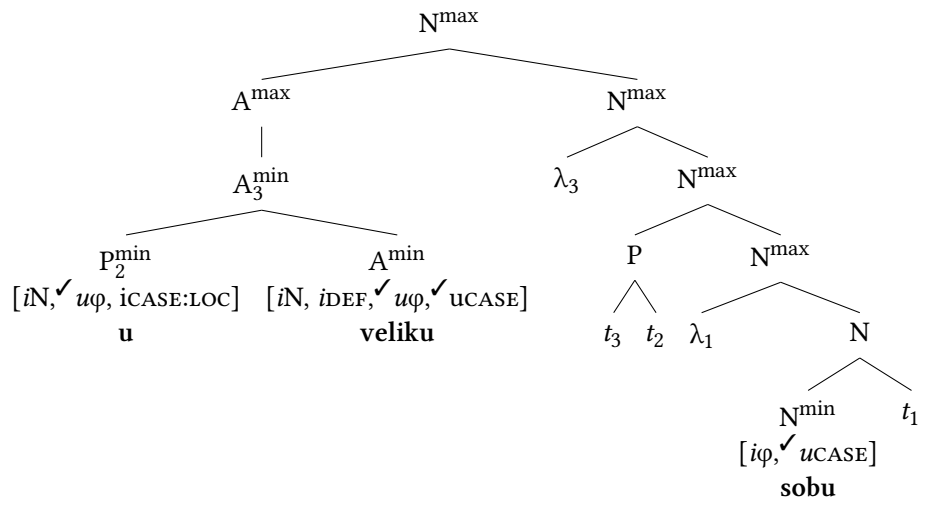
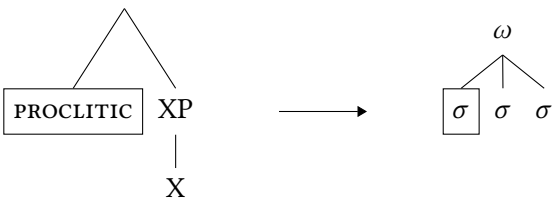


Figure 18.3: Successive excorporation as derivation of XLBE effects

COMPL(N^{min}), would excorporate to the root, ceteris paribus. A^{min} would have its [*u*φ] features checked via c-selection of N and its [*u*CASE] feature valued presumably via the chain ⟨N^{min}[uCASE:], N^{min}[iCASE:LOC]⟩. In case A^{min} is specified with a [DEF] feature, the features constitute a superset of those on P^{min} which would, in absence of [DEF] on A^{min}, otherwise excorporate to the root. This way, P is a defective goal that would undergo A-incorporation.

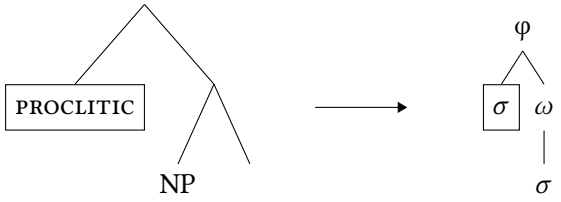
The preposition *u* has the prosodic properties of a proclitic, as mentioned earlier. Due to this, Talić (2013; 2015) provides a morphosyntactic account that is predicated on the assumption that proclitics, like prefixes, incorporate into the prosodic word ω of their host (37).

(37) (Talić 2015: ex. 7)



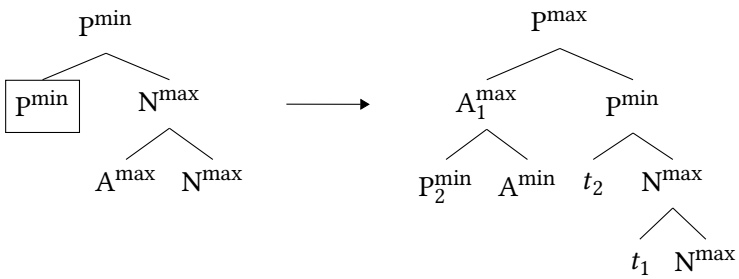
However, the clitic cannot interact with accent when syntactically attached to a branching host. In this case, the latter forms a prosodic phrase (φ) to which the proclitic may only attach.

(38) (Talić 2015: ex. 8)



Therefore, for the correct prosody to obtain, the syntactic configuration in (37) is required. Since under no approach can I derive such base-generated constituency (recall the drawbacks), Talić (2015) assumes that such orders are syntactically derived. In (39), I show her approach as demonstrated by her example (15) (ignoring the possibility of secondary AP and converting the phrase marker into BPS).

(39)



Such a syntactic approach assumes adjunct raising to Spec(root), viz. $\langle A_1^{max}, t_1 \rangle$, and subsequent incorporation of the preposition. This approach is architecturally rather similar to the approach I developed, with one crucial exception. The chain $\langle P_2^{min}, t_2 \rangle$ can be seen as breaching the anti-locality condition by moving the head into its own specifier.[19] The author, however, adopts the lines of reasoning from Matushansky (2006), i.a., which are, on independent grounds, divorced from the system of Roberts (2010; 2012) I am building on.

Also note that the relation between the prosodic constituency property and the availability of XLBE is not one of entailment. While the preposition *u* I have been citing in our data does have proclitic properties and is monosyllabic (its syllabic ω-weight: $\omega_\sigma(P^{min}) = 1$) there are other, prosodically non-simplex prepositions that feature in XLBE:

[19] See footnote 14.

(40) $\omega_\sigma(\mathrm{P}^{min}) = 2$ (Ser-Bo-Croatian)
Prema velikoj je zgradi otišao.
toward big.LOC is building.LOC went
'He went towards a big building.'

(41) $\omega_\sigma(\mathrm{P}^{min}) = 3$ (Ser-Bo-Croatian)
Povodom / uprkos teških je uslova ipak uspio.
in line despite difficult.GEN is circumstances.GEN still succeeded
'Due to difficult circumstances, he still succeeded.'

Thus, independently of the prosodic mappings, the anti-local configurations in (39) look as if, ceteris paribus, they should represent a standard derivation of Ser-Bo-Croatian PP grammar. Instead, I proposed a non-violating derivation that maintains the approach in full format, with little stipulation, and no reference to extra-syntactic modules.[20]

5 Phase-parameters of defective goalhood

Following Chomsky (2008) in assuming that only phase heads trigger movement, Roberts (2010) concludes that phase heads must, thereby, constitute the only cliticisation sites. For the clause, such phase heads are only C and v and may adduce from this idea of landing sites, or incorporation loci, a dichotomous typology of pronominal cliticisation: D-level arguments obligatorily cliticise onto C^0, while φ-level pronouns target v^0, as outlined in previous sections.

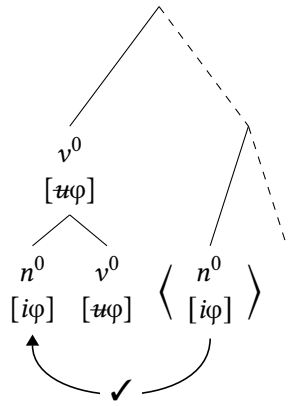
It is a fundamental requirement of the defectivity system that Roberts (2010) develops that lexical categorial features not constitute formal features on which the notion of defectivity is defined.

Assume a configuration in which v^0 combines with a φ-bearing nominal element, n^0. According to the theory, the minimal noun, bearing $[i\phi]$, incorporates[21] into v^0 after valuation of $[u\varphi]$ on the latter. This is demonstrated in (42). Assume, on the other hand, that lexical categorial features constitute legitimately formal features: since [N] ≠ [V], the condition on defectivity is not met in (43) and incorporation does not obtain. This is the problem I propose to resolve.

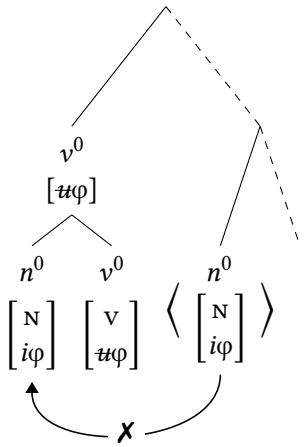
[20] The end result is similar to one Bošković (2005) achieves, being the only other account which achieves the required constituency here, but the road to it is very different.

[21] Or, rather, the feature valuation gives the effect of incorporation given that the chain reduction algorithm pronounces the copy at the head (effectively "in" v^0, by virtue of its feature makeup).

(42) $F_{v^0} \subset F_{n^0}$



(43) $F_{v^0} \not\subset F_{n^0}$



For the principle of defectivity to be operational in its full generality, it is necessary to develop the conditions under which both nominal and verbal categorial (formal) features are subsets of a larger feature-class which would legitimise (43).

In this regard, I adopt the tenets that the lexical categorial features are located in the categorisation formatives which combine with categoriless roots. These are the standard assumptions of Distributed Morphology.

Furthermore, it has been independently motivated that categorisers constitute the First phase. I propose to treat categorisers as phasers more explicitly. In this regard, I treat categorisers as "first-phasers", with the nominal or verbal lexical category as their attribute.

(44) a. $v^0 =_{\text{DEF}} [\pi : \text{V}]$
b. $n^0 =_{\text{DEF}} [\pi : \text{N}]$

What satisfies the defectivity condition in (43) is that both the probe and the goal bear the feature $[\pi]$, regardless of its (nominal or verbal) attribute.

This alone derives the non-arbitrariness of the defectivity system, as developed in Roberts (2010), which recognises and addresses only two types of defective goals insofar as pronominal cliticisation is concerned.

(45) a. C-orientation:
i. The relevant category of the defective goal α: D/N
ii. The category of the relevant probe β: C
iii. Agree between phase-phase objects yielding incorporation via chain $\langle \alpha_{[+\pi]}, \alpha_{[+\pi]} \rangle$

b. *v*-orientation:
   i. The relevant category of the defective goal α: φ
   ii. The category of the relevant probe β: *v*
   iii. Agree between phase-non-phase objects yielding incorporation via chain $\langle \alpha_{[+\pi]}, \alpha_{[-\pi]} \rangle$

My account leaves the analysis of Romance pronominal cliticisation, which Roberts (2010) treats as involving a defective φ goal and overall *v*-orientation, untouched. What we are allowing for is that the minimal D-less noun may count as a minimal phase and, thus, as a defective goal by virtue of categorisation constituting a first phase.

Let me wrap up this section on a diachronic note and the question of the historical sources of the D category in Slavonic as compared to, say, Romance.

(46) a. Romance pronominal clitics are φ-categories.
b. South Slavonic pronominal clitics are N-categories.

Some varieties of South Slavonic (including Macedonian, Bulgarian, and, to some extent, Slovenian) have developed an overtly full-fledged D-category which historically derives from demonstratives, in contrast to Romance, where it derives from pronouns. Given the approach I just outlined, the N/D parameter is therefore independent from the C-orientation parameter for cliticisation.

6 Discussion & conclusion

Let me take stock of the specific results this paper provides. The particular goal was to derive a NS constituency-compliant analysis of XLBE and X2P. To achieve this, I assumed an unrolling excorporation mechanism, according to which all functional layers of the clause (and, inversely and similarly, any other functional structure) originate as a complex head and proceed to unroll and excorporate as each argument is introduced in the structure. XLBE/X2P effects derive, as I have shown, from the featural subset relation, which either holds or does not hold at the point when the functional structure excorporates form the nominal category. In the last section, I showed how the defectivity-driven approach to cliticisation is consistent with the N/D parametric theory which assumes that some languages lack the functional D-layer. Assuming categorisation is an attributive property of the first phase, I have posited, on conceptually natural grounds, that phasality be recast as a feature with categorial attributes. With this twist, the subset relation

between N and C categories can be established, and the N-clitics consistently treated as C-orienting in South Slavonic.

The analysis I provided derives from basic properties of phrase-structure building, coupled with the notion of defective goals and a derivational onset as involving a head-complex (Shimada 2007). As it turns out, XLBE is perfectly amenable to an exclusively syntactic account of its configuration, thanks to Roberts's (2010) defectivity. A side product of such an approach was also a desirable account of 2P phenomena found in Bosnian CSs, which feature the seeming movement of the plural auxiliary into the first conjuncts.

Such an approach may be a stepping stone to understanding the interaction of pragmatics with speech act and vocative driven (X)LBE phenomena, as the following one, which I leave for future research.

(47) $\left[_{wishP}\right.$ Sretan$_i$ ti, Ian-e, t_i rođendan! $\left.\right]$
happy.M.SG you.DAT Ian-VOC birthday.M.SG

'Happy Birthday, Ian!'

Abbreviations

1	first person	IFF	intrinsic formal feature
2	second person	LBC	left branch condition
3	third person	LBE	left branch extraction
ACC	accusative	LCA	linear correspondence axiom
AUX	auxiliary	LOC	locative
BPS	bare phrase structure	M	masculine
COP	copula	NOM	nominative
CS	coordinate structure	PI	prosodic inversion
CSC	coordinate structure constraint	PL	plural
		PRS	present
DAT	dative	PRT	preterite
DEF	definite	PTCP	participle
EF	edge feature	SBJ	subject
EPP	extended projection principle	SG	singular
GEN	genitive	VOC	vocative

References

Abels, Klaus. 2003. *Successive cyclicity, anti-locality, and adposition stranding*. University of Connecticut, Storrs. (Doctoral dissertation).

Boeckx, Cedric. 2007. Some notes on bounding. *Language Research* 43(1). 35–52.
Borsley, Robert D. & E. Jaworska. 1988. A note on prepositions and case marking in Polish. *Linguistic Inquiry* 19(4). 685–691.
Bošković, Željko. 1994. D-structure, θ-criterion, and movement into θ-positions. *Linguistic Analysis* 24. 247–286.
Bošković, Željko. 2001. *On the nature of the syntax-phonology interface: Cliticization and related phenomena*. Amsterdam: Elsevier.
Bošković, Željko. 2004. Clitic placement in South Slavic. *Journal of Slavic Linguistics* 12. 37–90.
Bošković, Željko. 2005. On the locality of left branch extraction and the structure of NP. *Studia Linguistica* 59(1). 1–45. DOI: 10.1111/j.1467-9582.2005.00118.x.
Bošković, Željko. 2008. What will you have, DP or NP? In Emily Elfner & Martin Walkow (eds.), *NELS 37: Proceedings of the 37th annual meeting of the North East Linguistic Society*, 101–114. Amherst, MA: GLSA Publications.
Bošković, Željko. 2009. On Leo Tolstoy, its structure, case, left-branch extraction, and prosodic inversion. In Steven Franks, Vrinda Chidambaram & Brian Joseph (eds.), *A linguist's linguist: Studies in South Slavic linguistics in honor of E. Wayles Browne*, 99–122. Bloomington, IN: Slavica.
Bošković, Željko. 2013. Phases beyond clauses. In L. Schürcks, A. Giannakidou, U. Etxeberria & P. Kosta (eds.), *Nominal constructions in slavic and beyond* (Studies in Generative Grammar 16), 75–128. Berlin: De Gruyter.
Bošković, Željko. 2017. On the coordinate structure constraint, islandhood, phases, and rescue by PF deletion. Ms., University of Connecticut. https://boskovic.linguistics.uconn.edu/wp-content/uploads/sites/2801/2019/05/CSCFranksShortNoAcknow.pdf.
Ćavar, Damir & Chris Wilder. 1994. Long head movement? verb-movement and cliticization in Croatian. *Lingua* 93(1). 1–58. DOI: 10.1016/0024-3841(94)90352-2.
Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.), *Ken Hale: A life in language*, 1–52. Cambridge, MA: MIT Press.
Chomsky, Noam. 2008. On phases. In Robert Freidin, Carlos P. Otero & Maria Luisa Zubizarreta (eds.), *Foundational issues in linguistic theory: Essays in honor of Jean-Roger Vergnaud*, 133–166. Cambridge, MA: MIT Press.
Chomsky, Noam. 2013. Problems of projection. *Lingua* 130. 33–49. DOI: 10.1016/j.lingua.2012.12.003.
Collins, Chris & Edward Stabler. 2016. A formalization of minimalist syntax. *Syntax* 19(1). 43–78. DOI: 10.1111/synt.12117.

Corver, Norbert. 1992. Left branch extractions. In Kimberley Broderick (ed.), *NELS 22: Proceedings of the 22nd annual meeting of the North East Linguistic Society*, 67–84. Amherst, MA: GLSA Publications.

Doggett, Teal Bissell. 2004. *All things being unequal: Locality in movement*. MIT. (Doctoral dissertation).

Donati, Caterina & Carlo Cecchetto. 2011. Relabeling heads: A unified account for relativization structures. *Linguistic Inquiry* 42(4). 519–560. DOI: 10.1162/LING_a_00060.

Franks, Steven & Liljana Progovac. 1994. On the placement of Serbo-Croatian clitics. *Indiana Linguistic Studies* 7. 69–78.

Grohmann, Kleanthes K. 2003. Successive cyclicity under (anti-)local considerations. *Syntax* 6(3). 260–312. DOI: 10.1111/j.1467-9612.2003.00063.x.

Halpern, Aaron L. 1992. *Topics in the placement and morphology of clitics*. Stanford University. (Doctoral dissertation).

Halpern, Aaron L. 1995. *On the placement and morphology of clitics*. Stanford, CA: CSLI Publications.

Kayne, Richard S. 1994. *The antisymmetry of syntax*. Cambridge, MA: MIT Press.

Matushansky, Ora. 2006. Head movement in linguistic theory. *Linguistic Inquiry* 37(1). 69–109. DOI: 10.1162/002438906775321184.

Mitrović, Moreno. 2014. *Morphosyntactic atoms of propositional logic: A philological programme*. University of Cambridge. (Doctoral dissertation).

Mitrović, Moreno. 2017a. Phasal economy & incorporation. Ms. Bled Institute & University of Cyprus. Submitted to *Linguistic Inquiry*.

Mitrović, Moreno. 2017b. Phasal economy and incorporation. Ms., under revision. http://mitrovic.co/output.

Mitrović, Moreno. 2018. Configurational change in Indo-European coordinate constructions. In Ana Maria Martins & Adriana Cardoso (eds.), *Word order change*, chap. 2, 19–44. Oxford: Oxford University Press.

Mitrović, Moreno. 2021. *Superparticles*. Dordrecht: Springer.

Oda, Hiromune. 2017. Two types of the coordinate structure constraint and rescue by PF deletion. In Andrew Lamont & Katerina Tetzloff (eds.), *NELS 47: Proceedings of the 47th annual meeting of the North East Linguistic Society*, 343–356. Amherst, MA: GLSA Publications.

Rackowski, Andrea & Norvin Richards. 2005. Phase edge and extraction: A Tagalog case study. 36(4). 565–599. DOI: 10.1162/002438905774464368.

Roberts, Ian. 2010. *Agreement and head movement: Clitics, incorporation, and defective goals*. Cambridge, MA: MIT Press.

Roberts, Ian. 2012. Phases, head-movement, and second-position effects. In Ángel J. Gallego (ed.), *Phases: Developing the framework*, 385–440. De Gruyter.

Ross, John Robert. 1967. *Constraints on variables in syntax*. MIT. (Doctoral dissertation).

Saito, Mamoru. 2012. Case checking/valuation in Japanese: Move, Agree or Merge? *Nanzan Linguistics* 8. 109–127.

Saito, Mamoru & Keiko Murasugi. 1999. Subject predication within IP and DP: Essays in memory of Osvaldo Jaeggli. In Kyle Johnson & Ian Roberts (eds.), *Beyond principles and parameters*, 167–188. Dordrecht: Kluwer.

Shimada, Junri. 2007. Head movement, binding theory, and phrase structure. Ms., MIT.

Stjepanović, Sandra. 2014. Left Branch Extraction and the Coordinate Structure Constraint. In Jyoti Iyer & Leland Kusmer (eds.), *NELS 44: Proceedings of the 44th annual meeting of the North East Linguistic Society*, 157–170. Amherst, MA: GLSA Publications.

Talić, Aida. 2013. Extraordinary complement extraction: PP-complements and inherently case-marked complements. *Studies in Polish Linguistics* 8. 127–150.

Talić, Aida. 2015. Syntactic mobility of the host and accent shift to proclitics. In Thuy Bui & Deniz Özyıldız (eds.), *NELS 45: Proceedings of the 45th annual meeting of the North East Linguistic Society*. Amherst, MA: GLSA Publications.

Thurneysen, Rudolf. 2003. *A grammar of Old Irish*. Dublin: Dublin Institute for Advanced Studies.

Wackernagel, Jacob. 1892. Über ein Gesetz der indo-germanischen Wortstellung. *Indogermanische Forschungen* 1(1). 333–436. DOI: 10.1515/9783110242430.333.