# ЯЗЫКИ V2: ВТОРАЯ ПОЗИЦИЯ И ПЕРЕДВИЖЕНИЕ ГЛАГОЛА

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В статье обсуждаются конституирующие свойства V2-языков с точки зрения параметрической типологии. V2-языки представляют собой группу языков со сходной архитектурой клаузы и, в частности, единой второй позицией финитного глагола. В статье обосновывается утверждение, что «классический» формальный анализ V2, связанный с передвижением глагола и особым набором признаков у вершины, вызывающим такое передвижение, эмпирически адекватен, а современные попытки расширить круг V2-языков за счет ослабления диагностических требований контрпродуктивны. Языки с «частичным» или «остаточным» V2, определяемые по позиции глагола лишь в части независимых утвердительных предложений, не образуют естественного класса в отношении прочих параметров структуры клаузы; в то же время передвижение глагола само по себе не является достаточным условием для возникновения V2.

**Ключевые слова:** языки V2, передвижение, синтаксис, параметрическая типология, коммуникативная структура, парсинг

## APPROACHING V2: VERB SECOND AND VERB MOVEMENT

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The paper discusses constituting properties of V2 languages in a perspective of parametric typology. V2 languages are a small group of syntactically uniform languages sharing a number of parameters constraining the clausal architecture and the finite verb placement. We argue that whereas the generative procedure of deriving V2 by verb movement and feature composition of the target head is correct and has empirical validation, the broader definitions of V2 phenomena found in the contemporary work on the subject that loosen the diagnostic criteria on the single preverbal constituent are counterproductive. So called 'partial' or 'residual' V2 languages, where verb movement to the left-peripheral position is allegedly characteristic for a part of root declaratives, do not exist; at the same time, the verb movement by itself is not sufficient to produce the classic V2 profile.

**Key words:** verb-second languages, movement, syntax, parametric typology, information structure, parsing

## 1. V2 languages: data, framework and NLP parsing

The term 'Verb-Second Language' (V2 languages) refers to a relatively small class of world's languages where finite verbs have a fixed position in some types of declarative clauses. Following (Zimmerling 2002), we distinguish between 'Strict V2 languages', e.g. German, Dutch, Afrikaans, Danish, Swedish, Norwegian, where the verb invariably takes the clause-second position, and 'V1/V2 languages', e.g. Old and Modern Icelandic, Faroese, Middle Norwegian, Old High German, Yiddish, where both second and first positions (but not the 3<sup>rd</sup>, the 4<sup>th</sup>, etc.) are licensed. Almost all strict V2 and V1/V2 languages belong to the Germanic group of Indo-European languages, the notable exceptions being Kashmiri and Raeto-Romance, cf. Kaiser (2002). V2 is a grammaticalized formal constraint which seems to be independent from information structure (IS) and prosodic issues.

V2 languages share many parameter settings in word order, which can be implemented in rule-based NLP parsing, cf. Vikner (1995), Bhatt (1999) and Wolfe (2015). Generative accounts of V2, e.g. den Besten (1983), Holmberg & Platzack (1995) and Holmberg (2015) work out the insight that verb-second phenomenon is not a primitive feature of a language but a superficial generalization on the clause structure that is triggered by more general mechanisms, notably—verb movement to a dedicated position in the left periphery and movement of phrasal categories to a specifier position preceding the target position of the moved verb, the two instances of movement being in principle independent from each other. As a consequence, broader definitions of V2 have been proposed that generalize about various instances of clause-internal verb movement. In this paper we argue that although V2 indeed involves verb movement and thus linking V2 to movement of a verb to a dedicated position is correct, V2 is more complex than a side effect of verb movement.

## 2. Definitional properties of V2

V2 languages are for syntactic systems fitting two requirements: a) finite verb forms (V<sub>6</sub>) take the fixed (second) position in some type of declaratives, usually in root clauses, cf. Den Besten (1983), but sometimes also in embedded declaratives and in some interrogative clauses, cf. Bhatt (1999); b) the clause-initial position in the diagnostic type of clauses is filled by exactly one constituent—the so called bottleneck condition, in terms of Holmberg (2015). On economic reasons a) and b) can be restated as one general condition: if the second position of a finite verb is generalized in some of type of clauses, there can be exactly one preverbal (i.e. first) constituent in this type of clauses. In Diderichsen (1976), requirements a) and b) are viewed as two sides of one basic condition, a similar analysis is proposed in Zimmerling (2002: 221). However, the current practice is keeping a) and b) apart, since verb movement and accompanying movement of phrasal categories to the preverbal position have different motivation (Roberts 2012; Holmberg 2015). In addition, the exact number of clause-internal preverbal constituents is not always clear, since tentative V2 languages can have topicalization constructions, cf. section 2.3 below. Moreover, some languages which ban V>3 in a diagnostic type of declarative clauses at the same time license V1 orders in the same type of clauses, whereby the preverbal position is not filled by any overt sentence material, cf. section 2.5 below. Bech & Salvesen (2014) and Wolfe (2015) claim that the verb can reach its dedicated position in the clausal left periphery even if the bottleneck condition is not satisfied in any type of clauses: such word order systems are called 'residual V2 languages', cf. the discussion in section 3. In what follows we show that topicalization constructions, V1 orders and multiple XP-fronting can be explained without abandoning the bottleneck condition.

#### 2.1. The bottleneck condition

A descriptive schema of V2 needs three symbols—a symbol of clausal (left) border (#), a symbol of the preverbal constituent (XP) and a symbol for the finite verb ( $V_{fin}$ ), as represented by G(eneralization) 1.

(G1) 
$$\#XP - V_{fin}$$
,  $*\#XP - Y - V_{fin}$ 

The bottleneck condition is crucial for V2 diagnostics. It predicts two features of V2 syntax: a) that a combination of two (or more) phrasal categories X, Y preceding the finite verb in a V2 language should be ungrammatical; b) that the XP-position in the diagnostic type of V2 declaratives is not reserved for any particular syntactic category (e.g. noun phrase) and does not express any particular grammatical relation (e.g. subject), hence {-EPP} in Roberts' (2012) terminology. In other words, the XP-position in a V2 language can be filled by any element in an OR-expression {Cat<sub>1</sub>  $\vee$  Cat<sub>2</sub>  $\vee$  ... Cat<sub>n</sub>}, but simultaneous spell-out of two or more hierarchically independent categories in XP is blocked. Parsing

of well-formed V2 structures is licensed by a combination of an OR-expression filter, which lists sentence categories that fill XP in language L, and an &-expression filter which determines which types of expressions count as single constituents when filling XP in language L.

## 2.2. XP-movement and multiple wh-fronting

All V2 languages are sensitive to constituency rules. The regular constraints on the phrasal movement are further adjusted by additional requirements specific for the 1<sup>st</sup> position promotion. Thus, Danish strongly favours the PP split in clause-first XP promotion, being more tolerate in other instances of phrasal movement (see, e.g., Zimmerling 2002: 234–6):

- (1) a.  $[_{XP}$  Min mor] har han ikke nok  $[_{DP}$  stor tillid  $[_{PP}$  til min mor]]. my mother have.PRS he NEG enough big confidence to 'He surely does not have a big confidence to my mother.'

  b.  $*[_{YP}$  Til min mor] har han ikke nok  $[_{DP}$  stor tillid til min mor].
- Another well-known obstacle to dropping special rules for XP-movement is that XP in some V2 languages hosts not only whole constituents (maximal projections), but also parts of them. Old Icelandic examples (2a-b) show extraction of a head element from a DP and left branch extraction (LBE).
- (2)a.  $[_{xp} \lor tfall]$ [np útfall sjávarinnar]. flood.NOM.SG. be.3SG.PRT sea.GEN.SG.DEF 'The was a flood of tide' b. Þeirrar skal=tu [np beirrar konul biðia. this.GEN.SG.F shall.2SG=CL.2SG. woman woo 'You shall woo that woman'

Finally, in some cases it is impossible to determine whether a sequence  $Cat_1$  &  $Cat_2$  forms a single constituent or not without checking its capacity to fill XP. So Norwegian, which is considered a strict V2 language, occasionally licenses sequences of several adverbials in XP, cf. (3).

Both adverbials in (3) have the same IS status (correspond to a Theme), and there are no grounds to believe that any of them is extraclausal. Therefore, one must assume that at least those native speakers who accept (3) generate/parse a single adverbial phrase there. Multiple XP-movement is characteristic for a minority of V2 languages including Modern Icelandic, Faroese and Old Swedish, cf. the

discussion in Zimmerling (2002: 291; 501). A similar or identical parameter licenses optional multiple *wh*-fronting in Kashmiri interrogatives, cf. (4).

(4)	a.	L <sub>whp</sub> L <sub>whp</sub> Kus]	[ <sub>whp</sub> kemyis]	[ <sub>whp</sub> kyaa]]	dii?		
		who	whom	what	give-FUT		
		'Who will give what to whom?'					
	Ъ.	$[_{WhP} [_{WhP} Kus]$	[ <sub>whp</sub> kyaa]]	dii	[whp kemyis]?		
	c.	[ <sub>Whp</sub> [ <sub>Whp</sub> Kus]]	dii	[whp kemyis]	[ <sub>whp</sub> kyaa] ?		

Other V2 languages, e.g. German, ban structures like (3) and (4a), so multiple-XP-movement and multiple *wh*-fronting parameters may take different values in V2 languages. Multiple XP-movement/XP-fronting is compatible with V2, insofar the possibility of making a single constituent out of hierarchically independent phrases is restricted to special types of phrases and to contexts where all components of an ensemble have the same IS value—that of a Theme/Topic in (3) or a Focus/*wh*-word in (4a).

## 2.3. Topicalization

A group of V2 languages licenses constructions with a left-dislocated topical element coindexed with a main clause element; this is illustrated in (5) from Kashmiri, where the dislocated DP is coindexed with the resumptive pronoun.

(5) [DP Su LaRk], Rameshan vuch temis, tsuur karaan. that boy.NOM Ramesh.ERG saw he.DAT theft do.N.PERF 'As for that boy, it is Ramesh who saw him stealing'.

Some V2 languages like Swedish also license structures with a dislocated VP-fragment, like that in (6a).

(6)	a.	[ <sub>vp</sub> , Läser <sub>j</sub>	boken] <sub>i</sub>	det <sub>i</sub>	gör <sub>j</sub>	han	nu.
		read.3SG.PRS	book.SG.DEF	it	do.3SG.PRS	he.NOM	now
		'He is reading the book, that is what he is doing now'.					
	b.	$*[_{_{ m VP}}$ , Läse $r_{_{ m j}}$	, Läser, boken],		$g\ddot{o}r_{_{ m j}}$	han	nu.
		read.3SG.PRES. book.SG.DEF			do.3SG.PRS	he.NOM	now

Note that (6b) with a topicalized verb phrase in XP and a resumptive verb in V2 is ungrammatical in Swedish. Therefore, it is clear that the initial phrase in (6a) is extraclausal (left-dislocated). Structures like (5) and (6a) are compatible with V2, since formal criteria are met confirming that dislocated topics are extraclausal.

## 2.4. Empirical motivation for verb movement in V2 languages

Framework-internal minimalist accounts of V2 elaborate on the idea that the bottleneck condition is impossible without verb movement to a position in the left periphery. In early versions of the Chomskyan framework this domain has been identified as C, since it was believed that Comp and  $V_{\rm fin}$  always have a complementary distribution in V2 languages and compete for one and the same slot, cf. den Besten (1983), Holmberg & Platzack (1995). This seemingly aprioristic claim is based on two empirical generalizations:

- (G2) In V2 languages finite and non-finite verbs take different positions.
- (G3) In allegedly prototypical V2 languages (Modern German, Dutch, Danish, Swedish, Norwegian) there is root-subordinate clause asymmetry: in the presence of an overt complementizer, finite verbs do not take V2 and are either placed clause-finally—the West-Germanic option, German (7a–b), or one step further to the right, after negation/negative phrases/sentential adverbs—the Mainland Scandinavian option, Danish (8a–b).
- (7) a. Der Hans <u>hat</u> dem Peter keine Instruktionen <u>gegeben</u>. 'Hans has not given instructions to Peter.'
  - Ich glaube, [<sub>CP</sub> daß der Hans dem Peter keine Instruktionen gegeben hat].
     'I believe that Hans has not given instructions to Peter.'
- a. Jens <u>har ikke givet</u> instruktioner til Peter. 'Jens has not given instructions to Peter.'
  - b. Jeg tror,  $[_{CP}$  at Jens *ikke* har givet instruktioner til Peter]. 'I believe that Jens has not given instructions to Peter.'

The generalization G2 predicts that verb movement correlates with finiteness feature and verb morphology (TAM markers and inflectional properties). There are no {-EPP} languages such that their clause-second position is occupied by a base-generated finiteness marker, while their clause-first position is not reserved for a specific syntactic category. Thus, many Mande languages have basic word order S AUX O V and overtly resemble to V2 systems. However, this similarity is superficial, since the clause-initial position is invariably reserved for the grammatical subject.

The generalization G3 is more of a technical issue. It states which type of declarative clauses is diagnostic for a V2 language. In the form given above, (iii) is falsifiable, since there are languages where V2 order comes up not only in root declaratives, but also in some subordinate clauses, e.g. Kashmiri (Bhatt 1999, see also example (9)), Icelandic (Zimmerling 2002: 303) and Afrikaans. Other V2 languages, including Danish, Swedish and Norwegian, have numerous deviations from G3 too, therefore some linguists prefer to speak not of the root *vs.* subordinate clause asymmetry regarding V2, but of 'subordinate clauses with a subordinate clause word order', where the verb does not move, *vs.* 'subordinate clauses with a main clause word order', cf. Vikner (1995).

(9) ΧP  $V_{fin}$ S O  $V_{inf}$ laRkan tswaTh daar-yith. raath dyut a. boy.ERG vesterday gave waste.NOM throw-out 'Yesterday the boy threw out waste'. ΧP V<sub>fin</sub> Comp  $V_{fin}$ V<sub>inf</sub> tem dop [<sub>CP</sub> ki raath laRkan tswaTh daar-yith]. duyt 'He said that yesterday the boy threw out waste.'

#### 2.5. V1 and V>2 orders

Different positions of finite verbs in other types of clauses, i.e. V1 orders in interrogatives and conditionals without an overt complementizer, are often considered as an additional proof that finite verbs move in V2 languages. However, V1 orders in interrogatives, imperatives and conditionals lacking an overt complementizer, as well as subject-verb inversion and adjacent verb-subject orders are not diagnostic for V2 languages, contrary to the claims made in Salvesen & Bech (2014). As stated by Kaiser (2002), Kaiser & Zimmermann (2015), these features are widely attested in non-V2 languages that do not fit the 'bottleneck' condition in declaratives, e.g. in Spanish, Italian, French, Middle Romance languages, Basque, Estonian etc. They have different triggers: thus, VS orders in Spanish or Italian are not bound to the presence of a preverbal non-subject constituent, there are varieties of Germanic V2 languages that lack V2 orders in wh-questions, etc. Verb-subject adjacency of postverbal subject DPs is not diagnostic either: as noted in Bhatt (1999) and Zimmerling (2002: 490; 2013: 188-195), many V2 languages (German, Dutch, Kashmiri) with scrambling in the middle field (i.e. between  $V_{inf}$  and  $V_{inf}$ ) lack fixed slots for a postverbal subject DP.

#### 2.5.1. V1 orders

V1 orders in *yes-no* questions, imperatives and marginally acceptable V1 declaratives in strict V2 languages are usually explained in generative literature by postulating invisible operators or silent topic elements in XP, cf. Platzack (2008). These are framework-internal explanations characteristic of theories that crucially rely on the assumption that V2 languages always have an overt or silent syntactic category in front of the moved verb. For parametric typology such stipulations are redundant, if one explicitly specifies that in each V2 language V2 orders are restricted to some diagnostic group of clauses, and that in certain clauses the verb moves higher than (the target position of) V2. The functional motivation for this proposal is that V1 clauses have a different illocutionary force than V2 declaratives and it is preferable not to masque this fact by claiming that overt V1 and overt V2 have the same underlying structure. As for V1 declaratives in V1/V2 languages, we raise a stronger claim:

(G4) V1 declaratives in V1/V2 languages are IS-marked and formally derived variants of V2 declaratives.

An analysis of Old Icelandic, Middle Norwegian, Modern Icelandic put forward in Zimmerling (2002: 363–366) shows that V1 declaratives in such V1/V2 systems are found in a wide variety of different contexts, and the tag 'narrative inversion' is just a descriptive convention. V1 declaratives with verb fronting are also found in Russian, cf. Yanko (2001), Zimmerling (2013: 280–283) or Ossetic, cf. Lyutikova & Tatevosov (2009), and the analysis of scrambling patterns in these languages can be easily extended to V1/V2 languages. Indeed, there is no evidence that a ban on V>2 declaratives has any impact on IS-motivated derivation of V1 orders.

#### 2.5.2. V > 2 orders

The specific type of V>2 constructions emerges when the target position of verb movement can be reached by some other sentence category in root clauses. This is a rare option, but it is attested as well. Thus, in Swedish, the modal adverb *kanske* 'maybe' takes the same slot as the tensed verb and competes with it for C/V2, cf. Platzack (2008); very similar Danish (Diderichsen 1976) and Norwegian (Faarlund et al. 1997) word order systems lack this option.

(10)Nu kanske Johan vill komma. MAYBE John FUT come.INF not 'John probably won't come now'. Johan kanske inte Ъ. vill komma.

A close parallel to this pattern is found in some Clitic-Second languages like Serbo-Croatian, where V2 orders come up in derived structures with a so called Barrier constituent. With the default word order XP-CL, the clausal-second position is filled by clustering clitics and is of course not available for the verb, cf. (11a). But if the initial topical constituent has Barrier properties, the clitics normally do not attach to it, and the vacant target position is filled by the verb in clauses like (11b), which gives rise to Verb-Second and Clitic-Third orders; see Zimmerling & Kosta (2013: 197–199) and Zimmerling (2013: 445–464) for discussion and further examples.

- (11) a.  $[p_p]$  Poslije toga] = su <u>dobili</u> pozive u reprezentaciju. after that CL.AUX3.PL. get.3.PL.PERF calls to national team 'After that, they have been summoned to the national team.'
  - b. [BARRIER [ppPoslije svega toga]] =jeAfter all that AUX.3SG.N.PERF CL.1SG.DAT CL.AUX.3SG. ležati pijesku. potrebno samo na necessary.ADJ.SG.N. only lie.INF sand 'After all that, everything I needed was to lie on sand.'

All these options are language-specific and subject to microvariation in genetically and areally related V2 idioms. There is, however, one general conclusion we would like to draw. It is not verb movement itself, but the requirement that target position 2P attracting verbs AND/OR some other sentence category must be filled in a diagnostic group of clauses that is crucial for V2 syntax.

## 3. V2 and cartography

The classic account of V2 in both formal and descriptive grammars captures three basic facts about V2 languages: a) verb movement to a dedicated position is obligatory in the diagnostic group of clauses, b) all categories that can fill XP lie clause-internally, c) head movement to 2P and phrasal movement to SpecTP in V2 and V1/V2 languages have grammar-internal motivation and do not depend on IS/prosody, while marked constructions with V>2 orders have IS-triggers. The revival of the researchers' interest to V2 is due to the cartography hypothesis which suggests a universal template of multiple functional projections arranged in a fixed order common for all languages. According to Rizzi 1997, the left-periphery of the clause has a finer structure like  $Force > Topic_1 > Interrogative > Topic_2 > Focus \dots Topic_n > Finiteness > TP$ . The obvious question is, therefore, which one of the multiple projections of a finer-structured left periphery succeeds the non-split single C of the previous analyses in being the locus of V2 phenomena.

It seems that Fin is generally acknowledged as the successor of C; so, Holmberg (2015), Bech & Salvesen (2014), Wolfe (2015) argue that Fin attracts tensed verbs in V2 languages and presumably in a broader class of languages, the so called 'residual' V2 languages, where verb movement to FinP is not generalized in any group of declaratives. As FinP is dominated by other functional projections which can in principle host multiple XPs, the crucial question is whether cartographic theories retain the restrictive 'bottleneck' condition or give it up.

If references to cartography, as in Bhatt (1999: 112), are made just to specify that elements filling XP in an OR-expression  $\{Cat_1 \lor Cat_2 \lor ... Cat_n\}$  take different slots in the left periphery, some of them being topical, some of them being focal, little if anything changes, except for the claim that XP is a descriptive tag, while exact definitions of its syntactic position come from cartography. The same holds for hybrid accounts of XP-movement, which are based on the idea that only a part of phrasal categories reach the left periphery by movement, while other categories are base-generated there. For instance, Mathieu (2006) argues that only non-subject DPs are moved to the preverbal position in Old French—the language he describes as V2, while subject DPs do not move out of TP. Beninca & Poletto (2004) make a general claim that only focus elements move, while topic elements are base-generated in the left periphery.

If, however, cartographic theories include a claim that both V2 languages and non-V2 languages where the verb moves to the left periphery, but two or more clause-internal categories can precede it, have the same syntactic build-up, multiple issues arise. Sentences with a topical constituent in front of XP are also known in V2 languages, but there, as shown above in **2.3** and **2.5.2**, the topical constituent is extraclausal, so examples like (5) and (6a), strictly speaking, show not V>2 orders, but V2 orders with a preceding dislocated phrase. For languages like Old English and Old French—which, according to Bech & Salvesen (2014), both have V2—there is no independent verification that any of the preverbal constituents is extraclausal, since the 'bottleneck' condition on a single preverbal phrase is violated in all clause types, cf. <S Adv, Adv, O V> order in (12) and <S O<sub>1</sub> O<sub>2</sub> V O<sub>3</sub> > order in (13).

- (12) [DP Goliath] [AdvP par quarante jurs] [AdvP le matin é le vesper] [PP a l'ost de Israel] vint (Bible 1170)
   'For forty days, Goliath came to Israel's army in the morning and in the evening'. Old French.
- (13)[him] [pp æfter ðæm grimme] forguldon And they them after that cruelty repaid-3PL.PRT [pp bone wigcræft [\_be [<sub>nn</sub> æt him]] leornodon]. (Or. 22) that art.of.war that they at him learn-3PL.PRT 'And after that, they bitterly repaid him for the art of war that they learned from him'. — Old English.

To sum up, this updated approach fails to provide effective and reliable criteria for identifying V2. The main problem is that if a language has scrambling of preverbal elements and can place them in whatever order—S Adv V  $\sim$  Adv S V, S O V  $\sim$  O S V etc., there are no formal markers indicating which category is extraclausal. A better and more natural solution is to conclude that the entire perspective set out by a cartographic revision of V2 is misleading. 'Partial' or 'residual' V2 languages do not exist, non-restrictive word order systems with verb movement to clause-internal positions cannot be extensions of restrictive V2 or V1/V2 systems.

## 4. Verb movement and left periphery in non-V2 languages

In this section we briefly examine two languages which are definitely not V2 in the classic sense (that we share and advocate for here), but still have some properties of 'non-strict' / 'residual' V2. The aim of the discussion below is to show that clause-internal verb movement *per se* is not sufficient to produce the whole range of phenomena associated with V2 and can actually give rise to quite different and sometimes very peculiar systems.

#### 4.1. Ossetic

The enigmatic clause structure in Ossetic has been a challenge for many formal linguists who attempted to make it fit into the system based on more or less reasonable assumptions about what functional projection constitute the clause and how they are placed with respect to each other (cf. Lyutikova&Tatevosov 2009, Ershler&Volk 2009, Gareyshina et al. 2011, Ershler 2012a,b, Belyaev 2013, 2014). The most striking characteristic of the Ossetian clause is that constituents normally found at the left edge of the clause (that is, complementizers and *wh*-phrases) are located in the preverbal position, that is, clause-internally. Together with negative particle and negative XPs, they form a rigid preverbal complex that cannot be separated from the verb by any argumental XP. At the same time, the linear order of other constituents of the clause is—at least superficially—free, so that they can precede or follow the verb giving

rise to various IS-interpretations. Thus, in (14) a complex sentence embedding finite complement clause is demonstrated; note that the complementizer k x y 'that' can only occur preverbally, whereas argument XPs can be positioned to the left or to the right of the complementizer and verb.

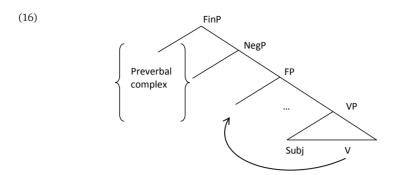
```
(14)
       a. æž
                      žon-ın
                      know-PRS.1SG
           T
           madinæ
                                       fırt-ı
                                                   kæi
                                                          arvıšt-a
                                                                             goræt-mæ.
          M.
                      3SG.GEN
                                       son-ACC
                                                  that
                                                          send.PST-TR.3SG
                                                                             city-LAT
          'I know that Madina sent her son to the city.'
```

- b. ...madinæ jæ firti gorætmæ kæj arvišta.
- c. ...kæj arvıšta madinæ jæ fırtı gorætmæ.
- d. \*... kæj madinæ jæ firti gorætmæ arvišta.
- e. \*... arvıšta madinæ kæj jæ fırtı gorætmæ.

(15a–b) show the preverbal complex consisting of an interrogative *wh*-XP and a negative XP; crucially, the subject XP occupies different positions wrt the finite verb: it is strictly adjacent to the verb when being a negative pronoun and precedes the negative oblique complement when being an interrogative pronoun. The preverbal position of the subject XP in (15a–b) is thus a result of its movement to the preverbal complex in virtue of belonging to the category of NPI/*wh*-XPs, and not in virtue of being a subject. This reasoning is further supported by (15c) where the regular subject XP occurs postverbally.

(15)	a.	æž	žon-ın	kæj-mæ	niči	azırd-ta.		
		I	know-PRS.1SG	who-COMIT	nobody	speak-PST.3SG		
		'I kn	'I know whom nobody spoke to'.					
	b.	æž	žon-ın	či	nikæj-mæ	azırd-ta.		
		I	know-PRS.1SG	who	nobody-COMIT	speak-PST.3SG		
		'I know who spoke to nobody'.						
	c.	æž	žon-ın	kæj	nikæj-mæ	azırd-ta	zalinæ.	
		I	know-PRS.1SG	that	nobody-COMIT	speak-PST.3SG	Z.	
		'I know that Zalina spoke to nobody'.						

It follows from (14) and (15) that the verb must undergo a clause-internal movement in order to reach the structural position adjacent to the preverbal complex, thus leaving behind all the constituents c-commanding it in the VP and surfacing in some higher functional projection FP, as in (16). In Lyutikova & Tatevosov (2009 and elsewhere) it is argued that this functional projection is the T(ense)P, but nothing in our current argumentation crucially depends on this particular assumption. Whatever projection the verb moves in Ossetic, it shall contain no [EPP] feature, which otherwise would attract the dedicated XP (i.e. the subject of the clause if FP is indeed the TP) and create an intervenor between the verb and the preverbal complex.



To sum up, the clausal architecture of Ossetic calls for clause-internal verb movement and against grammatical feature-driven subject movement, thus  $\{-EPP\}$  in Roberts' (2012) taxonomy. At the same time, Ossetic is hardly a V2 language in the classic sense, as it does not meet the crucial 'bottleneck' condition for (V1/)V2. Needless to say that verb movement does not obligatorily result in complementary distribution of finite verbs and subordinators, even if they show strong positional interactions.

#### 4.2. Russian

Russian is an example of a language where word order patterns sometimes mimic the true V2 languages' template. Thus, at least since Kovtunova (1976) the pairs of sentences like (17a–b) are considered as derivationally related, so that the preverbal position is occupied by the topical constituent, and the verb forms a rhematic (wide focus) IS-constituent with the postverbal material. Elena Paducheva (2008 and elsewhere) dubs the (b) examples as involving the subject inversion that she considers as a postsyntactic LA-transformation (examples are from Paducheva 2008).

John Bailyn (2012) attempts to provide an intra-syntactic account to the subject inversion; he claims that the preverbal constituent in both (17a) and (17b) (and similar examples) is in the structural subject position, i.e. Spec, TP, and the verb has moved to T. Thus, he treats the subject inversion separately from other word order permutations motivated by information structure. If we follow Bailyn's analysis of Russian "generalized inversion" constructions, we have to admit that the verb undergo the clause-internal movement out of the VP in order to precede the subject, and the specifier position of the target projection is not allocated to the subject exclusively, that is, Russian is {-EPP} in Roberts' (2012) taxonomy. Despite of these properties of Russian, however, we are not inclined to tag it as a 'partial V2' language; and we strongly doubt that other 'partial' / 'residual' V2 languages with similar characteristics exist.

## 5. Conclusions

In this paper, we have discussed the characteristic properties of V2 languages and the parameters of variation attested among them. This parametric representation of the complex V2 phenomenon can constitute an empirical basis of a theoretical work aiming at modelling the clausal architecture, as well as be implemented in rule-based parsing systems making use of adjustable parameter setting.

We have paid special attention to the recent claim that the broader definitions of V2 phenomena are possible which rely on a single parameter of the clause-internal verb movement and abandon other conditions on the clause architecture. We have shown that V2 is a complex phenomenon that cannot be reduced to the verb movement. Hence, non-restrictive word order systems disregarding the 'bottleneck' condition cannot be an extension of restrictive V2 and V1/V2 languages.

## **Abbreviations**

 $1/2/3-1^{\rm st}/2^{\rm nd}/3^{\rm rd}$  person, ACC—accusative, Adv—adverbial, AdvP—adverbial phrase, AUX—auxiliary, CL—clitic, COMIT—comitative, Comp—complementizer, CP—complementizer phrase, DAT—dative, DEF—definite, DP—determiner phrase, ERG—ergative, FinP—finiteness phrase, FUT—future, GEN—genitive, INF—infinitive, IS—information structure, LA—linear-accent transformations, LAT—lative, M/F/N—masculine/feminine/neuter, NEG—negation, NOM—nominative, NP—noun phrase, O—object, PERF—perfective, PL—plural, PP—prepositional phrase, PRS—present, PRT—preterite, PST—past, S—subject, SG—singular, TP—tense phrase, TR—transitive, V—verb, V1—verb in the  $1^{\rm st}$  position, V2—verb in the  $2^{\rm nd}$  position,  $V_{\rm fin}$ —finite verb, VP—verbal phrase, wh—interrogative pronoun.

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