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Parametrizing Verb Second Languages and Clitic Second Languages

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Abstract - In this paper, I discuss verb second (V2) and clitic second languages (CL2) as an object of the parametric typology. V2 systems are a small group of languages sharing a number of parameters constraining the clausal architecture and the finite verb placement. CL2 systems are a large group of languages sharing a number of parameters constraining the clausal architecture and clitic ordering. The constituting property of both V2 and CL2 syntax is the bottleneck condition licensing only one constituent in XP. The ordering of finite verbs in V2 languages and the ordering of clitics/clitic clusters in CL2 languages is explained as head movement of the diagnostic category (verb or clitic) to 2P accompanied by the XP-movement of phrasal categories. An extension of the class of rigid V2 languages is the class of V1/V2 languages which license IS-motivated V1 orders in declarative clauses, while CL1/CL2 languages are rare.

Keywords: parametric typology, movement, clausal architecture, verb second languages, clitic second languages

1 Introduction

Word order systems of natural languages are based on predictable constraints. Predictability of word order is often explained by some underlying principles of Universal Grammar (UG)¹. However, such well-known constraints as the verb second constraint (V2) attested e.g. in German and Swedish, or clitic second constraint (CL2) attested e.g. in Serbo-Croatian, Pashto and Warlpiri, correspond to specific parameter settings characteristic of their language type rather than to any elementary omnipresent UG features, cf. [5; 12; 22; 20] for discussion. V2 languages share many parameters in word order which can be implemented in rule-based NLP parsing: the description of a V2 language should contain language-specific parameter settings plus shared type-specific features [14]. A similar procedure can be applied to a larger class of CL2 languages [21]. Preliminary research findings suggest that cross-linguistic variation within V2 languages and CL2 languages is set out by similar or identical parameters licensing or ruling out topicalization, multiple XP-movement, V1/CL1 orders etc. Therefore, we put forward the hypothesis

that V2 languages and CL2 form together a natural class of second position (2P) languages defined in terms of shared constraints on clause structure, cf. [9].

2 Definitional properties of 2P languages

A descriptive schema of 2P needs four symbols – a symbol of clausal (left) border (#), a symbol of the preverbal or preclitic constituent (XP) and symbols for the pivotal category – the finite verb (V_{fin}) or clustering clitic (CL), as represented by (G)eneralization 1.

The bottleneck condition is crucial for 2P diagnostics. It predicts two features of 2P syntax: a) that a combination of two (or more) phrasal categories X, Y preceding the finite verb in a V2 language / the clustering clitics in a CL2 language should be ungrammatical; b) that the XP-position in the diagnostic type of V2 declaratives / any clause type with CL2 is not reserved for any particular syntactic category (e.g. noun phrase) and does not express any particular grammatical relation (e.g. subject).² In other words, the XP-position in a 2P language can be filled by any element in an OR-expression $\{Cat_1 \lor Cat_2 \lor ... Cat_n\}$, but simultaneous spell-out of two or more hierarchically independent categories in XP is blocked: *#{ $_{XP}$ Cat₁ & Cat₂ &... Cat_n} — V_{fin}/CL. Parsing of wellformed 2P structures is licensed by a combination of an ORexpression 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, and which do not.

¹ UG is defined framework-neutrally as shared part of all partial grammars.

² Roberts [12] refers to the (b) property of V2 languages as x-EPP], which is to some extent misleading, because the [EPP] feature in minimalist syntax is responsible for attraction of a constituent to the specifier of a head. The insight behind Roberts' notation is that in a language like English, where T is characterized as having an [EPP] feature, it attracts the subject exclusively, which is not the case with the first clause position in V2 languages. Thus, the label [-EPP] is rather a shortcut of an empirical generalization that the preverbal position is not dedicated for subjects.

2.1 Differences between V2 and CL2 systems

There are four main differences between V2 and CL2 languages.

(a) Sententional clitics form clusters in 2P, finite verbs do not. Clitic clusters are formed by Template algorithms predicting the rigid ordering in each pair of clustering clitics (a, b). Template rules for clitic clusters are equivalent to A-grammars [19].

(b) Finite verbs in V2 languages are obligatory elements of tensed clauses, clustering clitics in CL2 are optional elements.³

(c) Finite verbs in V2 languages take 2P only within a diagnostic type of declarative clauses (either root clauses or all declaratives), while clustering clitics normally take 2P in all types of root and complement clauses.

(d) V2 languages and CL2 languages differ with respect to topicalization. In those V2 languages which license initial topicalized elements in front of XP, such topicalized phrases lie clause-external, cf. example (1) from Kashmiri showing an topicalized DP coindexed with the clause-internal resumptive pronoun, and example (2a) from Swedish showing a dislocated VP fragment coindexed with a resumptive clause-internal auxiliary.

- (1) [_{DP} Su laRk]_i, Rameshan vuch *temis*_i tsuur karaan. that boy Ramesh saw he theft do 'As for that boy, it is Ramesh who saw him stealing'.
- (2) a. $[VP' L"aser_j boken]_i det_i g"or_j han nu.$ read book it does he now 'He is reading the book, that is what he is doing now'. b. $*[VP' L"aser_j boken]_i g"or_j han nu.^4$

In CL2 languages, the initial topicalized phrases causing late clitic placement lie clause-internally. The proof comes from those CL2 languages where initial topical constituents at once trigger CL > 2 orders and attract verbs to clausal 2P. This mechanism is known as Communicative Barrier, cf. [21]. Optional Barrier effect triggered by the topicalized PP [PPPoslije svega toga] 'after all that' is illustrated by the pair of Serbo-Croatian examples (3a-b) both taken from one and the same Croatian idiom⁵.

(3) a. $[_{PP} Poslije toga] = su \underline{dobili}$ pozive u reprezentaciju. after that CL get calls to team

'After that, they have been summoned to the national team.'

b. [^{BARRIER} [_{PP}Poslije svega toga]] <u>bilo</u> =mi =je
 After all that was CL CL potrebno samo ležati na pijesku.
 necessary only lie on sand
 'After all that, everything I needed was to lie on sand.'

The distribution of word orders $\#[_{XP} X] - CL...V$ in (3a) vs $\# [_{ARRIER}^{BARRIER} [_{XP} X]] - V - CL$ in (3b) proves that the verb and the clitics compete here for one and the same slot, i.e. 2P. The initial topical Barrier prevents the clitics from taking 2P, while the vacant 2P attracts the verb.

2.2 Areal distribution of 2P languages

Most V2 systems are known from Germanic languages. Moreover, all attested Germanic languages, except for Gothic, Elder Futhark, English and Old English are V2 systems. Rhaeto-Romance is considered a V2 system developed due to contact influence of Germanic languages [6]. The same has been claimed about Old French [9], but in the corpus of 1170 Old French Bible V>3 orders in declaratives are still frequent [6]. Thus, Old French is hardly a V2 system, since it violates the condition (G1). The only one genuine example of a V2 system developed without any contact with Germanic V2 languages is the Dardic language of Kashmiri [2].

CL2 systems are attested in virtually all areas, cf. Lummi (Salishan), Kashibo-Kakaitabo (Panoan), Caviňena (Tacan), Mayo (Uto-Aztecan), Kabyle (Afro-Asiatic), Pashto and Ossetic (Indo-Iranian), Maori (Polynesian), Warlpiri and Djaru (Pama-Nyungan), Czech, Slovene, Serbo-Croatian (Slavic) as well as in a number of Old Indo-European languages including Old Greek, Sanskrit, Hittite, Old Persian, Old Novgorod Russian etc. [20: 62; 21].

2.3 Feature-driven movement and its triggers

In the Minimalist Program and its mathematical formalization, Stablerian Minimalist Grammars [13], movement is featuredriven.

2.3.1 Head movement to 2P

Early (up to mid-1990s) versions of Chomsky's framework tag the left periphery as a C(omplementizer)P. Functional heads like C or, in later notation, Fin(iteness), are defined as having an uninterpretable Tense feature (uT-feature) or a set of uninterpretable inflectional agreement features (uPhi-features) attracting the pivotal category – tensed verbs in V2 languages and second position clitics in CL2 languages, cf. [12] and [21]. If such categories (verbs, clitics etc.) get a fixed position with respect to the clausal left border, this means that verb movement/clitic movement is obligatory, at least within the diagnostic group of clauses — with a stipulation that verb/clitic movement does not take

³ 2P clitics are free syntactic elements that are inserted (merged) in clause structure only if the predicate requires their presence. In this sense, all 2P clitics are optional. E.g. an auxiliary perfective clitic is merged only when there is a perfective verb requiring it.

⁴ The ill-formedness of (2b) proves that topicalized VP fragments like [$_{VP}$, Läser_j boken] do not take XP is Swedish ⁵ For the details about this idiom see [20: 457-462].

place if the target position is already filled by some other category, as in the example (3b) above.

2.3.2 XP-movement

XP-movement is triggered by an active Edge Feature [+EF], which attracts phrasal categories to the clause-initial position (SpecCP or SpecFinP in the later notation). The moved phrasal category and the moved verb/clitic head (V⁰, cl^{0}) form a required Spec-Head configuration for feature agreement, which is a well-formedness condition in the early minimalist syntax. This analysis captures correctly three basic facts about 2P languages: a) verb movement to 2P 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 2P languages have grammar-internal motivation and do not depend on IS/prosody. On the contrary, topicalization constructions with the order [TOP] — XP — V_{fin}/CL, cf. (1), (2a), (3b), are marked and always have Information Structure (IS) triggers.

2.3.3 [+ EPP] languages with non-clustering 2P elements

clause-level $2\mathbf{P}$ Non-clustering elements called 'predicative markers' or 'finite operators' are attested in a number of Mande languages like Bamana, Dan-Gweeta [15] and Kpelle [7] with the basic word order (X) - S - AUX - O - OV. The main verb takes a different position which overtly reminds of V2 systems. However, the clause-initial /pre-finite position in Mande languages is reserved for grammatical subject. Hence, they are [+EPP] languages without XPmovement. It is unclear whether finite operators in such word order systems take clausal 2P by movement or are directly merged there: in any case, their placement does not pattern with verb movement and they lack both verbal morphology and, in many Mande languages, clitic features.

3 Parametric variation

In this section, I am discussing parameters of crosslinguistic variation pertaining both to V2 and to CL2 languages.

3.1 Standard XP-movement

The clause-initial position in 2P languages (XP) can be filled both by maximal projections i.e. spelled-out constituents as well as by non-maximal expressions e.g. syntactic heads, syntactic complements, phonetic words. This holds for both V2 languages and for CL2 languages, though CL2 languages have more options.

3.1.1 Types of clitic hosts in CL2 systems

Basing on conditions imposed on the structure of clitic hosts, all CL2 systems are classified into four types [20: 69].

(a) W_1 systems. These are 2P languages which either do not have NPs/DPs or do not license them in XP.

XP is filled by two categories in an OR-expression $\{Cat_1 \lor Cat_2\}$. W₁ systems are rare. They are attested in Lummi and in Berber languages where 2P clitics are hosted either by verbs or by some operator words/TAM markers.

- (b) W_{2A} systems are 2P languages which license NPs/DPs and other types of constituents in XP and invariably place 2P clitics after the first phonetic word with the basic word order. This type is exemplified by Hittite, Sanskrit, Old Novgorod Russian etc.
- (c) W_{2B} systems are 2P languages which license NPs/DPs and other types of constituents in XP and invariably place 2P clitics after the first spelled-out constituent with the basic word order. This type is exemplified by Pashto, Ossetic, Czech, Slovak, Cavineña etc.
- (d) W_{2C} systems are 2P languages which license NPs/DPs and other types of constituents in XP and license 2P clitics both after the first phonetic word and after the first spelled-out constituent with the basic word order. This type is exemplified by Walrpiri, Warumungu, Luiseňo, Serbo-Croatian, Old Czech [20: 481-484] etc.

3.1.2 Non-maximal expressions in XP in V2 languages

From 4 theoretic possibilities corresponding to W_1 and W_2 -systems, only two, notably $V2_{2B}$ and $V2_{2C}$ systems are attested. In V2 systems, the structure of the initial constituent does not have prosodic triggers. V2₁-systems without NPs/DPs are theoretically possible but not attested. V2_{2A} systems ruling out maximal projections in NP are not attested either: if such languages exist, they could be interpreted as a transitional stage from CL2 to V2. The majority of V2 languages pattern with the V2_{2B} systems, while several V2 languages including Old Icelandic are true V2_{2C} systems. Old Icelandic example (4a) shows extraction of a head element from an NP/DP, while Old Icelandic example (4b) shows left branch extraction (LBE)⁶.

- (4) a. [XP Útfall] var [DP útfall sjávarinnar].
 flood was sea
 'The was a flood of tide.'
- b. [XP *Peirrar*] skal=tu [DP peirrar konu] biðja. This shall.you woman woo 'You shall woo that woman.'

⁶ In the copy theory of movement, cf. [6], both (4a) and (4b) are explained by postulating movement of maximal projections and discontinous spellout of the moved constituent.

3.2 Multiple XP-movement

Some 2P languages occasionally or regularly license multiple XP-movement which gives rise to the so called initial ensembles. An ensemble is a string of elements that make up a single constituent in a dedicated position but in other positions are hierarchically independent [21: 196; 22: 666]. 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. (5).

(5) $[_{XP} [_{AdvP} I byen] [_{AdvP} i dag]]$ trefte jeg Marit. $[_{XP} [_{AdvP} In the town] [_{AdvP} today]]$ met I Marit. 'Today, I met Marit in the town'.

Both adverbials in (5) 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 (5) generate/parse a single adverbial phrase there. Multiple XP-movement in declaratives is characteristic for a minority of 2P languages including Modern Icelandic, Faroese and Old Swedish, cf. [17: 291, 501], Czech and Bulgarian [20: 375-79]. XP-ensembles in declarative clauses always have IS triggers and often correspond to an initial contrastive Theme, cf. the Czech example (6)⁷.

(6) {_{Contr Topic}[XP [DP Petra] [AdvP do Francie]]} =bych Peter to France CL.would-I ještě poslal, ale Martina do Mad'arska ani náhodou' still send but Martin to Hungary never
'I still could sent P. to France, but never M. to Hungary.'

XP-ensembles in 2P languages seem to obey the following generalization on the mapping of formal syntax and IS. Ensembles containing formal categories α , β are only licensed if they form a single communicative constituent A in XP, see schematically below in (G2):

 $\begin{array}{l} (G2) \ \#_{A} \ [_{XP} \ [_{XP} \ \alpha \] \ [_{XP} \ \beta]] \} & \longrightarrow V_{fin}/CL, \ *_{[XP}_{A} \ [_{XP} \ \alpha]\} \\ \\ \{_{B}[_{XP} \ \beta]\}] & \longrightarrow V_{fin}/CL. \end{array}$

A similar parameter licenses optional multiple *wh*-fronting in Kashmiri interrogatives, cf. (7).

- (7) a. [_{WhP} [_{WhP} Kus] [_{WhP} kemyis] [_{WhP} kyaa]] dii? who whom what give-FUT 'Who will give what to whom?'
 - b. [whP [whP Kus][whP kyaa]] dii [whP kemyis]?

c. [WhP [WhP Kus]] dii [WhP kemyis] [WhP kyaa]?

XP-ensembles can be explained by Sidewards Movement in the model of Baylin [1]. Note however that XP-ensembles do not always show Superiority Effects, i.e. fixed ordering. Other 2P languages ban multiple XP-movement and multiple whfronting. Bulgarian is the only one language which has both XP-ensembles in declaratives (without Superiority) and obligatory wh-fronting (with Superiority).

3.3 Root versus subordinate clause asymmetry

Stable CL2 languages have a tendency towards uniform clitic placement in all types of clauses, root and subordinate. V2 languages tend towards asymmetrical finite verb placement. V2 is primarily a root phenomenon which gave rise to theories that V_{fin} and Comp compete for one and the same slot, cf. [3; 4]. However, the prediction that an overt complementizer automatically blocks V2 in subordinate clauses has not been borne out: some V2 systems like Kashmiri or Afrikaans have symmetrical V2. There exist CL2 systems which skip complementizers as clitic hosts. Hence, both groups of 2P languages may apply both symmetrical and asymmetrical ordering of the pivotal 2P elements.

3.3.1 Asymmetrical V2

Modern German, Dutch, Danish, Swedish and Norwegian show root-subordinate clause asymmetry: in the presence of an overt complementizer 'that' finite verbs do not take V2 and are either placed clause-finally — the West-Germanic option, cf. German examples (8a-b), or one step further to the right, after negation/negative phrases/sententional adverbs — the Mainland Scandinavian option, cf. Danish examples (9a-b).

(8) a. Der Hans <u>hat</u> dem Peter keine Instruktionen <u>gegeben</u>.

'Hans has not given any instructions to Peter.'

b. Ich glaube, [CP $da\beta$ {der Hans dem Peter keine Instruktionen gegeben} hat].

'I believe that Hans has not given any instructions to Peter.'

(9) a. Jens <u>har</u> ikke <u>givet</u> instruktioner til Peter.
 'Jens has not given instructions to Peter.'

b. Jeg tror, [_{CP} at Jens {_{Neg} ikke} <u>har givet</u> instruktioner til Peter].

'I believe that Jens has not given instructions to Peter.'

3.3.2 Symmetrical V2

Kashmiri and Afrikaans regularly have V2 orders in subordinate clauses. For these languages, the diagnostic group of clauses with V2 phenomena must be extended to all declaratives.

⁷ Curly brackets in example (6) and in (G2) mark communicative constituents, square brackets mark formal constituents.

3.3.3 Symmetrical CL2

In CL2 languages, clause-internal clitics and clauseinitial complementizers never form a complementary distribution. The exact definition of root vs subordinate asymmetry with respect to clitic placement is a controversial issue. If 2P clitics skip complementizers as their hosts and attach the presence of an overt Comp node does not affect clitic placement, as shown on G(eneralization) (G3).

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(G3) \#XP/X^{\circ} - CL \sim <Comp > - YP - CL
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(G3) correctly captures the situation in such CL2 languages as Pashto, Tagalog, Cebuano and other Central-Philippine languages [18; 20: 94].

3.3.4 Asymmetrical CL2

In Ossetic, Warumungu, South-Eastern Tepehuan, Ossetic and other CL2 languages clitics can or must attach to the complementizer, as shown on on G(eneralization) (G4).

(G4) $\#XP/X^{\circ} - CL \sim Comp > CL$

Asymmetrical CL2 languages conforming to (G4) normally preserve the strategy (G3) as a reserve option, while symmetrical CL2 languages that have (G3) as the main strategy do not apply (G4) at all. Along the same lines, asymmetrical V2 languages often preserve the possibility of embedded V2 which makes some authors speak of 'subordinate clauses with the main clause order <i.e. V2>', cf. [14].

3.4 V1 and CL1 orders

3.4.1 V1/V2 languages

A natural extension of rigid V2 languages are V1/V2 languages where finite verbs can take clausal-initial position in the same diagnostic group of declarative clauses. V1/V2 are represented e.g. by Modern Icelandic, Faroese, Yiddish, Kashmiri, Old Icelandic, Old Saxon, Old High German. In these languages, V1 orders in declaratives are frequent and have IS-triggers: they can be interpreted as IS-marked variants of V2 declaratives as suggested in [17: 362-266; 22: 669]. CL1/CL2 are poorly represented, since clustering clitics are normally specified as [+ strict enclitics] i.e. as clause-internal elements. The shift from clustering 2P enclitics to clustering 1P proclitics is not attested, though two CL1/CL2 languages, Macedonian and Rittharngu, lie close to this type [18].

3.4.2 V1 orders in rigid V2 systems

In some Germanic languages that normally described as rigid V2 systems, V1 orders are occasionally licensed in special pragmatic contexts e.g. in thetic sentences with inferential semantics, cf. the German example (10) and the Swedish example (11)

(10) #<u>Kenn</u> ich nicht. 'I <really> don't know <him, her, them>'

(11) <Var är tidningen?> #<u>Så jag</u> nyss på bordet.

'<Where is the newspaper?> I have <just> seen it on the table'.

Examples (10), (11) are probably indirect speech acts rather than true declaratives: verb fronting amounts here to adding an overt discourse particle. This strategy has a direct counterpart in some apparently rigid CL2 languages.

3.4.3 CL1 orders in rigid CL2 systems

Some presumably rigid CL2 languages apparently apply to a similar strategy – clitic fronting in indirect speech acts. This is attested in Slovene where CL2 is the default word order, cf. (12a), while CL1, cf. (12b) is a marked option reserved for thetic sentences similar to (10) and (11).

b. #Sem=ga=videl.'I have <indeed> seen him/it'

3.5 Clausal architecture and 2P

3.5.1 Complementary distribution of verbs and clitics

One of the basic insights behind the 2P analysis is that 2P is a dedicated position attracting not only the pivotal category (finite verbs in V2 languages, clitics in CL2 languages) but also some other categories which may reach 2P if the pivotal category is absent [5]. However, the analysis that Comp and V2 must form a complementary distribution so V2 should only be possible if Comp is not filled lexically [4] falls short of explaining symmetrical V2 effects, cf. section 3.3.2 above. Besides, Comp freely co-occurs with CL2 and may host clitics, cf. section 3.3.4 above. All this indicates that the initial claim that Comp and V2 must be distributed complementary was wrong. The real validation of the hypothesis that 2P can be filled by different categories in one and the same language comes from 2P systems where such categories are found within one and the same type of clauses. The most salient case are Barrier configurations, verb movement and late placement of clitics discussed above in section 2.1, cf. example (3b) where the verb takes clausal 2P which is made vacant due to the impact of the clausal initial

⁸ Macedonian pronominal clitics behave as strict enclitics in nominal clauses and as proclitics in verbal clauses. CL1 orders (#CL—V) are the default option in declaratives, while CL2 orders (#V—CL) are considered marked. CL > 2 orders and non-adjacent placement of clustering clitics and verbs are impossible [20: 308].

topical Barrier preventing 2P clitics from taking it. In asymmetrical CL2 languages, Barrier configurations with verb movement are especially characteristic of root clauses, cf. [20: 445-464].

3.5.2 Complementary distribution of finite verbs and adverbials in 2P

This rare option is attested in Swedish where the modal adverbial *kanske* 'maybe' takes the same slot as the tensed verb, so the auxiliary *vill* in (13a-c) must stand outside 2P as shown in [11].

- (13) a. Nu *kanske* Johan inte <u>vill</u> komma. now MAYBE John not FUT come.INF 'John probably won't come now'.
 - b. Johan *kanske* inte <u>vill</u> komma nu. John MAYBE not FUT come.INF now 'the same.'
 - c. Vem *kanske* inte <u>vill</u> komma? Who MAYBE not FUT come.INF 'Who won't probably come?'

Examples (13a-c) from a Germanic V2 system serve as a close parallel to the example (3b) illustrating the verb-andclitic distribution in a Slavic CL2 system with verb movement. In both cases, the pivotal category is prevented from taking 2P by movement if this node is already filled.

3.6 Verb-clitic adjacency and 2P

A majority of CL2 languages (the so called standard Wsystems in terms of [18; 21]) lack a constraint on clitic-verb adjacency with the basic word order #XP —CL, though [V— CL] orders may arise in derived structures with Barriers. However, there is class of CL2 languages which have developed the clitic-verb or verb-clitic adjacency with the basic word order. In [18] this class is dubbed W⁺-systems i.e. modified CL2 systems. There are two principal varieties of W⁺-systems. In W⁺₁ systems. attested in Modern Bulgarian, Tagalog, Cebuano, Bikol and other Central Philippine languages clustering clitic invariably take 2P with the basic word order, while the verbs take adjacent positions either from the left or from the right of clitics. If clitics are absent, the verb does not have a fixed position. This parametric setting is captured by G(eneralization) (G5)⁹.

(G5) #XP — [CL —V] ~# [V—CL]; #....V....#.

In the second variety of W^+ -systems, the pivotal element is the verb which cannot move further to the right from 2P, while clustering clitics (or clustering weak elements) take adjacent

positions. This parametric setting is captured by G(eneralization) (G6) and attested in such languages as Old Icelandic, Middle Norwegian [17: 465] and, according to some descriptions, also in a number of Middle Romance languages including late Old French [9] and Old Portuguese [16].

The taxons 'V2 system' and ' W_2^+ system' intersect: a V2 or V1/V2 language may also have clustering clitics with a fixed position. The taxons 'V2 system' and 'W system', 'V2 system' and ' W_1^+ system' do not intersect per definition, since no language can have both CL2 and V2 in the same position with the basic word order.

4 Conclusions

The hypothesis that V2 languages and CL2 languages form together a class of 2P languages which is definable in terms of a shared set of parameters has borne out. The placement of the pivotal categories V and CL to 2P as well the filling of XP must be analysed as movement. The main difference between V2 systems and CL2 systems is that CL > 2 orders regularly arise in CL2 systems in derived structures with an initial topical constituent, while $V_{fin} > 2$ orders with two or more clause-internal constituents placed in front of the finite verb in the diagnostic type of declarative clauses are exceptionally rare. V2 declaratives may have IS triggered V1 variants, but CL2 clauses usually lack IS triggered CL1 variants.. Therefore, the class of V1/V2 languages is a natural extension of the class of rigid V2 languages, while true C1/C2 languages are infrequent. At the same time, occasional verb fronting in rigid V2 languages and occasional clitic fronting in rigid CL2 languages have identical IS triggers.

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⁹ The Macedonian parametric setting can be set out as a modified variant of (G5), with an extra option #[CL —V]: (G5)' # XP — [CL —V] ~#[V—CL] ~ #[CL —V]; #...V...#.

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