1. A RICH LEFT PERIPHERY FOR VERB SECOND LANGUAGES

The detailed study of Italian (Rizzi 1997, Rizzi & Bocci 2017) offers rich positional evidence for a well-developed C-zone, as given in (1).

(1) Italian
A Maria, domani, il tuo libro, glielo devi dare al più presto.
To Maria, tomorrow, your book, you it-to should give as soon as possible
(Rizzi 2017:3; 23)

The co-occurrence of left peripheral elements cannot be superficially observed in Verb Second (henceforth V2) languages. The verb is in the “second linear position” of the clause and more than one element to the left of the inflected verb is not allowed, as shown by the examples in (2b, c, d) from German, a V2 language.

(2) German
a. Jan hat das Buch gelesen
   John has the book read
b. * Das Buch Jan hat gelesen
   * Das Buch Jan has read
c. * Gestern Jan hat das Buch gelesen
   * Gestern Jan has the book read
d. * Das Buch gestern Jan hat gelesen.

The lack of co-occurrence of multiple left peripheral items has been considered challenging for a “split-CP” account (see Abels 2017).

After having presented the recent analyses for V2 working in a cartographic framework, I shall introduce a Criterial approach to V2 in section 2. In section 3, I present the status of

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*a This research is funded by the ERC project n. 340297 SynCart. I am grateful too all my informants and extremely thankful to Franziska Stuntebeck, David Gerards, Renzo Caduff, Diego Pescarini, Caterina Bonan, Frédérique Berthelot, Stanislao Zompí for useful discussions.

1 Being the second element can only be referred to as a byproduct of subjacent syntactic phenomena. As already stated by different authors (Zwart 1992:76 a.o.), grammars are not sensitive to notions like “first” or “second”.

2 Most contemporary Germanic languages are V2: Dutch (Den Besten 1983; Haegeman 1996), Mainland Scandinavian, Insular Scandinavian, Yiddish (Vikner 1995 inter alia), and Afrikaans (Biberauer 2002) as well as older stages of Germanic (Walkden 2014), including Old English (Haeberli 2002). Modern English is the only contemporary Germanic language without V2 in root contexts, but it has some residual (Rizzi 1991) instances of V2. V2 is also attested in Breton (Roberts 2004), Kashimir (Bhatt 1999) Estonian, Sorbian (a Slavic language spoken at the border between Germany and the Czech Republic), in two dialects of the Indo-Aryan language Himachali (Holmberg 2015), in the Nakh-Dagestanian (Caucasic) language Ingush spoken in Russia (Nichols 2011), Dinka, a Nilo-Saharan language spoken in South Sudan (Van Urk & Richards 2015). The only modern Romance language with V2 orders is (the sum of different varieties of) Rhaetoromance spoken in Italy (Poletto 2002; Casalicchio & Cognola 2016) and in Switzerland (Fuß 2005; Anderson 2005, 2016).
subjects adopting Cartographic guidelines and finally in section 4, I shall provide evidence for a criterial view for subject-initial contexts in V2 languages.

1.1. A Brief history of V2 in subject-initial sentences

The standard analysis explaining V2 structures involves the movement of the verb to the Left Periphery. The intuition (Den Besten 1983) emerges from an asymmetry between main and embedded clauses. In (3a), the verb occupies the “second position” in main clauses, whereas in (3b) the verb remains in a lower functional projection in embedded clauses. In those embedded contexts which are not introduced by an overt complementizer ³ (3c), the verb behaves as in main clauses.

(3) German
a. Giotto malte dieses Fresko
Giotto painted this fresco
b. Der Stadtführer sagt dass Giotto dieses Fresko malte
The tourist-guide says that Giotto this Fresco painted
c. Der Stadtführer glaubt - Giotto malte dieses Fresko
the tourist-guide thinks Giotto painted this Fresco

Den Besten (1983) clearly and elegantly proposed that the verb and the complementizer both compete for the same position. Thus, it was easy to analyse V2 as verb movement to a C position.

Travis (1984), on the other hand, hypothesized that subject-initial contexts should be analysed differently from non-subject initial contexts. In the former cases, the verb only moves to an inflectional functional projection within the IP, while in the latter, the movement of the verb targets the C-domain. In the early ‘90s, such a proposal has been the subject of a lively debate between Zwart (1992, 1997) who adopted Travis’ (1984) idea for Dutch, and Haegeman (1991), Schwartz & Vikner (1996) who claimed that “the verb always leaves IP” moving to the C-domain in V2 contexts, both in subject-initial and non-subject-initial contexts. More recently, Van Craenenbroeck & Haegeman (2007), discussed evidence from the presence of the object clitics from two Flemish dialects⁴ and assert that the verb always moves to a C° head in V2 root clauses: this account is referred to as V outside TP (VOTP).

³ Embedded V2 structures in German like (3c) are allowed in embedded contexts selected by bridge verbs (see Pioletto 2014: 6 for a similar pattern in Old Italian).
⁴ Van Craenenbroeck & Haegeman (2007) discussed evidence for such an account drawing from two Flemish dialects. Adopting from Van Craenenbroeck & Van Koppen (2002), “in embedded clauses this object clitic obligatorily follows the complementizer and precedes the DP subject (1a). In non-subject- initial main clauses, on the other hand, the clitic follows the inflected verb and precedes the subject (ib)” (Van Craenenbroeck & Haegeman 2007: 169):

(i) Wambeek dialect of Flemish
a. dan-t Marie al wetj.
   that-it Marie already knows
   .... that Marie already knows it.’
   b. Nou weni-t Marie al.
      now knows-it Marie already
      ‘Now, Marie already knows it.’

(Van Craenenbroeck & Haegeman 2007:169; 5)

Samo (2018, ch.4) considers this element as a component of the complementizer, which is IP-externally created and moved to the Left Periphery. If the clitic is IP internal and moved to the C° with the complementizer, an account in terms à-la Travis 1984 should not be excluded.
In other words, Travis (1984) and Zwart (1997) limited the cases of the movement of the verb to CP. They proposed that the finite verb only raises to a high functional head of the inflectional domain (IP) in subject-initial main clauses. The literature refers to this account as V inside TP (VITP). In (4) the different syntactic structures according to the two accounts: (a) stands for subject-initial sentences and (b)/(c) as non-subject initial sentences (respectively another thematic role, e.g. object, and a Prepositional Phrase). English is employed as a metalanguage.

(4) **VITP vs VOTP analyses of V2**

**VOTP** (Schwartz & Vikner 1996, Van Craenenbroeck & Haegeman 2007)

- a. \([\text{SpecCP} \text{John [C\textsuperscript{-} reads [IP the book [in the library]]]]}\]
- b. \([\text{SpecCP} \text{The book [C\textsuperscript{-} reads [IP John [in the library]]]]}\]
- c. \([\text{SpecCP} \text{In the library [C\textsuperscript{-} reads [IP John [the book]]]]}\]

**VITP** (Travis 1984, Zwart 1997)

- a. \([\text{CP - [SpecIP} \text{John [IP reads the book in the library]]]}\]
- b. \([\text{SpecCP} \text{The book [C\textsuperscript{-} reads [IP John [in the library]]]]}\]
- c. \([\text{SpecCP} \text{In the library [C\textsuperscript{-} reads [IP John [the book]]]]}\]

Recent analyses working under a cartographic framework followed a VOTP analysis, as briefly presented in section 1.2. However, evidence from cross-linguistic studies (Rizzi & Shlonsky 2006) suggest that the “canonical” subject stays in its criterial position (SubjP) which is confined to the IP: in other words, the adoption of the proposal in Travis (1984) and Zwart (1997) is theoretically suitable with the criterial approach (section 2).

### 1.2. From C° to Force° and Fin°

Recent analyses working under cartographic guidelines (Haegeman 1996; Benincà & Poletto 2004; Holmberg 2015, Wolfe 2016) desired to keep Den Besten’s (1983) intuition of the movement of the verb to a C° within a richer Left Periphery, the complementizer positions are Force° and Fin°. A movement to Force° and Fin° means movement to C in every context and the subsequent adoption of the VOTP analysis.

The typology proposed by Benincà (1995) between Less-Strict V2 languages (such as Old Romance varieties which allows a higher quality and quantity of V3 orders) and Strict V2 languages (e.g. German, Dutch) could be easily explained adopting two landing sites. Following Holmberg (2015) and Wolfe (2015), Fin° attracts the finite verb (INFL). Since Fin° is endowed with an Edge Feature (Generalized EPP feature, see Roberts & Rossou 2002; Roberts 2004), it triggers the movement of a constituent to its specifier position. According to Mohr (2009: 146 – 154), if the element bears specific informational properties, the fronted item undergoes a double-step movement, first to SpecFinP and then to the specifier of the activated criterial position (e.g. SpecFocusP, SpecTopicP). The fronted element and/or its “copy” in SpecFinP create a “bottleneck” effect (Haegeman 1996, 2012; Poletto 2002; Roberts 2004) and are able to block any other movement to the LP in terms of Relativized Minimality (henceforth RM, Rizzi 1990), since the feature triggering the violation is considered of a “general” type (cf. Roberts 2004). A further EF proposed in Force° is required in Strict-V2 languages and thus accounting for the typology discussed in Benincà (1995). Summing up, (i) the verb (INFL) moves and (ii) it triggers the movement of the fronted XP, according to this framework. However, these proposals violate theory-internal guidelines of Cartography: the movement to the XP to SpecFin° is not expected under a criterial movement approach and the movement to
SpecForce is a violation of criterial freezing (Rizzi 2015a). Finally, the locality explanation for the lack of multiple elements co-occurring is not clear from a featural relativized minimality point of view. Samo (2018, ch.2) provides an in-depth analysis of the theory-internal drawbacks of recent analysis. Therefore, it is desirable to look for further landing sites for the movement of INFL in V2 languages.

2. A CRITERIAL APPROACH TO VERB SECOND

As briefly discussed in section 1, recent analyses (Haegeman 1996; Benincà & Poletto 2004; Holmberg 2015; Wolfe 2016) adopted Den Besten’s (1983) intuition of the movement of the verb to two different complementizer positions. In this framework, (i) the verb (INFL) moves and (ii) it triggers the movement of the fronted XP. Even if this typology is appealing, and elegantly categorizes V2 languages, theory-internal drawbacks are found. The following section investigates further landing site for the movement of INFL in V2 languages. In section 2.1., I shall present Criterial approach to scope-discourse semantics and in section 2.2. I shall present a criterial approach to V2 (based on Samo 2018).

2.1. Criterial Approach and Spec-Head Configurations.

A basic tenet of cartographic work is the criterial approach to scope-discourse semantics. Properties of scope-discourse semantics are expressed by different kinds of operators (interrogative, relative, exclamatives, etc.) and positions used to express “articulations relevant for the structuring of discourse” (Rizzi & Cinque 2016:145). According to the Criterial approach to Scope-discourse semantics (Rizzi 1997), the LP is populated by several functional heads which attract phrases bearing matching features (e.g. Topic attracts an element bearing a +Top feature); these heads start the application of interpretative routines at the interface with sound, through the assignment of the appropriate intonational contour (Bocci 2013), and at the interface with meaning, by triggering the interpretation of the dependent of the criterial head in terms of the appropriate notions.

The criterial approach contributes to the "syntacticisation" (Cinque & Rizzi 2010; Rizzi 2013) of semantic, pragmatic and prosodic properties. It makes explicit the syntactic component necessarily correlating with these properties in different configurations, as summarized in (5).

(5) Criterial approach to scope-discourse semantics properties
(based on Rizzi 2015a:316 – 317)

a. In syntax, the criterial head attracts a phrase bearing the matching criterial feature and creates a Spec-head configuration of matching elements. The fronted phrase cannot undergo further movements.

b. At the interfaces with sound, the criterial head provides “explicit instruction to the phonological processes of pitch contour assignment, to yield the special contours that typically make topic-comment and focus-presupposition articulations easily detectable from the phonetic signal (Bocci 2013)” (Rizzi 2015a:317). At the interface with meaning, the criterial head gives instructions for properly interpreting the dependents.

c. Once “a phrase enters into a criterial configuration, it is frozen in place, and becomes unavailable to further movements” (Rizzi 2015a:317). Further movement is excluded because the element should be readable at the interfaces with sound and meaning.
Criterial heads give rise to Spec-head-complement configurations in the criterial functional projection. The role of the head is to give instructions to the complement in order to read the Specifier.

I adopt the LP in Rizzi & Cinque (2016) and Rizzi & Bocci (2017), based on Rizzi (1997, as given in (6).

(6) \[
\text{[Force [Top* [Int [Top* [Foc [Top* [Mod [Top* [Qemb [Fin [IP [...]]]]]]]]]]]]}
\]
(Rizzi & Cinque 2016:146)

Some heads in (6), such as Topic and Focus, triggers the movement of an element to their Specifier position and give the proper instructions at the interface with the system of sound and meaning. This is the case of Italian, where a correctly focalized element moves to SpecFocusP. The Spec-head configuration is created, since the head of Focus attracts the XP in its specifier, as given in (7):

(7) **Italian**
\[
\text{[SpecFoc } \text{IL LIBRO} \text{ [Foc° - [Gianni ha letto ___ (non l’articolo)]]]}
\]
\[\text{THE BOOK} \text{ John has read ___ (not the article)}\]

These abstractly postulated heads are overtly realized by particles or morphemes in natural languages, such as Gungbe (Aboh 2004) or Japanese (Endo 2007; Saito 2012). Evidence from Gungbe in (8) shows a focus marker, which is confined to the Left Periphery of the clause\(^5\). The Spec-head configuration is thus created in FocusP, assuming the form in (8).

(8) **Gungbe**
\[
\text{[SpecFoc } \text{Kòfí} \text{ [Foc° } \text{wè } \text{[ùn yró]]]}!
\]
\[\text{Kofi} \text{ Foc 2sg call}
\]
\[\text{‘I called KOFI’}\]
(Aboh 2007: 85, 9c)

The sentences in (7) and (8) are the result of a Spec-head configuration in FocusP. However, not only can the head be realized by means of external merge (e.g. in Gungbe), but the head can also be activated through internal merge\(^6\). Following Rizzi (1991) and Roberts & Roussou (2002), INFL is able to move to the Left Periphery, in the so-called I-to-C movement. The evidence from Greek (Tsimpli 1995) given in (9) shows that the verb moves to the left to be “adjacent” to the fronted focalizing element, creating a Spec-Head configuration.

(9) **Modern Greek**
\[
\text{[SpecFoc } \text{To vivlio} \text{ [Foc° sdhose [I Maria sto Yani]]]?}
\]
\[\text{The book gave Mary to John}\]
(Tsimpli 1995: 177; 2b)

When an element is focalized, it requires the adjacency with the inflected verb. This type of Spec-Head configuration is active in different languages such as Modern Eastern Armenian (Giorgi & Haroutyunian 2016, given in 10a), Standard Arabic (Shlonsky 2000, given in 10b), Hindi-Urdu (Kidwai 2000), Georgian (Skopeteas & Fanselow 2010). These languages are not to be considered as V2 languages *stricto sensu*, because more than one element can “cross” the

\(^5\) See Rizzi (2013:204) for an analysis of echo-questions in Gungbe.

\(^6\) The reader is referred to Miyagawa 2010, ch.1 for an overview.
fronted focalized element, since as given the example in Hungarian (Puskás 2000) in (10c). In other words, we face a V2 without a “bottleneck-effect”.

(10) **Modern Eastern Armenian**

a. Salorn ê Siranê kerel plum.the has Siran eaten ‘The plum Siran ate’ (the plum is contrastively focused)  
   (Giorgi & Haroutyunian 2016:1, 1)

b. **Standard Arabic**

‘al-kitaab-a wajada muhammad-un. the-book-ACC found Muhammad-NOM ‘the book, Muhammad found.’  
   (Shlonsky 2000: 329; 6a)

c. **Hungarian**

Tegnap Attilát ‘nem láttta Emöke. yesterday Attila.ACC NEG see-past.3s Emöke.NOM ‘Yesterday Emöke didn’t see Attila.’  
   (Puskás 2000: 332; 48a)

On the other side, natural languages show Spec-Head configurations with focalized elements triggering the same violations as in V2 environments. This is the case of Wh-questions in English, which has been described in the literature as a “Residual V2” language (Rizzi 1991).

(11) **English**

a. [SpecFoc What [Foc° have [you done]]]?

b. [SpecFoc Which book [Foc° did [you read]]]?

The adjacency found in (11) has been explained in terms of a Wh-Criterion (Rizzi 1991), given in (12).

(12) **Wh-Criterion (Rizzi 1991)**

a. A wh-operator must be in a Spec-head relation with a +wh-head.

b. A +wh-head must be in a Spec-head relation with a wh-operator

Another residual V2 structure still preserved in English involves the fronting of a focalized negative items, as in (8):

(13) **English**

a. In no case **would** I do that.  
   (Haegeman & Zanuttini 1991:244; 26c)

b. Never in my life **did** I see such a beautiful painting.

In the spirit of the Wh-criterion, Haegeman (1991 and related works) proposed a NEG-criterion.

---

7 Literature is uniform in claiming that English was a V2 language (cf. Roberts 2007), but it may not have been as strict as contemporary German (Haegerli 2002).

8 As for the Negative Criterion, Rizzi (1991) following Belletti (1990) assumes that there is an intermediate position between AgrP and TP called NegP, hosting negative adverbials, where the feature +Neg is licensed. An
Towards a criterial approach: V2 as a sum of residual V2s

Samo (2018) does not consider V2 as a unitary phenomenon, but as a sum of “Residual V2s” (Wh-criterion, Rizzi 1991; Neg-Criterion, Haegeman & Zanuttini 1991, etc.). The XP moves to an activated criterial position (scope-discourse semantic position) in the Left Periphery (e.g. TopicP, FocusP, ModP) and creates a Spec-Head configuration with INFL. Contrary to the theoretical approach described in section 1.2., (i) the fronted XP moves and (ii) it triggers the movement of the verb (INFL). Samo (2018) adopts the fine structure of the left periphery in (6), here repeated.

(6) [Force [Top* [Int [Top* [Foc [Top* [Mod [Top* [Qemb [Fin [IP [...]]]]]]]]]]]]  
(Rizzi & Bocci, 2017; Rizzi & Cinque 2016:146)

A series of Residual V2s are developed and listed in (15), according to the informational value of the left-dislocated item.

(15) Residual V2s

ModP: Highlighted adverbials and complements  
TopicP: Topicalized elements  
FocusP: Wh questions, Focalized elements  
ForceP: Imperative clauses, Conditionals, Exclamatives, Optative sentences  
SubjP: “Canonical” subject-initial clauses

(adopted from Samo 2018: 252; 6)

Therefore, Samo (2018) modelling on the WH-criterion (12) and the NEG-criterion (14), proposed a more general Peripheral criterion:

inflected verbal element can be “associated with this feature when it passes through Neg° under head to head movement, as proposed in Moritz (1989)” (Rizzi 1991:11).

The relevant operator: In the Nilo-Saharian V2 language Dinka (Van Urk & Richards 2015; Van Urk 2015) constituents can be the first element of a clause, but “in neutral word order, the subject is clause-initial” (Van Urk 2015:61). A difference with Germanic V2 is that the first position slot is necessarily filled with “nominals in the absolutive case” (Van Urk 2015:66) and a marking on the inflected verb (according to the fronted element), which has been indicated in Van Urk’s glosses as Voice morphology (following Andersen 2007). This evidence can be adopted for explaining a Topic criterion (Vance 1997, contra Roberts & Roussou (2002:138).

A Low Periphery V2 (Belletti 2004): Van Urk (2016:79 – 86) discovered that “a V2 effect is found at the edge of transitive verb phrases, so that the first XP in the verb must be a DP in the absolutive case” (Van Urk 2016:79). Van Urk describes this phenomenon as “V2 in the verb phrase (Van Urk 2015: 78;161), proposing that the “direct object occupies Spec-vP”. Translating Spec-vP in Cartographic terms, I propose that the direct object may target (keeping an asymmetry with the LP) a position in the Low IP area (Belletti 2004), creating a Spec-Head configuration with the lexical verb.
(16) Peripheral Criterion  

a. An operator of the set {TOP, MOD, FOC, WH, SUBJ, ETC.} must be in a Spec-head relation with the matching head.

b. A head of the set {+TOP, +MOD, +FOC, +WH, +SUBJ, ETC.} must be in a Spec-head relation with the relevant operator.

(Samo 2018:90; 12’)

The “second linear position” is given by the fact that the inflected verb targets the highest activated configuration. A criterial approach to V2 opens up the possibility of a formal mechanism not requiring a “bottleneck effect” in SpecFinP. A “bottleneck” exists higher, according to the activated criterial position able to block movement of items of the same “structural type” (building on Rizzi 2004; Starke 2001) and not of a general type. Adopting English as a metalanguage, we may observe that multiple elements bearing different features may co-occur in the LP, as ideally presented in (17).

(17) An ideal mechanism for V2 languages

The book, \textit{TOP} has to the professor, \textit{FOC} yesterday, \textit{MOD} the student given

The reader is referred to Samo (2018)\textsuperscript{10} further provides a fine-grained analysis of the nature of the complementizer which explains the asymmetries found in V2 languages (see Vikner 1995), adopting an IP internal nature of the complementizers in those languages not allowing V2 in embedded contexts (see Leu 2015; Haegeman 2012).

3. THE SUBJECT CRITERION

In section 2, I adopted a criterial model of V2 (Samo 2018). In other words, every discourse criterion triggers a Spec-Head configuration and the sum of different Spec-Head relations (or “Residual V2s”) could provide a fine-grained description of the behaviour of V2 languages. Adopting such a view, and since I assume the existence of a Subject Criterion, the subject should be considered as a landing site for the verb in subject-initial contexts.

\textsuperscript{10} Samo (2018) also presents a criterial approach to scrambling.
The subject criterion has been proposed to cartographically express the classical EPP feature (Rizzi 2006, 2015b; Rizzi & Shlonsky 2007; Berthelot 2017). Adopting criterial requirements, a functional head Subj (distinct from Tense), must be locally c-commanded by an element, either a specifier or a head, bearing the formal features of Subj, which Rizzi & Shlonsky (2006) took to be Phi-features. According to the criterial approach in 2.1., the subject, being a criterial element, is frozen in place and it cannot move further higher in the structure. However, subjects are not totally unmovable: not only can a subject be topic or a focus, but it is possible to make subject interrogatives and subject relatives, which do implicate movement.

A Subject criterion requires (i) a dedicated functional projection and (ii) instructions to be given at the interfaces with sound and meaning.

As for (i) there is evidence, e.g. from Northern Italian dialects, that a clitic subject realizes Subj°, as in (18).

(18) *Milanese*

El fio el mangia l pom
‘The boy subj-cl eats the apple’

(Poletto 2000; Manzini & Savoia 2005 from Rizzi 2015b: 26; 27)

As for (ii), the instruction that the criterial head is the one, the subject is the argument “about which” the event is presented. (Rizzi 2015a: 333), namely a predicate as in (19):

(19) *Subject Spec-head configuration*

As recently discussed in Rizzi (2015a: 333), the attracting feature and simultaneously the one that adopting a labeling algorithm freezes the element, might be PersonP (adopting Shlonsky 2013).

3.1. *Is a subject always a topic?*

Subjects and Topics have many properties in common, but they should be kept separated. One characteristic in common is “aboutness”: a comment is something about the topic and the predicate is something about the subject.

A primary difference is that subjects are obligatory in a structure (since the formulation of the EPP), whereas Topics are not. A second difference is related to the distribution of Topics. Topics are not as free as subjects. A prototypical case involves “what happened?” contexts (Rizzi 2015b *inter alia*). A subject can be an appropriate answer, whereas a topic cannot. This is shown in evidence from Italian (20) and German (21):
(20) **Italian**

Q: Che cosa è successo?  
‘What happened?’

A: Un camion ha tamponato un autobus  
‘A truck bumped into a bus’

A’: # Un autobus, un camion lo ha tamponato  
‘A bus, a truck bumped into it’

(Rizzi 2015b: 25; 20)

(21) **German**

Q: Was ist passiert?  
‘What happened’?

A: Die Polizei hat den Supermarkt abgesperrt.  
The police has the supermarket cordoned.

B: # Den Supermarkt hat die Polizei abgesperrt.  
The supermarket has the police cordoned.

A topic as a felicitous answer is possible only if some background connections with a “contextually given set” is previously introduced. The idea of a given set is reminiscent of the D-Linking (Pesetsky 1987). Evidence from Italian and German are given in (22) and (23).

(22) **Italian**

Q: Sai perché il traffico degli autobus è così perturbato stamattina?  
‘Do you know why the bus traffic is so perturbed this morning?’

A: Mah, io so solo che un autobus, un camion lo ha tamponato mentre usciva dal garage  
‘Well, I only know that a bus, a truck bumped into it while it was going out from the garage’

(Rizzi 2015b:25; 21)

(23) **German**

Context: A couple talks about the price of the vegetable just bought by one partner.

A: Warum hast du die Gemüse so teuer bezahlt?  
‘Why did you pay the vegetables so much. What happened’?

B: Die Polizei hat den Supermarkt abgesperrt,  
The police has the supermarket cordoned  
weswegen ich in einem Gemüseland einkaufen musste.  
Therefore I in a delicatessen shop must.PST  
‘The police cordoned the supermarket, so I had to go to a greengrocer’

B’: ?Den Supermarkt hat die Polizei abgesperrt,  
The police has the supermarket cordoned  
weswegen ich in einem Gemüseland einkaufen musste.  
Therefore I in a delicatessen shop must.PST  
‘The police cordoned the supermarket, so I had to go to a greengrocer’
Adopting Rizzi (2015b), I express the interpretative rules triggered by a subject as follows in (24).

(24) **Subj:**

a. Interpret the Spec as the argument which the predicate is about
b. Interpret the complement as a predicate

(adapted from Rizzi 2015b:26)

On the other hand, the interpretative rules triggered by topics are given in (25):

(25) **Topic:**

a. Interpret the Spec as a D-linked argument which the predicate is about
b. Interpret the complement as a comment on the Spec

(adapted from Rizzi 2015b: 25 and Rizzi 1997)

Subjects and Topics are thus to be considered as two different syntactic elements.

### 3.2. A cartography of subjects

The question arises as to which position is the subject position in a cartography of subject positions. According to Cardinaletti (2004:116), "the preverbal subject field is more complex than usually thought, and more than one subject position should be assumed. The properties attributed to preverbal subjects (subject of predication, checking the EPP feature, checking phi features, checking nominative case) can be distributed across discrete functional projections, each of which realizes a feature or a set of features". Cardinaletti’s (2004) work confirms the observation by McCloskey (1997:197) that there is "a progressive deconstruction of the traditional category 'subject' so that the properties which are supposed to define it are distributed across a range of distinct (but derivationally linked) syntactic entities and positions". In other words, “there exists more than one preverbal subject position”. (Cardinaletti 2004: 120). Indeed, Cardinaletti (2004) was the first to propose a “Cartography of Subject positions”, given in (26).

(26) **Cartography of subject positions**

[SpecSubjP [SpecEppP [specAgrSP ]]]

(Cardinaletti 2004: 154; 156)

Adopting the cartography of subjects in (26), I shall propose a typology of loci as landing site of the verb in Subject-initial clauses in V2 languages.

### 4. Subject and V2: A typology of loci for the subjects in V2 languages

A criterial approach is thus able to predict different landing sites for inflection in subject-initial sentences in V2 languages. This section will provide evidence for this claim.

Naturally, the subject can target left peripheral positions if the element bears scope-discourse semantics features (27a, 27b).

(27) **Subjects bearing scope-discourse semantics feature**

a. [ForceP [… [SpecTopicP Subj [Topic° INFL [… [TP…]]]]]]

b. [ForceP [… [SpecFocusP Subj [Focus° INFL [… [TP…]]]]]]
However, as described in section 3.2, subjects are not always topics. Canonical subjects are thus predicted to create configurations within the spectrum of the cartography of subjects in (28), likely in SpecSubjP. This is in line with a VITP analysis (Travis 1984; Zwart 1997).

(28) **Canonical subjects**

c. \[ \text{ForceP} \ldots \text{FinP} [\text{SpecSubjP Subj} [\text{Subj}^\text{\circ} \text{INFL} \ldots [\text{TP}]]]]] \]

Following a criterial approach, one of the elements of language variation is the loss of Spec-Head configuration requirements. Such an account predicts that only in case of subject-initial contexts we expect that in certain V2 languages the verb can stop in other IP positions, for example Tense positions (as it is the case for Italian or French). Language variation is thus expected according to the height of the verb movement in the IP. In the next subsections, I shall first investigate the landing site of the verb in Swiss Romansh (sub-section 4.1) and then I shall turn to Icelandic (sub-section 4.2.).

### 4.1. Subject-initial sentences and subject clitics in Swiss Romansh

Following Anderson (2016:169), the label Swiss Romansh (henceforth SR) indicates five varieties (Surselvan, Sutselvan, Surmiran, Putér & Vallader) spoken in the canton of Grisons (German Graubünden, Italian Grigioni, French Grisons) in Switzerland and all of which have written standards.

In (29), evidence from Surmiran is shown, a doubling subject enclitic is optional in non-subject initial contexts, whereas it is out in subject-initial sentences.

(29) **Surmiran**

a. Rumantsch discorra Ursus stupent
Rumantsch speaks.3sg Ursus excellently
‘Ursus speaks Rumantsch very well’

\(\text{(Anderson 2005:206; 7.44a)}\)

b. Rumantsch discorra=’I Ursus stupent
Rumantsch speaks.3sg-3sg.m Ursus excellently
‘Ursus speaks Rumantsch very well’

\(\text{(Anderson 2005:206; 7.45a)}\)

c. Ursus discorra stupent Rumantsch
Ursus speaks.3sg excellently Rumantsch
‘Ursus speaks Rumantsch very well’

\(\text{(Anderson 2005:206; 7.43)}\)

d. *Ursus discorra=’I stupent Rumantsch
Ursus speaks.3sg.3sg.m. excellently Rumantsch
Ursus speaks Rumantsch very well’

\(\text{(Anderson 2005:207; 7.45b)}\)

As shown in (29), subject enclitics doubling a lexical subject only occur in non-subject initial contexts. Among the varieties\(^{11}\), doubling is possible in "all person/number combinations where a subject enclitic is available, that is, 1sg, 1pl and 3sg\(^{12}\), 3pl.’’ (Fuß 2005:190). Within a non-generative literature, clitic doubling was considered to be stylistic because it serves “to

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\(^{11}\) Surselvan only allows doubling with an impersonal subject.

\(^{12}\) In Putér, Vallader, & Surmiran, doubling seems exhibiting a definiteness effect: the full DP must bear definiteness properties (or specific), that is, sentences such as ‘yesterday arrived he a man’ are not possible (Fuß 2005: 192).
reinforce the subject”. In particular, Sutselvan shows a different form of clitic doubling: the clitic doubling which “appears to be more common” (Füß 2005:192) and now is “almost an obligatory phenomenon that has lost its function as a stylistically marked structural option”. As a matter of fact, the DP is described as not receiving stress (Linder 1987:150). Examples from Sutselvan are provided in (30):

(30) **Sutselvan**

a. Egn da quels lev-i ear jou
   One of those wanted-cl1s also I
   ‘I also wanted one of those’ (Linder 1987:148)

b. Ascheia vain-sa nus arviart igel mulegn...
   so have-cl1p we unlocked the mill
   ‘So we have unlocked the mill’ (Linder 1987:149)

c. Igl fetschi preaschas, â-l el getg.
   It is urgent, has-cl3sm he said.
   ‘He said it’s urgent’ (Linder 1987:153)

d. Cunquegl c’igl eara november, vev-*la la scola* antschiat
   since it was November, had-cl3sf the school begun
   ‘Since it was November, the school had begun’ (Linder 1987:153)

e. Natiral vev-*in las matànas* radetg sei mailenders.
   Of course had-cl3p the girls brought up Milans
   ‘Of course, the girl had brought up some Milans [pastries]’ (Linder 1987:193)

The clitic possibly lies in the head of SubjP (as in Northern Italian dialects, Rizzi 2015a:333), becoming part of the verbal inflection in the targeted head in the CP and spelled-out as -l.

I propose that this asymmetry can be accounted as follows: the subject target the specifier of the criterial position SubjP, thus it moves to SpecSubjP and the inflection moves to a Subject position lower than Subj°, plausibly AgrS°. In (31) is given the derivation for (29).

(31) **Surmiran V2s: subject vs. non-subject initial sentences**

a. **Subject Initial contexts**

   [CP [SpecSubjP Ursus [Subj° [Epp° [AgrS° discorra [IP stupent Rumantsch]]]]]]
b. Non-subject initial contexts

\[
[\text{SpecFocP/TopP} \text{Rumantsch} [\text{Foc}^\text{°}/\text{Top}^\text{°} \text{discorr} \text{al} \text{Rumantsch} [\text{SpecSubj} \text{Ursus} [\text{Subj}^\text{°} \text{discorr} \text{al} \text{[AgrS}^\text{°} \text{discorra} [\text{IP} \Delta]])]]]
\]

(adapted from Anderson 2005 and Fuß 2005)

I propose that the configuration in subject-initial contexts for SR varieties can be summarized as the syntactic structure in (32).

\[(32) \ [\text{ForceP} \ldots \text{FinP} [\text{SpecSubjP} \text{Subj} [\text{Subj}^\text{°} - [\text{EppP} - [\text{AgrSP}^\text{°} \text{INFL} \ldots [\text{TP} \ldots]]]]]]]

In section 4.2, I shall provide evidence for a lower landing site for INFL within the IP.

4.2. The case of V3 adverbs in Icelandic in subject initial-clauses

In Icelandic, a class of adverbials is able to intervene between the subject and the inflected lexical verb, creating the order Subj – Adv – LexVerb. The adverbs triggering V3 structures (V3 adverbs, following Jónsson 2002 in Práðinsson 2007: 39) are auðvitað 'obviously', líklega 'probably', sennilega 'probably', ennþa 'still', kannski 'maybe', náttúrulega 'naturally', vonandi 'hopefully' satisfy V2 requirements if they are preposed\(^{13}\). On the other hand, other adverbs like aldrei 'never' and alltaf 'always' cannot intervene between the subject and the inflected verb. According to the description in Práðinsson (2007:39 – 40; 2.43) auxiliaries can only precede V3 adverbs. In previous works (Samo 2014, 2016), I observed that these adverbs rely in the higher positions\(^{14}\) of the Inflectional Phrase, as in (33):

\[(33) \ \text{[Modeva}luate} \text{v náttúrulega/vonandi [Mode}vidential \text{au}ðvitað [Modepistemic \text{likelega / sennilega [Modirrealis kannski [ASPcontinuative ennþa [Asp}erfective alltaf / never ]]}]]]]

\(^{13}\) Focus adverbs, like bara 'just' and einfaldlega 'simply', also allow V3 structures in subject-initial contexts, but they do not satisfy V2 requirements (Cinque 1999: 169fn12; Nilsen 2003; see Samo 2018 for an analysis under a criterial V2 approach).

\(^{14}\) The adverbs náttúrulega and vonandi can fill the class of the evaluative adverbs. In order to classify these adverbs, Cinque (1999: 84) assumes the way in which the logic tradition analyze them, that is, for p is a proposition, "it is good/perfectly/bad thing that p" (Cinque 1999:84 from Palmer 1986:12ff). Then, if I report here the sentence in (24a), Jón náttúrulega lýkur þessu einhvern daginn 'John naturally finishes this some day', I can turn it into "it is a natural thing that John finishes this some day"; the same pattern seems to work with vonandi 'hopefully', "It is a hopeful thing that John finishes this someday". The adverb auðvitað 'obviously' is one of the plausible candidates that can be generated in the specifier position of the Evidential Mood Phrase, according to Cinque (1999: 86). The adverbs sennilega and likelega, both 'probably', seem to be generated in the specifier of the Epistemic Mood Phrase (Cinque 1999: 86). The adverb kannski 'maybe' finds place in the specifier of the Irrealis mood (Cinque 1999: 88 – 89); adverb ennþa 'still', according to Cinque (1999: 95) seems to be generated in the specifier of the Continuative Aspect Phrase.
My proposal is that the subject moves to its criterial position SpecSubjP and the verb targets a T position within the IP higher than the ModEvaluativeP position (Cinque 1999) ‘always/never’. In (34), the derivation is provided:

(34) Icelandic V3

a. [SpecSubjP Jón [Aux° [ModEvaluative náttúrulega/vonandi [ModEvidential auðvitað [ModEpistemic likelega / sennilega [ModIrrealis kannski [AspContinutive ennþa [Tense° lýkur [AspPerfective alltaf / never ]]]]]]]]]


The derivation in (34) confirms the asymmetry between root and embedded clauses. As a matter of fact, Icelandic is one of the generalized V2 languages, where the inflected verb can move to IP in embedded contexts too. To be more specific, as reported in Wiklund et al. (2007: 210), the verb obligatory precedes alltaf ‘always’ in embedded contexts.

To sum up, I propose that, differently from SR varieties, INFL is not in a lower subject position, but the verb moves to a lower functional projection. The verb targets a T position like in Italian (Belletti 1990) or French (Pollock 1989).

I propose an underlying syntactic configuration of Icelandic, as given in (35).

(35) [ForceP […] FinP [SpecSubjP Subj [Aux° [ModEvaluative [ModEvidential [ModEpistemic [ModIrrealis [AspContinutive [Tense° INFL [AspPerfective ]]]]]]]]]]

4.3. A typology of Subject initial clauses in V2 languages

Summing up the results coming from the evidence in section 4, I turn to propose a typology of configurations concerning subject-initial sentences in V2 clauses.

As already discussed in the relevant sub-section (sub-section 2.1), subjects can target the Left Periphery if they bear the relevant features. They undergo movement to the activated criterial position, where a Spec-Head configuration with INFL is thus created. This type of configurations are expected in all the V2 languages requiring Spec-Head configuration in TopicP (36a) and/or FocusP (36b).

(36) Subjects bearing scope-discourse semantics feature

a. [ForceP […] [SpecTopicP Subj [Topic° INFL […] [TP…]]]]]]]

b. [ForceP […] [SpecFocusP Subj [Focus° INFL […] [TP…]]]]]]]

→ All V2 languages requiring Spec-Head in TopicP / FocusP

Micro-parametric variation is expected in canonical subject-initial contexts. Drawing from the evidence presented in section 4, a criterial approach to V2 predicts a typology of configurations: (i) a criterial Spec-Head configuration in SpecSubjP (37a), which can be considered as the relevant configuration for West Germanic languages such as German and Dutch, and (ii) different degrees of heights of movement of the verb in Agr/Tense positions as in (36b) for Swiss Romansh varieties and in (37c) for Icelandic.

15 Auxiliaries do not show such a pattern, leading me to conclude that they may be merged higher or they represent the overt realization of Subj°, the position where the verb lands in Surmiran subject-initial contexts.
(37) **Canonical subjects structures**

a. \[ \text{[ForceP} \ldots \text{[FinP} \text{[SpecSubjP} \text{Subj} \text{]} \text{Subj}^\circ \text{INFL} \text{[} \ldots \text{[TP} \ldots \text{]]]]]} \rightarrow \text{West Germanic} \]

b. \[ \text{[ForceP} \ldots \text{[FinP} \text{[SpecSubjP} \text{Subj} \text{]} \text{Subj}^\circ \text{[EppP} - \text{[AgrS}^\circ \text{INFL} \text{[} \ldots \text{[TP} \ldots \text{]]]]]]]} \rightarrow \text{Swiss Romansh} \]

c. \[ \text{[ForceP} \ldots \text{[FinP} \text{[SpecSubjP} \text{Subj} \text{]} \text{Subj}^\circ \text{[AspContinuative [Tense}^\circ \text{INFL [AspPerfective]}}} \ldots \text{]]]]]]]} \rightarrow \text{Icelandic} \]

It can be demonstrated on the basis of the results presented in this section that a criterial approach to V2 is able to provide a fine-grained cartography of positions where the verb lands in canonical subject-initial sentences.

5. **CONCLUSIONS**

In this work I explored a criterial approach to V2 in subject-initial clauses adopting Cartographic guidelines (Cinque & Rizzi 2010; Rizzi & Cinque 2016). A Criterial approach to V2 (Samo 2018) considers the V2 phenomenon as a sum of “Residual V2s” (Rizzi 1991): every left peripheral position is able to create a Spec-Head configuration with the verb which ultimately targets the highest activated criterial position.

Evidence presented in this work indicates that the “canonical” subject and the verb do not move to a C position in declarative clauses (following Travis 1984, Zwart 1997) in V2 languages, but the subject targets its criterial position within the IP. The inflected verb can either create Spec-Head configuration or land in a lower position, as observed in SR varieties and Icelandic.

Future research should refine the criterial model and provide a fine-grained description of the micro-parametric variation among different V2 languages.

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