Truncation feeds intervention: Two clause type effects in Basque*

Abstract

In the generative literature, clause type effects have typically been modeled in one of two ways—"truncation" whereby embedded clauses are structurally reduced relative to root clauses, and intervention, by which non-root clauses have additional material that blocks movement available in root contexts. This paper analyzes two clause type effects in Basque—the possibility of verb-initial word orders (V1) and variation in the relative order of Aux, Neg and VP in embedded contexts. We show that these two effects covary systematically across clause types. We present a unified approach to these clause type effects that suggests that these two mechanisms interact, that is, that truncation feeds intervention. Omission of a Force head responsible for the *V1 effect in relevant clause types forces a set of operators to remerge in a position where they block movement of negation. VP-Neg-Aux orders in these clause types reflect a smuggling repair operation.

1 Introduction

In the generative literature, clause type effects have typically been modeled in one of two ways—"truncation" whereby embedded clauses are structurally reduced relative to root clauses (Benincà and Poletto, 2004; Haegeman, 2006), and intervention, by which non-root clauses have additional material that blocks movement available in root contexts (Roberts, 2004; Haegeman, 2010a,b, 2012). We schematize these two approaches in (1) and (2), respectively.

(1) ***Truncation***

a. [F_n ... [F_2 [F_1]]] [(embedded) root contexts]

b. [F_{n-x} ... [F_2 [F_1]]] [non-root contexts]

(2) ***Intervention***

a. [Probe ... [Goal]] [(embedded) root contexts]

b. [Probe ... [Intervenor ... [Goal]]] [non-root contexts]

This paper presents an analysis of two clause type effects in Basque that suggests that these mechanisms interact, that is, that truncation feeds intervention. The first phenomenon that we consider is a well-known ban on tense-bearing verb forms in clause-initial position in some clause types (henceforth "*V1") (Altube, 1929; Ortiz de Urbina, 1989, 1993, 1994; Uriagereka, 1999; Elordieta and Jouitteau, 2010; Etxepare, 2015). As shown in (3), a tense-bearing verb cannot appear clause-initially in root contexts, but may do so in some embedded contexts including relative clauses. Adapting Ortiz de Urbina's (1994) analysis of these facts, we propose that Basque *V1 reflects a phonological property of Force, namely the need for phonetic content in its spec. In embedded contexts where Force does not project, the rule does not apply, with the consequence that V1 is possible.

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(3) ***V1 in Basque***

a. *Dator Omar.
come.3SG.ABS Omar.ABS
'Omar is coming.' [root clauses]

b. [Datorr-en] ekaitz-a.
come.3SG.ABS-COMP storm-the.ABS
'The storm that is coming.' [relative clauses]

A fact not previously discussed extensively in the Basque literature is that the *V1 restriction covaries across clause types with a second phenomenon that we examine, namely, variation in the ordering of {Aux, Neg, VP}. (See Artiagoitia (2003) and Etxepare (2003) for brief discussion.) As illustrated in (4), these elements appear in the order Neg-Aux-VP in root contexts, but VP-Neg-Aux in some kinds of embeddings, such as relative clauses.

(4) ***{Aux, Neg, VP} ordering in Basque***

a. Ez da etorr-i.
NEG AUX.3SG.ABS come-PERF
'[He/she/it] hasn't come.' [root clauses]

b. [Etorr-i ez de-n] ekaitz-a.
come-IMPERF NEG AUX.3SG.ABS storm-the.ABS
'The storm that hasn't come.' [relative clauses]

What the clause types that allow VP-Neg-Aux have in common is an operator in the left periphery. We propose that VP-Neg-Aux orders reflect the interaction of these operators with negation. In truncated contexts, in which Force does not project, these operators sit in a lower position where they block movement of negation to its usual left-peripheral landing site ΣP. A smuggling repair strategy derives the VP-Neg-Aux order (Collins, 2005a,b). The analysis, if correct, entails that truncation of Force feeds the intervention effects responsible for VP-Neg-Aux orders.

The discussion is organized as follows. Sections 2 and 3 of this paper describe the clause type-sensitivity of the *V1 constraint and ordering of {Aux, Neg, VP} respectively. In Section 4, we argue against a "verb-second" (V2) approach to these facts and propose an alternative approach adapting Ortiz de Urbina's (1999) articulated CP structure for Basque.

2 *V1 in Basque

The first phenomenon that we focus on is *V1, a constraint holding that in (most) root contexts, the inflected verb cannot appear linearly adjacent to the left-edge of the sentence (Altube, 1929; Ortiz de Urbina, 1989, 1993, 1994; Uriagereka, 1999; Elordieta and Jouitteau, 2010). We illustrate the core facts in (5), where the main verb cannot appear sentence initially.

(5) a. *Dator emakume-a.
come.3SG.ABS woman-the.ABS
'The woman is coming.'

b. Emakume-a dator.
woman-the.ABS come.3SG.ABS
'The woman is coming.'

c. *Dator emakume-a?
come.3SG.ABS woman-the.ABS
'Is the woman coming?'

An exception to *V1 is found imperative contexts like those in (6) where an inflected imperative form appears in first position. We discuss these cases in detail in section 4.

(6) Zatoz gu-rekin!
come.2SG.ABS we-with
'Come with us.'

Licit first position elements are any non-topic XP. In the general case, new-information foci and *wh*-phrases in Basque appear to the left of the inflected verb, and such constituents may serve as first position elements. The examples in (7) illustrate this with *etorri*, 'come', which belongs to a closed class of synthetic verbs where the verb root and tense and agreement morphology appear on the same word (see (93)-(95) above). The examples show that, in such contexts, focused adverbials, DPs and PPs are all licit first-position elements.

(7) a. GAUR dator Jon.
today come.3SG.ABS Jon.ABS
'Jon is coming TODAY.'
b. JON dator gaur.
Jon.ABS come.3SG.ABS today.
'JON is coming today.'
c. KOTXE-AN dator Jon.
Car-in come.3SG.ABS Jon.ABS
'Jon is coming IN THE CAR.'
d. Nor dator azkar?
who.ABS come.3SG quickly
'Who is coming quickly?'

With open class verbs, the verb root and any aspectual morphemes are separated from tense and agreement morphology, which appear instead on an auxiliary verb. In affirmative contexts, the verb root appears to the left of the auxiliary and can serve as the first position element as illustrated in (8). In some dialects, these orders can have a polarity focus interpretation as noted by Ortiz de Urbina (1994).

(8) Hasi-ko da.
start-FUT AUX.3SG.ABS
'It's going to start.'/"It IS going to start.'

Focused constituents appear immediately to the left of the verb root in affirmative contexts.

(9) a. BOST-ET-AN hasi-ko da.
Five-PL-in start-FUT AUX.3SG.ABS.
'It's going to start AT FIVE.'
b. Noiz hasi-ko da?
When start-FUT AUX.3SG.ABS.
'When is it going to start?'

In negative contexts with no focused XP, the sentential negation morpheme, *ez*, appears to the left of the tense and agreement-bearing synthetic verb or auxiliary, as illustrated in (10) and

[0]A further exception is found in the speech of some (especially younger) speakers, who allow for finite-verb-initial patterns in presentational contexts as in (i), where a heavy intonational break obligatorily appears between the finite verb and the following material. We set these cases aside in the remaining discussion.

(i) Dago # etxe haundi bat.
COP-LOC # house big one
'There's a big house.'

(11). Here, *ez* may also serve as a first position element.

(10) Ez dator.
NEG come-3SG.ABS
'(She/he/it) is not coming.'

(11) Ez du bazkal-du.
NEG AUX.3SG.ERG lunch-PERF
'(She/he/it) hasn't had lunch.'

In addition, in affirmative polarity focus (affirmative denial) contexts, an element *ba-*, historically related to the freestanding 'yes' morpheme *bai*, can appear to the left of the verb and may serve as a first-position element (Laka, 1990).

(12) Ba-dator.
AFF-come.3SG.ABS
'(She/he/it) IS coming.'

In negative focalization contexts, the focussed constituent appears to the left of *ez*.

(13) JON-EK/nor-k ez du bazkal-du.
Jon-ERG/who-ERG NEG AUX.3SG.ERG lunch-PERF
'JON/who hasn't had lunch./?'

Elements that *cannot* be first-position elements are hanging topics—topic XPs separated from clausal material to the right by a pause:

(14) *Jon, dator bihar
Jon.3SG.ABS come.3SG tomorrow
'As for Jon, he's coming tomorrow.'

Other forms that cannot appear in first position are a class pre-verbal evidential and speech act particles. These include the *yes/no* question particle *al*, the evidential particle *omen*, and dubitative *ote* (Ortiz de Urbina, 1994), as in (15)–(17).

(15) *(Jon) al dator?
Jon.ABS PRT come.3SG
'Is Jon coming?'

(16) *(Jon) omen dator.
Jon.ABS PRT come.3SG
'Jon is allegedly coming.'[1]

(17) *(Jon) ote dator?
Jon.ABS PRT come.3SG
'Is Jon by chance coming?'

Importantly, as Ortiz de Urbina (1994; 1995) describes in detail, all of the *V1-violating contexts described above can be repaired by "*ba*-support"—insertion of a preverbal particle, *ba-*, to the left of the inflected verb, and to the left of any preverbal particles. We illustrate this in (18)-(20) which show repair of *V1 violations via *ba-* insertion in contexts with a bare inflected verb, *omen*, and a preverbal topic, respectively. This element is homophonous with the preverbal

[1]This description of the facts holds for the standard dialect and for central/western varieties. Etxepare (2010) notes that in some eastern varieties *omen* may appear clause initially, preceding a finite V, when it is the specifier of a functional projectional related to modality, but not necessarily interpreted with a hearsay evidentiality reading.

particle that appears in polarity focus contexts (12). Crucially, as Ortiz de Urbina notes, *ba-* need not have a polarity focus interpretation in contexts, *only in contexts where it bleeds *V1.*

(18) Ba-dauzka-t hiru anai.
ba-have-1SG.ERG three brother.ABS
'I have three brothers.' (no polarity focus interpretation)

(19) Ba omen dator.
ba EVID come.3SG.ABS
'(She) is allegedly coming.'

(20) Jon, ba-dator.
Jon.ABS ba-come.3SG.ABS
'As for Jon, he is coming.'

Ortiz de Urbina (1994) treats "*ba*-support" as a last resort phenomenon to satisfy a lexicalization requirement on the finite verb. As Ortiz de Urbina notes, where this non-polarity-focus *ba-* is not needed, it *cannot* appear. That is, where another first-position element is available, such as a focused constituent or negation, as in (21) and (22), respectively—*ba-* cannot be inserted without a polarity focus interpretation. We will follow Ortiz de Urbina in treating this as an expletive element in the account developed below.[2]

(21) Jon ba-dator
Jon ba-come.3SG.ABS
ok:'Jon IS coming.'/ *:'JON is coming.'

(22) *Ez ba-dator
NEG ba-come.3SG.ABS
'(He/she/it) is not coming.'

Basque *V1 has sometimes been compared to verb second (V2)(Ortiz de Urbina, 1994, 1995; Uriagereka, 1999; Elordieta and Jouitteau, 2010). In the analysis below, we consider in detail the possibility that the Basque facts can be modeled in a way similar to V2. For the moment, we note that Basque differs from canonical V2 in that, in many contexts, including neutral declaratives, the finite verb in Basque does not appear strictly in second position but rather can appear in "$\geq$ 2 position". We illustrate this in (23), where the finite auxiliary *du* appears sentence finally.

(23) Jon-ek liburu-a irakurr-i du.
Jon-ERG book-the.ABS read-PERF AUX.3SG.ABS.3SG.ERG
'Jon has read the book.'
(Neutral contexts)

A second way in which Basque *V1 differs from Germanic V2 is in the effect of the type of complement clause on word order patterns. Superficially, the characterization of Basque provided so far makes it appear similar to Norwegian and Swedish, which allow for both V2 and non-V2 word orders in the presence of an overt complementizer. In (24a), from Swedish, the verb appears as the second constituent to the right of the complementizer *att*. The non-V2 order is shown in (24b), where the verb appears to the right of the negative adverbial, *inte*. As we describe shortly, the *V1 restriction in Basque is similar to V2 in Norwegian and Swedish in that it is possible in the presence of an overt complementizer in some clause types.

[2]See Elordieta and Jouitteau (2010) for a somewhat different approach to expletive insertion in Basque and Breton.

(24) a. Han sa att Lisa hade inte läst bok-en.
He said that Lisa had not read book-the
'He said that Lisa hadn't read the book.' [V2]

b. Han sa att Lisa inte hade läst bok-en.
He said that Lisa not had read book-the
'He said that Lisa hadn't read the book.' [non-V2]
(Swedish, adapted from Wiklund et al. 2009)

Much of the literature on V2 in Germanic and on Scandinavian varieties in particular has focussed on pragmatic correlates of V2 word orders (Truckenbrodt, 2006; Heycock, 2006; Julien, 2009; Wiklund et al., 2009; Holmberg, 2015). Wiklund et al. (2009) examine the availability of embedded V2 in Norwegian and Swedish under different embedding predicates using Hooper and Thompson's (1973) classification. Specifically, Wiklund et al. report that embedded V2 is available under strongly assertive predicates (Hooper and Thompson's Class A, e.g. *say, claim*), weakly assertive predicates (Class B, e.g. *believe, think*) and semi-factive predicates (Class E, e.g. *discover, know*). However, in clauses under non-assertive predicates (Class C, e.g. *doubt, deny*) and true factives (Class D, e.g. *regret*), embedded V2 is poor. With regard to other subordinate clause types, relative clauses, embedded interrogative and temporal clauses are all bad with V2 in Swedish/Norwegian, but other clause types including concession clauses, purpose clauses and reason clauses indeed allow for V2 patterns. (See Julien (2009); Hrafnbjargarson and Wiklund (2009); Wiklund et al. (2009); Franco (2012) for relevant data.) Based in part on these facts, Julien (2009) argues that V2 word order "goes hand in hand with illocutionary force."

From the perspective of this literature, a question that arises is whether the alternation between V1 and expletive *ba-* repair in Basque is sensitive to the same pragmatic effects described in the above literature on Scandinavian embedded V2. Basque expletive *ba-* in embedded contexts differs in two main ways from that of V2 Norwegian/Swedish. First, unlike Swedish/Norwegian V2, expletive *ba-* is not just possible but obligatory for most speakers in clausal complements of all five of Hooper and Thompson's predicate classes, as illustrated in (25)-(29).

(25) ***Class A: Strongly assertive***

Jon-ek esa-n du *[datorr-ela]/ [ba-datorr-ela].
Jon-ERG say-PERF AUX.3SG.ABS.3SG.ERG come.3.ABS-COMP/ ba-come.3.ABS-COMP
'Jon has said that he is coming.'

(26) ***Class B: Weakly assertive***

Jon-ek uste du *[datorr-ela]/ [ba-datorr-ela].
Jon-ERG think AUX.3SG.ABS.3SG.ERG come.3SG.ABS-COMP/ ba-come.3SG.ABS-COMP
'Jon thinks that he is coming.'

(27) ***Class C: Non-assertive***

Jon-ek ukatu egi-n du *[datorr-ela]/
Jon-ERG deny do-PERF AUX.3SG.ABS.3SG.ERG come.3SG.ABS-COMP/
[ba-datorr-ela].
ba-come.3SG.ABS-COMP
'Jon has denied that he is coming.'

(28) ***Class D: Factives***

Jon-ek ahaz-tu du *[datorr-ela]/
Jon-ERG forget-PERF AUX.3SG.ABS.3SG.ERG come.3SG.ABS-COMP/
[ba-datorr-ela].
ba-come.3SG.ABS-COMP
'Jon has forgotten that he is coming.'

(29) ***Class E: Semi-factives***

Jon-ek jaki-n du *[datorr-ela]/
Jon-ERG know-PERF AUX.3SG.ABS.3SG.ERG come.3SG.ABS.PL-COMP/
[ba-datorr-ela].
ba-come.3SG.ABS.PL-COMP
'Jon has found out that he is coming.'

In the examples in (25)-(29), the embedded clauses all appear to the right of the main clause. All of these main clause predicates, however, allow for an alternative word order whereby the embedded clause appears to the left of the main clause verb as in the example with *esan*, 'say' in (30). This word order difference appears to have no consequence for the availability of expletive *ba-* in V-initial contexts.[3]

(30) Jon-ek [*datorr-ela/ba-datorr-ela] esa-n
Jon-ERG come.3SG.ABS-COMP/ba-come.3SG.ABS-COMP say-PERF
du.
AUX.3SG.ABS.3SG.ERG
'Jon has said that he is coming.'

Instead, the availability of V1 appears to correlate with the complementizer morpheme. Embedded clauses with the interrogative/relative complementizer *-(e)n* allow V1 orders and/or disallow expletive *ba-* in V-initial contexts. In relative clauses, expletive *ba-* is completely unavailable as shown in (31). Embedded *yes/no* questions, temporal clauses and *as*-clauses all allow V1 word orders, though some speakers also accept expletive *ba-*, as shown in (32)-(34).[4]

[3]Wiklund et al. (2009) argue instead that V2 word order does not covary strictly with any pragmatic meaning, but rather that the possibility of embedded V2 word order correlates with possible Main Point of Utterance (MPU) interpretation for the embedding (Simons, 2007). Specifically, Wiklund et al. note that the same predicate classes that allow for embedded V2 also allow for embedded MPU: predicates of class A, B, and E allow for both V2 and embbedded MPU, classes C and D allow for neither. Importantly, Wiklund et al. note that V2 word order *itself* does not strictly covary with MPU interpretation, since non-V2 embedded clauses with classes A,B and E can have MPU interpretation. Following Simons (2007), they use, as a diagnostic of MPU, whether a given embedded clause can be a felicitous answer to a preceding question.

In Basque, the possibility of verb-initial orders appears not to correlate with the predicate classes that best allow MPU interpretation. The question-answer pairs in (i) show that as in English, Swedish and Norwegian, complements of *say*-class complements are fine on an MPU interpretation, while complements of *doubt*-class predicates are degraded. Again, complements of both predicate classes are generally bad without expletive *ba-*.

(i)

Q: Ez du-t inguruan Jon ikus-ten. Ikusi du-zu?
NEG AUX-1SG.ERG nearby Jon see-IMPERF seePERF AUX-2SG.ERG?
'I haven't seen Jon around. Have you seen him?'

A1: Ez, baina uste du-t ba-datorr-ela jada.
NEG but think AUX-1SG.ERG ba-come-3SG.ABS-COMP already
'No, but I think he's coming now.'

A2: #Ez, izan-ere, duda egi-ten du-t ba-datorr-ela.
No, in.fact, doubt make-IMPERF AUX-1SG.ERG ba-come-3SG.ABS-COMP
'No, in fact, I doubt that he's coming.'

[4]These complementizers surface as *-la* and *-n* when preceded by a person or tense morpheme and as *-ela* and *-en*, elsewhere. For convenience, we represent these complementizers as *-(e)n* and *-(e)la* throughout. Other Basque complementizers include *bait-* 'since', found mainly in Eastern dialects and *ba-* (protasis) 'if' homophonous with the affirmative/expletive particle discussed above. These elements appear left-adjacent to the auxiliary. These morphemes do not co-occur with *ba*-support, and are therefore not useful for examining the correlations we focus on here.

(31) ***Relative clauses***

[Dabil-en/*ba-dabil-en] erlojua.
walk.3SG.ABS-COMP/ba-walk.3SG.ABS-COMP watch
'The watch that runs.'

(32) ***Embedded yes/no questions***

Ez daki-t [datorr-en/%ba-datorr-en] ala ez.
NEG know-1SG come.3SG.ABS-COMP/BA-come.3.ABS-COMP or not
'I don't know if she's coming or not.'

(33) ***Temporal clauses***

Jon ikusi-ko dut
Jon-ABS see-FUT AUX.3SG.ABS.1SG.ERG
[datorr-en-ean/%ba-datorr-en-ean].
come.3SG.ABS-COMP-in/ba-come.3SG.ABS-COMP-in
'I will see Jon when he comes.'

(34) ***As clauses***

[Daki-zu-n-ez/%ba-daki-zu-n-ez], Jon
know-3SG.ABS.2SG.ERG-COMP-as/ba-know-3SG.ABS.2SG.ERG-COMP-as Jon.ABS
etorri-ko da.
come-FUT AUX.3SG.ABS
'As you know, Jon is going to come.'

In addition, some central and western dialects have distinct forms for factive complements, *-(e)na*, and for complements of downward entailing predicates, *-(e)nik*. These are commonly taken to be bimorphemic sequences consisting of the complementizer *-(e)n* with the definite morpheme *-a*, and complementizer *-(e)n* with the partitive morpheme *-ik*, respectively (Laka, 1990; Uribe-Etxebarria, 1994). Speakers generally reject expletive *ba-* in such cases. Again, most speakers require *ba-* in semantically equivalent sentences with the complementizer *-(e)la* (see (28)).

(35) ***Factive clauses (some western dialects)***

Jon-ek jaki-n du
Jon-ERG know-PERF AUX.3SG.ABS.3SG.ERG
[datorr-ena/*ba-datorr-ena].
come.3SG.ABS-COMP/ba-come.3SG.ABS-COMP
'Jon has found out that he is coming.'

(36) ***-enik clauses (central and western dialects)***

Ez dut uste
NEG AUX.3SG.ABS.1SG.ERG think
[datorr-en-ik/*ba-datorr-en-ik].
come.3SG.ABS-COMP-PART/ba-come.3SG.ABS-COMP-PART
'I don't think he/she/it will come.'

Finally, like with the above examples with the declarative complementizer *-(e)la*, most speakers reject V1 orders with embedded reason clauses formed with the complementizer *-(e)lako* (though some speakers accept such constructions to some degree.)[5]

(37) ***Reason clauses***

[5]The complementizer *-(e)lako* is plausibly bimorphemic, consisting of the complementizer *-(e)la* plus genitive *-ko*. We set this issue aside here. What will be important for the analysis to be developed below will be that *-(e)lako* is generally incompatible with *V1 and VP-Neg-Aux orders as discussed below.

Jon-ek hala kontatu du
Jon-ERG like.that tell AUX.3SG.ABS.3SG.ERG
[%daki-elako/ba-daki-elako].
know-3SG.ABS.3SG.ERG-because/ba-know-3SG.ABS.3SG.ERG-because
'Jon has told it like that because he knows it.'

To summarize, the distribution of Basque expletive *ba-* vs. V1 is not readily explainable in terms of pragmatic factors as proposed for Swedish/Norwegian embedded V2. In particular, the examples in (25)-(29) show that expletive *ba-* is obligatory in some embeddings that allow MPU interpretation, but also in others that abhor it. Similarly, the fact that expletive *ba-* is obligatory in embeddings under *doubt/deny*-class predicates, as well as embeddings under *say*-class ((25)) and factive predicates ((28)), suggests that Hooper and Thompson's predicate classes are not helpful in drawing the right distinctions.

Instead, variation between expletive *ba-* and V1 in embedded contexts seems to correlate partially with the complementizer morpheme. As noted above, there is some variation across speakers, but for most speakers, V1 is impossible and expletive *ba-* obligatory in embedded clauses with the complementizer *-(e)la* ((25)-(29), (37)). In contrast, clauses with the complementizer *-(e)n*, all allow V1 and/or disallow expletive *ba-*. In section 4, we present an analysis of these effects. Our proposal departs from the observation that the distribution of *ba-* vs. V1 in embedded contexts is similar to another phenomenon, namely the ordering of {Aux, Neg, VP}, which we describe in the next section.

3 Ordering {Aux, Neg, VP}

A much-studied fact about Basque syntax is that the order of the tense-bearing auxiliary and extended verbal shell is sensitive to sentence polarity (Ortiz de Urbina, 1989; Laka, 1990; Uribe-Etxebarria, 1994; Elordieta, 2001, 2008; Haddican, 2004). In affirmative main clauses with analytic verbs, the verb and verbal dependents obligatorily appear to the left of the finite auxiliary (VP-Aux).[6] In negative main clauses, the negative morpheme, *ez*, appears left-adjacent to the auxiliary, and the verb phrase obligatorily appears to its right (Neg-Aux-VP). We illustrate these two orders in (38) and (39), respectively.

(38) ***Affirmative main clauses***

Miren-ek [$_{\mathbf{VP}}$ Jon ikus-i] **du**
Miren-ERG Jon.ABS see-PERF AUX.3SG.ABS.3SG.ERG
'Miren has seen Jon.'

(39) ***Negative main clauses***

Miren-ek **ez** **du** [$_{\mathbf{VP}}$ Jon ikus-i]
Miren-ERG NEG AUX.3SG.ABS.3SG.ERG Jon.ABS see-PERF
'Miren hasn't seen Jon.'

Less well described in the literature is the fact that this word order alternation is sensitive to clause type. (See Laka (1990), Artiagoitia (2003) and Etxepare (2003) for some discussion). For some embedded clause types, the negative word order must be VP-Neg-Aux, as in the relative

[6]This characterization holds for wide-focus ("out of the blue") contexts in all dialects. Some eastern dialects allow for word orders where a focalized XP can appear left-adjacent to the auxiliary as in (i). We set aside these facts here.

(i) MIREN-ek du [Jon ikus-i]
Miren-ERG AUX.3SG.ABS.3SG.ERG Jon.ABS see-PERF
'It is Miren that has seen Jon.'

clause example in (40), and in other clause types, VP-Neg-Aux order is optional. In such VP-Neg-Aux orders, the complementizer appears affixed to the tense-bearing auxiliary. Affirmative clauses in all embeddings are ordered VP-Aux as in root clauses.

(40) ***Negative relative clauses***

a. [**VP** Eror-i] **ez** **de**-n etxe-a.
fall-PERF NEG AUX.3SG.ABS-COMP house-the.ABS
'The house that hasn't fallen.'

b. ***Ez** **de**-n [**VP** eror-i] etxe-a.
NEG AUX.3SG.ABS-COMP fall-PERF house-the.ABS
'The house that hasn't fallen.'

(41) ***Affirmative relative clauses***

[**VP** Eror-i] **de**-n etxe-a.
fall-PERF AUX.3SG.ABS-COMP house-the
'The house that has fallen.'

As Artiagoitia (2003) notes, the availability of VP-Neg-Aux orders in embedded contexts correlates partially with the complementizer morpheme: VP-Neg-Aux orders are optional or obligatory in embedded clauses with the complementizer *-(e)n*, but degraded in clauses with the complementizer *-ela*, where most speakers strongly prefer Neg-Aux-VP, as illustrated in (42)–(46).[7]

(42) ***Class A: Strongly assertive***

Jon-ek esa-n du *[etorri-ko ez de-la]/ [ez
Jon-ERG say-PERF AUX.3SG.ABS.3SG.ERG come-FUT NEG AUX.3SG.ABS-COMP/ NEG
de-la etorri-ko].
AUX.3SG.ABS-COMP come-FUT
'Jon has said that he will not come.'

(43) ***Class B: Weakly assertive***

Jon-ek uste du *[etorri-ko ez de-la]/ [ez
Jon-ERG think AUX.3SG.ABS.3SG.ERG come-FUT NEG AUX.3SG.ABS-COMP/ NEG
de-la etorri-ko].
AUX.3SG.ABS-COMP come-FUT
'Jon thinks that he will not come.'

(44) ***Class C: Non-assertive***

Jon-ek ukatu egi-n du *[etorri-ko ez de-la]/
Jon-ERG deny do-PERF AUX.3SG.ABS.3SG.ERG come-FUT NEG AUX.3SG.ABS-COMP/
[ez de-la etorri-ko].
NEG AUX.3SG.ABS-COMP come-FUT
'Jon denies that he will not come.'

(45) ***Class D: Factives***

Jon-ek ahaz-tu du *[etorri-ko ez de-la]/ [ez
Jon-ERG forget-PERF AUX.3SG.ABS.3SG.ERG come-FUT NEG AUX.3SG.ABS-COMP/ NEG
de-la etorri-ko].
AUX.3SG.ABS-COMP come-FUT
'Jon forgot that he will not come.'

(46) ***Class E: Semi-factives***

[7] Here, we set aside orders in subjunctive clauses. See Artiagoitia and Elordieta (to appear) for discussion.

Jon-ek jaki-n du *[etorri-ko ez de-la]/ [ez
Jon-ERG know-PERF AUX.3SG.ABS.3SG.ERG come-FUT NEG AUX.3SG.ABS-COMP/ NEG
de-la etorri-ko].
AUX.3SG.ABS-COMP come-FUT
'Jon found out that he will not come.'

As Artiagoitia (2003) notes, some speakers accept VP-Neg-Aux orders in reason clauses with the complementizer *-(e)lako*. As noted in Section 2 (see (37)), some speakers also accept V1 with such clauses.

(47) ***Reason clauses***

Jon poztu egin-go da %[Ines etorri-ko ez de-lako]/
Jon-ABS happy do-FUT AUX.3SG.ABS Ines-ABS come-FUT NEG AUX.3SG.ABS-because/
[Ines ez de-lako etorri-ko].
Ines-ABS NEG AUX.3SG.ABS-because come-FUT
'Jon will be happy because Ines isn't going to come.'

In contrast, the embedded clause types with the complementizer *-(e)n* discussed in Section 2 all allow or require the VP-Neg-Aux order. In relative clauses, the finite embedded environment where expletive *ba-* is most sharply degraded, the VP-Neg-Aux order is obligatory, as illustrated in (40). Other embedded clauses with the complementizer *-(e)n* allow it, as illustrated in (48)-(52).

(48) ***Embedded yes/no questions***

Ez dakit [etorri-ko ez de-n]/ [ez de-n
Not know.1SG come.come-FUT NEG AUX.3.ABS-COMP/ NEG AUX.3.ABS-COMP
etorri-ko].
come-FUT
'I don't know if she's not going to come.'

(49) ***Temporal clauses***

Jon poztu egin-go da [hori behar-ko ez
Jon.ABS happy do-FUT AUX.3SG.ABS that need-FUT NEG
du-en-ean]/ %[ez du-en-ean hori
AUX.3SG.ABS.3SG.ERG-COMP-in/ NEG that need-FUT
beharko].
AUX.3SG.ABS.3SG.ERG-COMP-in
'I will see Jon when he doesn't need that.'

(50) ***As clauses***

[Zu-k beharbada jakin-go ez duzu-n-ez]/ %[zuk
You-ERG perhaps know-FUT NEG AUX.3SG.ABS.2SG.ERG-COMP-as you-ERG
beharbada ez duzu-n-ez jakin-go], azkenean gobernu-ak
perhaps NEG AUX.3SG.ABS.2SG.ERG-COMP-as know-FUT finally, government-ERG
BEZ-a igo-tze-a erabak-i du.
VAT-the.ABS raise-NOM-the.3SG.ABS decide-PERF AUX.3SG.ERG
'As you perhaps don't know (lit. 'will not know'), the government has decided to raise the value added tax.'

For factive clauses with the complementizer *-ena* and clauses marked with partitive *-enik*, there is somewhat greater variability. All speakers seem to allow the VP-Neg-Aux, while only some allow Neg-Aux-VP as shown in (51) and (51). Here, then, the correlation with the availability of *V1 is imperfect, since *ba*-support seems to be strictly disallowed in these environments.

(51) ***Factives clauses (some western dialects)***

Jon-ek ahaz-tu du [etorri-ko ez de-na]/ %[ez
Jon-ERG forget-PERF AUX.3SG.ABS.3SG.ERG come-FUT NEG AUX.3SG.ABS-COMP/ NEG
de-na etorri-ko].
AUX.3SG.ABS-COMP come-FUT
'Jon forgot that he will not come.'

(52) ***-enik clauses (central and western dialects)***

Jon-ek ez du esa-n [etorri-ko ez
Jon-ERG NEG AUX.3SG.ABS.3SG.ERG say-PERF come-FUT NEG
de-n-ik]/ %[ez de-n-ik etorri-ko].
AUX.3SG.ABS-COMP-PART/ NEG AUX.3SG.ABS-COMP-PART come-FUT
'Jon hasn't said that he's not going to come.'

At first sight, an appealing approach to Neg-VP-Aux word orders is to relate this pattern to a more general ban on clausal material to the right of the auxiliary in some such clauses. In relative clauses in particular, no clausal material at all may appear between the Aux+C cluster and the relative head. (53), for example, shows that adverbs like *atzo*, 'yesterday' which normally have a fair amount of freedom to appear post-verbally, obligatorily appear pre-verbally in relative clauses. This fact suggests the possibility that VP-Neg-Aux orders in some *-(e)n* clauses are a special case of whatever constraint accounts for the obligatory Aux-final word order in (53).

(53) a. *[Eror-i ez ze-n **atzo**] etxe-a.
fall-PERF NEG AUX.3SG.ABS.PST-COMP yesterday house-the
'The house that didn't fall yesterday.'

b. [**Atzo** eror-i ez ze-n] etxe-a.
yesterday fall-PERF NEG AUX.3SG.ABS.PST-COMP house-the
'The house that didn't fall yesterday.'

Nevertheless, the word order restriction in (53), whatever its source, is at least partially independent of the {Aux, Neg, VP} ordering variation described above, since VP-Neg-Aux word orders are possible in clauses with post-verbal clausal material. In (54), for example, the adverbial clause word order is VP-Neg-Aux, but the locative 'at the bus stop' (interpreted as the location of the seeing event) can appear to the right of the auxiliary. We conclude, therefore, that whatever ensures the strict Aux-final word order in relative clauses like (53) is partially distinct from variation in {Aux, Neg, VP} ordering.

(54) Ikus-i ez zu-en-ez parada-n, joa-n egin
see-PERF NEG AUX.3SG.ABS.3SG.ERG.PST-COMP-as bus.stop-in, go-INFIN do-IMPERF
ze-n.
AUX.3SG.ABS.PST
'As [she] didn't see [him] at the bus stop, she left.'

To summarize, we have seen that the relative order of {Aux, Neg, VP} in embedded clauses generally covaries across clause types with the *V1 effect discussed in Section 2. With the exception of factive *-ena* and partitive *-enik* clauses in some western dialects, where there is some cross-speaker variability, the generalization is that the VP-Neg-Aux order is available in just those kinds of embeddings that also allow for V1. Again, these effects do not correlate with selecting predicate type in e.g. Hooper and Thompson's (1973) classification, nor with any special pragmatic interpretation associated with "assertion" or MPU. Rather, these effects appear to covary partially with the complementizer morpheme: clauses with the complementizer *-ela* generally require expletive *ba-* in *V1-violating contexts and do not allow the VP-Neg-Aux order; clauses with *-(e)n*, on the other hand, allow V1 and VP-Neg-Aux orders, though some

clause types also allow for expletive *ba-* and the alternative Neg-Aux-VP order. We summarize the distribution of these clause type-sensitive phenomena in Table 1. In the remaining discussion, we develop an account of these facts.

Embedding type	**Comp.**	**V1 vs. expletive *ba-***	**V-Neg-Aux vs. Neg-Aux-V**
Strongly assertives	*-(e)la*	*ba-*	Neg-Aux-VP
Weakly assertives	*-(e)la*	*ba-*	Neg-Aux-VP
Non-assertives	*-(e)la*	*ba-*	Neg-Aux-VP
Factives	*-(e)la*	*ba-*	Neg-Aux-VP
Semi-factives	*-(e)la*	*ba-*	Neg-Aux-VP
Reason clauses	*-(e)lako*	%*ba-*/V1	%Neg-Aux-VP/VP-Neg-Aux
***Yes/no* questions**	*-(e)n*	*ba-*/V1	Neg-Aux-VP/VP-Neg-Aux
Temporal clauses	*-(e)n*	%*ba-*/V1	%Neg-Aux-VP/VP-Neg-Aux
***As-* clauses**	*-(e)n*	%*ba-*/V1	%Neg-Aux-VP/VP-Neg-Aux
Factives (some dialects)	*-(e)n*	V1	%Neg-Aux-VP/VP-Neg-Aux
Partitives (some dialects)	*-(e)n*	V1	%Neg-Aux-VP/VP-Neg-Aux
Relative clauses	*-(e)n*	V1	VP-Neg-Aux

Table 1: The distribution of V1 and V-Neg-Aux orders by embedding type

4 Mapping clause-type sensitivity

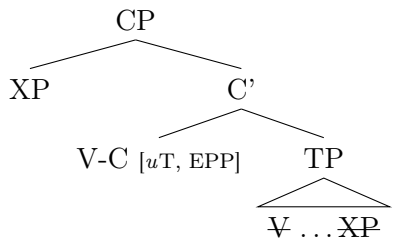
In the analysis to follow, we model these clause type effects adapting Ortiz de Urbina's (1999) articulated discourse field for Basque (cf. Rizzi (1997); Benincà and Poletto (2004); Haegeman (2006)). One frequent approach to clause type effects in the cartographic tradition has been to assume that embedded clauses are impoverished relative to root clauses in lacking some heads—typically related to illocutionary properties of root clauses—that gives rise to the root-clause syntactic effect (Haegeman, 2006; Benincà and Poletto, 2004; Wiklund et al., 2009). This approach, therefore, relies on the notion of variable "truncation" of an extended functional projection (in this case "CP") frequently applied in other domains to model phenomena including clause union effects (Cinque, 2004; Wurmbrand, 2001, 2004), and differences among strong, weak and clitic pronouns (Cardinaletti and Starke, 1999; Déchaine and Wiltschko, 2002). Nevertheless, in a series of recent publications, Haegeman (2010a; 2010b; 2012; 2013; 2014) has suggested that not all kinds of main clause effects should be explained in such terms, and that some kinds of clause-type restrictions are a consequence of constraints on movement. In the following discussion, we argue that both mechanisms apply: truncation feeds intervention by forcing a set of operators (interrogative, temporal, relative, factive) to be (re-)merged in a lower position where they block movement. These assumptions will accommodate a unified approach to the two word order alternations just discussed. In section 4.1, we first consider and reject a strict V2 approach to *V1 and V-Neg-Aux word orders. In Sections 4.2 and 4.3 we propose a different approach to these facts adapting Ortiz de Urbina's (1999) articulated left peripheral structure.

4.1 Prospects for a V2 account

The section considers and rejects one possible solution to the above word order puzzle based on standard approaches to V2 and a head movement approach to Basque verb cluster formation. We dwell on these issues because the head movement analysis has been particularly influential in the Basque literature. Readers uninterested in this debate may wish to skip ahead to section 4.2.

The standard contemporary view of V2 in Germanic, which is descended in spirit from den Besten's (1983) early work on the topic, takes V2 effects to reflect the interaction of two features: a generalized EPP feature on a high C-field head attracting exactly one XP; and a [uT] feature on this same head that probes and attracts the finite verb (Chomsky, 2000; Roberts, 2004; Benincà and Poletto, 2004; Julien, 2009; Jouitteau, 2008; Holmberg, 2015; Leu, 2015). With the further assumptions that this head takes its specifier to its left, and that this EPP movement blocks further movement to the left-periphery, then the combined effect of these two features correctly expresses the requirement that the inflected verb must appear in exactly second position, that is, with exactly one phrasal constituent to its left. In some recent variations on this approach, the projection targeted by these movements has been related to the pragmatics of root clauses—a "Force" or "Speech Act" head—for varieties in which V2 is restricted to root contexts (Rizzi, 1997; Bayer, 2004; Julien, 2009). We call this the EPP+V-raising approach and summarize it in (55).

(55) ***The EPP+V-raising approach to V2***



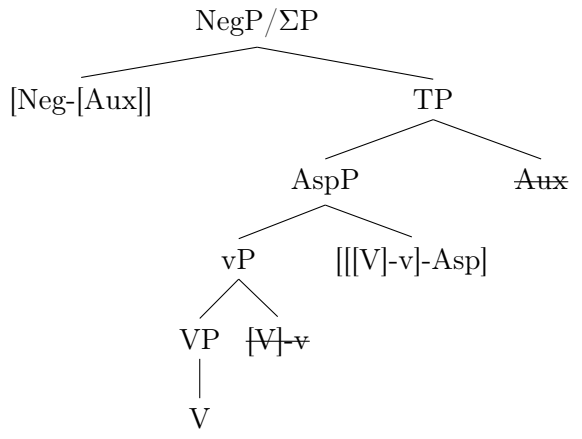
The discussion in Sections 2 and 3 raises the possibility that *V1 and Neg-V-Aux word order in Basque (embedded) root clauses can be related to the XP-to-C and T-to-C movement in (55), respectively, on this standard approach to V2, and we consider this possibility in this section. We begin by reviewing some previous proposals about verb movement to the left periphery in Basque.

As discussed in section 3, the relative order of the tense-bearing auxiliary and extended verbal shell is sensitive to sentence polarity. Again, in affirmative sentences with analytic verbs such as (38), the verb and verbal dependents appear to the left of the finite auxiliary (VP-Aux). In negative sentences, such as (39), the negative morpheme, *ez*, appears left-adjacent to the inflected verb. The verb and non-focused, non-topicalized verbal dependents appear to the right of these (Neg-Aux-VP). There are two main analyses of these facts in the Basque literature, which we will call the *head-movement approach* and the *predicate fronting approach*. We consider the first of these in the following discussion, turning to the second (which we will ultimately adopt) in the next section.

The head movement approach, developed by Ortiz de Urbina (1989) and Laka (1990)(see also Elordieta (2001, 2008), models the polarity sensitivity just described in terms of the effect of negation on auxiliary (T) movement. Laka (1990) proposes that the negative morpheme, *ez*, heads a projection, ΣP, merged outside of TP, which takes its complement to the right; TP-internal heads take their complements to the left. In neutral declarative contexts like (23) and (38), where negation is not merged, the finite verb appears sentence finally, inside TP. In negative contexts, Laka (1990) and Elordieta (2001, 2008) propose that prosodically weak auxiliary verbs head-adjoin to negation which provides lexical support. The Neg-Aux word order means that this must be adjunction operation must result in linearization of Aux to the right of its target head, Neg, as shown in (56).[8]

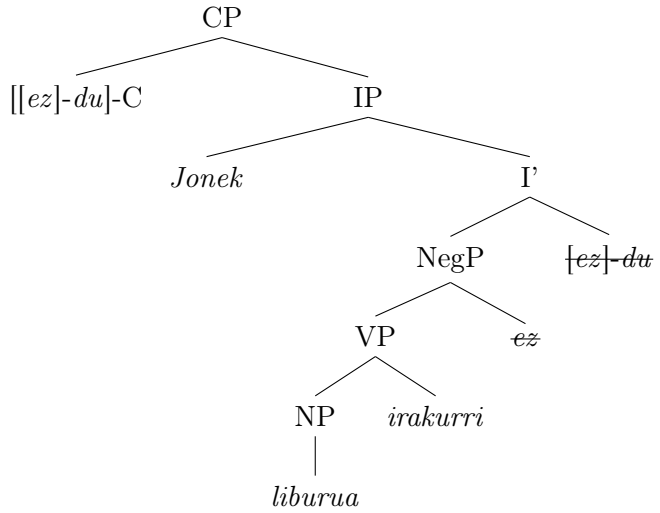
[8]For expository convenience we focus here on analytic verbs. The analysis for synthetic verbs on this approach is quite similar with the main difference that V raises to T.

(56) ***The head movement approach (Laka, 1990)***



A variant of this approach by Ortiz de Urbina (1994) is that negation is instead merged inside IP (his label for the projection hosting the auxiliary) and successively head-adjoins to the auxiliary and a left-headed C, as in (57). Ortiz de Urbina (1994: 143) suggests that the latter movement step may be related to scopal properties of negation. In affirmative contexts, the auxiliary remains *in situ*.

(57) ***Neg-I-C movement (Ortiz de Urbina, 1994)***



As Ortiz de Urbina (1994:143, fn.11) notes, this approach, together with the assumption of variable complementizer lowering to I, suggests an account of VP-Neg-Aux orders in embedded *-(e)n* clauses. In such cases, the complementizer lowers, right-adjoining to the auxiliary which does not raise, and the verb, negation and auxiliary all stay *in situ*, yielding the VP-Neg-Aux-C order.

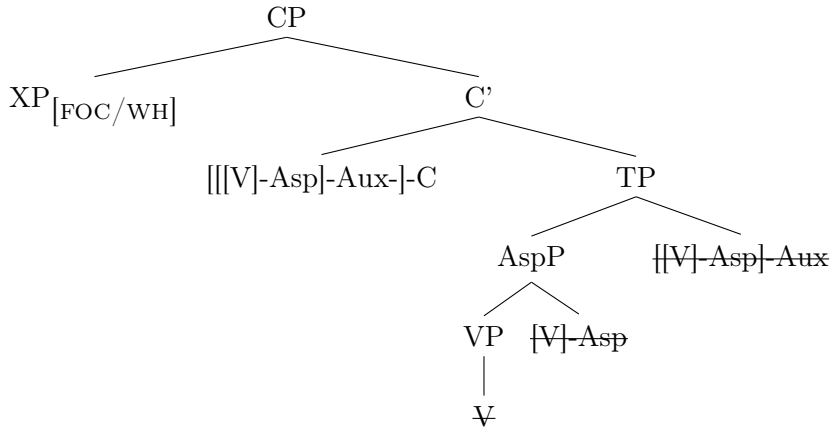
Additional assumptions will be needed to account for a fact mentioned above, namely that in the general case, foci must appear left-adjacent to the main verb, as in (58). (We will qualify this characterization shortly.)

(58) JON-ek/Nor-k (*Miren) ikusi-i zu-en (Miren).
Jon-ABS/Who-ERG Miren.ABS see-PERF AUX.3SG.ABS.3SG.ERG.PST-COMP Miren.ABS
'JON/who saw Miren./?'

Ortiz de Urbina (1989, 1994) proposes that Basque is a "residual V2" language (Rizzi, 1996),

that is, the verb raises to C only in certain environments including focus constructions. Specifically, Ortiz de Urbina proposes that the verb raises to C to satisfy the "*wh*-criterion", a requirement that the focus phrase sit in a spec-head relationship with the inflected verb (Rizzi, 1996). In affirmative sentences, the verb+aspect cluster head-adjoins to the auxiliary, again, to satisfy a lexicalization requirement on the prosodically weak auxiliary. The verb+auxiliary then head-adjoins to C as illustrated in (59). In negative contexts, the negative morpheme satisfies the lexicalization requirement on the auxiliary and the verb stays in situ. (This approach or close variants of it have been adopted by several other authors including G. Elordieta (1997); A. Elordieta (2001; 2008); Irurtzun (2007); Arteatx (2011).)

(59) ***V-I-C movement (Ortiz de Urbina, 1994)***



From the perspective of Ortiz de Urbina's analysis, an initially appealing approach to the similar distributions of *V1 and Neg-V-Aux orders is that these phenomena reflect the presence of the two crucial features that conspire to produce V2 on the standard approach: an EPP feature on C attracting an XP (responsible for *V1) and a [*u*T] feature on this same head attracting the tense-bearing verb (responsible for Neg-Aux-V orders). This will mean that the verb+aux head-adjunction structure will sit in a spec-head relationship with a first position element, just as in the standard approach to V2 outlined above. In "true" embeddings with *-(e)n* complementizers, this [EPP] feature will be absent, with the consequence that V1 will be possible (and expletive *ba-* does not generally occur). Similarly, the absence of Aux-to-C movement in such contexts will mean that V, Neg and Aux will stay in situ, spelling out in the desired order in such clauses—V-Neg-Aux.

This approach, nevertheless, has at least six problems which we describe in turn below. We will conclude that, unlike in Germanic V2 constructions, the tense-bearing verb in Basque never raises to the same projection hosting the first-position XP (Uriagereka, 1999), and that a predicate fronting approach to polarity effects on word order provides a better account of these facts than does the head-movement approach.

Problem 1: The negative morpheme* ez *as a TP-internal head. A first problem with the proposal sketched above concerns the status of the negative morpheme *ez* as a head merged TP-internally. As discussed in section 2, *ez* can be a first-position element. From the perspective of the approach to V2 in (55), where the first-position element is the specifier of the EPP-feature-bearing head, we expect *ez* to raise as an XP, rather than as a head as in (57). One possible response is that *ez* is somehow exceptional in being a head that can satisfy the EPP feature on C. (See Roberts (2004) for a similar approach to second position effects in Welsh and Breton.) Such an account, however, would need to explain how *ez* does this, and why other kinds of preverbal heads including the evidential and speech act particles, *omen*, *al* and *ote* cannot. (See (15)-(17).) In addition, this account would not solve a related problem with merging *ez* as a TP-internal head, namely that it seems to entail a violation of the Head Movement constraint (Travis, 1984) in the case of negative synthetic verb constructions, such

as (60).

(60) Ez dato-z
NEG come-3PL.ABS
'They aren't coming.'

By all appearances, such verbs are derived by V-T movement (Laka, 1990). If *ez* is a TP-internal head, such sentences therefore seem to involve V-T movement across Neg, as in (61).

(61) $[_{\text{VP}}\ \text{V}\ [_{\text{NegP}}\ ez\ [_{\text{TP}}\ \text{V-T}\ ]]]$

A second possible solution is to depart from Ortiz de Urbina's (1994) proposal and take *ez* to be merged as a specifier (TP-internally) that raises to spec, CP. We return to this possibility in Section 4.2.

Problem 2: The position of the verb in analytic contexts. A second set of problems with a strict V2 approach to the above facts concerns the fact that the main verb in analytic contexts can also be a first position element as in (8), repeated here.

(62) Hasi-ko da.
start-FUT AUX.3SG.ABS
'It's going to start.'/"It IS going to start.'

If first position elements are XPs, in spec, CP, then on standard assumptions, the verb+aspect complex cannot raise to C by head movement as in (57), but rather will need to raise as an XP. But, recall from Section **??** that foci can be first-position elements and that the verb can appear between these and the auxiliary: XP-V-Aux. For the auxiliary to be in a spec-head configuration with the focused XP, the main verb in such contexts will instead need to be head adjoined to the auxiliary. Note that it will not do to say that the focused constituent pied-pipes the verb to spec, CP, in such contexts since foci can never carry along the verb in long *wh*-/focus movement sentences and negative contexts as in (63) and (64). A strict V2 approach based on a structure like (57), therefore faces the non-trivial obstacle of explaining why the verb can behave like a first-position XP in some contexts but a head in "C" in others.

(63) Nor esa-n duzu [ez de-la etorri-ko ~~nor~~].
who say-PERF AUX NEG AUX-COMP come-FUT who
'Who did you say isn't going to come?'

(64) JON ez da etorri behar.
Jon.ABS NEG AUXcome need AUX
'JON must not come.'

Problem 3: Speech act/evidential particles. A related problem concerns the position of the preverbal particles *omen*, *al* and *ote*, which obligatorily appear between the verb+aspect cluster and the auxiliary as (65) and (66).

(65) Etorr-i omen da.
come-PERF EVID AUX
'(He/she/it) has allegedly come.'

(66) Etorri-ko ote/al da?
come-PERF DUB/SP.ACT AUX
'Will/might (he/she/it) come?'

The fact that these particles cannot be first position elements (see again (15)-(17)) suggests that they are heads, as, indeed, assumed in all other analyses of these particles that we are aware

of (Elordieta, 1997, 2001; Haddican, 2004; Etxepare, 2010; Arregi and Nevins, 2012). If the verb comes to be linearized to the left of the auxiliary via head movement, and if the head movement constraint is scrupulously obeyed, then these particles will need to be merged between T and V —a surprisingly low position from the perspective of much of the literature on such elements (Cinque, 1999; Rooryck, 2001; Faller, 2002). We illustrate the merged order of these heads on this approach, abstracting away from movement, in (67).

(67) $[_{\text{CP}}$ C $[_{\text{TP}}$ $[_{\text{PrtP}}$ $[_{\text{VP}}$ V] **Prt**] T]]

Stifling qualms, for the moment, about the merged position of these particles, an additional difficulty with the structure in (67) comes from the fact that, in the case of preverbal particles preceding synthetic verbs, as in (16), V-T incorporation will entail a head movement constraint violation, since the verb will need to move across the particle to incorporate into T.

Problem 4: Clause-medial complementizers. A fourth challenge for the strict V2 approach sketched above concerns word orders in *-(e)la* clauses, where the auxiliary+complementizer sequence appears medially in negative clauses and finally in affirmative clauses, as described in Section 3. We illustrate this in (68).

(68) ***Complement clauses with -(e)la***

a. Jon-ek uste du [ez de-**la** etorri-ko].
Jon-ERG think AUX.3SG.ABS.3SG.ERG NEG AUX.3SG.ABS-**COMP** come-FUT
'Jon thinks that he will not come.'

b. Jon-ek uste du [etorri-ko de-**la**].
Jon-ERG think AUX.3SG.ABS.3SG.ERG come-FUT AUX.3SG.ABS-**COMP**
'Jon thinks that he will come.'

Combining Aux movement to C with a left-headed C as in Ortiz de Urbina's (1994) structure in (57) correctly accounts for medial orders in negative contexts, but cannot account for the complementizer-final pattern in affirmative contexts in (68b). Ortiz de Urbina (1994:147) proposes that in the latter case, the complementizer lowers to Infl in order to cliticize onto the auxiliary, an approach obviously incompatible with T-C movement. Similarly, Laka (1990) proposes a right-headed C, which correctly accounts for the clause-final complementizer pattern in (68b), but cannot account for medial orders as in (68a). It's difficult, therefore, to see how an account of clause-medial complementizers can be reconciled with standard approaches to V2.

Problem 5: Remnant topicalization. We noted earlier that the usual position for foci is left adjacent to the main verb, as illustrated in (58). Nevertheless, some dialects also allow foci to appear right-peripherally as in (69a). Importantly, the focalized constituent cannot easily appear with other material separating it from the right edge of the clause as in (69b).

(69) a. Jon-ek irakurr-i du periodiko-a
Jon-ERG read-PERF AUX.3SG.ABS.3SG.ERG newspaper-DEF.ABS
ETXE-A-N.
house-DEF.ABS-in
'Jon read the newspaper AT HOME.'

b. ??Jon-ek irakurr-i du ETXE-A-N
Jon-ERG read-PERF AUX.3SG.ABS.3SG.ERG house-DEF.ABS-in
periodiko-a.
newspaper-DEF.ABS
'Jon read the newspaper AT HOME.'
(adapted from (Ortiz de Urbina, 2002))

Ortiz de Urbina (2002) and Uribe-Etxebarria (2003) argue that sentences such as (69) involve movement of the focalized XP to its usual focus position followed by topicalization of the remnant

material.

(70) [$_{\text{TopP}}$ YP Top [$_{\text{FocP}}$ XP Foc ~~[$_{\text{YP}}$ XP Y]~~]]
(adapted from Ortiz de Urbina (2002))

As Ortiz de Urbina (2002) notes, the topicalized remnant behaves intonationally like true topics in terms of pauses and requiring a pitch reset on following constituents. Additional evidence for remnant topicalization comes from the fact that the focalized constituent scopes over remnant-internal negation, just as it does in non-topicalization contexts (Ortiz de Urbina, 2002; Etxepare and Haddican, 2013).

(71) a. Ez diot liburua oparitu ANDONI-RI, (eta) ez Miren-i.
NEG AUX book-the offered Andoni-DAT, and NEG Miren-DAT
'The one I did not offer the book to is Andoni, and not Miren'
b. ANDONI-RI ez diot liburua oparitu, (eta) ez Miren-i.
Andoni-DAT NEG AUX book-the offered and NEG Miren-dat
'It is Andoni that I didn't offer the book to, not Miren.'
(adapted from Etxepare and Haddican (2013))

The importance of these facts for the V2 analysis of Basque is that, if remnant topicalization applies to the same structure visible in canonical leftward focus constructions (as proposed by Ortiz de Urbina (2002) and Uribe-Etxebarria (2003)), then the tense-bearing verb cannot be in a spec-head relation with the focalized constituent, assuming that topicalization raises XPs and cannot apply to bar-level constituents. The question of what ensures focus-verb adjacency in canonical contexts would seem to require a different answer than Ortiz de Urbina's (1994) spec-head analysis. We return to this issue shortly.

Problem 6: The similar distribution of *V1 and Neg-Aux-V. A final shortcoming of the V2 approach outlined above is that it does not provide a particularly explanatory account of the similar distribution of *V1 and Neg-Aux-V across clause types. We suggested above that [uT] and [EPP] features might necessarily co-occur on the same complementizer head, thereby accounting for the correlation between *V1 and Neg-Aux-V across clause types. But as Holmberg (to appear) notes, these features are, in principle, independent. Nothing in standard theories of EPP positions or T-to-C movement provides reason for thinking that they should necessarily co-occur. Indeed, variation between V2 and non-V2 word orders in Scandinavian embeddings as in (24)(repeated below) appears to illustrate the independence of these movement steps. Here, movement of the embedded subject to spec, CP applies in both V2 and non-V2 orders. The two orders differ minimally in that T-C movement applies in the V2 order but not in the non-V2 order.

(72) a. Han sa att Lisa hade inte läst bok-en.
He said that Lisa had not read book-the
'He said that Lisa hadn't read the book.' [V2]
b. Han sa att Lisa inte hade läst bok-en.
He said that Lisa not had read book-the
'He said that Lisa hadn't read the book.' [non-V2]
(Swedish, adapted from Wiklund et al. 2009)

In light of such facts, the consensus in recent work on Germanic is that T-to-C movement correlates with speech-act pragmatic features in a way that XP movement to C does not (Truckenbrodt, 2006; Wiklund et al., 2009; Franco, 2012; Holmberg, 2015). As described in Section 3, V-Neg-Aux orders do not correlate with speech act pragmatic properties of embedded clauses in a way similar to V2 in Mainland Scandinavian. Why [uT] and [EPP] should correlate closely across clause types in Basque therefore calls for some explanation.

To summarize, the above sets of facts are problematic for a strict V2 approach to the correlation between *V1 and Neg-Aux-V. In the account developed below, we propose a different approach to these facts adapting Ortiz de Urbina's (1999) articulated left peripheral structure for Basque, and abandoning the idea that the tense-bearing verb head raises to an [EPP]-bearing head responsible for *V1 effects.

4.2 Truncation feeds intervention

We begin by recalling that the complementizer *-(e)n* appears in embedded interrogatives, relative clauses, temporal and *as*-clauses, and in some dialects, factive embeddings, while *-(e)la* appears in declarative embeddings and, in some dialects, factive complements. What *-(e)n* clauses plausibly all have in common is the presence of an operator—interrogative, temporal, relative, temporal or factive—in the left periphery of the clause, which declaratives lack. Such an approach to relative clauses is common on head external analyses of relative clauses (Chomsky, 1977, a.o.), and is a frequent analysis of temporal adverbial clauses (Haegeman, 2010a, 2012). For similar approaches to *yes/no* questions see Ortiz de Urbina (1994); Haegeman (2010b) and Den Dikken (2006). See Zanuttini and Portner (2003) for an operator-based approach to factive embeddings. In addition, our analysis will require that *as*-adverbial clauses (Potts, 2002), and partitive *-enik* clauses in the relevant dialects have such an operator as well.

Following recent work by Haegeman (2010a; 2010b; 2012; 2013; 2014), and Haegeman and Ürögdi (2010), we will argue that intervention effects triggered by these operators are responsible for certain properties of these clauses described above. Importantly, though, the fact that there is (speaker-internal) variation between VP-Neg-Aux and Neg-Aux-VP and between *ba*-support and V1 in these clause types suggests that some other parameter of variation is needed. That is, since main-clause word orders are available in some interrogative, factive etc. clauses, the mere presence of these operators appears insufficient to explain the variation. Similarly, the fact that the choice of the complementizer *-(e)n* vs. *-(e)la* does not covary strictly with *V1 and ordering options for {Aux,Neg, VP} suggests that the choice of complementizer itself does not govern this variation.[9]

We assume the functional sequence in (73) for Neg-Aux-VP orders, based in part on Ortiz de Urbina (1999). (See Poletto (2002); Benincà and Poletto (2004) for previous approaches to V2-like patterns assuming a split-CP.)[10] Here, "Force" denotes a clause typing morpheme, in whose spec, the interrogative, relative etc. operators are (re-)merged.

(73) $[_{\text{TopP}}$ Top $[_{\text{ForceP}}$ **Op**$_{[\text{Q}]}$ Force$_{[\text{uQ}]}$ $[_{\text{FocusP}}$ Focus $[_{\Sigma\text{P}}$ Σ $[_{\text{FinP}}$ Fin $[_{\text{TP}}$ T ...
(Neg-Aux-VP orders)

We assume that the subordinating morphemes *-(e)n* and *-(e)la* are merged low, in Fin, and that the auxiliary head-adjoins to these morphemes in embedded contexts. The position labeled "T" in (73) will stand for a sequence of heads hosting the clitics/agreement morphemes on finite verbs[11] as described above (Laka, 1993; Cheng and Demirdache, 1993; Arregi and Nevins, 2012). We abstract away from the internal syntax of auxiliary verbs in the discussion to follow.

For our purposes, it will not matter whether linearization of syntactic objects involves head directionality parametrization, or whether objects are universally linearized in the order spec-head-complement with additional movement steps (e.g. "roll-up") deriving complement-head orders. We take no position on this issue here. For expository convenience, syntactic objects are displayed in the order spec-head-complement in the trees below.

[9] We assume that exponence of *-(e)n* rather than *-(e)la* reflects an agree relation between the clause-typing feature and Fin, though this agreement plays no role in explaining the clause-type effects discussed here (Roberts, 2004; Ortiz de Urbina, 1999; Artiagoitia and Elordieta, to appear).

[10] This is an adaptation of Ortiz de Urbina's hierarchy, which does not include an evidential head position nor a Σ position.

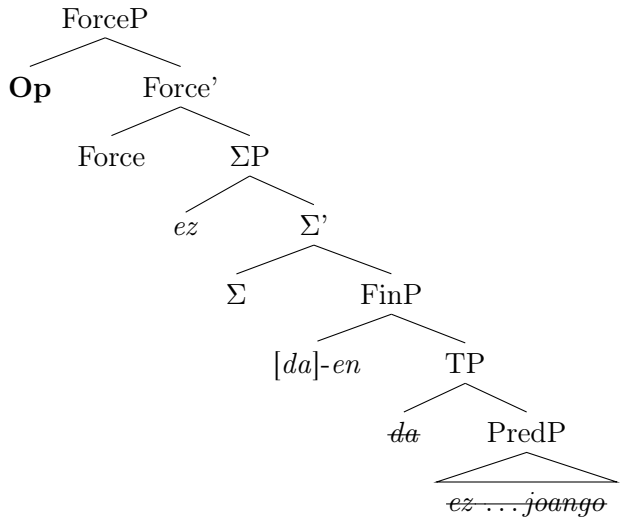
[11] This includes auxiliaries as well as the synthetic verb forms like (3).

We assume that focused constituents, including *wh*-phrases have a [FOCUS] feature and move to the spec of FocP. Topics, likewise, bear a [TOPIC] feature and move to TopP (Ortiz de Urbina, 1999; Elordieta, 2001). Adapting Laka's seminal (1990) proposal, we propose that Σ is a left-peripheral polarity-related head, to which the negative morpheme, *ez*, raises. (See Haddican (2004) and Etxepare and Haddican (2013) for evidence that *ez* raises to this position rather than being first-merged there). The fact that *ez* can serve as a first-position element (unlike evidential particles), and the fact that it can cross intervening heads suggest that it raises as an XP rather than as a head, and we therefore take it to be a negative adverbial, first merged in the spec of a TP-internal position that we will call PredP. Specifically, we propose that Σ has an uninterpretable polarity feature [*u*Pol] and an EPP feature that probes and attracts *ez*. We discuss the behavior of Σ in affirmative contexts shortly. (See Kramer and Rawlins (2009) and Holmberg (2013) for similar proposals about agreement with Σ in answers to negative polar questions.) In the case of root contexts, embedded *-(e)la* clauses and, optionally, *-(e)n* clauses these assumptions will now correctly express the Neg-Aux-VP word order, as illustrated in (74).

(74) ***(Embedded) Root Neg-Aux-VP***

a. . . . ez d(a)-en joan-go.
. . . NEG AUX-COMP go-FUT
'. . . whether (he/she/it) hasn't gone.'

b.



We propose that the locus of cross-speaker and intra-speaker variation governing the choice between VP-Neg-Aux and Neg-Aux-VP is truncation, that is, whether the clause typing feature is merged as a separate Force head, or whether this feature is merged instead on Fin, the position of the complementizer (Rizzi, 1997).[12] Drawing on "truncation"-based approaches to clause type effects, we propose that *-(e)n* clauses may be deficient relative to root and *-(e)la* clauses in that the former but not the latter may lack a projection headed by the clause-typing feature, Force, which is present in the latter case. Importantly, our approach differs from some previous truncation approaches to clause-type effects in that we do not take this structural difference to correlate with the pragmatics of illocutionary force, for reasons given in sections 2 and 3. (See Haegeman (2010a,b, 2012) for a discussion of some shortcomings of this approach.) In truncated contexts, the operator will be (re-)merged not in ForceP but in FinP, as in (75). When they sit in FinP, as in (75), however, they will.[13]

[12] In the case of intra-speaker variation, we assume these two grammars are in competition in the sense of (Kroch, 1989).

[13] A reviewer notes that factives like (28) require *ba*-support and Neg-Aux-VP orders. If such sentences involve

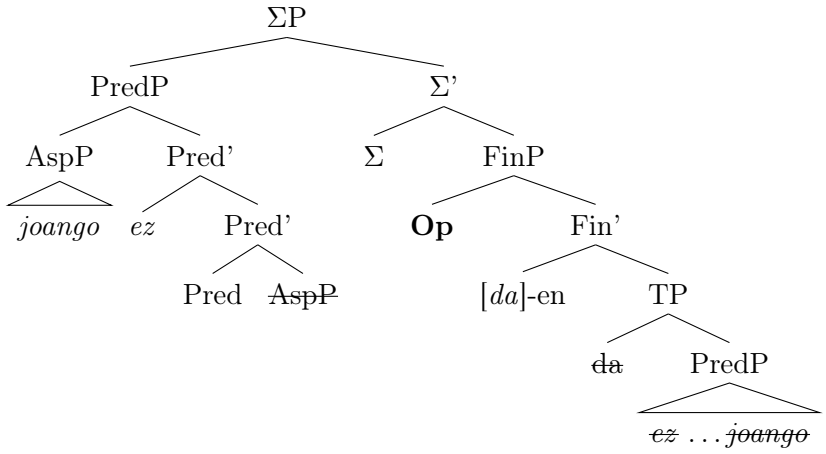
(75) $[_{\text{FocusP}}$ Focus $[_{\Sigma\text{P}}$ Σ $[_{\text{FinP}}$ **Op**$_{[\text{Q}]}$ Fin-Force$_{[\text{uQ}]}$ $[_{\text{TP}}$ T ... (VP-Neg-Aux)

We propose that VP-Neg-Aux orders reflect a smuggling repair (Collins, 2005a,b) operation that applies when the operator sits in FinP, blocking movement to ΣP. The extended VP—here labeled "PredP"—raises with *ez* inside, past the operator in FinP, as in (76). The fact that the main verb and dependents may appear to the left of *ez* reflects roll up—raising of the complement of Pred to an outer specifier.[14]

(76) ***Embedded VP-Neg-Aux***

a. ...joan-go ez d(a)-en.
...go-FUT NEG AUX-COMP
'...whether (he/she/it) hasn't gone.'

b.



A question raised immediately by this proposal is what conditions the availability of a portmanteau Force-Fin morpheme. Rizzi (1997) proposed that, in English, a single Force-Fin head is made possible by the absence of a topic head intervening between Force and Fin. Rizzi cited Bresnan's (1977) famous observation about the obviation of *that*-trace effects in the presence of a preposed adverb. Rizzi took this adverb to sit in a TopP between Force and Fin and make possible a distinct Force head, as in (77b). Where no intervening topic is present, as in (77a), Force-Fin are merged as a single head in the position of Fin yielding an ungoverned trace.

(77) a. *An amendment which they say that t will be law next year.
b. An amendment which they say that, next year, t will be law.

Similar facts come from Northern Bizkaian dialects of Basque. These dialects have a lexical distinction between accented and unaccented words such that the latter can only be intonationally prominent in Focus position—FocusP, in our proposal (Hualde et al., 1994). In addition, Elordieta (2002) and Arregi (2006) note a difference between *-(e)la* and *-(e)n* clauses in these dialects in the availability of focal stress assignment to unaccented words. As shown in (78) and (79), a lexically unaccented word (*handi*, 'big' in (78) and (79)) can receive focal stress in *-(e)la* clauses, on the relevant interpretation, but never in *-(e)n* clauses on any interpretation.

a factive operator, our analysis will require that this operator always sits high in ForceP, since it never gives rise to intervention. We take it to be a condition on exponence of Fin that it cannot spell out as *-(e)n* when there is an operator in its spec.

[14] A reviewer worries about the nature of this last movement step. One possibility is that this is one step in a "roll-up" sequence in the sense of Kayne (1994) and Biberauer et al. (2014)—iterative complement-to-spec movement starting at the bottom of a spine. Such a process would presumuably be responsible for the uniformly head-final nature of the Basque Verbal complexes. On this approach, then, complement-head linearization in Basque verbal complexes would be derived by movement, rather than by head directionality parameterization. A second possibility compatible with directionality parameterization but not Biberauer et al.'s approach, is that this is a single case of complement-to-spec movement whose motivation is opaque to us. Again, we do not take a position on these issues here.

(78) Lagun-ek esan dabe [Mikel-ek etxe **handi-à** erosi dabe-ela].
friend-ERG say AUX.3PL.ERG [Mikel-ERG house big-the.ABS buy AUX-3SG.ERG-C]
'My friends said that Mikel has bought a big house.'

(79) Lagun-ek galdetu dabe [Mikel-ek etxe **handi-(*à)** erosi
friend-ERG ask AUX.3PL.ERG [Mikel-ERG house big-the.ABS buy
dabe-en].
AUX.3SG.ERG-C]
'My friends asked me whether Mikel has bought a big house.'

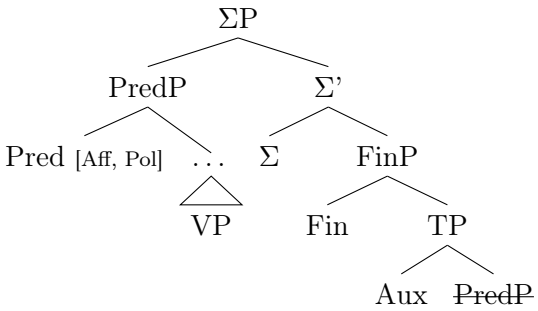
We take these facts to reflect the structural deficiency of *-(e)n* clauses relative to *-(e)la* clauses, namely the absence of a left-peripheral Focus position in the former. We assume that this is related to the availability of a single Force-Fin head. From the perspective of our proposal, however, it cannot be the case, as Rizzi (1997:311) suggests, that a joint Force-Fin head is possible only when no heads intervene between Force and Fin, since a Σ head must be present in *-(e)n* clauses as in (76). We do not take a position here on the formal relationship between the presence of Force/Topic and the availability of a single Force-Fin head, but rather observe that the Northern Bizkaian stress facts, alongside the *V1 and {Aux, Neg, VP} ordering facts, support the spirit of Rizzi's proposal.[15]

We propose that independent evidence of the PredP fronting operation in (76) comes from affirmative contexts like (80) (Haddican, 2004; Etxepare and Uribe-Etxebarria, 2009; Etxepare and Haddican, 2013).

(80) Ane-k Jon ikus-i du.
Ane-ERG Jon.ABS see-PERF AUX
'Ane has seen Jon.'

Here, in the absence of *ez*, PredP raises to Σ to satisfy the latter's polarity feature. We take this movement to be a kind of predicate fronting (Massam, 2000, 2001, 2010; Coon, 2010, 2012), where the predicate fronts not to satisfy featural needs of T, but rather those of a higher polarity related head, namely Σ.

(81) ***Affirmative orders***



Evidence in favor of predicate fronting in affirmative clauses comes from TP ellipsis sentences as in (82). The auxiliary in the second sentence is left unpronounced, plausibly as a banal case of TP ellipsis (Laka, 1990). On the head-movement approach, additional assumptions are required

[15]Note that *-(e)n* also appears in embedded *wh*-questions:

(i) Ez daki-t [nor etorr-i d-en].
NEG know-1SG.ERG who come-PERF AUX-C
'I don't know who has come.'

From the perspective of our proposal, these facts must mean that the *wh*-item in such contexts does not sit in FocP, but rather in some other position—plausibly unextracted from PredP in the spec of ΣP. This is explained below.

to derive (82), possibly some special instance of predicate fronting that applies only in ellipsis contexts.

(82) Jon-ek kafea erosi du, eta Ane-k [$_{\Sigma P}$ [$_{PredP}$ liburu-a leitu] Σ ~~[TP du]~~
Jon-ERG coffee bought has and Ane-ERG book-the read
'Jon has bought a coffee and Ane read a book.'

In addition, the predicate fronting analysis straightforwardly accounts for the fact that elements plausibly merged high in the functional sequence including speech act/evidential heads as in (83), and the *if*-complementizer morpheme, appear to the right of the main verb and to the left of the auxiliary in affirmative contexts. That is, taking the landing site of predicate fronting, ΣP, to be a left peripheral position above these elements, then the word order of these sentences follows without further assumptions on this approach. Again, the head-movement approach would appear to require merging the speech-act/evidential morphemes in an implausibly low position, or else some bespoke post-syntactic movement rule.

(83) Etorri [al/omen/ote] da ?/.
come INTER/EVID/CONJECT AUX.3SG.ABS
'He/she supposedly came'/ 'Did/might he/she have come.'

(84) Etorr-i ba-da.
come-PRF if-AUX.3SG.ABS
'If he/she has come.'

Support for an affirmative feature in PredP responsible for PredP fronting comes from polarity focus sentences like (85), where the main verb is intonationally prominent. Here, the source of affirmative meaning under focus appears to be the constituent containing the main verb, which we have here taken to be PredP.

(85) [$_{FocP}$ [$_{PredP}$ ETORRI] [$_{TP}$ da Iker]].
come.PERF AUX.3SG.ABS Iker
'Iker HAS (indeed) come.'

This approach leads to the expectation that other kinds of A'-movement—focus movement in particular—should be sensitive to the presence of these operators. Indeed, there is a well known distinction between *-(e)la* and *-(e)n* in terms of opacity to focus extraction. (See Etxepare and Ortiz de Urbina (2003) for relevant discussion.) As shown in (86)-(88), focus movement is fine out of embedded declaratives with *-(e)la*, but sharply out in *-(e)n* marked clauses.

(86) ***Extraction out of embedded declaratives***

Non esa-n duzu [utz-i dute-(e)la liburu-a]?
where say-PERF AUX leave-PERF AUX-COMP book.ABS-the
'Where have you said that they have left the book?'

(87) ***Extraction out of embedded interrogatives***

*/??Non ez daki-zu [ikus-i dute-(e)n]?
where NEG know see-PERF AUX.3SG.ABS.3SG.ERG-COMP
'Where don't you know if they saw it?'

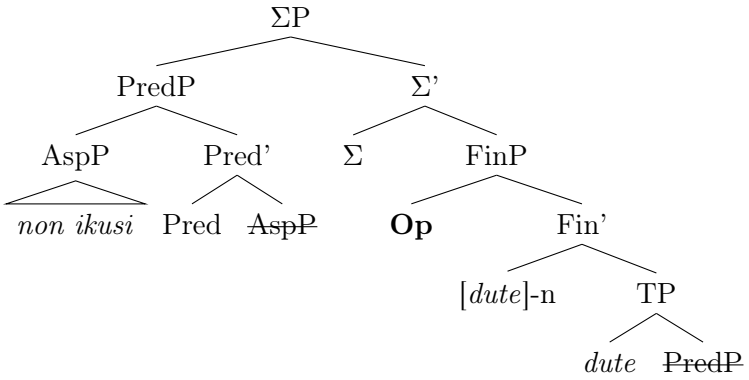
(88) ***Extraction out of relatives***

*Non ikusi duzu [Jonek ~~non~~ muxu bat ema-n dio-(e)n] mutil-a?
where see-PERF AUX Jon-ERG where kiss one give-PERF AUX-COMP guy.ABS-the
'Where did you see the guy that Jon kissed?' (downstairs interpretation)

These facts, however, are problematic from the perspective of the proposal in (76), if we take

the presence of the relative and interrogative operators to be responsible for the degradation of (88) and (87). In particular we might expect PredP to be able smuggle the embedded focus/*wh*-item around the relevant operator, to the spec of ΣP, whence it might raise into the higher clause. (89) illustrates the lower clause in (87) on this approach.

(89)



One possible solution to this problem is to attribute the unavailability of (87) and (88) to a freezing effect. That is, the *wh*-/focus item cannot raise into the higher clause, because it sits in a moved XP as in (89). However, as noted by Elordieta (2008), Basque seems fairly permissive in allowing foci to sub-extract from moved XPs in cases like (90).

(90) Nor-ekin pentsa-tu duzu [CP ~~nor-ekin~~ ezkondu behar
who-with think-PERF AUX.3SG.ABS.2SG.ERG who-with marry must
naiz-ela] agindu didate-la ~~CP~~?
AUX.1SG.ABS-COMP order AUX.3SG.ABS.1SG.DAT.3PL.ERG-COMP
'Who did you think they told me I had to get married with.'

We propose instead that the unavailability of focus extraction in (87) and (88) reflects the absence of a focus position in *-(e)n* clauses as discussed above. Specifically, we propose that in order for the *wh*-/focus item to raise into the higher clause it must raise cyclically through a lower Focus position. This is possible out of declarative embeddings like (87), which may contain a focus position but not out of *-(e)n* clauses which lack one.

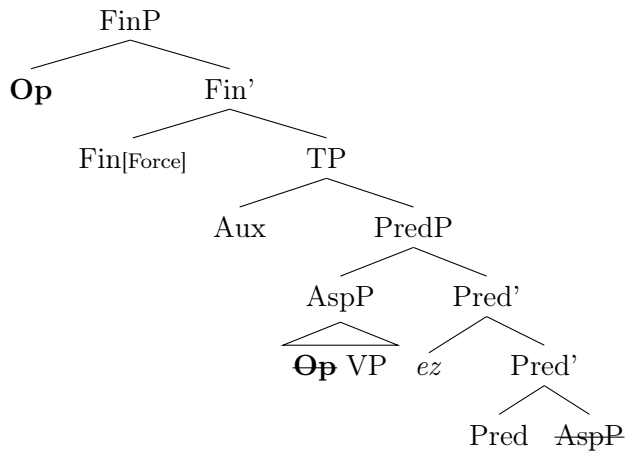
Unaddressed so far is the possibility that movement of the operators themselves might be subject to blocking. On a standard implementation of the head external analysis of relative clauses, for example, we would expect the relative operator to raise from a first-merged VP-internal position. In negative contexts, according to the assumptions introduced so far, it will raise out of Pred across the negative morpheme *ez*, before the latter raises to Σ, as in (91).

(91) $[_{\Sigma P}$ *ez* Σ $[_{\text{FinP}}$ Op Fin ... $[_{\text{PredP}}$ ~~*ez*~~ Pred ... $[_{\text{VP}}$ V ~~Op~~]]]

Our approach, therefore, entails that the operator blocks raising of *ez*, but not vice-versa, a surprising result if locality effects reflect featural similarity between interacting elements (Rizzi, 1990). This result is, in fact, expected on assumptions previously introduced. Recall from earlier discussion of the smuggling repair operation that the complement of Pred raises to its spec, as shown in (76). This step is required to produce the right morpheme order in the relevant contexts—VP-Neg-Aux. This step, however, will have the additional consequence of allowing any low-merged operators to raise past the negative morpheme, *ez*, in the inner spec of PredP. From this intermediate position, the operator will be able to raise to Fin without crossing *ez*. We illustrate this in (92), which illustrates a VP-Neg-Aux order derivation up to FinP. Subsequent agreement between Σ and *ez* will then be blocked by the intervening operator in the way previously described. The fact that a low merged operator blocks *ez* movement, but not

vice-versa, is therefore expected on our proposal.

(92) ***Operator smuggling***



In the remaining discussion, we explain how the proposal also helps express variation across clause types in the *V1 restriction.

4.3 The nature of *V1 and *ba*-support

We have argued so far (sections 2, and 4.1) that Basque shares with V2 languages the requirement that, in relevant clause types at least, a "first position" slot must be filled by some XP—almost any sort will do—but Basque does not have head movement of the finite verb to the head of this projection.

From the perspective of the standard approach to V2, one initially appealing way of understanding these facts is that the Basque *V1 restriction in relevant clause types reflects the presence of an EPP feature requiring a given position to be filled at spell-out (Chomsky, 2000; Roberts, 2004; Van Urk and Richards, 2015). Basque would differ from archetypical V2 languages in lacking head movement of the finite verb to the head of this EPP-bearing phrase. A second approach (which we will later adopt), is that this restriction is phonological in nature, i.e. that in relevant clause types the first position slot must be filled by some phonetic material, perhaps for prosodic reasons. (We will spell this out, shortly.)

A prediction of the EPP approach but not the phonological approach is that silent material should be able to fill the first position slot. One set of facts that, at first glance, appears to support this hypothesis concerns imperative contexts like those in (93)-(95), where an inflected synthetic imperative form appears linearly adjacent to the left edge of the sentence.

(93) Z-au-de isilik!
2SG.ABS-be-ABS.PL quiet
'Be quiet!'

(94) Z-ato-z gu-rekin!
2SG.ABS-come-ABS.PL 1PL-with
'Come with us!'

(95) Z-oa-z hemen-dik!
2SG.ABS-go-ABS.PL here-ABL
'Get out of here.'

Such sentences are reminiscent of Germanic, where verbs may appear in initial position in imperative contexts with an overt subject, as in (96).

(96) Var du tyst!
be you quiet
'You be quiet!'
(Swedish, Holmberg (2015))

From the perspective of approaches to imperatives that assume a silent imperative operator (Han, 1998; Zanuttini, 2008), one possible understanding of the word orders in (93)-(96) is that the first position slot is occupied by the silent operator. A problem for this approach, however, is that V1 is not available with all imperative forms. In particular, with transitive forms, V1 orders are sharply out:

(97) *D-akar-zu ardo-a!
EXPL-bring-2SG.ERG wine-the.ABS
'Bring the wine!'

(98) *D-arama-zu txaketa!
wear.3SG.ABS.2SG.ERG jacket.the.ABS
'Wear the jacket!'

(99) *D-aki-zu erantzun-a!
know.3SG.ABS.2SG.ERG answer-the.ABS
'Find out the answer!'

In the intransitive forms in (93)-(95), the leftmost position in the finite verb form is filled by a second person clitic *z-*. In (97)-(99), this position is filled by an expletive morpheme (Laka, 1993; Fernández and Albizu, 2000; Albizu, 2002; Arregi and Nevins, 2012), *d* that appears in third person absolutive contexts.[16] One possible approach to the above contrast is that the second person clitic can occupy the first position slot in imperative contexts. Something further would be needed to explain why the clitics cannot do so in declarative contexts, i.e. why the word orders in (93)-(95) are unavailable on declarative interpretations. (See Haddican (2015) for a proposal that suggests a solution to these issues.) What is relevant for present purposes is that the unavailability of (97)-(99) are unexplained if a silent imperative operator can satisfy the *V1 constraint.

A second test of the hypothesis that silent material can fill the first-position slot comes from successive cyclic movement out of *-(e)la* clauses, which obey *V1 as discussed above. In (100a), but not (100b), the lower clause contains a silent copy of the *wh*-phrase. If silent material can satsify *V1, then we expect this requirement to be satisfied in (100a) but not (100b). In fact, judgments vary considerably across speakers. Some speakers indeed find (100a) somewhat improved relative to (100b), but for many such speakers, this effect is subtle. Most informants that we have consulted, however, find no difference between the two.

(100) a. %Nor esa-n duzu [~~nor~~ datorr-ela kotxe-an].
who.ABS say-PERF AUX.2SG.ABS come.3SG-C car-in.
'Who have you said is coming in the car?'
b. %Nor-k esa-n du [datorr-ela kotxe-an].
who-ERG say-PERF AUX.2SG.ABS come.3SG-C car-in.
'Who said that he is coming in the car?'

A more serious problem for the EPP approach than the weak effect in (100) concerns root polar questions. Basque is also unlike Germanic V2 languages in that finite verbs cannot appear root clause-initially in *yes/no* questions. We illustrate this in (101) and (10c), repeated here.

(101) Kennst du das Land?
know.2sg you that country.

[16] We are grateful to Pablo Albizu for these observations and for a helpful discussion of these facts.

'Do you know that country?'
(German)

(102) *Dator emakume-a?
come.3SG.ABS woman-the.ABS
'Is the woman coming?'

If, from the perspective of traditional approaches to Germanic V2, the first position slot in (101) is filled by a silent polarity or Q operator, and if such an element is also present in (101), then the difference between these two constructions suggests that silent operators are licit first-position elements in German, but not Basque.

A final disadvantage of the EPP approach has to do with the fact that *V1 violations are reparable by *ba-* insertion (Ortiz de Urbina, 1994, 1995). The fact that *ba-* has no consequence for interpretation suggests that this requirement is phonological rather than syntactic in nature and that *ba-* is inserted post-syntactically. We conclude, therefore, that *V1 in Basque is not a restriction imposed by the narrow syntax unlike in the standard approach to V2 in Germanic. We note that this approach will leave unexplained the fact that some speakers find (100a) somewhat better than (100b) and we set aside the nature of this cross-speaker variation in the remaining discussion.

A more promising phonological approach to *V1 in Basque is in terms of syntax-to-prosody mapping. In the spirit of Kandybowicz's (2009) analysis of edge effects in Nupe, we might take the *V1 effect in (embedded) root clauses to reflect a PF output condition on a certain projection—ForceP, say—requiring its left edge to have phonetic content, in order for the constituent to be parsed as an intonational phrase. (See Selkirk (2009, 2011) and Elfner (2012) for similar proposals.) Clauses with *-(e)n* might variably lack this projection with the consequence that *V1 doesn't apply obligatorily in these clauses.

Support for this approach comes from the fact that *-(e)la* clauses indeed have canonical properties of intonational phrases that *-(e)n* clauses may lack. In (103), for example, with an embedded *-(e)la* clause, there is (i) a continuation rise on *Jonek*, (ii) a pitch reset at the left edge of the lower clause (in brackets) and (iii) a tone lowering at the right edge of the lower clause.

(103) Jon-ek [etorr-i de-la] esa-n du.
Jon-ERG come-PERF AUX.3SGABS-COMP say-PERF AUX.3SG.ABS.3SG.ERG
'Jon has said that he is coming.'

Clauses with complementizer *-(e)n*, on the other hand, do not always have these properties. The relative clause in (104), for example has neither a pitch reset on its left edge nor tone lowering on its right edge.

(104) Jon-ek [daki-en] momentua-n esan-go digu.
Jon-ERG know.3SG.ERG-COMP moment.the-in say-FUT AUX.1PL.DAT
'Jon will tell us the moment he knows.'

Importantly, however, *-(e)n* clauses need not always lack these prosodic properties. In (105), the *-(e)n*-marked temporal clause, is set off by an intonational break and pitch reset, but is verb initial. Such examples, therefore mean that, whatever the nature of the prosodic effects in (104) and (103) *V1 does not correlate in any strict sense with characteristic properties of intonational phrases.

(105) [Zatoz-en-ean] joan-go gara erosket-ak egi-te-ra.
come.2SG.ABS-COMP-in go-FUT AUX.2SG.ABS shop-PL do-NOM-to.
'When you come, we'll go to do the shopping.'

In the remaining discussion we will set aside the isssue of how/whether the *V1 restriction

in Basque might be expressed as a prosodic mapping requirement. For the purpose of modeling the similar distribution across clause types of *V1 and {Aux, Neg, VP} orders, what will be crucial is the assumption that *V1 is a phonological property of the same projection in which the intervention-inducing operators are (re-)merged—Force in our analysis. Let us characterize this property as in (106).

(106) ***ForceP at PF***

a. If spec, ForceP is vacant at spell-out, move the closest "satellite XP"—XP in specifier position—into it.

b. **Else**: insert *ba-* in spec, Force.

What (106) will do is this. In root and *-(e)la* clauses, it moves to spec, ForceP the closest satellite XP in its c-command domain. (106b) means that, in cases where there is no local XP available for attraction, expletive *ba-* is inserted in this position instead. These two conditions have the consequence that the finite verb never appears clause-initially in root and *-(e)la* contexts. In *-(e)n* clauses, where Force does not project, the rule in (106) will not apply, with the consequence that V1 orders will be possible.

The inventory of possible first-position elements in root clauses discussed in Section 2 will now follow from the rule in (106) and the sequence of left-peripheral heads illustrated in (73). We illustrate this beginning with the negative and polarity focus contexts in (10) and (12) repeated here as (107) and (108), respectively. In these contexts, negative *ez* or affirmative *ba*, previously moved to ΣP, will be the closest element to Force and will be attracted to spec, ForceP. We illustrate this in (109), which derives (107).

(107) Ez da etorr-i.
NEG AUX.3SG.ABS come-PERF
'(She) has not come.'

(108) Ba-dator.
AFF-come.3SG.ABS
'She IS coming.'

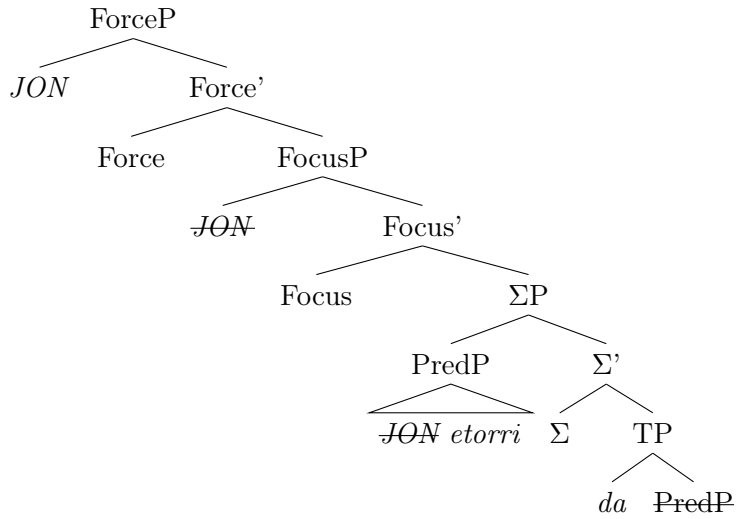
(109) [$_{\text{ForceP}}$ *ez* Force [$_{\Sigma\text{P}}$ ~~*ez*~~ Σ [$_{\text{TP}}$ *da* [$_{\text{PredP}}$ ~~*ez*~~ Pol....*etorri*]]]]

The analysis of clause-initial focus sentences such as (110) (see (7)) will require additional assumptions. When the Focus head is merged, the FOCUS-marked constituent, *Jon*, moves to spec, FocusP. Force is merged later and *Jon*, as the closest satellite XP, is attracted to its spec. The focused element will previously have raised to ΣP, inside PredP, as described above. The focused element will subextract from this constituent on its way to FocP, as in (111). This approach entails that movement of focalized constituents to FocP are not subject to freezing, that is, they freely extract from a moved XP (Collins, 2005b,a). (See discussion of (86) for independent evidence for anti-freezing effects in Basque focus movement.)

(110) JON etorr-i da.
Jon.ABS come-PERF AUX.3SG.ABS.
'JON has come.'

(111) ***Affirmative orders***

(112) ***Operator smuggling***



The analysis so far, however, mispredicts a fact mentioned above, namely the fact that leftward foci cannot be separated from main verb by non-focused material as in (113) (which repeats (58)).

(113) JON-ek/Nor-k (*Miren) ikus-i zuen (Miren).
Jon-ABS/Who-ERG Miren.ABS come.PERF AUX Miren.
'JON/who saw Miren./?'

If, as just proposed, verbal dependents raise along with the verbal complex and, in affirmative sentences, raise to ΣP, then without further assumptions, we expect non-focused material to be able to appear between the focused constituent and the main verb contrary to fact. Following Jayaseelan (2008; 2010), we assume that in non-neutral contexts like (112), *all* verbal dependents are information-structurally marked, e.g. as topics/foci, and move in the narrow syntax to a topic/focus position.[17] That is, in the context of a focus-marked argument, other verbal dependents are necessarily marked as topics of some kind. (See Abraham (2002) for a likeminded approach to scrambling in German.) On this approach, the reason why *Miren* cannot appear between the focused constituent and the verbal complexes in (112) and (113), is that, as a non-focused constituent, it cannot stay inside PredP, but must move to a topic position.[18] In "neutral" sentence-wide focus contexts, arguments must be ordered strictly [external argument]-[applied object]-[internal argument]. We assume that in such cases, arguments remain inside PredP, which will raise successively to Focus and Force. This strict order reflects the merged position of arguments in vP, on standard approaches to Basque, where the applied object will be merged above the direct object in an applicative phrase, and external arguments will be merged outside of this in vP (Elordieta, 2001; Rezac, 2008).

5 Conclusion

The core empirical problem addressed in this paper is the source of covariation between two word order alternations in Basque across clause types—the possibility of verb-initial word orders

[17] We owe this idea to Richard Kayne (p.c.).

[18] This approach is not entirely novel in spirit. Uriagereka (1999) also notes that adjacency between the focused constituent and the tense-bearing V is not absolute and attributes the string-wise proximity of these elements to phonological factors. Here we suggest that the relevant movement steps ensuring this proximity are information-structural in nature.

(V1) and variation in the relative order of {Aux, Neg, VP} in negative contexts. The principal theoretical implication of the analysis is that two mechanisms commonly used in modeling clause type effects cross linguistically—truncation and intervention—interact. In particular, the locus of variation governing both V1 and relative ordering of {Aux, Neg, V} is whether the clause typing feature projects as a separate head, Force, high in the C-field or else is merged lower on Fin. This truncation of the left peripheral sequence feeds intervention effects in the case of V-Neg-Aux orders, by forcing a set of operators to be merged in a lower position than in non-blocking contexts.

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