Sentence Polarity and Word Order in Basque[1]

A well-known fact about Basque is that word order is sensitive to sentence polarity. In negative sentences, the relative order of the auxiliary and main verb is V-Aux, while in affirmative (neutral) sentences the order is Neg-Aux-V. The main goal of this paper is to argue for a new approach to this phenomenon within a grammar that assumes antisymmetry (Kayne 1994), and only XP movement. The proposal has two main components. First, drawing on Cinque's (1999) universal hierarchy of functional heads, it argues that the negative order—Aux-V—is the merged order. The affirmative V-Aux order is produced by raising of the VP to a higher, polarity-related position called PolP. Second, PolP is also argued to host the negative morpheme, *ez,* in negative sentences, and the emphatic marker, *ba,* in emphatic affirmatives. Evidence from scope interaction between negation and evidential and speech act particles suggests that the surface position of *ez* cannot be its merged position; rather *ez* is merged in a lower position and raises to spec, PolP.

Part 1 of this paper discusses the surface ordering of clausal functional heads within Cinque's (1999) framework, and argues for VP raising in affirmative sentences. Part 2 argues for raising of *ez* to PolP. Part 3 discusses the behavior of verbal dependents drawing on Koopman and Szabolcsi's (2000) analysis of verb movement in Hungarian, German and Dutch. Part 4 addresses some remaining empirical problems.

1. The surface order of functional morphemes within Cinque's (1999) hierarchy

1.1 An inventory of clausal functional heads

Basque has the following particles and modals, among others (given in Cinque's proposed order for functional heads):

(1)

al	Mood (Speech act) (Question particle)
ote	Mod (Eval)
omen/bide	Mood (Evid)
behar	Mod (Necessity)
ohi	Asp (Habit)
nahi	Mod (Volitional)
ari	Asp (Prog)
ahal	Mod (Root)[2]

Basque also has the following inflectional suffixes to the main (non-finite) verb:

(2)

–ko	Tense (Future)
–t(z)en	Asp (Imperfective)
–tu, -∅, -i	Asp (Pefective)[3]

Basque marks past tense on the finite auxiliary with the suffix *–en*. Present tense auxiliaries bear no overt tense morphology.[4]

The following effort to study Basque functional morphemes using Cinque's hierarchy will crucially depend on the correct labeling of these morphemes within Cinque's framework. Despite the subtlety of difference between some of Cinque's categories, the identity of the above morphemes is surprisingly straightforward. The above labels for *omen* (Mood(evid)), *ohi* (Asp(habit)), *ahal* (Mod(root)) and *–en* (T(past)) are similar or identical to labels standardly given in the literature on Basque, and they are the same labels used by Cinque in his discussion of Basque examples. Likewise, *–ko* (T(future)) is unambiguously labeled as a future marker in the literature.

The morphemes, *nahi* (Mod(volitional)), and *behar* (Mod(necessity)), are also routinely treated in the literature as modals of volition and necessity, respectively. Ortiz de Urbina (1989:23-34) discusses these forms at length and shows that these elements (as well as *ahal*) behave alternately as both nominals and verbs. The details of this dual identity are not addressed here since it is the verbal nature of these morphemes that will be relevant to the present discussion.

The labeling of *–i, -∅, -tu* (perfective) and *–t(z)en* (imperfective) is slightly more subtle.

(3) (Zabala and Odriozola 1996:238)

a. Miren berandu etor-tzen da beti.
Miren-A late come-[-pf.]Asp Aux always
'Miren always comes late.'
b. Miren berandu etor(r)-i da gaur.
Miren-A late come-[+pf.]Asp Aux today
'Today Miren came late.'

The different aspectual categories in (3a) and (3b) are referred to in the literature as the "habitual present," and the "present perfect" respectively. The two types of morphemes—*-i, -∅* and *–tu* on one hand and *–t(z)en* on the other—can never co-occur. Given this, it is standardly assumed (cf. Laka 1989, 1990; Zabala and Odriozola 1996) that the two sets represent different values of a single aspectual feature, [±perfective]. In his discussion of Basque examples, Cinque himself interprets *–n* (∅) and *–i* as perfect suffixes.

Ortiz de Urbina (1992) argues instead that the *-i, -∅* and *–tu* endings are part of the base form of the verb and that perfective and imperfective forms are derived by adding the suffixes ∅ and *–tzen* respectively. (In the latter case, a morphological

rearrangement operation is required to remove *-i*, *-∅* and *–tu* before suffixation.)(Zabala and Odriozola 1996:238 fn.2). This view has the advantage of accounting for the fact that verbs selected by modals *behar*, *nahi* and *ahal* all obligatorily take *-i*, *-∅* and *–tu* regardless of the perfectiveness of the action. In other words, when suffixed to verbs selected by modals, *-i*, *-∅* and *–tu* do not always mark perfective aspect. Hence, while there seems to be agreement that *–t(z)en* is always an imperfect marker, it is less clear that *-i*, *-∅* and *–tu* are always perfect markers. In this paper, we adopt the standard view that *-i*, *-∅* and *–tu*, on one hand, and *–t(z)en* on the other, are different values of a single head, Asp(Perfect). However, it should be noted that very little hinges on this commitment for the purposes of the present analysis.

The particle, *ote*, is used to express doubt or surprise. Ortiz de Urbina (1989: 128) glosses it as "dubitative". In this sense, *ote* resembles Korean *-kwun* as discussed by Cinque (1999: 53), which he labels "evaluative". (However, *-kwun* and *ote* differ in that *ote* may only be used for questions while *-kwun* may be used for declaratives.)

The labeling of the remaining morphemes from (1), *ari, al*, and *bide* is consonant with Cinque's discussion of similar morphemes in other languages in chapters 3 and 4.

To sum up, Cinque's proposal predicts the above suffixes to be merged in the following order (cf. p.106):

(4)

> **al** Mood(speech act)>**ote** Mood(eval)>**omen** Mood(evid)>**-en** T(past)>**-ko** T(future)>**behar** Mod(necessity)>**ohi** Asp(habitual)>**nahi** Mod(volitional)-**t(z)en/-tu** Asp(perfect)>**berri** Asp(retrospective)>**ari** Asp(progressive)>Verb

This is largely in line with Cinque's own hierarchy for overt heads in Basque, based on examples used in the text (p. 165).

(5) Mood(evidential)>T>Mod>Asp(habitual)>Voice>V

1.2 Negative sentences

(6) shows standard word order for negative sentences in Basque.

(6) Ez al zio-n galde-tu-ko?
Neg. speech act Aux-T(past) ask-Asp(perfect)-T(future)
'Wasn't she going to ask him (that)?'

In (6), the first two functional morphemes appear in the predicted order: Mood(speech act)>T(past). However, the final three morphemes appear in the exact opposite order: V>Asp(perfect)>T(future). For OV orders and agglutinating suffixes, in which the predicted hierarchy often appears inverted, Cinque (1999: 57) proposes the following derivation, taken from Kayne (1994). This "roll-up" type of movement produces an output order that is the exact inverse of the input order.

(7) X $[_{YP}$…Y ZP]…→…X $[_{YP}$ZP Y t]…→…$[_{YP}$ZP Y t_{ZP}] X t_{YP}

If the morpheme cluster below the auxiliary in (6), *galde-tu-ko,* is taken as the output of the roll-up operation in (7), then the input order of the morphemes in (6) is exactly what Cinque predicts. Strikingly, the five functional heads (excluding agreement and negation morphemes) line up in the exact order predicted by Cinque. The following examples show that generally speaking, this Cinquean/verb roll-up analysis successfully predicts surface morpheme orders in negative sentences. (Rolled-up chunks appear in brackets.)

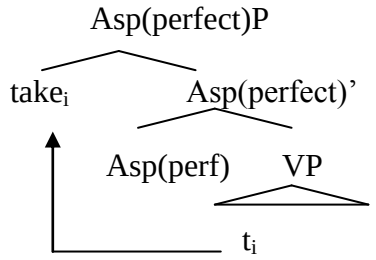
(8) Ez ote da [kontura-tu-ko]?

Neg Mod(eval) Aux realize-Asp(perfect)-T(future)
'Won't he realize?'

(9) Ez zu-en [har-tu-ko].
Neg Aux-T(past) take-Asp(perfect)-T(future)
'She wasn't going to take it.'

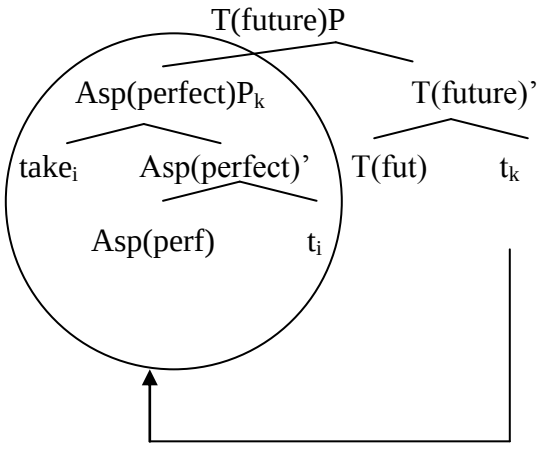
(10)-(11) illustrate the derivation of the rolled-up verb chunk, *hartuko* in (9). (The negative morpheme, *ez*, is discussed in Part 2.) (10) shows merger of the perfect marker *–tu* above the verb and movement of the verb, 'take', to its spec.

(10)



(11) shows merger of the future marker *–ko* and raising of Asp(perfect)P to its spec, yielding the output order of the bracketed material in (9).

(11)



Unlike the verbal suffixes in (8)-(9), modals, *behar*, *nahi*, *ohi* and *ari* are represented as separate words in Basque orthography. However, their word order in negative sentences is derivable via roll-up movement just like the above verbal suffixes. The following examples show standard word order for negative sentences with *behar, nahi* and *ohi*.

(12) Ez zu-en [har-tu behar].
Neg Aux-T(past) take-Asp(perfect) Mod(necessity)
'She didn't have to take it'/'She shouldn't have taken it'

(13) Ez zu-en [har-tu nahi].
Neg Aux-T(past) take-Asp(perfect) Mod(obligation)
'She didn't want to take it.'

(14) Normalean, ez nu-en [gosal-du ohi].[5]
Normally Neg Aux-T(past) breakfast-Asp(perfect) Mod(habitual)
'Normally, I wouldn't eat breakfast.' (only for Western varieties)

Again, the order of the final three morphemes is the exact opposite of that predicted by Cinque: V>Asp(perfect)>Mod(obligation/necessity) instead of Mod(obligation/necessity)>Asp(perfect)>V. However, if roll-up movement applies to modal-verb chunks, as it plausibly does to the verb-suffix complexes in (8)-(9), then the underlying morpheme order matches up exactly with Cinque's hierarchy.

1.3 Affirmative sentences

At first glance, affirmative sentences in Basque appear more difficult to account for in Cinque's framework. Consider the following sentences.

(15) Lagun-tzen omen zintu-en.
Help-Asp(imperfect) Mod(evid) Aux-T(past)
'Supposedly, he helped (imperfect) you.'

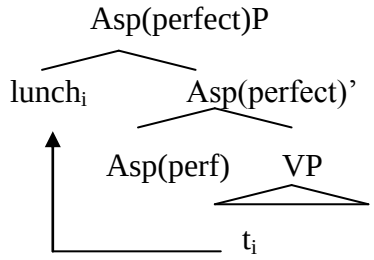
(16) Bazkal-du-ko bide zue-n.
Lunch-Asp(perfect)-T(future) Mod(evid) Aux-T(past)
'Apparently he was going to have lunch.'

Examples (15) and (16) show standard word order for affirmative sentences in Basque.[6] The morpheme order in (16) is Asp(perfect)>T(future)>Mod(evid)> T(past); the predicted order is Mod(evid)>T(past)>T(fut)>Asp(perfect). The roll-up derivation discussed earlier cannot solve the problem, entirely. Roll-up movement correctly produces *bazkalduko* in (16), but not the rest of the sentence. The reverse order would be **Bazkal-du-ko zue-n bide*, instead of the attested order, *Bazkal-du-ko bide zue-n*.

Instead, it seems that the main verb, *bazkalduko*, is produced by roll-up movement—as in the negative examples—and then raises to the front of the clause. This derivation is made explicit in (17)-(19). The landing site of the verbal complex will be called PolP in observance of the fact that the negative morpheme, *ez* is also appears to raise to this position.[7] (Movement to PolP is discussed in detail in Part 2.)

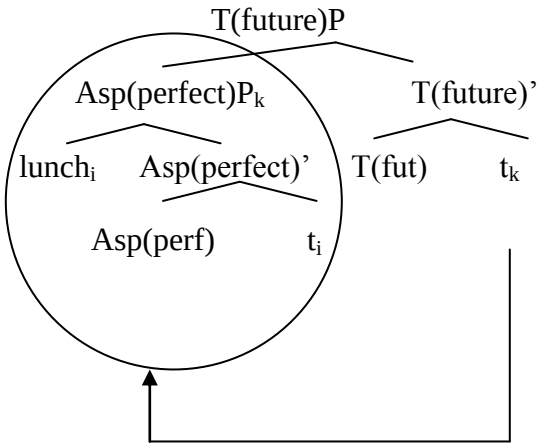
(17) shows merger of the perfect marker *–tu*, and movement of the verb, 'lunch', to its spec.

(17)



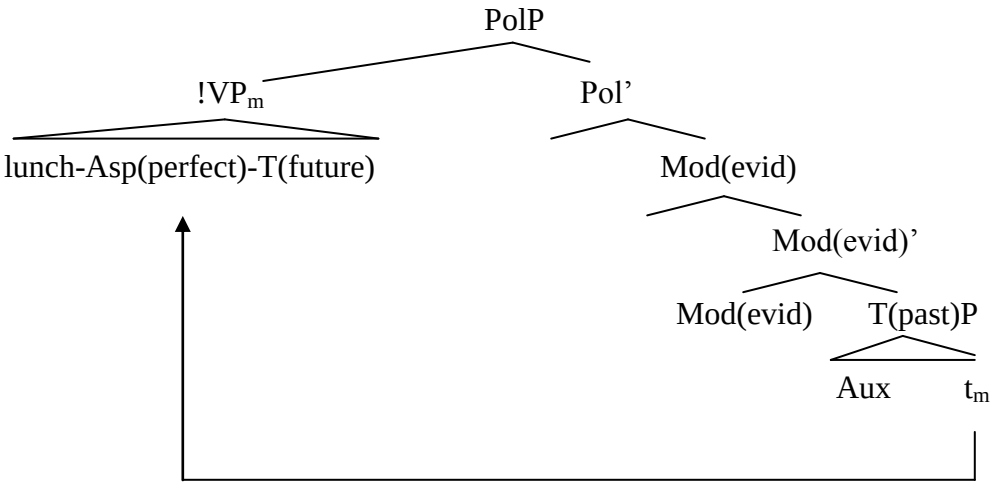
(18) shows merger of the future marker *–ko* and raising of Asp(perfect)P to its spec.

(18)


T(future)P
Asp(perfect)P$_k$
T(future)'
lunch$_i$
Asp(perfect)'
T(fut)
t$_k$
Asp(perf)
t$_i$

Finally, (19) shows merger of the auxiliary and the evidential particle *bide* and raising of the inverted verbal chunk to spec, PolP. The label !VP denotes an unspecified category below the auxiliary containing the rolled-up verbal complex.

(19)



Modals also appear to raise with the main verb. (20), which shows standard word order for affirmative sentences with modals, suggests that the verbal complex raises to a position above the particles.

(20)

a. (Ortiz de Urbina 1989, 129)
[Zorrak ordain-du ahal] omen dituzte.
debts pay-Asp(perfect) be-able Mod(evid) Aux
'Supposedly, they can pay off their debts.'

b. [Zorrak ordain-du nahi] omen dituzte.
debts pay-Asp(perfect) want Mod(evid) aux.
'Supposedly, they want to pay off their debts.'

c. [Zorrak ordaindu behar] ote dituzte?
debts pay-Asp(perfect) have-to Mod(eval) aux.
'Supposedly, they have to pay off their debts?'

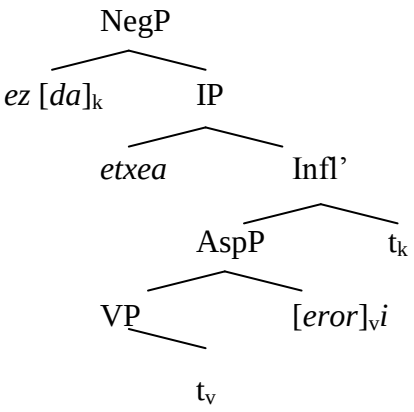
Hence, as Cinque himself points out (1999: 189, note 20), his extended functional sequence suggests that negative sentences are closer to the underlying order than the affirmatives. That is, affirmative derivations appear to involve extra movement—raising of the verbal complex—which is not present in negative derivations. This challenges the standard approach to these phenomena, which takes the affirmative word order as derivationally prior to the negative order. Assuming an underlyingly mixed-head structure for Basque, Laka (1990), Ortiz de Urbina (1989) and A. Elordieta (2001) propose that the auxiliary verb originates to the right of the main verb—as it appears on the surface in affirmative sentences—and raises in negative sentences.

(21) (Laka 1990:19, 29)

a. ez da etxea erori.
no has house-the fallen
'The house hasn't fallen down.'

b. etxea erori da.
house-the fallen has
'The house has fallen down.'

(22) (Laka 1990:29)



(22) derives (21a), from Laka (1990). Crucially, the inflected auxiliary, *da*, head adjoins to Neg. In affirmative sentences, the negative head is absent and the auxiliary does not raise, producing the order in (21b).

Yet, assuming antisymmetry and that the VP is merged lower than the auxiliary, the standard, Basque affirmative order cannot be the underlying order, since the VP appears to the left of the auxiliary. Under antisymmetry, the only way to produce the VP-Aux order is by moving the VP to the left across Aux; the surface order of these constituents in negative sentences—Aux-VP—is necessarily their merged order under these assumptions. Part 2 discusses certain empirical advantages to this antisymmetric approach.

2. PolP: The landing site of VP and the negative morpheme, *ez*

Drawing on Cinque's (1999) universal hierarchy of functional projections, this paper has argued so far that the negative order in Basque—Aux-V—is derivationally prior; the affirmative V-Aux order is produced by raising of the inverted verbal complex. This section discusses the landing site of this movement, PolP. In particular, it argues that in negative sentences, PolP also hosts the negative morpheme, *ez*, which raises from its lower, merged position in spec, NegP. Evidence for this movement is taken from scope interaction between *ez* and preverbal particles.

2.1 A single surface position for *ez* and the VP

Standard distributional tests suggest that *ez* (as a sentence negator) and the raised VP (in neutral sentences) occupy the same surface position. To the right, nothing may intervene between these elements and the Aux except evidential, evaluative and speech act "particles." (23) shows that when a subject or an adverb intervene between the Aux and main verb/*ez*, the result is unacceptable.

(23)

a. Lagun-tzen (*Miren/*maiz) omen zintu-en.
Help-Asp(imperfect) (Mary/often) Mod(evid) Aux-T(past)
'Apparently she (often) helped (Miren).'

b. Ez (*Miren/*maiz) omen zintu-en lagun-tzen.
Neg (Mary/Mod) (evid) Aux-T(past) Help-Asp(imperfect)
'Apparently she (often) didn't help (Miren).'

To the left, any focalized or *wh*-phrases must appear left adjacent to *ez* or the raised VP.[8]

(24)

a. Nork/JONEK (*Miren) ikus-i du (√Miren)
Who-Erg/JON-Erg (Mary) see-Asp(perfect) Aux (Mary)
'Who/JOHN saw Mary.'

b. Nork/JONEK (*Miren) ez du ikusi (√Miren)
Who-Erg/JON-Erg (Mary) Neg Aux see-Asp(perfect) (Mary)
'Who/JOHN didn't see Mary.'

In addition, non-focused arguments and other material may precede *ez* and the raised VP when focalized elements and *wh*-elements are absent. (The surface order of verbal dependents is addressed in Part 3.)

(25)

a. Atzo, Jon etor(r)-i zen
Yesterday Jon come-Asp(perfect) Aux-T(past)
'Yesterday, Jon came.'

b. Atzo, Jon ez zen etor(r)-i
Yesterday Jon Neg Aux-T(past) come-Asp(perfect)
'Yesterday, Jon didn't come.'

A third element that appears to occupy this slot is *ba-* (which resembles, and is historically related to *bai*, 'yes') in emphatic affirmatives. (Not all speakers accept this construction.) (26) shows that when *ba* is present, verb raising does not occur. The

absence of verb raising in such constructions stands to reason if *ba* is merged in spec, PolP and is able to satisfy the polarity needs of Pol^0.

(26) (Laka 1990: 101)
Jon ba da etorri
John so has arrived
'John has so arrived.'

2.2 Evidence for raising of *ez* and VP

Two aspects of the interaction of the negative morpheme, *ez*, with preverbal particles *omen, ei, bide* (evidential), *al* (speech act), *ote* (evaluative) and eastern *ohi* (habitual), suggest that negation undergoes movement. First, the surface position of *ez* is unusually high: it obligatorily appears to the left of these speech act and evidential particles. Second, these particles obligatorily scope over negation as shown in (27)-(29).

(27) Ez omen zue-n ur-ik topa-tu
Neg Mod(evid) Aux-past water-part find- Asp(perfect)
'Supposedly, she didn't find any water.'

(28) Ez al zue-n urik topa-tu?
Neg Mod(speech act) Aux-past water-part find- Asp(perfect)
'Didn't she find any water?'

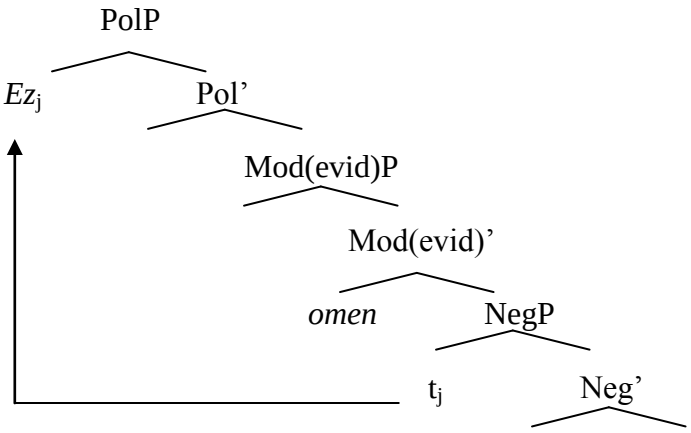
(29) **Ez omen** zen Oiartzunen jaio,
Neg Mod(evid) Aux-T(past) Oiartzun-in be born,
baina **ez omen** zen kampo-an jaio ere.
but Neg Mod(evid) Aux-T(past) outside-in be born also.
'They say he wasn't born in Oiartzun, # but they say he wasn't born outside (Oiartzun) either.' [9]

The infelicity of the continuation in (29) suggests that the scopal order of negation and the evidential particle is Mod(evid)>Neg, as reflected in the gloss. Were the scopal order Neg>Mod(evid), the continuation in (29) should be felicitous contrary to fact: 'They don't say that he was born in Oiartzun, but they don't say that he was born outside

Oiartzun, either.' Rather, the reading in (29) is one in which the person in question is said not to have been born anywhere.

These facts suggest an analysis similar to Cinque's (1999: chap. 5) account of inverse scope of negation over speech act and evidential adverbs in Italian: *ez* is merged in spec, NegP, below these evidential and speech act particles, and later specifier extracts to spec, PolP which is merged above the particles. The inverse scope is a consequence of obligatory reconstruction of negation at LF to its merged position in NegP. This derivation is illustrated in (30).

(30)



Under this analysis, some expected minimality effects obtain. In negative derivations, at the point at which PolP is merged, two different elements are equipped with features that can satisfy the featural needs of PolP: negation, and the main verb chunk. (See 2.4, below.) In these cases, it is invariably the closer element, *ez*, which raises; the main verb never raises in matrix clauses. (Embedded clauses are discussed below.)

Predictably, similar scope effects obtain in the case of VP raising to PolP. In (20) (repeated below), the preverbal particle obligatorily takes inverse scope over modal verbs in raised VPs, as shown in the glosses.

(20)

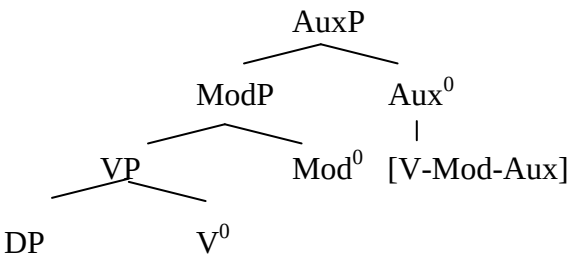
a. [Zorrak ordain-du ahal] omen dituzte.
debts pay-Asp(perfect) be-able Mod(evid) Aux
'Supposedly, they can pay off their debts.' (Ortiz de Urbina 1989: 129)

b. [Zorrak ordain-du nahi] omen dituzte.
debts pay-Asp(perfect) want Mod(evid) aux.
'Supposedly, they want to pay off their debts.'

c. [Zorrak ordaindu behar] ote dituzte?
debts pay-Asp(perfect) have-to Mod(eval) aux.
'Do they have to pay off their debts?'

A. Elordieta (2001) offers a different account of the word order of evidential particles within a framework that assumes an underlying head-final structure for L-related projections. Speech act and evidential particles are merged in a single, right-headed projection, ModP, between the VP and the auxiliary. The particle is carried along by head movement as the main verb raises to adjoin to the auxiliary. This derivation is shown in (31).

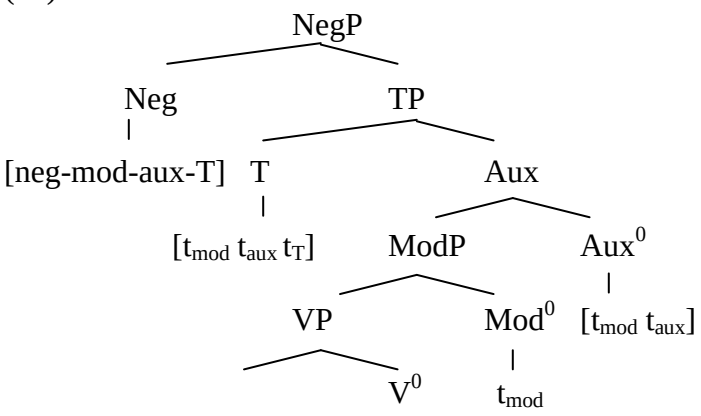
(31) (A. Elordieta 2001:183)



A. Elordieta does not explicitly discuss the word order of these particles in negative sentences like (23) (repeated below), however based on her discussion of other negative sentences, they are presumably derived as follows. Following Laka (1990), A. Elordieta assumes that a head-initial NegP is merged above the auxiliary. When the auxiliary head raises to T^0 and later Neg^0, it carries along the modal particle, which has previously head adjoined to the auxiliary (as in affirmative sentences such as (27)).

(27) Ez omen zue-n ur-ik topa-tu
Neg Mod(evid) Aux-past water-part find- Asp(perfect)
'Apparently, she didn't find any water.'

(32)



This approach appears to be the only way to produce the correct word order for preverbal particles in a mixed-head framework that derives negative/affirmative word order differences by head raising of the auxiliary to Neg^0. However, while this approach correctly accounts for word order, it does not obviously account for scope taking in negative sentences. As discussed earlier, preverbal particles such as *omen* in (27) obligatorily take inverse scope over negation. In the derivation in (32), it is not clear how this is to be accounted for in a theory in which scope relations reflect c-command

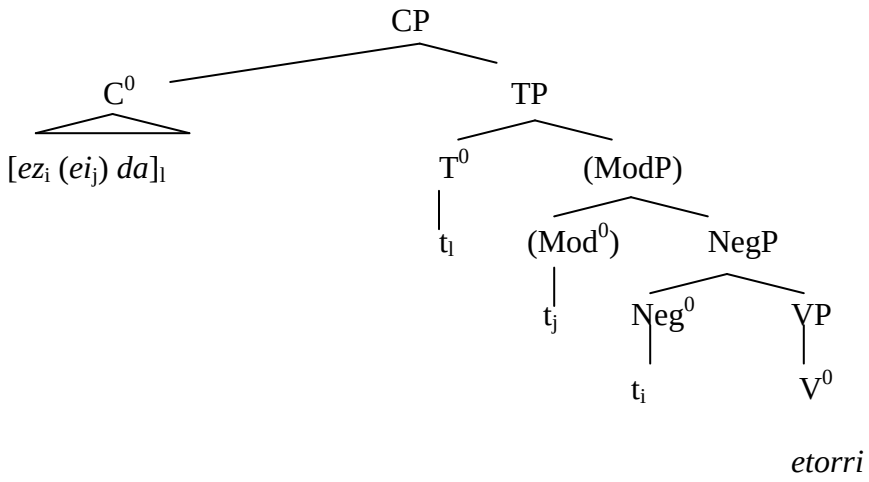
relationships at LF. The inverse scope cannot be a consequence of reconstruction at LF, since at no point in the derivation does the modal particle c-command negation. On the other hand, to assume that the modal particle raises at LF to a position above negation would require the spurious step of extracting the modal particle—the most deeply embedded element in the head adjoined cluster in (32)—from its surface position, head adjoined to the auxiliary.

In the present proposal, the scope relations between these elements are explained as a familiar consequence of reconstruction at LF: the negative morpheme reconstructs to its merged position in spec, NegP, below the modal particles. Moreover, this account of scope interaction comes almost for free. The existence of a high polarity related position is independently motivated in this approach by word order and scope facts in affirmative sentences and (theory internally) by Cinque's extended functional projection.

2.3 Evidence for XP-movement versus head movement

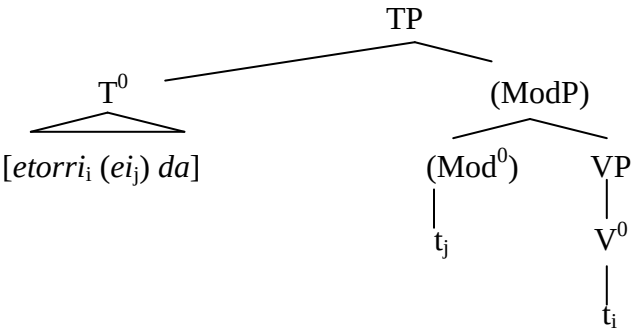
The present approach resembles G. Elordieta's (1997) proposal in assuming antisymmetry and in the fact that affirmative word orders are produced by raising of the main verb. However, Elordieta's proposal differs crucially in assuming that the main verb raises via head movement. (33) and (34) show Elordieta's derivations for negative and affirmative orders respectively.

(33) (G. Elordieta 1997:72)
Ez ei da etor(r)i
Neg Asp(mod) Aux come-Asp(perfect)
'Apparently he didn't come.'



In (33), *ez* incorporates the modal particle and the auxiliary on its way up to C^0, where a negative operator sits.

(34) (G. Elordieta 1997:72)
etorri ei da
come-Asp(perfect) Asp(mod) Aux
'Apparently he came.'



In (34), the main verb incorporates the evidential particle on its way to T^0. Elordieta follows Ortiz de Urbina (1989) in assuming that this movement is motivated by the need to provide lexical support for the morphologically weak, clitic-like auxiliary, which can never appear in sentence initial position.

This head movement approach correctly predicts that these inverted chunks are impermeable to movement: no extraneous material, such as adverbs or arguments may appear among the lower inverted VPs. As head-adjoined chunks, these strings are predicted to be inaccessible to movement under standard assumptions. In addition, because preverbal modal particles are merged higher than negation, G. Elordieta's approach suggests an attractive account of scope interaction between preverbal particles and negation: as proposed above, the scope facts may be a consequence of obligatory reconstruction of *ez* to its merged position at LF. (G. Elordieta does not discuss these facts, himself.)

Nevertheless, two kinds of evidence favor an XP-movement analysis over a head movement approach. First, full object DPs appear to participate in inversion.

(35) [**nire etxea** ikus-i nahi] du
my house see-Asp(perf) want Aux.
'She wants to see my house.'

In (35), showing standard, neutral word order, the direct object DP 'my house' appears at the left edge of the inverted chunk. A head movement account of inversion would seem to require the spurious step of left-adjoining the phrase 'my house' to the verb head.

An alternative to (35) is that the verb and object in (35) do not form a constituent but rather that the object has raised separately from the main verb and auxiliary as in (36).

(36) [**nire etxea**]$_i$ [ikus-i nahi] du t_i
my house see-Asp(perf) want Aux.
'She wants to see my house.'

This alternative structure, however, fails to capture the fact that in negative sentences, verbal dependents also often appear left-adjacent to the main verb, as in (37).

(37) ez du [**nire etxea** ikus-i nahi]
Neg Aux my house see-Asp(perf) want
'She doesn't want to see my house.'

The structure in (36) would seem to require an independent movement analysis to capture this fact. By contrast, the roll-up approach advocated here offers a unified account of these two orders: verbal dependents invert along with other VP material and are carried along when this inverted chunk raises in affirmative sentences. (Verbal dependents are discussed in greater detail in Part 3.)

A second advantage to the present XP-movement account is its ability to explain certain VP-ellipsis phenomena. As Laka (1990) observes, Basque allows for ellipsis of clausal material below negation.

(38) (Laka 1990:33)
Marik liburua erosi du eta Peruk ez
Mari book-the bought has and Peter no
'Mary has bought the book and Peter hasn't.'[10, 11]

Crucially, this deleted material is interpretable as containing a preverbal evidential particle.

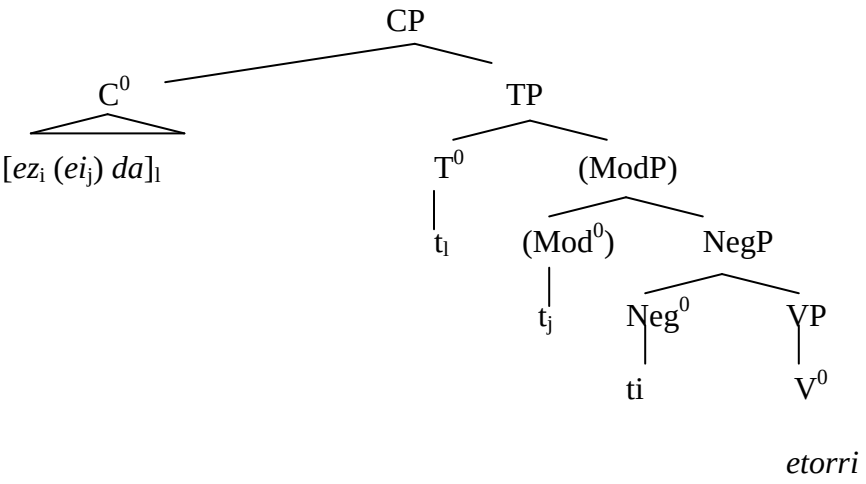
(39) Jon etorri omen da, baina Maitane ez.
Jon come Mod(evid) Aux, but Maitane Neg.
√ 'John apparently has come, but Maitane apparently hasn't.'
√ 'John apparently has come, but Maitane hasn't.'

The availability of the first interpretation in (39) suggests a deleted constituent with the following content.

(40) Jon etorri omen da, baina Maitane ez ~~[omen da etorri]~~
Jon come Mod(evid) Aux, but Maitane Neg. ~~[Mod(evid) Aux come]~~
'John apparently has come, but Maitane apparently hasn't.'

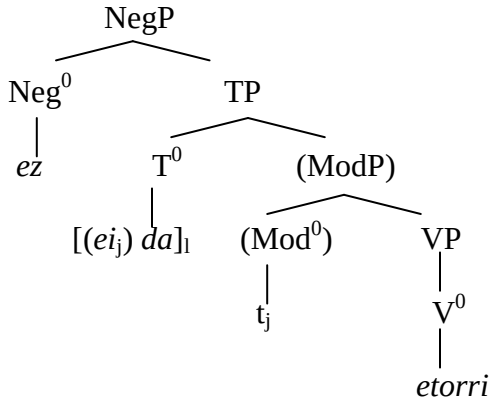
Crucially, in the head movement derivation in (33) (repeated below), the negative morpheme, *ez*, never forms part of a constituent distinct from the deleted modal particle, auxiliary and main verb. In other words, the derivation in (33) appears to require deletion of a non-constituent to account for the second interpretation in (39).

(33) (G. Elordieta 1997:72)
Ez ei da etor(r)i
Neg Asp(mod) Aux come-Asp(perfect)
'Apparently he didn't come.'



One solution to the ellipsis problem might be to merge *ez* above the Aux (in TP in Elordieta's proposal) and modal particle as in (41).

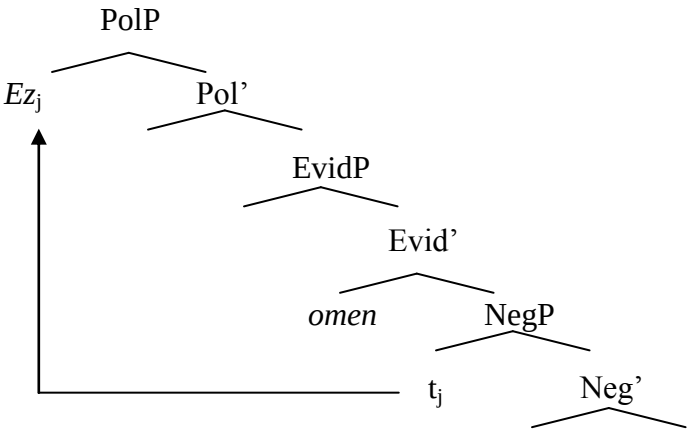
(41)



This alternative, however, can no longer account for scope interaction with preverbal particles. Again, since at no point in this derivation does the modal particle c-command negation, it is mysterious how preverbal modal particles are able to scope above negation.

In the XP-movement account advocated here, these facts are accounted for straightforwardly. As discussed above, scope relations between *ez* and preverbal particles are explained by reconstruction of *ez* to its merged position in NegP at LF. In ellipsis constructions, *ez* raises to spec, PolP (as shown in (30), repeated below), and deletion then applies to EvidP, deleting the material to the right of *ez*. [12]

(30)



These scope and ellipsis facts, then, seem to recommend an XP-movement approach to raising. If *ez* is merged as a head below the modal particle, the ellipsis facts are inexplicable, or require a violation of the HMC. If, instead, *ez* is merged above the modal particle, it becomes difficult to account for scope interaction between these elements.

2.4 Similar proposals in recent work

This section reviews recent work by Zanuttini (1997), Koopman and Szabolcsi (2000) and Ndayiragije (1999) that suggest that some of the properties proposed here for Basque are attested in other natural languages.

Zanuttini (1997: 40-43) presents the following data from Paduan yes/no questions in which either the verb or negative marker alternately raise to C^0 depending on the polarity of the sentence. According to Zanuttini, in affirmative yes/no questions, the verb raises to C^0 to satisfy the featural needs of a yes/no operator in spec, CP. In negative

yes/no questions containing both a verb and a negative marker, the negative marker—as the closer of the two elements—raises to C^0.

(42) (Zanuttini 1997)

a. El vien.	b. Vien-lo?	c. Nol vien?
s.cl. comes	comes-s.cl.	Neg-s.cl. comes
'He comes.'	'Is he coming?'	'Doesn't he come?'

While the present proposal differs from Zanuttini's in assuming XP movement rather than head movement, and in certain empirical details—in Paduan it is the verb itself rather than the VP that raises—Zanuttini's discussion nevertheless suggests an additional case in which the verb and the negative morpheme alternately raise to satisfy the polarity needs of a higher head.

The Basque pattern is also reminiscent of verbal modifier (VM) climbing in Hungarian as described by Koopman and Szabolcsi (2000).

(43) (Koopman and Szabolcsi, 2000:1-2) (bold added)

a. **Haza** fogok akarni kezdeni menni
home will-1sg want-inf begin-inf go-inf
'I will want to begin to go home.'

b. Nem fogok akarni kezdeni **haza** menni.
not will-1sg want-inf begin-inf home go-inf
'I will not want to begin to go home.'

The examples in (43) show that the verbal modifier, *haza*, 'home' obligatorily fronts in neutral finite clauses; it cannot front in negative or focus constructions. To explain this, Koopman and Szabolcsi posit a NeutP head, in complementary distribution with NegP and FocusP. NeutP attracts a verbal projection, VP+ (immediately below

AgrP), which in neutral clauses is emptied of all material except the VM through remnant movement. In non-neutral clauses, instead of NeutP, NegP and/or FocusP project; these heads do not attract VP+.

Further support for a neutral projection comes from Ndayiragije's (1999) description of the "anti-focus" marker *–ra* on the verb in Kirundi. Ndayiragije's data in (44) below, show that *–ra* is in complementary distribution with negation and focus. These data suggest, then, suggest evidence for an overt, morphologically realized counterpart to the null Hungarian Neut^0.

(44) (adapted from Ndayiragije 1999)

a. Abâna ba-á-*ra*-nyôye amatá.
children 3P-pst-F-drink:Perf milk
'Children drank milk.

b. Abâna nti-ba-á-(**ra*)-nyôye amatá.
children Neg.-3P-pst-(F)-drink:Perf milk
'Children didn't drink milk.

c. Abâna ba-á-(**ra*)-nyôye amatá. (Focus = Obj)
children 3P-pst-(F)-drink:Perf milk
'Children drank milk (not water).'

d. Abâna ba-á-(**ra*)-nyôye iki? (*wh* = Obj)
children 3P-pst-(F)-drink:Perf what
'What did the children drink?'

These Hungarian and Kirundi patterns differ from the Basque data in two key respects. First, focus in Basque does not obligatorily block raising as it does in Hungarian; the Basque distinction presented here is between affirmation and negation rather than neutrality and non-neutrality.[13] Second, in the present proposal for Basque, negation and the VP alternately target a single projection, here called PolP. The Kirundi data and Koopman and Szabolcsi's discussion of Hungarian instead provide evidence for

an additional "neutral" head, distinct from the projection hosting negation. Nevertheless, these Hungarian and Kirundi facts lend support to the present proposal for Basque as additional evidence that neutral, declarative constructions may be "marked," both morphologically and via movement. Indeed, from the perspective of the standard assumption that movement is driven by marked interpretations—negation, interrogation, focalization, etc.—and absent in unmarked, neutral constructions, there appears to be little obvious motivation for raising of the inverted verbal complex to PolP in affirmative sentences. This is an important theoretical disadvantage of the present analysis vis-à-vis Laka's (1990) seminal proposal in which negative/affirmative word order differences are a consequence of head raising of the auxiliary (to Neg^0) in negative constructions but not in affirmatives. However, while it may be generally true cross-linguistically that negation and focus are more likely than neutrality to trigger movement and overt morphological marking, these Hungarian and Kirundi data provide compelling evidence that this need not always be the case.

3. Verbal Dependents

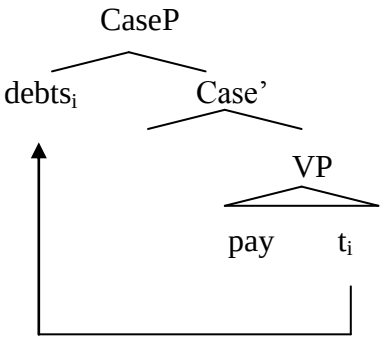
This section discusses word order permutations involving verbal dependents. The main goal of this section will be to show that several different word order patterns can be explained in a principled way within the XP-movement framework adopted here using independently required processes, in particular pied-piping and remnant movement.

3.1 A preliminary derivation

A sample derivation, using (45), begins with (46).

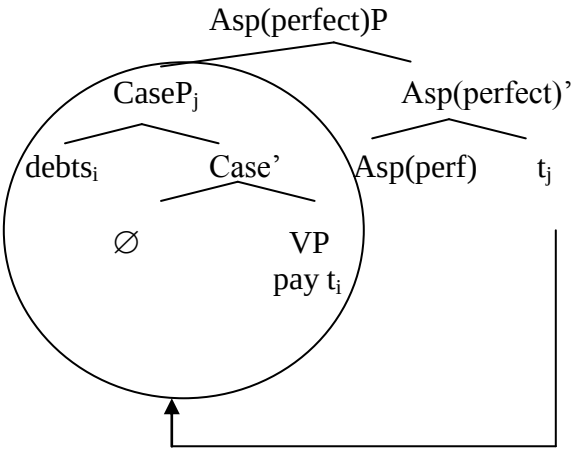
(45) Ez omen zituzte-n zorrak ordain-du nahi
Neg Mod(evid) Aux-T(past) debts pay-Asp(perfect) Mod(vol)
'Supposedly, they didn't want to pay off the debts.'

(46)



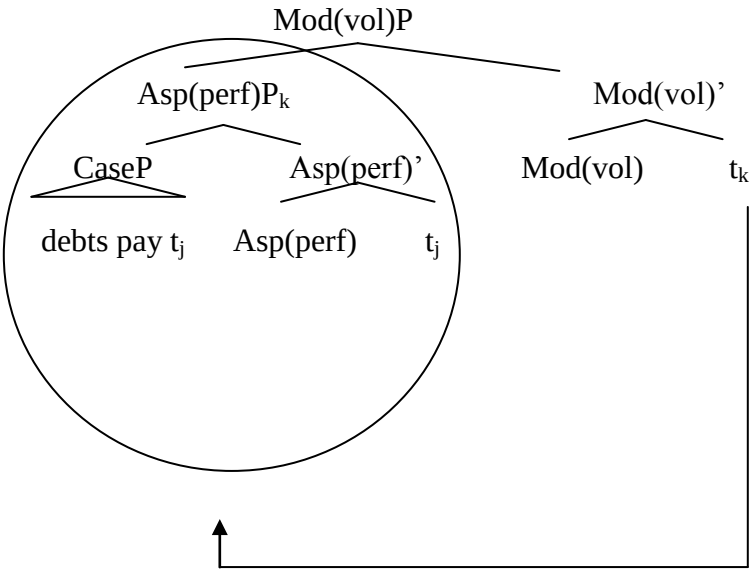
(46) shows merger of CaseP above VP and movement of the object, 'debts', to its spec, in order to pick up its (phonetically null) absolutive case morphology. Following Koopman and Szabolcsi (2000), CaseP is taken to be a projection above VP to which overt noun phrases move to check case. It is assumed that other, distinct projections furnish ergative and dative case morphology, however these processes will not be addressed here (cf. Laka 1993).

(47)



(47) shows merger of the perfect morpheme and raising of the object and remnant VP. The verb moves to spec, Asp(perfect)P in order to pick up its perfective morphology, and in so doing, may pied-pipe its object sitting in spec, CaseP. The possibility of pied-piping CaseP, rather than stranding it, will be a key fact in explaining variation in object word orders. (Word orders produced by stranding are discussed below.) In such cases of pied-piping, the features on the verbal head percolate up to the top CaseP node, where it then triggers movement to the higher projection, Asp(perfect)P. This possibility of feature percolation is assumed to be related to the fact that CaseP forms part of the extended projection of the VP.

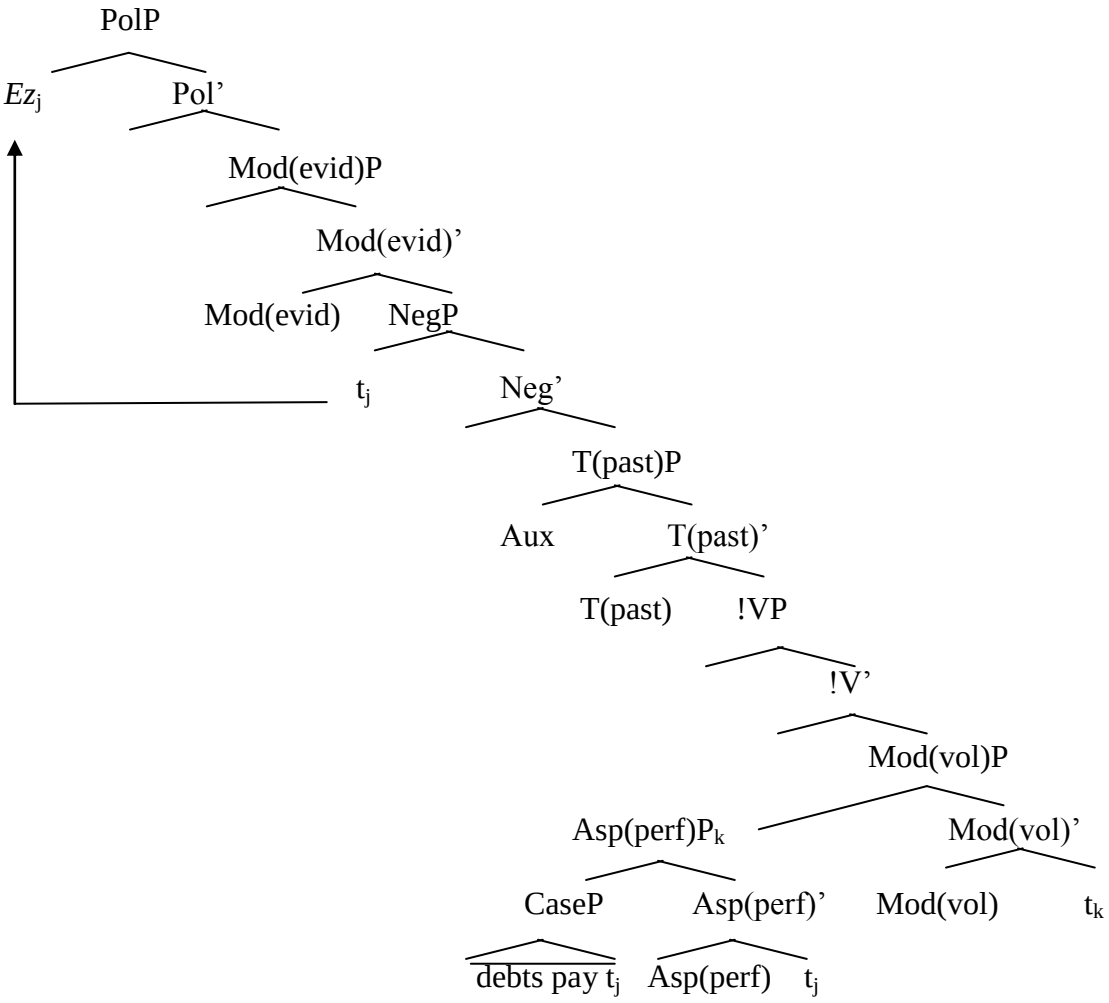
(48)



(48) shows merger of Mod(vol) and raising of Asp(perf)P to its spec. As discussed in Part 1, verbs selected by modals must bear a perfect suffix.[14] In more theoretical terms, Mod(vol)P attracts Asp(perf) with its [+perfect] feature.[15]

In negative sentences, the above morphemes move no further. In these cases, PolP attracts the higher negative marker *ez*, merged in spec, NegP, as shown in (49). (49) also shows the auxiliary in TP. The complex nature of agreement morphology on the auxiliary is not addressed here (cf. Laka 1993).

(49)

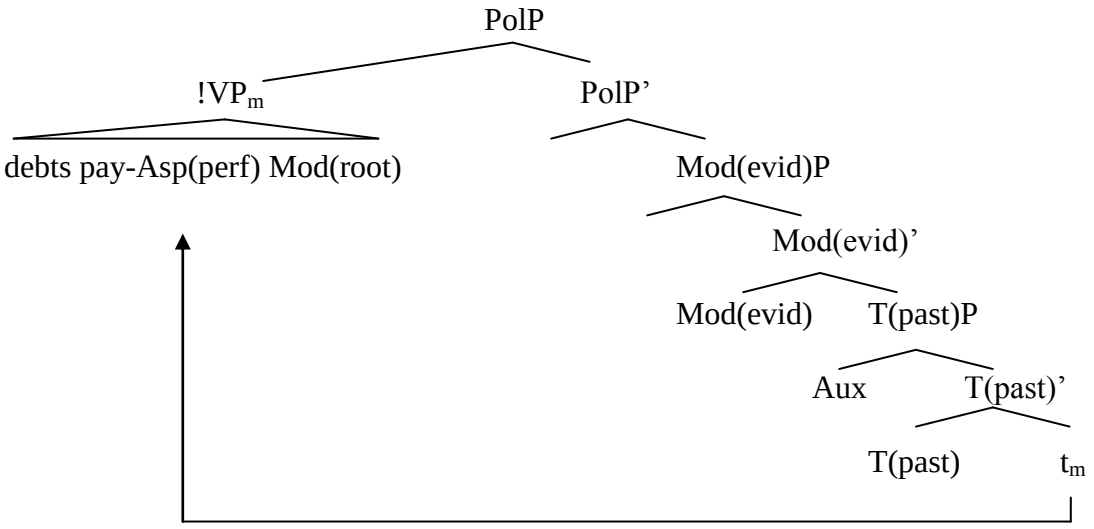


Affirmative and negative derivations differ minimally in the element that moves to PolP (see 2.0): in affirmative sentences PolP does not attract the negative morpheme, *ez*, but rather the inverted verbal complex. Consider, for example, (50), the neutral, affirmative counterpart to (45), with the inverted verbal complex in brackets.

(50) [Zorrak ordain-du nahi] omen zituzte-n.
debts pay-Asp(perfect) Mod(vol) Mod(evid) Aux-T(past)
'Supposedly, they wanted to pay off the debts.'

The derivation of (50) initially follows the same steps as the negative sentences in (46)-(48). However, in affirmative sentences, the negative morpheme, *ez*, is not merged in NegP, and PolP attracts the verbal complex in !VP. This last step is shown in (51).[16]

(51)



3.2 Remnant movement and stacking

In the derivation given in (46)-(48), the direct object rolls up with the verb and lower functional morphemes. However, this is not always the case.

(52) (Ortiz de Urbina 1989:123) (Bold added)

a. Jonek **Miren-i egia** esan-∅ dio. Affirmative
J. M-Dat truth say-Asp(perfect) Aux
'John has told Mary the truth.'

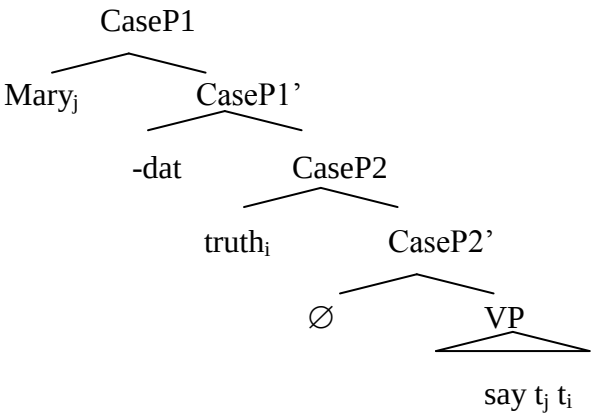
b. Jonek ez dio **Miren-i egia** esan-∅. Negative
J. Neg. Aux M-Dat truth say-Asp(perfect)
'John hasn't told Mary the truth.'

c. Jonek ez dio esan-∅ **Miren-i egia**. Negative
'John hasn't told Mary the truth.'

(52), taken from Ortiz de Urbina (1989), shows the position of objects in affirmative and negative sentences (without focus interpretation). The patterns shown in (52a) and (52b) are accounted for in the derivation given in (46)-(48). In the affirmative example, (52a), the objects, *Mireni* and *egia*, 'truth', appear before the verb, rolled-up and fronted as shown for the direct object in (46)-(48). (52b) is a negative sentence, and the objects again appear inverted, before the verb. (Again, since (52b) is negative, the rolled-up chunk does not front).[17]

The problem is to explain (52c). (52c) is also negative, yet crucially, the objects do not appear to the left of the verb, but rather to the right of it.[18] In terms of the present proposal, the difference seems to be that in (52c), the verb does not pied-pipe the object(s) in CaseP(s) as it raises to pick up its morphology, but instead leaves it behind. The following steps—akin to (46) and (47) above—illustrate this.

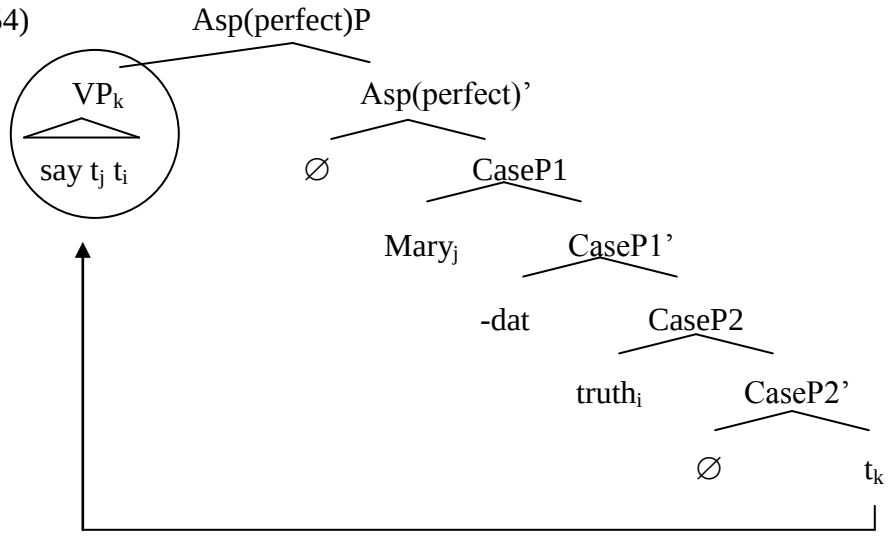
(53)



(53) shows merger of two CasePs above VP and movement of the objects to their respective case positions.

(54) shows the point at which the derivations of (52b) and (52c) diverge. In the earlier derivation (cf. (47)), the verb carries along its objects in CaseP1 and CaseP2 as it raises to spec, Asp(perfect)P. This produces the pattern visible in (52b) in which the objects rolls up with the verb. However, in (54), when the verb raises to pick up its perfective/imperfective morphology, it does not pied-pipe its objects; instead only the remnant VP raises. This accounts for the ordering in (52c).

(54)



Unfortunately, while the derivation in steps in (53) and (54) correctly derives (52c), it cannot be the complete story since objects can also appear to the right of modal verbs. (55) repeats (52c) with the modal *nahi*, 'want' inserted.

(55) Jonek ez dio esan-∅ nahi **Miren-i egia**.
J. Neg Aux say-Asp(perfect) Mod(volitional) Mary-dat truth.
'John doesn't want to tell Mary the truth.'

In (55), the modal *nahi*, 'want,' appears between the objects and the main verb, *esan*, 'say.' The main verb + perfective aspect has inverted with the modal, but left its dependents behind. In more theoretical terms, (55) suggests that, before the main verb with its perfect aspect morphology raises to the specifier of the modal (as proposed in the derivation in (46)-(48)), the objects must first have extracted from the structure in (54). If the main verb were to raise without the objects first extracting, the unacceptable sequence shown in (56) would result.

(56)*Jonek ez dio esan-∅ **Miren-i egia** nahi.
J. Neg Aux say-Asp(perfect) Mary-dat truth Mod(volitional).
'John doesn't want to tell Mary the truth.'

The contrast between (55) and (56) feels like the same phenomenon visible in the negative/affirmative asymmetry in (52), repeated here.

(52) (Ortiz de Urbina 1989:123) (Bold added)

a. Jonek **Miren-i egia** esan-∅ dio. Affirmative
J. M-Dat truth say-Asp(perfect) Aux
'John has told Mary the truth.'

b. Jonek ez dio **Miren-i egia** esan-∅. Negative
J. Neg. Aux M-Dat truth say-Asp(perfect)
'John hasn't told Mary the truth.'

c. Jonek ez dio esan-∅ **Miren-i egia**. Negative
'John hasn't told Mary the truth.'

The missing pattern in (52) is a neutral order where the objects appear to the right of the main verb and to the left of the Aux. The affirmative counterpart to (52c) is sharply unacceptable:

(57) *Jonek esan-∅ **Miren-i egia** dio.
J. say-Asp(perfect) M-dat truth Aux
'John hasn't told Mary the truth.'

Here again, an unacceptable pattern results when the main verb raises without the objects extracting. Specifically, (57) is predicted to occur when (i) the objects raise to their respective CasePs (cf (53)); (ii) the verb moves to Asp(perfect)P without pied-piping the objects (cf (54)); and (iii) the entire !VP then raises to PolP (fronting in neutral sentences).

The generalization about the contrasts in (55)/(56) and (52a)/(57) seems to be that objects can only raise when they precede the verb and never when they follow the verb. In more theoretical terms, the objects may raise with the verb (verbal complex) when they sit higher than verb, but never as a complement.

This pattern may be expressed in the following constraint.

(58) *Basque complexity filter*: An XP cannot move if its complement is lexically filled.[19, 20]

This device, adapted from Koopman and Szabolcsi's (2000:159) analysis of similar phenomena in Hungarian, Dutch and German, permits an XP to raise with overt material in its specifier, but not as its complement. Crucially, however, (58) does not filter out cases in which the VP optionally pied-pipes dependents in its selecting CaseP(s), as in (47) above; CaseP, then, must be stipulated as an exception to (58). Again, the fact that CaseP and its complement VP sometimes behave as a single projection may be related to the fact that case positions above the verb often appear to

function as part of the extended projection of the verb or as part of a VP shell (Larson 1988).

The problem is to explain why and how the objects extract. Since they have already raised to check case, there appears to be no reason for them to move further. One possible solution is to use "stacking positions" as proposed by Koopman and Szabolcsi (2000), to explain a similar pattern in Hungarian.

(59) (Koopman and Szabolcsi 2000:45)
Nem akartam [szét szedni kezdeni] a rádiót.
Neg wanted-1sg apart take-inf begin-inf the radio-acc
'I did not want to begin to take apart the radio.'

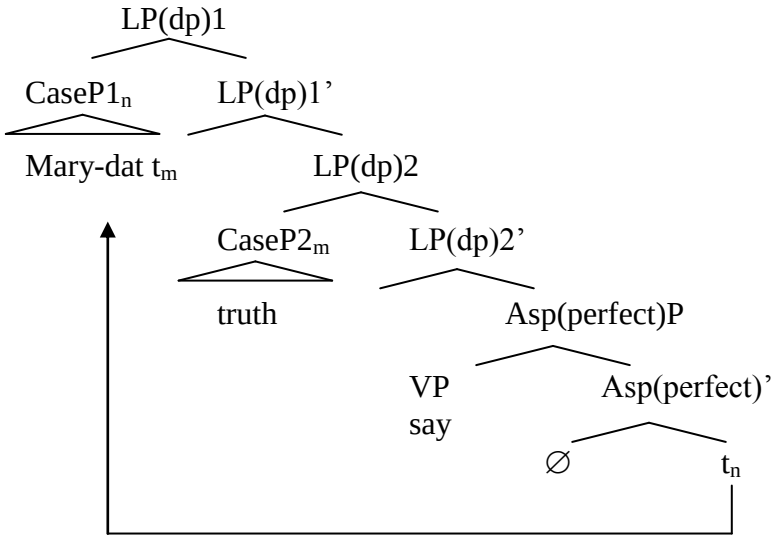
(59) shows that in non-neutral sentences in Hungarian, infinitivals can invert with certain "restructuring" type verbs. (The inverted chunk is shown in brackets.) Here, 'apart take' has raised and inverted with 'begin.' However, when inversion occurs, verbal dependents—'the radio' in (59)—must be left behind, like in Basque (52c) above. To accommodate these facts, Koopman and Szabolcsi propose "stacking positions" (p. 43): landing sites for the verbal dependents above the verb, which enable the remnant verbal projection (VP+ in their proposal) to raise and invert with the selecting restructuring/modal verb.

Let us return to the problematic data in (55), repeated here.

(55) Jonek ez dio esan-∅ nahi **Miren-i egia**.
J. Neg Aux say-Asp(perfect) Mod(volitional) Mary-dat truth.
'John doesn't want to tell Mary the truth.'

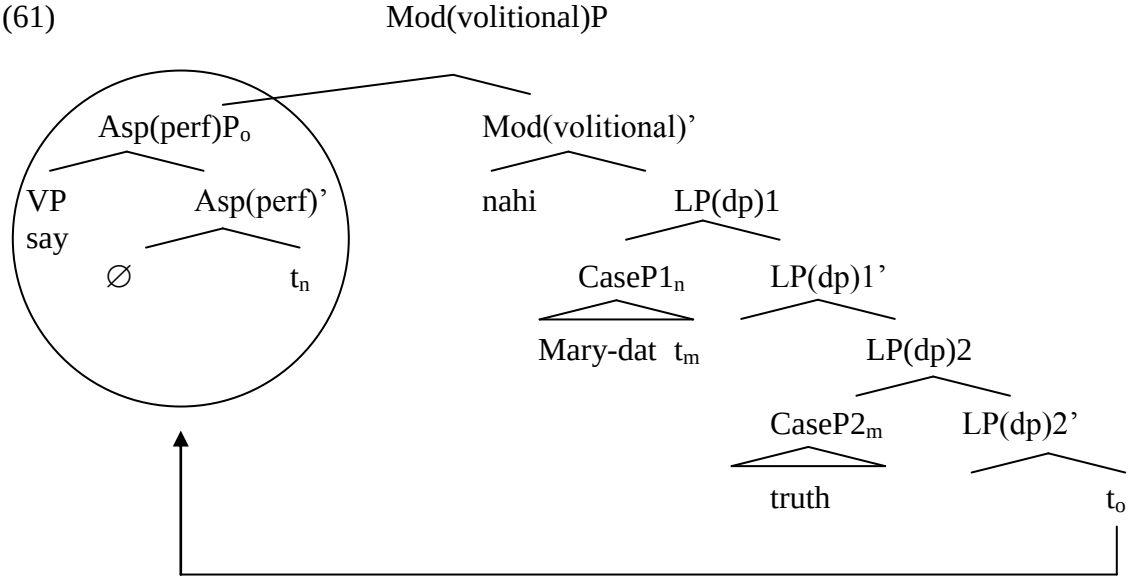
Like in Hungarian, the objects may be assumed to raise to a stacking position—LP(dp)—above AspP. This allows the verb with its perfective morphology to raise to the specifier of the modal as required. (60) continues the derivation left off in (54).

(60)



(60) shows the merger of the stacking positions—LP(dp)1 and LP(dp)2—and raising of the case projections to their specs: first CaseP2 extracts from CaseP1 to LP(dp)2, and then CaseP1 (containing the trace of CaseP2) raises to LP(dp)1.[21] Again, these DPs raise in compliance with (58), which forbids objects to raise as complements of the verb. Then, the modal, *nahi* is merged and the main verb with its aspectual morphology raises to the specifier of the modal.

(61)



In (61), Asp(perfect)P has raised to spec, Mod(volitional)P to fulfill the morphological needs of the modal as discussed above. This correctly produces the order of the verbs and objects in (55).[22]

To review, this section has proposed a series of derivations that uses independently attested phenomena—pied piping and remnant movement—to explain various word order permutations among verbal dependents. A key feature of the proposal is that it reduces two seemingly independent restrictions on object word order in verbal complexes—in post-auxiliary position ((56) vs. (57)) and in pre-auxiliary position ((52a) vs. (57))—to a single constraint on Basque movement within the clause, namely, that an XP cannot raise if its complement is lexically filled.

4. Some Remaining Problems

4.1 Focus

The word order of focus constructions suggests a problem with the account of !VP raising discussed in Part 2. In particular, (24a) (repeated here) shows that focalized constituents, including *wh*-elements must appear left-adjacent to the verb.

(24)

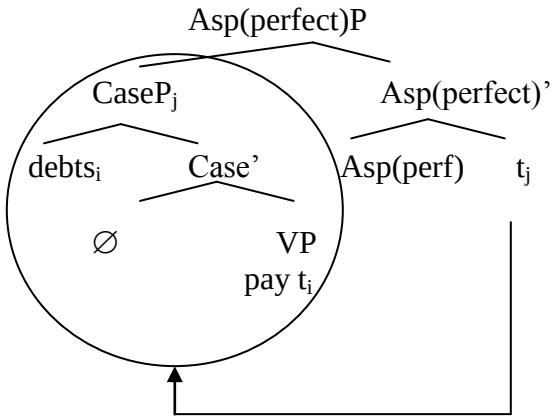
a. Nork/JONEK (*Miren) ikus-i du (√Miren)
Who-Erg/JON-Erg (Mary) see-Asp(perfect) Aux (Mary)
'Who/JOHN saw Mary.'

b. Nork/JONEK (*Miren) ez du (√Miren) ikusi (√Miren)
Who-Erg/JON-Erg (Mary) Neg Aux see-Asp(perfect) (Mary)
'Who/JOHN didn't see Mary.'

If, as Ortiz de Urbina (1995) has argued, foci and *wh*-phrases move to a specific focus position (CP) above the main verb, then it is mysterious why verbal dependents, as part of the rolled-up verbal chunk, cannot intervene between the main verb and focalized constituent, as in (24a).[23] In other words, the present proposal has no obvious explanation for why non-focalized objects in focus constructions such as (24a) must appear postverbally (or topicalized).

Part 3 explained the difference between preverbal and post-verbal objects in terms of whether the objects (in CaseP) are pied-piped. Non-focused objects that appear left-adjacent to the main verb sit in specifiers of case projections and are pied-piped by the verb as it raises to pick up its aspect morphology. (This step is repeated as (42) below.) Hence, the defining characteristic of all inverted verbal constituents with objects is that they contain case projections; raised verbal constituents without dependents lack case projections since in these constructions the remnant VP extracts from CaseP.

(47)



No principled account of these facts can be offered at this time. The restriction on word order in these environments is stipulated as follows.

(62) *Basque:* When spec, FocusP is lexically filled, the spec of its complement, PolP, may not contain a case projection.

A more refined treatment of these facts must await further investigation.

4.2 Embedded orders

So far, this paper has discussed word order alternations in matrix clauses. In embedded contexts, however, the Aux-V ordering facts are different (Ortiz de Urbina 1989, Laka 1990, 1991).[24] This paper will not attempt to account for these facts. However, at least two facts suggest that embedded word order alternations constitute partially independent phenomena.

First, the availability of certain orders crucially depends on the complementizer and type of embedding. The ordering of Aux and V in affirmative embedded clauses is in all cases the same as in matrix clauses: V-Aux.

(63) (Laka 1991: 904)
Mirenek galde-tu du [etxe-a eror-i de-n]
Miren ask-Asp Aux [house-det fall Aux-comp
'Mary asked whether the house fell down.'

However, the ordering of Aux-V in negative embedded clauses appears significantly more complicated. With some complementizers, both orders—V-Aux and Aux-V—are available. The complementizers with variable negative orders include the indicative complementizer *–ela*, the interrogative complementizer *–n, ba*, 'if' and *-elako*, 'because.' The variation between the orderings is both intra-speaker and inter-speaker: some speakers accept both orders while others accept only one ordering or the other.

(64)

a. Badakit [[egia esan] ez didazu-la]
I know truth say Neg Aux-Comp
'I know you didn't tell me the truth.' [25]

b. Badakit [ez didazu-la [egia esan]]
I know Neg Aux-Comp truth say
'I know you didn't tell me the truth.'

On the other hand, with the complementizer *–n* in relative and adverbial clauses, only the V-Aux order is possible.

(65) (Laka 1990)

a. [[eror-i] ez de-n] etxe-a.
fall-Asp(perfect) Neg Aux-comp house-the.
'The house that hasn't fallen.'

b. [*ez de-n [erori]] etxea.
Neg Aux-comp fall-Asp(perfect) house-the

(66)

a. [etorri] ez de-n-ez
come Neg Aux-C-since
'since she hasn't come'

b. *ez de-n-ez [etorri]
Neg Aux-C etorri

Hence, the availability of Aux-V orders in negative embedded clauses appears to depend partly on the complementizer.

In addition, Etxepare (2003) claims that the different orders available with the *-ela* and *-en* complementizers encode semantic differences. For Etxepare, in clausal complements of factive verbs with the V-Aux order, the factive complement takes matrix scope, i.e. is presupposed by the speaker. This is not the case for clauses with the Aux-V order.[26]

(67) (Etxepare, 2003)

a. Ematen du badakiela ez dire-la etorri-ko, baina etorri-ko dira
seems Aux ptc-he-knows-Comp neg Aux-Comp come-fut but come-fut Aux
'It seems that he already knows that they will not come, but they will.'

b. Ematen du badakiela etorriko ez direla, #baina etorriko dira
seems Aux ptc-he-knows-Comp come-fut neg Aux-Comp but come-fut Aux
'It seems that he already knows that they will not come, but they will.'

These facts, then, suggest that Aux-V word alternations in embedded contexts constitute a partially different phenomenon from Aux-V alternations in matrix contexts. For the moment, no further insight into these problems can be offered.

5. Conclusion

The primary goal of this paper is to argue for a new understanding of negative/affirmative word order alternations in Basque. The proposal has two main components. First, drawing on Cinque's (1999) universal hierarchy of functional heads it argues that the negative order—Aux-V—is derivationally prior; the affirmative V-Aux order is produced by raising of the VP to a position called PolP. Second, PolP is also argued to host the negative morpheme *ez*, in negative sentences, and the emphatic marker, *ba* in emphatic affirmatives. Evidence from scope interaction between negation and evidential and speech act particles, suggests that the surface position of the negative morpheme, *ez* cannot be its merged position, but rather that *ez* is merged in a lower position and raises to spec, PolP. The present proposal's ability to explain these scope facts is an advantage over approaches which derive negative/affirmative word order differences by head raising of the auxiliary to Neg^0. In addition, these same scope data, together with VP-ellipsis facts, provide evidence that the movement involved must be XP-movement, rather than head movement.

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Notes:

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[2] The position of root modals in Cinque's hierarchy is unspecified (p. 90), although Cinque suggests that they are probably below Mod (volitional). This is fully consistent with the behavior of Basque *ahal*—the permission/ability modal. Nevertheless, given this uncertainty, *ahal* will remain peripheral to the present discussion.

[3] For a closed class of verbs ending in *–n* in perfective environments, two different analyses are available in the literature. Some authors analyze the perfective suffix on these verbs as -∅, while others analyze it as -*n*. In this paper I will assume the former position, however nothing in the present analysis, crucially depends on this assumption.

[4] I follow Laka (1993) and depart from traditional analyses in assuming that the past tense marker is *–en*, rather than a vowel alternation on certain verbs (see Trask 1997). Nothing in the present analysis, however, crucially depends on this assumption. Cf. also note 59, Chapter 3 in Cinque (1999).

[5] The behavior of *ohi* in eastern dialects requires additional analysis.

(i)

Eastern dialects

Ez ohi zuen bazkal-tzen .

Neg Mod(habitual) Aux-T(past) eat-Asp(imperf)

'She didn't usually come.'

a. Western dialects

Ez zuen bazkal-du ohi.

Neg Aux-T(past) come-Asp(perfect) Mod(habitual)

'She didn't usually eat.'

In Western dialects, *ohi* behaves like a modal. Just like the unambiguous modals, *behar* and *nahi*, Western *ohi* requires the main verb to take a perfect aspect marker. Also, Western *ohi* appears clause-finally in negative sentences. In Eastern dialects, *ohi* appears in the slot shared by particles, *omen*, *bide* and *ote*, and the main verb bears an imperfect marker (perhaps for independent reasons, since the imperfect marker is normally used for habitual/repetitive type actions). The Eastern form, (ia), is problematic for the present Cinquean proposal, since the order of functional heads is not tidily derivable via roll-up and fronting: *ohi* appears above T(past), but the main verb does not. I will assume that Eastern *ohi*, is merged in an additional habitual head position among the other particle heads, above T(past).

[6] Some focus constructions have a different order. These are omitted from the present discussion. (cf. Laka 1990)

[7] Laka (1990:146-7), in fact, proposes a similar account for verb focalization constructions of the type in (i).

(i) etorri da.

arrived has

'She has ARRIVED.'

In these cases, Laka proposes phrasal movement of the verb to spec, ΣP—a position hosting negation and focalized constituents.

[8] Uriagereka (1999) presents data, including the following example, in which certain adjunct *wh*-phrases need not be strictly left-adjacent to a raised VP; however not all speakers accept these examples.

(i) Zergatik (Jonek) esan du garagardoa edango du-ela?

Why (Jon-Erg) say Aux beer drink-Asp(fut) Aux-Comp.

'Why has Jon said that he will drink beer?

[9] This observation and a useful discussion of these facts were provided by Xabier Artiagoitia (p.c.).

[10] As Laka further observes, this is not constituent negation of the subject. Constructions of this type have the following form, in which the subjects are focalized and negation precedes the negated constituent.

(i) MARIK erosi du liburua, ez PERUK.

[11] VP-ellipsis is also possible in emphatic affirmative constructions.

(i) (Etxepare, 2003)

Jonek ez du ardorik erosi baina Mikelek bai […]/*ba

Jon-erg neg Aux wine-part bought but Mikel-erg aff aff

'Jon didn't buy wine but Mikel did'

These constructions also marginally allow an interpretation in which the deleted material contains an evidential particle, but the reading without the evidential particle is favored. No account for the difference between these constructions and VP-ellipsis with *ez* is offered here.

(ii) Jon ez omen da etorri, baina Maitane bai

Jon Neg Mod(evid) come, but Maitane yes.

? 'John apparently hasn't come, but Maitane apparently has.'

√ 'John apparently hasn't come, but Maitane has.'

[12] A further disadvantage to a head movement approach from the perspective of the present proposal concerns the morpheme order in progressive constructions.

(i) Ez zen Euskara **ikas-ten** **ari**

Neg Aux T(past) Basque study-Asp(imperfect) Asp(progressive)

'She wasn't studying Basque.'

In (i), the main verb bears an imperfect suffix and appears to the left of the progressive morpheme, *ari*. According to the hierarchy in (4), the merged order of the morphemes in (i) is (**t(z)en/-tu** Asp(perfect)>**ari** Asp(progressive)>**Verb**). The main verb then must raise past the particle *ari* in order to pick up the suffix *–t(z)en*. Assuming that *ari* is a head, a head-raising approach to these phenomena would seem to require the verb root *ikas* to jump over the head, *ari*, in violation of the Head Movement Constraint. From the perpective of the present proposal, these considerations favor an XP-movement account, at least for progressive constructions. I thank an anonymous reviewer, however, for pointing out that *–t(z)en* may not, in fact, be a true imperfect morpheme but rather a locative nominalized form.

[13] In Eastern dialects of Basque, *wh*-phrases and focus constructions *can* block raising of the main verb chunk, as discussed by Laka (1990) and Ortiz de Urbina (1995). These dialects, then, are consistent with an analysis in which the main verb chunk raises to a NeutP position along the lines proposed by Koopman and Szabolcsi (2000).

(i)

a. Nork du Jon ikus-i?

who Aux John see-Asp(perfect)

'Who has seen John?' (Ortiz de Urbina, 1995)

b. MIRENEK du Jon ikus-i.

Mary Aux John see-Asp(perfect)

'MARY has seen John.' (Ortiz de Urbina, 1995)

c. Ez du Jon ikus-i.

Neg Aux John see-Asp(perfect)

'She didn't see John.'

d. Mirenek Jon ikus-i du.

Mary John see-Asp(perfect) Aux.

'Mary has seen John.' (neutral order)

[14] In Eastern dialects, verbs selected by this root modal, *ahal* take an imperfect suffix.

[15] As an anonymous reviewer observes, the verb + aspect complex need not always appear to the left of the modal, as in (i). From the perspective of the present proposal, it appears that Asp(perfect)P does not raise to spec, Mod(volitional)P in these cases.

(i) Ez du nahi egia esan-∅.

Neg Aux Mod(volitional) truth say-Asp(perfect)

'(She) doesn't want to tell the truth.'

[16] The present proposal follows Cinque (1999) and (2000) and departs from Koopman and Szabolcsi in assuming a monoclausal structure for modals and the main verbs they select.

[17] In affirmative sentences such as (i), objects may follow the verb; however, either subject or the verb must be interpreted as the focus.

(i) Jonek esan-∅ dio **Miren-i egia**.

J. say-Asp(perfect) Aux M-Dat truth

'John has told Mary the truth.'

[18] Further consultation with informants is required to determine to what extent this difference may be dialectal.

[19] This constraint may only hold for the clause and not for DPs. Under the standard assumption that numerals are merged below definite morphemes and above the head noun, the following example suggests that the numeral with its complement noun may have raised to a higher specifier position above the definite and plural morphemes.

(i) [hiru etxe]-a-k

three house-Def.-Pl.

'The three houses.'

[20] The qualification "lexically filled" is included to account for the fact that !VP—a projection without overt content—raises with its complement to PolP.

[21] Alternatively, since the relative order of the objects is preserved, one might posit a single LP(dp). That is, CaseP1 and its complement, CaseP2 might move together to spec, LP(dp).

[22] In fact, additional layers of stacking positions seem to be required. The availability of objects to the right of the inverted verbal complex in (i) suggests that stacking positions are also required above Mod(necessity)P.

(i) Jonek ez dio [esan-∅ behar-ko] Miren-i egia

J. Neg Aux say-Asp(perfect) Mod(necessity)-T(future) Mary-dat truth

'John won't need to tell Mary the truth.'

[23] See Elordieta (2001) and Arregi (forthcoming) for a discussion of focus marking in-situ.

[24] I am grateful to two anonymous reviewers for comments regarding these facts.

[25] Interestingly, as an anonymous reviewer observes, speakers find a sharp difference between (64a) and (i), below. This contrast is predicted by the present proposal since movement of *esan egia* (whatever the landing site) violates the complexity filter in (58).

(i) *Badakit [[esan egia] ez didazu-la]

I know say truth Neg Aux-Comp

'I know you didn't tell me the truth.'

[26] Ricardo Etxepare (p.c.) finds that a different semantic difference obtains between the different orderings available under –*n*.

(i)

a. Ez dakit [[esan] ez didazu-n]
I know say Neg Aux-Comp
'I don't know whether you didn't tell me.'

b. Ez dakit [ez didazu-n [esan]]
I know Neg Aux-Comp say
'I don't know whether you didn't tell me.'

For him, (ia) can only be expletive negation, where (ib) can have both an expletive negation interpretation and a regular negation interpretation 'I don't know whether it is the case that you didn't tell me.' So far, however, I have not been able to find other speakers who share this difference, in part, because not all speakers accept both orders.