

On some languages lacking V-to-I movement

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1 Introduction

The goal of this short paper (which is part of a much larger work; [Roberts in progress](#)) is to look again at the well-known facts concerning the apparent absence of verb-movement in English and various other languages in the light of [Cinque's \(1999\)](#) proposals for the structure of IP. In this connection, [Johnson 1991](#) is an enduringly important contribution, some of whose results are reconsidered below. The conclusion is that [Pollock's \(1989\)](#) observations essentially stand, although the apparent lack of verb-movement in languages like English must be reconsidered in the light of the richer structures which emerge from Cinque's work and the empirical observations in [Johnson 1991](#).

2 English

[Pollock's \(1989\)](#) classic study of verb-positions in English and French showed that V does not raise to I (or, in more recent terms, T) in Modern English (this is not true for some earlier stages of English; see [Roberts 1985](#)). Well-known examples of the following kind illustrate this:

- (1) a. John (*eats) often/always/already eats apples.
- b. John does/will/must (*speak) not speak French.
- c. The kids (*speak) all speak French.

Here we see that the finite lexical verb cannot precede low adverbs of the *often/always/already* type, cannot precede the clausal negator *not* and cannot precede a floating quantifier. Since [Pollock 1989](#), this kind of evidence has been taken to show that the finite lexical verb does not raise to T. Furthermore, the verb and the direct object must always be adjacent, as these examples show. Auxiliaries behave differently, as has been known since at least [Emonds 1978](#); I will leave auxiliaries aside here.

[Schifano \(2015: 132\)](#), citing [Cinque \(1999: fn. 7, 214\)](#) and [Tescari-Neto \(2012: 57\)](#), points out that finite lexical verbs in English do appear to precede certain adverbs which are very low in the Cinque hierarchy, such as *well*:

(2) John sings well (*sings).

Cinque (1999: 106) places *well* in SpecVoice, outside vP.¹

However, no adverb can intervene between the verb and the direct object in English. This prohibition includes *well*, as (3) shows:

(3) John (*well) sang (*well) the song (well).

The fact that *well* can only appear following the direct object may suggest that there is vP-fronting of some kind at work here, rather than head-movement of the finite lexical verb (see footnote 1 on other very low adverbs in English). The relevant part of the structure of the grammatical version of (3), with *well* in final position, would thus be as in (4):²

(4) [TP John ... [VoiceP [vP sang the song] [well [Voice ... (vP) ...]]]

The ungrammatical preverbal position of *well* in (3) is simply an excessively high position for this adverb, as it must be higher than SpecVoiceP, while the position intervening between the verb and the direct object is too low, being vP-internal. Roberts 2010: 175–180, following and adapting Collins 1997, argues for this kind of low vP-movement in English for Quotative Inversion as in “*Who’s there?*” *called out John*/**called John out*; this cannot be verb-second because particles are always stranded under verb second, while here we see that particle-stranding leads to ungrammaticality.³

1 And above low positions for *fast/early*, *again*, *often* and *completely*, the last three of which have higher positions too. As Cinque (1999: 103–104) points out, *fast* and *early* behave like *well* in being unable to precede the finite lexical verb. They also behave like *well* in being unable to appear between the verb and the direct object:

(i) John (*early/fast) finished (*early/fast) his dinner early/fast.

All of *again*, *often* and *completely* are able to appear following both the verb and the direct object, but can also precede them:

(ii) John again/often/completely finished his dinner again/often/completely.

These facts are compatible with the vP-fronting proposal to be given directly, combined with Cinque’s idea that *again*, *often* and *completely*, but not *well*, *fast* and *early* have the possibility of appearing in a higher position.

2 There is almost certainly more structure inside the vP *sang the song* here, but we leave that question aside for expository purposes.

3 See Roberts 2010: fn. 17, 248 for the suggestion that Locative Inversion (*Into the room ran John*) may also involve low vP-movement. See also Roberts 2010: fn. 18, 248 on the ungrammaticality of **“Brilliant!” told Harry Ron*, noted by Collins 1997.

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Johnson (1991: 580ff.) points out a contrast between the order *V Adv DO*, which in English is always bad, as we have seen, and the order *V Adv PP*, where the PP is a complement of V, which is often much better:⁴

- (5) a. Mikey (slowly/quickly) talked (slowly/quickly) to Gary (slowly/quickly).
b. Mikey (*well) talked (well) to Gary (well).
c. Mikey (*early) talked (early) to Gary (early).

In (5a), *slowly/quickly* can appear both in a high, preverbal Asp position (Cinque's $Asp_{Celerative(I)}$) and a lower, postverbal one, $Asp_{Celerative(II)}$. Here we could assume that the *to*-PP raises out of vP to a low position within the vP -shells and the remnant vP moves on to SpecVoiceP. The apparently optional positions of the postverbal adverbs are due to the optionality of PP-raising.⁵ (5b) confirms the observation in (3) concerning the unavailability of *well* in preverbal position; the two postverbal positions can be accounted for as for (5a). (5c) confirms Cinque's (1999: 104) observation that *early* can only appear in the low $SpecAsp_{Celerative}P$.

A similar pattern emerges with *to*-datives (here we leave aside the preverbal positions, where the adverbs consistently pattern as in (3) and (5)):

- (6) a. John sent the money (quickly/early) to the tax authorities (quickly/early).
b. John taught French (early/well) to his children (early/well).
c. John gave the money (quickly/slowly) to the robber (quickly/slowly).

⁴ Regarding (5a), the adverb *fast*, although very close in meaning to *quickly*, shows a much more restricted distribution:

- (i) Mikey (*fast) talked (?fast) to Gary (fast).

Like *early*, it seems unable to appear in the high $Asp_{Celerative}$ position, but it also appears unable to occur in the medial position. Also, there are differences in judgements regarding (i), where the judgement reported is my own, and those of some other native speakers of English concerning in particular the string-final position of *fast*, with some speakers rejecting *fast* in this position. *Fast* appears to be a highly idiosyncratic adverb (see Cinque 1999: 103, fn. 73, 212 on non-*ly* adverbs).

⁵ Adding an *about*-PP to (5) gives rise to the following, changing the verb to *speak* as this is more natural with both a *to*-PP and an *about*-PP:

- (i) a. Mikey spoke (slowly) to Gary (slowly) about the problem (slowly).
b. Mikey spoke (??fast) to Gary (*fast) about the problem (?fast).
c. Mikey spoke (well) to Gary (?*well) about the problem (well).

(ia) seems to indicate that either PP can move out of vP or not; (ib) shows the idiosyncratic nature of *fast* once again, while (ic) seems to indicate a possible restriction on movement of the *about*-PP alone.

By contrast, in true ditransitive constructions there is no possibility of an adverb appearing in a medial position:

- (7) a. John sent the tax authorities (*quickly/early) the money (quickly/early).
 b. John taught his children (*early/well) French (early/well).
 c. John gave the robber (*quickly/slowly) the money (quickly/slowly).

We can account for this by assuming the following structure for the lower part of the ν P in dative constructions (below the level of Voice and the ν which introduces the external argument; as (8) shows, I assume that each argument is introduced in its own ν P-shell):

- (8) [YP [AppIP [Appl [ν GoalP Goal [ν Goal [ν P V Theme [(Root)]]]]]]]

The innermost argument merges as the complement of V, which I take to be the combination of the categorizing ν and the Root. As is standard, I take this argument to be the Theme. In the *to*-dative, the Goal is realized as the *to*-PP and ν P raises to SpecAppIP, giving the order $V > Theme > Goal$. ApplP then raises to SpecVoiceP (which is higher than YP, and so not shown in (8)), allowing the entire $V > Theme > Goal$ sequence to precede adverbs like *well* and *early*, as in the adverb-final versions of (6). The target of optional raising of the Goal PP is SpecYP; this option gives rise to the adverb-medial orders of (6).

In ditransitives, ν raises to Appl. This gives rise to the order $V > Goal > Theme$. ApplP raises to SpecVoiceP, yielding the grammatical adverb-final orders of (7). Since there are no adverb-positions inside ApplP (a subcase of the general assumption that the argument-licensing domain, i.e. the lower clausal phase ν P/VoiceP, does not contain any adverb-licensing heads; see [Schifano 2015: fn. 34, 130](#).⁶ In this way we account for the ungrammaticality of the medial adverbs in (7).

This analysis has two interesting consequences. First, it provides novel confirmation for the idea that the $V > Goal > Theme$ sequence in ditransitives is a “ ν P-shell” constituent, in that it can be fronted and adverbs cannot be interpolated. Second, the “dative alternation”, i.e. the alternation of *to*-datives and ditransitives, reduces to the option of head-movement to Appl (ditransitives) or pied-piping of ν P to SpecAppIP.⁷

⁶ Except for a series of very low Asp heads, which, according to [Cinque \(1999: 106\)](#) are $Asp_{Celerative(II)}$, $Asp_{Repetitive(II)}$, $Asp_{Frequentative(II)}$ and $Asp_{SgCompletive(II)}$. It may not be accidental that these are iterations of higher heads in the TMA domain ([Cinque 1999: 103–104](#), citing [Travis 1988](#); [Cinque 2006: fn. 1, 94](#)). I will refer to these categories collectively as “inner aspect.”

⁷ The analysis is in line with [Barss & Lasnik’s \(1986\)](#) observations regarding binding, scope and NPI-licensing facts in ditransitives, summarized in (i), which indicate that the Goal asymmetrically c-commands the Theme:

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Verb-particle constructions resemble datives in that there is the well-known word-order alternation between $V > DP > Prt$ and $V > Prt > DP$, as in (examples from Johnson 1991: 593):

- (9) a. Mikey looked the reference up/looked up the reference.
 b. Betsy threw the bicycle out/threw out the bicycle.
 c. Brent dusted the counter off/dusted off the counter.

No medial adverb position is available with either order, while the “low” adverbs in question can follow the entire string and, as usual, celerative adverbs like *quickly* can precede the verb:^{8,9}

- (i) a. I showed John himself/*himself John in the mirror. (Principle A)
 b. I denied each worker_i his_i paycheck/its_i owner each paycheck_i.
 (bound-variable reading for *his*, but not *its*)
 c. Which worker_i did you deny his_i paycheck? (weak crossover)
 *Which paycheck_i did you deny its_i owner?
 d. I gave no one anything/*anything no one. (NPI licensing).

The evidence for inverse asymmetric c-command relations in the *to*-dative construction is a problem on the present approach, however (see Larson 1988: 338):

- (ii) a. I showed John to himself/*himself to John in the mirror. (Principle A)
 b. I sent every paycheck_i to its_i owner/??his_i paycheck to every worker_i.
 (bound-variable reading for *its*, but not readily for *his*)
 c. Which paycheck_i did you send to its_i owner?
 *Which worker_i did you send his_i paycheck to? (weak crossover)
 d. I gave no presents to any children/*any presents to no children. (NPI licensing).

The Theme argument in the raised *vP* does not c-command the Goal at any point in the derivation proposed in the text. See Collins 2005: 116 for comparable data in relation to the smuggling analysis of passives, which this analysis of datives resembles, and a tentative solution.

8 Adpositional modifiers such as *straight* and *right* can appear before the particle in the $V > DP > Prt$ order, but not in the other one:

- (i) a. Mikey looked the reference straight/right up.
 b. *Mikey looked straight/right up the reference.

Interestingly, a similar contrast is found between *to*-datives and ditransitives:

- (ii) a. John sent the letter straight/right to Mary.
 b. John sent (*straight/right) Mary (*straight/right) the letter.

This supports the idea that there is a parallel between verb-particle constructions and datives, and poses a potential problem for analyses of ditransitives which posit an empty preposition, e.g. Kayne 1984.

9 David Pesetsky (p.c.) points out that more compositional verb-particle combinations tolerate a medial adverb somewhat more readily than (10b,d,f):

- (10) a. John (quickly) looked (*quickly) up (*quickly/*well/*early) the reference (quickly/well/early).
 b. John (quickly) looked the reference (*quickly/*well/*early) up (quickly/well/early).
 c. Betsy (quickly) threw (*quickly/*early) out (*quickly/*early) the bicycle (quickly/early).
 d. Betsy (quickly) threw the bicycle (*quickly/*early) out (quickly/early).
 e. Brent (quickly) dusted (*quickly/*early) off (*quickly/*early) the counter (quickly/early).
 f. Brent (quickly) dusted the counter (*quickly/*early) off (quickly/early).

We can adapt the analysis of dative constructions given above, so that the structure of verb-particle constructions is as follows:

- (11) [YP [AppIP [Appl Prt] [_{vP} [v [_{VP} Theme V]]]]]

Here, if *v* moves to Appl, the order $V > Prt > DP$ ensues, while if *vP* moves to SpecAppIP the order $V > DP > Prt$ is the result. Movement of AppIP to SpecVoiceP creates the adverb-final orders, as elsewhere. There is no position inside AppIP for an adverb, hence the ungrammaticality of medial adverbs seen in (10).

Finally, we should consider the well-known contrast in (12), which Johnson (1991: 613) accounts for in terms of object shift and the assumption that weak pronouns such as *it* must be “as close to the verb as possible”:

- (12) a. John looked it up.
 b. *John looked up it.

We can simply adopt Johnson’s assumption that the pronoun has to be as close to the verb as possible, i.e. string-adjacent to it, without assuming object shift. Thus, where the Theme in (12) is the weak pronoun *it*, *v*-movement stranding it in the remnant *vP* is not allowed, so the only option is *vP*-fronting to SpecAppIP, giving the order $V > pronoun > Prt$.

Further evidence for low *vP*-movement comes from Cinque’s (1999: 28–30) discussion of circumstantial adverbs in examples such as the following:

- (i) ?John called the elevator quickly up/pushed the button quickly down, etc.

It is possible that the particle is somewhat more “prepositional” in this case, although then the $V > DP > PP$ order needs to be explained. Adverbs of this class are fully grammatical between the verb and what is unambiguously a PP:

- (ii) John ran quickly up the hill.

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- (13) a. He attended classes every day of the week at a different university.
b. He attended classes in each university on a different day of the week.

Adverbials of this kind vary in order, can be in one another's scope, are typically PPs, cannot appear to the left of VP (unless they are topicalized) and are predicated of the event. Cinque (1999: 30) suggests that such adverbials are merged in ν P-shells, as shown in (14), and that leftward movement of the "main" ν P can give rise to the various surface orders:

- (14) [ν P [every day] ν [ν P [at the university] ν [ν P he attended classes]]].

I conclude from the above discussion that in English, ν P moves to SpecVoiceP, which, aside from the "inner-aspect" heads, is the lowest position in the TMA system. There is no verb-movement to a higher position in the TMA hierarchy; this is the content of Pollock's original observation regarding the difference between English and French. This is not to imply that there are no TMA heads in English; the presence of both TMA adverbs and auxiliaries indicates that there are. But these heads do not have the capacity to attract finite lexical verbs.

3 Mainland Scandinavian

Aside from English, other languages lacking V-movement into the T field include Mainland Scandinavian (MSc), and various creoles, notably Haitian. The Mainland Scandinavian languages are all verb-second, and so to control for the effects of verb-movement to second position we must look at the position of the finite verb in subordinate clauses where V2 is blocked. Here the Pollockian diagnostics regarding the position of the finite verb in relation to negation and "low" adverbs like *often* and floated quantifiers clearly show that the verb does not raise into the T field in subordinate clauses, as was established by Holmberg & Platzack (1995) and Vikner (1995). The Danish examples in (15), from (Vikner 1995: 144 and p.c.; glosses and translations mine), illustrate:

- (15) a. Jeg tror at Johan ikke købte bogen.
I believe that John not bought book-the
'I believe that John didn't buy the book.'
b. Jeg tror at Johan ofte købte boger.
I believe that John often bought books.
'I believe that John often bought books.'
c. Jeg tror at børnene alle købte boger.
I believe that children- the all bought books.
'I believe that John often bought books.'

Both Holmberg & Platzack (1995: 75) and Vikner (1995: 41ff.) assume that the finite verb transits through T in V2 clauses in MSc. But, as pointed out by Roberts (2010: 169), building on earlier work by Zwart (1997), Biberauer (2003), Biberauer & Roberts (2005) and Richards & Biberauer (2005), if we do not adopt a rigid Head Movement Constraint there is no reason to assume that the verb does not move directly from *v* (or Voice, if this is the head of the lower clausal phase) to the left periphery. In fact, there is little evidence from the verb/auxiliary system for Tense, Mood or Aspect heads at all: modals are raising verbs (this is argued for Danish in Thráinsson & Vikner 1995: 63), there is no progressive periphrasis and the equivalent of *have* in the perfect periphrasis behaves like a main verb, as the following Danish example (from Vikner 1995: 145, gloss and translation are mine) shows:

- (16) Jeg spurgte hvorfor Peter ikke havde læst den.
 I asked why Peter not had read it.
 ‘I asked why Peter hadn’t read it.’

On the other hand, see Cinque (1999: 34–36) for evidence that Norwegian has a full range of aspectual adverbials. Roberts (2010: 175–183) gives some evidence, from earlier work by Wiklund et al. (2007) and Bentzen (2007, 2009), that Norwegian has low *v*P-movement of a kind somewhat similar to English.¹⁰

4 Creoles

Haitian Creole (HC) is a French-lexifier creole. Unlike French, though, finite lexical verbs in HC do not raise over the clausal negator *pa*, as (17), from Aboh & DeGraff 2017: 445 shows:

- (17) a. Jinyò pa pale Kreyòl.
 Jinyò NEG speak Creole
 ‘Jinyò doesn’t speak Creole.’
 b. *Jinyò pale pa Kreyòl.
 Jinyò speak NEG Creole

(See the references given in Aboh & DeGraff 2017, in particular DeGraff 1994, where the Pollockian diagnostics are systematically applied to HC.) Aboh & De-

¹⁰ This proposal has implications for adverb-placement in dative and verb-particle constructions in MSc embedded clauses. Pursuing this here would take us too far afield, but the predictions can be readily extrapolated from the discussion of English above.

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Graff also show that *pa* precedes the negative adverb *janm* “never,” and both of these negative elements precede the verb:

- (18) Jinyò pa janm pale kreyòl.
Jinyò NEG never speak Creole
‘Jinyò never speaks Creole.’

However, *pa* seems to occupy quite a high structural position¹¹ in that it precedes all TMA elements, which in turn precede the verb (see also DeGraff 1993: 63):

- (19) a. Jan pa t- av- ale nan mache.
John NEG ANT IRR go in market
‘John would not have gone to the market.’
b. *Jan te- pa (av-) ale nan mache.
John ANT NEG IRR go in market

DeGraff (1993) suggests that HC *pa* heads a high NegP, above the entire TMA field. However, it is clear from the fact that the verb does not structurally interact with the TMA field, and the fact that the verb must follow “already”, that the verb is in a low position:

11 In MSc, aspectual and passive auxiliaries always follow negation in non-V2 environments (thanks to Sten Vikner for help with the Danish data):

- (i) Jeg tror ad Peter ikke er blevet arresteret.
I think that Peter not is been arrested
‘I don’t think that Peter has been arrested.’

This suggests that here too negation precedes some of the TMA field, but not the position to which the finite verb moves in French and in non-V2 environments in Icelandic; cf. the contrast between (i) and Icelandic examples such as the following (translation added):

- (ii) Það var Hrafinkelssaga sem einhver hafði ekki lesið.
It was Hrafinkel’s saga that somebody had not read
‘It was Hrafinkel’s saga that somebody had not read.’ (Thráinsson 2007: 63)

(On the need for an indefinite subject in the embedded clause in order to show finite V-movement to T, see Thráinsson’s discussion of this example). In English, too, non-constituent negation precedes all aspectual and passive auxiliaries except for the highest one, which undergoes *havelbe*-raising:

- (iii) John must not have been being properly attended to.

This indicates that negation in English, MSc and HC must occupy a position in between finite T and the remainder of the TMA field, i.e. somewhat higher than has usually been thought since Pollock 1989.

- (20) a. Bouki deja pase rad yo.
 B. already iron cloth the
 ‘Bouki has already ironed their clothes.’
 b. *Bouki pase deja rad yo.
 B. iron already cloth the
 (Roberts 1999: 304, citing DeGraff (1994))

Cinque (1999: 61–63) provides evidence that the TMA markers are consistent with the order of functional heads he independently proposes for the TMA field, illustrating with examples such as the following (Cinque 1999: 63, citing Leblanc 1989):

- (21) Jan te toujours te ap rakonte yon istwa.
 J. PAST always ANT PROG tell a story
 ‘Jan had always been telling a story.’

It seems clear, then, that HC lacks lexical verb movement (out of the lower clausal phase), with TMA particles interacting in complex ways and in a fairly rigid sequence expressing TMA semantics.

Concerning the expression of tense in HC, Aboh & DeGraff (2017: 448) say:

“[T]he absence of V-to-T movement in HC means that the verb itself does not bear temporal specifications. Instead, these specifications are deduced from the combination of TMA markers and the lexical aspect of the verb. Put differently, temporal specification is computed based on TMA markers and *Aktionsart*. HC, like many Creoles and Niger-Congo languages...displays an asymmetry between eventive/dynamic verbs and stative verbs: when they occur without any TMA marker, eventive/dynamic verbs are interpreted as perfective, while stative verbs are interpreted as present.”

The following examples illustrate this (the French translation of (22a) is omitted here; emphasis in the translations in original):

- (22) a. Prèske pèsonn pa vote pou Manigat.
 almost nobody NEG vote for Manigat
 ‘Almost nobody voted for Manigat.’
 b. Mwen pa kwè pèsonn ap vini.
 1SG NEG believe nobody FUT come
 ‘I don’t believe that anybody will come.’

Furthermore, “a bare noun phrase with non-individuated generic reference allows a habitual reading while a determined noun phrase triggers a perfective reading”

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(Aboh & DeGraff 2017: 448–449):

- (23) a. Jinyò vann chat.
Jinyò sell cat
'Jinyò **sells** cats.'
- b. Jinyò vann chat la.
Jinyò sell cat DET
'Jinyò **sold** the cat.'

So in HC it seems fairly clear that lexical verbs remain in a low position, and don't inflect at all.¹² Another French-lexifier creole, Mauritian, seems to behave like HC, while Réunionnais has what appears to be V-to-T movement and Mesolec-

¹² There is some evidence that HC has low ν P-movement of the kind described for English above (thanks to Michel DeGraff for examples and discussion):

- (i) a. Jan (byen) chante (*byen) chante a (byen).
John (well) sang (well) song the (well)
'John sang the song well.'
- b. Jan (byen) pale (byen) ak Mari (byen).
John (well) spoke (well) with Mary (well).
'John spoke to Mary well.'

(ia) shows that, as in English, "well" cannot intervene between the verb and a nominal direct object, but that it can follow the whole ν P, also as in English. This is the basic motivation for low ν P-fronting. On the other hand, "well" can also precede the verb, unlike in English. It seems, then, that low ν P-fronting may be optional in HC.

The equivalents of ditransitives involve serial verbs in HC:

- (ii) Jan (byen) anseye franse (*?byen) bay timoun yo (byen).
John (well) teach French (well) give children the (well)
'John taught French to his children well.'

If we place the serial verb *bay* in Appl, the word order here is consistent with our analysis of English *to*-datives above: the lower ν P, *anseye franse*, raises to SpecApplP and ApplP can raise to SpecVoiceP, giving adverb-final order. There is no adverb-merge site inside ApplP and so the medial occurrence of *byen* is impossible. As in (i), the possibility of preverbal *byen* implies that Appl-raising to SpecVoiceP is optional. The same conclusion is suggested by examples with a benefactive PP:

- (iii) Jan (byen) ekri lèt la (byen) pou timoun yo (byen)
John (well) write letter the (well) for children the (well)
'John wrote the letter well for the children.'

Here the possibility of the medial adverb reflects optional raising of the PP *pou timoun yo* out of ν P before ν P-fronting. The contrast with (ii) shows that this is impossible for *bay timoun yo*, which follows if *bay* is in Appl, since then this string is not a constituent.

tal Louisiana Creole shows optionality related to whether the verb has a “short” or “long” form; see the data and references in [Roberts \(1999: 306\)](#).

In Cape Verdean Creole (CVC), a Portuguese-lexifier creole studied in depth by [Baptista \(2002\)](#), the finite verb follows the negator *ka*, which, like its HC counterpart, precedes the TMA markers:

- (24) a. Anos nu ka fronta-l.
 1PL 1PL.SCL NEG attack-him
 ‘We did not attack him.’ ([Baptista 2002:184](#); gloss slightly modified)
- b. Azagua ka sta ta daba.
 Rainy-period NEG TMA TMA give+ANT
 ‘The rainy period was not yielding much.’
- c. *Azagua sta ta ka daba.
 Rainy-period TMA TMA NEG give+ANT
 ([Baptista 2002: 117](#))

However, the verb must precede “well”, as in Spanish and Portuguese (where in general lexical verbs, although they move into the TMA system, do not move as high as in French; see [Schifano 2015](#)):¹³

- (25) a. João prende ben se lison.
 J. learn well his lesson
 ‘J. learnt his lesson well.’
- b. *João ben prende se lison.
 J. well learn his lesson
 ([Baptista 2002: 186](#))

This suggests that there is some verb-movement into the TMA field, which is confirmed by the ability of the verb to precede floated quantifiers and to precede the TMA marker *ba*:

- (26) a. Es txiga tudu na mismu tenpu.
 They arrive all at same time
 ‘They all arrive at the same time.’ ([Baptista 2002: fn. 18, 194](#))

¹³ “Well” can follow the verb and the object:

- (i) João prende se lison ben.
 J. learn his lesson well
 ‘J. learnt his lesson well.’

According to [Baptista \(2002: 186\)](#), there is dialect or register version regarding this possibility. It appears that these dialects/registers allowing (i) have English-like low *v*P-fronting to SpecVoiceP.

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- b. João ta staba ta kumeba.
J. TMA be+ANT TMA eat+ANT
'J. would have been eating.'

(Baptista 2002: 199)

Baptista suggests that the TMA suffix *-ba* triggers V-movement into the TMA field. We could treat this as a case of a T_{ANT} head bearing an uninterpretable feature and a V-feature, thereby attracting the verb (which must bear an interpretable T-feature). Thus CVC appears to differ minimally from HC (and Mauritian Creole) in having a very restricted case of verb-movement, in the sense that a low Tense head attracts the verb.

5 Conclusion

In this paper we have seen several examples of systems where lexical verbs do not raise into the TMA system (which appears to be the appropriate “cartographic reformulation” of Pollock’s original observations regarding the differences between English and French): English, MSc embedded clauses and HC. We also briefly saw that CVC allows just the particle *-ba* to attract the verb (there may be a loose parallel between this and the fact that English allows just two auxiliaries, *have* and *be*, to raise). Such systems do not lack TMA positions, as HC abundantly shows; what they lack is the features capable of attracting V (putting it rather mechanically, these could be uninterpretable V-features which probe V).

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