Evidence for an aspectual functional head in French and Spanish
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1. Introduction*

The examples in (1) are wellknown. They come from the famous article in which Jean-Yves Pollock proposed that what was till then known as the functional head I (Inflection) should be split up into two distinct heads. As shown in (1a,b) the French finite verb precedes both the temporal adverb *souvent* as well as the negative particle *pas*. Infinitival verbs in French may also precede *souvent* (1c), but they must necessarily follow *pas* (1d).

(1)   a   Jean embrasse *souvent* Marie   (Pollock, 1989:367)
                   Jean kisses *often* Marie
                   'Jean often kisses Marie'

        b   Jean (n') aime *pas* Marie   (*ibid*.)
                   Jean (n') likes *not* Marie
                   'Jean doesn't like Marie'

        c   Paraître *souvent* triste pendant son voyage de noce, c'est rare
                   To look *often* sad ….   (*ibid*.378)
                   'To often look sad during one's honeymoon is rare'

        d   *Ne paraître *pas* triste pendant son voyage de noce, c'est normal
                    (Ne) to look *not* sad ….   (*ibid*.379)
                   'Not to look sad during one's honeymoon is normal'

These facts show that French has two functional heads, one preceding *pas* and one occurring between adverbs like *souvent* and *pas*. For the purpose of the present article I will call the former F1 and the latter F2. In (2) I present a schematic representation:

(2)   a   F1   pas   F2   Adv [$_{VP}$ ….V ….]

F2 is targeted by infinitivals and F2 by finite verbs, which as required by the Head Movement Constraint (Travis, 1984), have to pass through F2. Pollock calls the movement of the verb to F2 *Short Verb Movement*.
   According to Pollock F2 should be equated to AGR (subject agreement) and F1 to T (Tense). But, given the fact that tense morphemes are closer to the verb than agreement morphemes, Baker's Mirror Principle (Baker, 1985) predicts that these denominations should be inverted. This is precisely the position taken by Belletti (1990), for whom F1 is AGR and F2 T.
   In his *Minimalist Program*, Chomsky (1995), questions the idea that AGR has the status of a functional head. Verbal agreement morphology plays no role at the conceptual-intensional interface, and, according to minimalist principles, should not be present there. Moreover the checking of subject agreement features can simply take place in the T head to which the verb moves (overtly or covertly). If Chomsky is

right, neither F1 nor F2 is AGR. This does not mean that one of the two heads can be dispensed with: if that were the case the facts in (1) could not be accounted for.

It is sometimes assumed that (Romance) clauses contain an aspectual head (cf., among others, Alexiadou, 1997, Costa and Galves, 2000). This opens up the possibility that the split of I(nflection) discovered by Pollock, rather than being a split between Tense and AGR, is a split between Tense and ASP(ect). In this article I present comparative data from French and Spanish that support this idea. In particular, I will show that the facts under consideration indicate that F1 is Tense (as in Pollock's original proposal) and F2 is Aspect. This entails that there is indeed no need to assume that there is a functional head AGR.

Throughout this article, I will make crucial use Cinque's insightful hierarchy of adverbials (Cinque, 1999), which I will briefly discuss at the beginning of section 2. I will then consider the positions of French and Spanish finite verbs with respect to this hierarchy. As will be shown, contrary to what happens in French, the position of the Spanish finite verb is not fixed within a certain range of the hierarchy. I will propose that this variability follows from the fact that Spanish manifests a certain liberty in the order in which adverbials and the F-head targeted by the finite verb are merged in the derivation. In section 3. I will consider infinitivals in French. It will be shown that these manifest (almost) the same variability with respect to adverbials as Spanish finite verbs. This will lead me to claim that both types of verbs move to - variable - F2. Section 4. will be dedicated to the movement of active participles in complex tenses. I will argue that these participles target F2 in both languages. Such participles typically encode (perfective) aspect and the fact that they move to F2, thus, indicates that F2 is in fact an aspectual head, a point I will elaborate on in section 5. In this section I will also argue that Pollock's idea that F1 is T(ense) is correct .

2. Finite V-Movement in French and Spanish

Since at least Emonds, 1978, adverbials have proven to be a useful diagnostic tool for establishing the target positions of V-movements. Cinque (1999) greatly refined this tool by examining the relative order of adverbials in a large number of languages and showing that this order is universally constant. For the present work I am concerned with French and Spanish adverbs that occur in the middlefield, that is, between the preverbal subject and the direct object. Among these are those in (3), which occur in the indicated order.

(3) From Cinque's Universal Adverb Hierarchy:
     modal < frequency < already < always < immediately<almost < manner

The French and Spanish versions of the adverbials in (3) are those that I will use to detect a number of properties of V-movement in the languages under consideration. For the purpose of exposition I will call those adverbials which occur between modal adverbs and manner adverbs *middle adverbs*. Following standard practice, I assume that adverbs, once merged, do not move (except for obvious cases such as wh-movement etc., which are irrelevant here). Furthermore, I follow Cinque's proposal that (non-affixal) adverbs are (AdvP) specifiers of empty functional heads.

Let us now consider the position of French and Spanish finite verbs with respect to adverbs in (3). We start with French.

As shown in (4) the verb in French necessarily precedes manner adverbs (4a,b), middle adverbs (4c-f) as well as modal adverbs (4g,h).

(4)　　a　　*Paul *lourdement* charge la voiture　　　　　(Schlyter,1974:85)
　　　　　　　Paul *heavily* loads the car
　　　　　　　'Paul loads the car heavily'
　　　　b　　Paul charge *lourdement* la voiture

　　　　c　　*Il *fréquemment* lit les livres de Sartre　　　　　(Sieben,1997:19)
　　　　　　　frequently reads the books of Sartre
　　　　　　　'He frequently reads Sartre's books'
　　　　d　　Il lit *fréquemment* les livres de Sartre

　　　　e　　*Il *régulièrement* racontera ces histoires à Jean　　　　　(*ibid*.)
　　　　　　　He *regularly* will+tell these stories to Jean
　　　　　　　'He will regularly tell theses stories to Jean'
　　　　f　　Il racontera *régulièrement* ces histoires à Jean

　　　　g　　*Jean *probablement* donne les livres à Paul　　　　　(*ibid*.)
　　　　　　　Jean *probably* gives the books to Paul
　　　　h　　Jean donne *probablement* les livres à Paul

These facts indicate that the target of French finite V-movement – F1 – necessarily merges later than all adverbials under consideration.

The situation in Spanish is more complex. With respect to manner adverbs the facts are the same as in French, that is, the finite verb has to precede them (in (5) *lógicamente* should be interpreted as a manner adverb, i.e. as 'in a logical way'):

(5)　　a　　*El chico *lógicamente* contestó la pregunta　　　(Ojea López,1994:400)
　　　　　　　The boy *logically* answered the question
　　　　　　　'The boy answered the question logically'
　　　　b　　El chico contestó *lógicamente* la pregunta

However, with respect to modal adverbs, Spanish is clearly different form French, in that it manifest a very strong preference for the verb to follow them:

(6)　　a　　Juan *probablemente* conoce a María　(Rodriguez Ramalle, 1998:121)
　　　　　　　(You) *probably* know María
　　　　b　　?*Juan conoces *probablemente* a María

The combination of middle adverbs and finite verb in Spanish will be shown to be of special interest here. In this case the verb is free, in the sense that it can either precede or follow the adverb (7). Thus, with middle adverbs, Spanish permits both an 'English order' (see the glosses) and a 'French order'.

(7)　　a　　Juan *inmediatamente* cerró la puerta
　　　　　　　Juan *immediately* closed the door

b Juan cerró *inmediatamente* la puerta

c Ese alumno *siempre* asiste a mis clases   (Ojea López, 1994:409)
   This pupil *always* assist to my classes
   'This pupil always follows my classes'
d Ese alumno asiste *siempre* a mis clases

e Ese alumno *ya* asiste a mis clases   (*ibid.*)
   This pupil *already* assists to my classes
f Ese alumno asiste *ya* a mis clases

g Juan *frecuentemente* besa a María (Rodríguez Ramalle, 1998:121)
   Juan frequently kisses María
h Juan besa *frecuentemente* a María

Notice that we cannot account for these facts by assuming that the movement of the verb into the functional domain is optional. If this were the case we would expect it to be able to follow manner adverbs, contrary to fact (cf. 5a). Moreover, though optional movement would explain cases in which the verb either follows or precedes a sequence of more than one middle adverb (8a,b), it provides no explanation for the fact that the verb can also occur between them, as in (8c).

(8) a Juan *siempre inmediatamente* abre la puerta cuando llego
     Juan *always immediately* opens the door when (I) come
   b Juan abre *siempre inmediatamente* la puerta cuando llego
   c Juan *siempre* abre *inmediatamente* la puerta cuando llego

Let us now see how we can we can account for the Spanish facts. One possibility is that suggested by Cinque (1999, chapter 2), who studies similar facts of variability in Italian complex tenses. According to Cinque, this variability indicates that the verbal forms moving into the functional domain can stop in any of the adverbial heads in a given range of the hierarchy. For Spanish finite verbs this would then be the range comprised by middle adverbs. It should be mentioned here that Cinque assumes that the adverbial projections are always present in the sentence, even when their specifier is not realized lexically. This entails that the order *subject – finite verb – manner adverb* in Spanish would arise as a consequence of the verb moving to some (middle) adverbial head without an overt adverbial specifier.

 The *Minimalist Program* of Chomsky (1995) requires that overt V-movement be triggered by the necessity to check a strong verbal feature of a functional head. An approach along the lines of Cinque is incompatible with this requirement (unless one stipulates that the strong V-feature is assigned arbitrarily to any of the middle adverbial heads, a stipulation that seems quite unmotivated). Another problem with Cinque's vision is his assumption of the presence of covert adverbial projections. The heavy computational load this entails clearly contradicts minimalist requirements.[1]

 Notice that Cinque's hierarchy in itself does not imply the presence of covert adverbial heads. The hierarchy can simply be seen as an universal restriction on the order in which adverbial heads (and their specifiers) are merged, when present in the

numeration. Presumably this restriction ultimately follows from semantic requirements.

One idea that is more in line with minimalist principles is that one and the same (non-adverbial) head with a strong V feature is responsible for the movement of the Spanish finite verb. Here I will pursue this idea and for the moment I will call the head under consideration Fx. From the facts discussed above it follows that Spanish must permit a certain freedom as to the order of merging Fx and the middle adverbs present in the numeration, though Fx must merge after manner and before modal adverbs (if present). We thus have the following redundancy rule for Spanish:
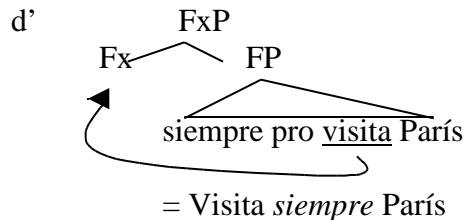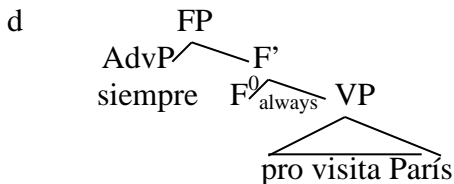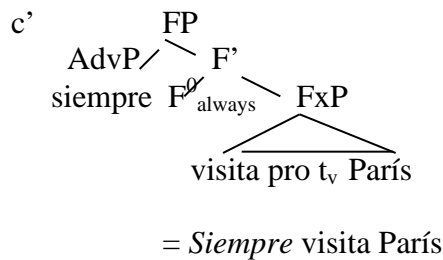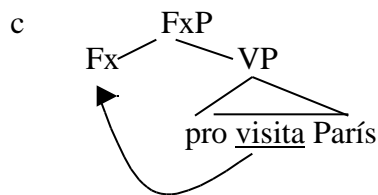
(9)   Fx merges *after* manner adverbs, *before/after* middle adverbs, *before* modal

For concreteness I discuss an example of (the relevant parts) of the derivations of the pair of examples with a middle adverb in (10).

(10)   a   *Siempre* visita París
                 (he) always visits Paris
         b   Visita *siempre* París

We start with the VP in (11a) and the elements that are still in the numeration in (11b). (9) permits us to merge Fx immediately with the VP, projecting FxP. The verb moves to Fx (11c). Subsequently we merge the adverbial head and its specifier (11c') and obtain (10a). The alternative, also permitted by (9), is to start with the mergers of the adverbial head and its specifier (11d), and merge Fx afterwards, then moving the verb to Fx (11d') (The HMC requires the verb to pass through the adverbial head, I abstract from this in (11d)). In this case the result is (10b).

(11)   a   [$_{VP}$ pro visita París]
         b F^0_{always}, siempre, Fx

c   FxP
      Fx   VP
          pro visita París
   (verb moves from V to Fx)

c'   FP
    AdvP   F'
   siempre F^0_{always} FxP
              visita pro t_v París

= *Siempre* visita París

d   FP
    AdvP   F'
   siempre F^0_{always} VP
                pro visita París

d'   FxP
      Fx   FP
             siempre pro visita París
   (verb moves to Fx)

= Visita *siempre* París

In the next section I will argue that Spanish 'Fx' should be equated to F2, that is, to the target position of *Short Verb Movement*.

3. Infinitivals

According to Pollock (1989), the short verb movement of French infinitivals is optional. This indeed accounts for fact such as those presented in (12).

(12)   a   (Il a prétendu) *soigneusement* ranger les chambres
              (He has claimed) *carefully* to+clean the rooms
              '(He has claimed) to clean the rooms carefully'
    b   (Il a prétendu) ranger *soigneusement* les chambres

    c   *Presque* oublier son nom, ça n'arrive pas fréquemment (Pollock,1989:
              Almost to+forget his name, that (ne) happens frequently   377)
              'To almost forget one's name, that doesn't happen frequently'
    d   Oublier *presque* son nom, ça n'arrive pas fréquemment

    e   *Souvent* paraître triste pendant son voyage de noces, c'est rare   (*ibid*)
              Often   to+look sad during his honeymoon, that's rare
              'To often look sad during one's honeymoon is rare'
    f   Paraître *souvent* triste pendant son voyage de noces, c'est rare

An alternative explanation for these data is that we have to do with variability in merging order, comparable to that of Spanish finite verbs. In fact, as shown in (13), cases with more adverbials permit the verb to occur between those.[2] This indicates that indeed variability is at stake.

(13)   a   (Il a prétendu) *immédiatement* ranger *soigneusement* les chambres
              '(He has claimed) to clean the rooms carefully immediately'
    b   *Souvent* oublier *presque* son nom, c'est desagréable
              'To often almost loose one's bag is not desirable'

We know that the infinitival verb in French cannot move higher than *pas* (1d). As shown in (16), modal adverbs necessarily precede *pas*, so that the highest position of the French infinitival seems to be the same as that of the Spanish finite verb (which doesn't cross modal adverbs).

(16)   a   Jean ne mange *probablement* pas de viande
              Jean NE eats *probably* PAS of the meat
              'Jean probably doesn't eat meat'
    b   *Jean ne mange pas *probablement* de viande

I conclude that French infinitivals indeed manifests variability in merging order that is comparable to that of Spanish finite verbs. It should be noticed, however, that the range of this variability is not exactly the same: the Spanish finite verb has to move over manner adverbs (5), but French infinitivals may optionally remain behind them (12a). Interestingly, in older stages of Spanish the order *manner adverb – finite verb* did occur. This is illustrated in (14).

(14)   a   ....lo que tú *tan abiertamente* conoces...   (Rojas,1499:107)

…what you *so clearly* know…
b ….los golpes que todavía *alternativamente* sonaban
… the blows that still *alternatively* sounded   (Cervantes,1605:111)

As shown in (15), at least at the time of Cervantes, the verb could also move higher crossing manner adverbs (15a) and middle adverbs (15b):

(15)   a   Don Quijote ,(…), arrimó *reciamente* las espuelas a…   (*ibid*.:418)
            Don Quijote dug *strongly* the spurs into…
            'Don Quijote dug the spurs strongly into…'
       b   …porque veía que la de Torralba venía *ya* muy cerca   (*ibid*.:113)
            …because (he) saw that Torralba came *already* very near
            '…because he saw that Torralba was already very near'

Though the properties of the target of Spanish finite verb movement have thus slightly diverged from those of the target of French infinitivals in the course history, I think that the variability of French infinitivals and that of Spanish finite verbs demonstrate enough parallelism to hypothesize that their target has the same status. In other words, I suggest that F2 (the target of *Short Verb Movement,* which is, by definitition, the target of French infinitivals) and Fx of the preceding section (the target of Spanish finite verbs) are the same. Thus, if I am correct, both French and Spanish have a 'variable' functional head with a strong verbal feature, which occurs lower than French F1 (the target position of the French finite verb). The languages differ parametrically in that the variability in Spanish is somewhat more restricted than that in French. By way of summary I repeat the redundancy rule (9) for Spanish in (16a), adding that for French in (16b).

(16)   a   *Spanish*: F2 merges *after* manner adverbs, *before/after* middle
            adverbs, *before* modal adverbs
       b   *French* : F2 merges *before*/*after* manner adverbs, *before/after* middle
            adverbs, *before* 'pas'

In the next section I will show that F2 is also targeted by the past participle of complex tenses in both French and Spanish. Before that, I will dedicate some attention to Spanish infinitivals.
   Spanish speakers clearly prefer infinitival verbs to precede adverbials. Cases in which in which such verbs follows manner adverbials (17) are considered ungrammatical, and cases in which they follow middle adverbs (18) are qualified as 'questionable', 'impossible' or 'old-fashioned'.

(17)   a   *Cuidadosamente preparar la cena es lo que todo el mundo debe hacer
            Carefully to+prepare the meal is it that everyone must do
       b   Preparar *cuidadosamente* la cena is what everyone must do
            'To prepare the meal carefully is what everyone must do'

(18)   a   ??*Casi* olvidar su propio nombre, no sucede a menudo (Lois,1989,44)

Almost to+forget his own name, not happens often

b   Olvidar *casi* su propio nombre, no sucede a menudo
             'To almost forget your own name, doesn't happen often'

c   ??*Siempre* salir a las ocho es una buena costumbre
             Always to+go out at eight is a good custom

d   Salir *siempre* a las ocho es una buena costumbre
             'To always go out at eight is a good custom'

Leaving out of consideration the question marks in (18) (for which I have no explanation), what appears to be the case is that Spanish infinitivals move to the same position as French finite verbs, F1. I will assume that this is so.

4. Verb movement in complex tenses

Let us now consider the movement of the past participle in complex tenses, starting with French. In this language the participle shows the same distribution as infinitivals. Thus it can either precede or follow manner adverbs (19) and middle adverbs (20), but it cannot precede *pas* (21). As expected, it also cannot precede modal adverbs (22).

(19)   a   Paul a *lourdement* chargé la voiture hier soir   (Schlyter,1974:85)
             Paul has *heavily* loaded the car last night
             'Paul has loaded the car heavily last night'
      b   Paul a chargé *lourdement* la voiture hier soir

(20)   a   Jean a *immédiatement* réagi
             Jean has *immediately* reacted
      b   Jean a réagi *immédiatement*

      c   Jean a *fréquemment* lu les livres de Sartre   (Sieben,1997:19)
             Jean has *frequently* read the books of Sartre
      d   Jean a lu *fréquemment* les livres de Sartre

(21)   a   Paul n'a *pas* mangé
             Paul NE has PAS eaten
             'Paul hasn't eaten'
      b   *Paul n'a mangé *pas*

(22)   a   Paul a *probablement* donné les livres à Jean   (Schlyter,1974:85)
             'Paul has *probably* given the books to Jean'
      b   *Paul a donné *probablement* les livres à Jean

Moreover, like infinitivals, the participle can appear between a manner adverb and a middle adverb (23a) or between two middle adverbs (23b).

(23)   a   Marie a *souvent* rangé *soigneusement* sa chambre

Marie has *often* cleaned *carefully* her room

b Ferry avait *toujours* ouvert *immédiatement* la porte quand Brigitte est
Ferry had *always* opened *immediately* the door when Brigitte has
arrivée
come

According to Pollock (1989), French has a *Past Participle Phrase* headed by a specific participial functional projection to which the participle optionally moves. However, given the parallelism between infinitivals and past participles I think there is every reason to assume that they target the same position, that is, F2.

What about the auxiliary? In Pollocks article it is assumed to select the Past Participle Phrase, which, if I am correct, is in fact F2P. This means it is merged with F2P, and moves from there on to F1. The facts in Spanish clearly suggest that the auxiliary does indeed merge with F2P. Let us now consider these.

Recall that according to the redundancy rule for Spanish (16a), F2 must merge after manner and before modal adverbs, but could merge either before or after any middle adverb. As shown in (24-26) the past participle surfaces in these merging positions, which is what we expect if it moves to F2. Moreover, the finite auxiliary immediately precedes the participle (for marked exceptions, see below). This is also expected, at least if the auxiliary selects F2P and if, like other finite verbs, it is not attracted by a higher head.

(24) a *El chico ha *lógicamente* contestado la pregunta
The boy has *logically* (= in a logical way) answered the question
b *El chico *lógicamente* ha contestado la pregunta
c El chico ha contestado *lógicamente* la pregunta
'The boy has answered the question logically'

(25) a Juan *inmediatamente* ha cerrado la puerta
Juan *immediately* has closed the door
'Juan has immediately closed the door'
b Juan ha cerrado *immediatemente* la puerta

c Ese alumno *siempre* ha asistido a mis clases
This pupil *always* has assisted to my classes
'This pupil has always attended my classes'
d Ese alumno ha asistido *siempre* a mis clases

e Ese alumno *ya* habrá terminado sus ejercicios
This pupil *already* will+have finished his exercises
'This pupil will already have finished his exercises'
f Ese alumno habrá terminado *ya* sus ejercicios

g Pilar *frecuentemente* ha trabajado en casa este mes
Pilar *frequently* has worked at home this month
'Pilar has frequently worked at home this month'
h Pilar ha trabajado *frecuentemente* en casa este mes

(26) a *Probablemente* has leído las novelas de Vázquez Montalbán

(You) *probably* have read the novels of V.M.
b	*?Has leído *probablemente* las novelas de Vázquez Montalbán

It should be mentioned, incidentally, that some Spanish speakers allow the sequence *finite auxiliary – past participle* to be split up, especially when the auxiliary is not monosyllabic, as in (27b) (see Suñer, 1987, for details). These speakers seem to allow for a higher head with a verbal feature that can, perhaps optionally, be strong and hence attract the auxiliary. I leave the question whether this higher head can be equated to the strong head that attracts the finite verb in French (F1) open to further investigation.

(27)	a	*?Los niños han *ya* comido la cena
		The children have *already* eaten the meal
	b	?Hasta Juan, que había *siempre* asistido a mis clases... (Ojea López,
		Even Juan, who had *always* attended my classes ... 1994:409)

The splitting of the auxiliary and the participle becomes acceptable when the former is infinitival, something which is predicted by the fact that infinitivals move higher than finite forms (to F1).

(28)	a	Haber *siempre* vivido en esta casa...
		'To have always lived in this house....
	b	Haberse *inmediatamente* quejado a la dirección ... (Lois,1989:55)
		'To have immediately complained to the management...'

I conclude that there are good reasons to assume that the target of past participle movement in both French and Spanish is F2 and that the auxiliary selects the projection of this head.

5. On the status of F1 and F2.

Having discussed a number of cases of both long and short movement in French and Spanish, I will now go on to consider what the status of their targets can be. In (29) I present a summary of the results obtained above ('x' indicates the target of overt V-movement).

(29)

	F1	F2
French		
finite forms	x	
infinitivals		x
past participles		x
Spanish		
finite forms		x
infinitivals	x	
past participles		x

Let us start by considering F1, which is overtly targeted by finite verbs in French and by infinitivals in Spanish. Finite and infinitival forms are usually distinguished by, respectively, a positive and a negative specification for the feature [tense]. Within the

functional domain the tense feature is assumed to be present in the T(ense) head. The facts in (29) thus provide good reasons to equate F1 to T. The difference between the two languages follows if we assume that in French the [+tense] specification implies the presence of a strong verbal feature (triggering overt verb movement) and the [-tense] specification the presence of a weak verbal feature (triggering covert movement) and that in Spanish this is the other way round. I summarize this in (28).

(28)   *French*: T [+tense] → strong V-feature
      T [-tense] → weak V-feature
   Spanish: T [+tense] → weak V-feature
      T [-tense] → strong V-feature

What about F2? An important point is that past participles end up in this position in both languages. Let us consider the role of such participles.

 I will base myself here on Kamp and R. (1993) and the elaboration thereof by de Swart (1998). Their semantic proposals provide a clear basis for teasing apart the role of the participle and that of the auxiliary it co-occurs with. They argue that complex tenses semantically involve the presence of an aspectual operator that converts the eventuality expressed in the lexical domain into a 'result state'. This state starts when the eventuality ends. The operator - PERF - is extensional in the sense that it asserts the existence of both the eventuality and the result state. In itself it is atemporal, but it is bound by a higher tense operator, TENSE (specified as 'present', 'past' etc.), which is also present in simplex tenses. Within this approach the interpretation of, for instance, *John had seen Mary* will be 'at some time in the past there is a state which is the result of JOHN SEE MARY'.

 Though the authors under consideration do not discuss the morphological expression of the operators, it is clear that TENSE is expressed in the finite and infinitival forms of main verbs simplex tenses and those of the auxiliary in complex tenses.[3] PERF, on the other hand, is typically brought in by the participial ending, which is invariable with respect to tense, but which is indispensable in complex tenses by definition.[4]

 Returning now to syntax, there seems to be nothing against equating the functional head T to the TENSE operator. Within the Minimalist framework employed here, the morphologically expressed tense features are checked against the same features of T/TENSE, which accounts for overt finite and infinitival V-movement in the case T/TENSE has a strong V-feature. If past participles move overtly into the functional domain, and we know that they do in French and Spanish, there must be an analogous reason for this. That is, the position they move to (F2) has to be a functional head with a strong V-feature and - in addition - one or more features that check participial morphology, i.e. the perfective feature(s). Equating F2 to PERF and assigning it a strong V feature gives us the right result for complex tenses.[5]

 There is one drawback for the proposal above, which is that not only past participles, but also finite and infinitival main verbs move to or through F2.[5] This entails that *equating* F2 to PERF is not correct. Rather, what appears to be the case is that F2 is a head that can act as PERF operator, but also may have another function. Let us assume that the PERF morphology of the past participle has the feature specification [+perf] and that other finite and infinitival forms of main verbs bear the specification [-perf]. Both [+perf] and [-perf] are checked in F2, which I will now call ASP_{perf}.

6. Conclusion

In the present article, I have argued that the target of Romance *Long Verb Movement* is T, just as was originally proposed by Pollock. Within the Romance languages the strength of T varies according to finiteness as well as according to language, with Spanish presenting the opposite picture of French. I have argued, furthermore, that F2, the target of *Short Verb Movement*, is not AGR, but an aspectual head, ASP_{perf}, specified as [+] or [-] perfective. The position of this head is variable with respect to middle adverbs, and in French also with respect to manner adverbs. ASP_{perf} is strong in both languages and overtly attracts finite and infinitival verbs when it is [-perfective] and active participles when it is [+perfective]. In the latter case the projection of ASP_{perf} merges with an auxiliary, which checks the V-feature of T.

Notes
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[1] There are more problems with Cinque's assumptions. One is that it is impossible to detect where the verb moves to when not all relevant adverbials are overtly present. Another concerns the content of the covert heads. Cinque assumes these have an, unmarked, default value. One would expect that such a default value could not be contradicted. For the concrete examples he discusses however this does not hold true. For instance, he gives '-[-volition]' as a default value for the modal 'volitional' head, whose marked value is 'intentionally'. This predicts that (ib) should be almost as odd as (ib), something that is clearly not the case.

(i)   a. He broke the window. But he did it unintentionally.

            b. He intentionally broke the window. #But he did it unintentionally.

Of course a way out here is to assume that the default value is simply 'unspecified for x', but this would contradict the *Principle of Full Interpretation*: it would be quite unclear why the head would be present at all as it adds no information to the sentence.

[2] Similar data are discussed in Iatridou (1990). According to her, they indicate that *Short Verb Movement* does not exist. This is not surprising: the fact that verb movement can be variable with respect to adverbials was no known before Cinque (1997).

[3] Of course things are more complicated in periphrastic tenses, such as the English future. I leave these out of consideration here.

[4] De Swart (1998) argues that the distinction between the 'passé simple' and the 'imparfait' is not aspectual in French. I am assuming here that the same holds for Spanish 'definido' and 'imperfecto'.

[5] The idea that participial morphology is checked against a participial head is already present in Belletti (1990), who assumes an independent participial phrase containing an aspectual node.

References

Alexiadou, Artemis. 1997. *Adverb placement. A case study in antisymmetric syntax.* Amsterdam: John Benjamins.

Baker, Mark. C. 1985. The mirror principle and morphosyntactic explanation. *Linguistic Inquiry* 16: 373-416.

Belletti, Adriana. 1990. *Generalized verb movement, aspects of verb syntax*. Turin: Rosenberg and Sellier.

Cervantes Saavedra, Miguel de. 1605/1615. *El ingenioso hidalgo Don Quijote de la Mancha.* Edition: Austral 1960. Madrid: Espasa Calpe.

Costa, João and Charlotte Galves. 2000. Peripheral subjects in two varieties of Portuguese: evidence for a non-unified analysis. Paper presented at *Going romance 2000*, Utrecht University.

Chomsky, Noam. 1995. *The minimalistic program.* Cambridge, Mass.:MIT Press.

Cinque, Guglielmo. 1999. *Adverbs and functional heads*, *a cross-linguistic perspective*. New York, Oxford: Oxford University Press.

Emonds, Joseph. 1978. The verbal complex V'-V in French. *Linguistic Inquiry* 9: 151-175.

Iatridou, Sabine. 1990. About Agr(P). *Linguistic Inquiry* 21: 551-577.

Kamp, Hans and Uwe Reyle. 1993. *From discourse to logic.* Dordrecht: Kluwer.

Lois, Ximena. 1989. *Aspects de la syntaxe de l'espagnol et théorie de la grammaire*. Thèse de doctorat. University of Paris-VIII.

Pollock, Jean-Yves. 1989. Verb movement, universal grammar and the structure of IP. *Linguistic Inquiry* 20: 365-424.

Ojea López, Ana I. 1994. Adverbios y categorías funcionales en español. *Revista Española de Lingüística* 24:393-416.

Rodríguez Ramalle, Teresa María. 1998. Bases papa un estudio sintáctico-semántico de la posición del adverbio. *Cuadernos de Linguística del Instituto Ortega y Gasset* 5: 107-126.

Rojas, Fernando de. 1499. *La Celestina*. Edition: Austral 1968. Buenos Aires: Espasa Calpe.

Schlyter, S. 1974. Une hièrarcie d'adverbes et leur distribution. In *Actes du colloque franco-allemand de Grammaire Transformationelle II*, ed. C. Rohrer and N. Ruwet. Tübingen: Max Niemeyer.

Sieben, Maud. 1997. Les adverbes français et néerlandais en comparaison. Ms. Groningen University.

Suñer, Margarita. 1987. *Haber* + past participle. *Linguistic Inquiry*: 18: 683-690.

Swart, Henriëtte de. 1998. Aspect shift and coercion. *Natural Language and Linguistic Theory* 16: 347-385.

Travis, Lisa. 1984. *Parameters and the effects of word order variation*. Doctoral dissertation, MIT.