

# Temporal and Aspectual Variation in Adult Root Infinitives

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## 1. Introduction

In this paper, we want to raise theoretical awareness of and interest in a marginal construction in colloquial registers of adult grammars which we refer to as *adult root infinitive (ARI)*. By studying the grammatical properties of this construction in adult grammars, we set ARIs apart from the well-known phenomenon of root (Rizzi 1993/4) or optional infinitives (Wexler 1994) in child language, to which it may, but need not, be related. Our concentration on adult RIs is justified by the pertinent syntactic and semantic properties we present. We pursue a cross-linguistic approach contrasting Romance and Germanic varieties; more concretely, we present an analysis of ARIs extending earlier stages of our research (Grohmann & Etxepare 2003). Here we will explore some very clear predictions cross-linguistically, where we focus on the availability of verb-raising beyond Infl (T) and some arising issues.

The phenomenon at hand is that below, illustrated with our main languages, English (1) and Spanish (2), where the verbal predicate of an apparently independent root clause appears in infinitival form, even in the presence of an overt subject. However, the subject is not Case-marked (cf. accusative in English (1)), and the entire ARI must be followed by a Coda (see section 2 for more discussion of these and other properties).

(1) Me go to that party?! I would never do such a thing! (English)

(2) Yo ir a esa fiesta?! Jamás! (Spanish)

Other Romance (3) and Germanic (4) languages exhibit the phenomenon of ARIs as well:

(3) a. Io andare la festa?! Mai! (Italian)

b. Jo anar al cinema ?! Vinga, hombre! (Catalan)

c. Eu ir ao cinema ?! Antes morto! (Galician)

d. Eu ir a la festa?! Que piada! (European Portuguese)

e. Eu ir a la festa?! Que piada! (Brazilian Portuguese)

f. Moi aller au cinema ?! Jamais! (French)

(4) a. Ich zu der Party gehen?! Nie im Leben! (German)

b. Ik naar dat feestje gaan?! Dat nooit! (Dutch)

c. Jeg gå på festen?! Aldri i liv-et! (Norwegian)





- (14) a. Juan leer esas cosas en aquellos tiempos?!  
*John read.INF those things in old times*  
 b. John read that sort of thing back in those days?!
- (15) a. \*El Athletic afortunadamente ganar la liga?!  
*the Athletic luckily win.INF the league*  
 b. \*Athletic [Bilbao] luckily win the league ?!
- (16) a. \*María probablemente ir allí?!  
*Mary probably go.INF there*  
 b. \*Mary probably go there?!

With respect to the left periphery, we can observe that topicalization is unacceptable in English, but grammatical in Spanish if resumed by a clitic (clitic left dislocation), which we take to be an indication that clitic left dislocated elements sit in a slightly lower position than bona fide topics (here identified as [Spec,FP] as opposed to [Spec,TopP]) — proto-typical exponents of Comp-phenomena like hanging topic left dislocation, focalization, or *wh*-questions are simply out:

- (17) a. Las elecciones ganarlas Kerry?!  
*the elections win.INF.CL Kerry*  
 b. \*The elections, Kerry win?!
- (18) a. \*Juan, el tío comprarse un Ferrari?!  
*John the guy buy.INF a Ferrari*  
 b. \*John, the guy buy a Ferrari?!
- (19) a. \*BROCCOLI comprar él?!  
*broccoli.FOC buy.INF he*  
 b. \*BROCCOLI him buy?!
- (20) a. \*Quién comprar un Volkswagen?!  
*who buy.INF a Volkswagen*  
 b. \*Who buy a Volkswagen?!

## 2.2. Temporal variation in ARIs

ARIs across languages vary as to the kind of temporal modification they admit. English doesn't permit modification to a deictic point in the past like (21b), for example, whereas the Spanish equivalent in (22b) is perfectly well-formed and can be interpreted as intended:

- (21) a. John read that sort of thing back in the old days?! No way!  
 b. \*John read that sort of thing yesterday?! No way!

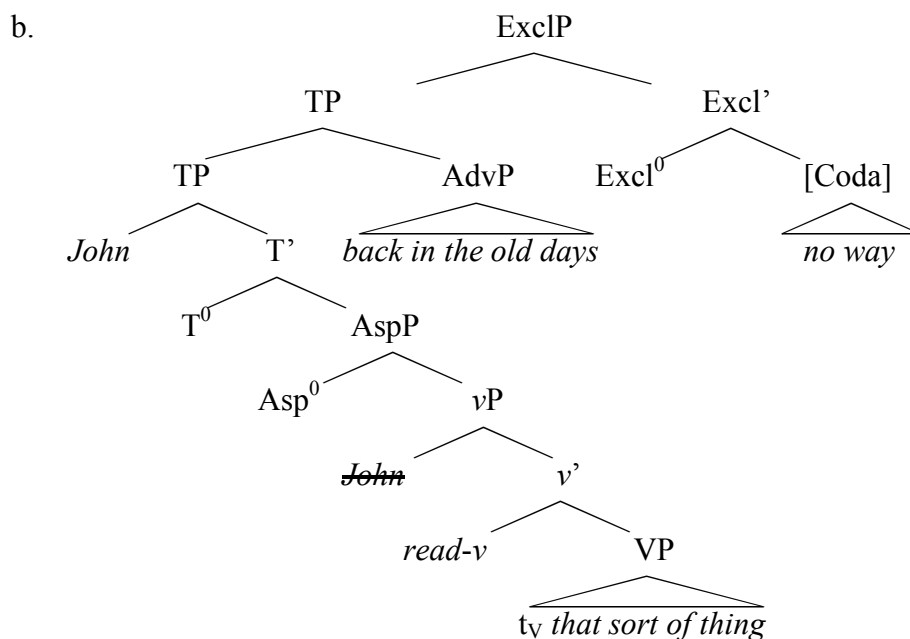
- (22) a. Juan leer eso en aquellos tiempos?! Ya me extraña!  
 b. Juan leer eso ayer?! Ya me extraña!

Interestingly, Spanish and English also differ as to how far the infinitival raises — and it is this difference which we ultimately capitalize on to account for the difference in (21)-(22). In Spanish, unlike in English, the infinitival raises past the temporal head (see e.g. Kayne 1991 and Uriagereka 1995) to target the head of a low CP projection that Uriagereka (1995) calls FP: the lowest Comp-related head  $F^0$ .

The explanation of this phenomenon we offered in Grohmann & Etxepare (2003) relies on the raising of the infinitival to  $F^0$  and on the complex structure of ARIs. Here we follow Baker & Travis (1997) in claiming that deictic tenses are similar to definite determiners and define a domain which is opaque for quantification. In languages where the infinitival remains below deictic  $T^0$ , the eventuality variable (on the lexical verb) is not accessible for quantification, and the structure is semantically deviant. In languages where the infinitival raises beyond  $T^0$ , the eventuality variable carried by the infinitival is free to be bound by the exclamative operator, and the sentence is good.

The relevant structural representation of licit temporal, but (crucially) non-deictic, modification in English is given in (23). For simplicity — and the specifics will not affect our line of argumentation, and we believe neither will a potential revision of our basic clause structure assumed here — we assume that temporal modifiers are left- or right-adjoined to TP. With nothing intervening, and regardless of whether AspP is present or not in this case, the exclamative operator ( $Excl^0$ ) can bind the eventuality variable on the lexical verb *read* (by assumption, in  $v^0$ ). (Strikethrough font indicates a moved copy; subscripted *t* is used for traces of a relevant head element, something we will briefly return to below.)

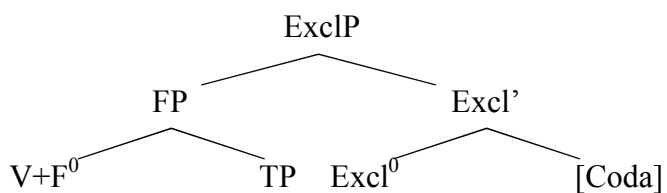
- (23) a. John read that sort of thing back in the old days?! No way!



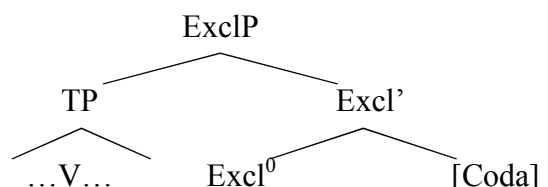


(26) summarizes the main difference between languages that work like Spanish and those that work like English in (dis)allowing deictic temporal modification:

(26) a. (Spanish ARI)



b. (English ARI)



Note also that in Spanish, ARIs with a lexical modal do not allow deictic past adverbs:

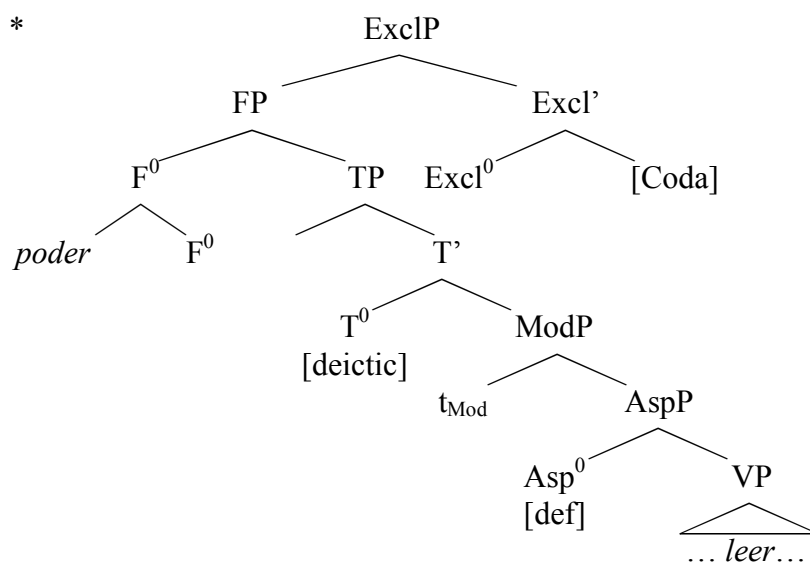
(27) a. \*Juan **poder** leer un libro **ayer**?!  
*John can.INF read.INF a book yesterday*  
 ‘John be able to read a book yesterday?!’

b. Juan **leer** un libro **ayer**?!  
*John read.INF a book yesterday*  
 ‘John read a book yesterday?!’

The problem lies obviously not in the lexical modal itself (which is compatible with deictic past adverbs otherwise), but rather in the ARI. Somehow, ARIs with lexical modals in Spanish behave like English ARIs concerning modification by deictic adverbs.

We take (28) to be the structure of the ungrammatical ARI with a lexical modal (27a):

(28) \*



The fact has now a straightforward account: in a complex structure such as (28) it is the lexical modal which raises outside the domain of deictic Tense. The lexical infinitival verb remains in situ, and therefore the event variable it carries cannot be linked to the exclamative operator due to the intervention effect of the Tense-Aspect domain.

Before we continue with our investigation of the predictions made by this analysis (which is basically carried over from Grohmann & Etxepare 2003), a brief note is in order with regard to our treatment verb raising. In the structural representations used throughout, we indicate the verb's base position with  $t_V$  and its surface position with the spelled out lexical item. We thus ignore the specifics of “verb raising” — whether it takes place through strict head-to-head movement (as under traditional approaches) or through some other means (such as recent suggestions of PF-movement or variations thereof). What is important to us is that the lexical verb is always interpreted in its surface position, whereas the features or properties of functional heads such as Asp(ect) and T(ense) are interpreted in  $Asp^0$  and  $T^0$ , respectively. The exact mechanics will be addressed in Etxepare & Grohmann (in progress).

### 3. Cross-linguistic predictions

The correlation between the position of the infinitival and the possibility of deictic temporal modification in Spanish and English is strengthened by its comparative bite. It extends to other languages in the Romance and Germanic families. The Romance languages seem to divide into two groups which respectively show the properties of Spanish on the one hand and English on the other: on the Spanish side line up Galician, Catalan, and Italian; European and Brazilian Portuguese, French (and all Germanic languages) seem to exhibit the properties shown for English. For lack of a better term, we will bundle these languages into two groups, Group I and Group II:

- Group I: Spanish, Galician, Catalan, Italian
- Group II: European Portuguese, Brazilian Portuguese, French, Germanic

We concentrate on the following properties of ARIs in these languages:

- (i) availability of deictic temporal modifiers;
- (ii) quantificational restrictions on the subject;
- (iii) relative position of the infinitival with regard to aspectual and temporal adverbs;
- (iv) co-occurrence of overt complementizers and infinitivals in control infinitives.

#### 3.1. Availability of deictic temporal modifiers

ARIs as represented by some Romance and Germanic languages in (29) to (31) present an interesting variation in temporal modification in the Romance area: whereas ARIs in Italian, Spanish, Catalan, and Galician (29a-d) allow adverbial modification by past temporal adverbs, their European and Brazilian Portuguese counterparts don't, and pattern in this regard with French (30a-c) as well as German, Dutch, Norwegian, and English (31a-d):

- (29) a. Io andare a la festa **ieri?! Stai scherzando!** (Italian)  
 b. Yo ir a la fiesta **ayer?! Estás de broma!** (Spanish)  
 c. Jo anar al cinema **ahir? Vinga, hombre!** (Catalan)  
 d. Ir de chea eu **onte?! Toleas!** (Galician)  
 ‘Me go to the party yesterday?! You are kidding!’
- (30) a. \*Eu ir a la festa **ontem?! (European Portuguese)**  
 b. \*Eu ir ao festa **ontem?! (Brazilian Portuguese)**  
 c. \*Moi aller à la fête **hier?! (French)**  
 ‘Me go to the party yesterday?! (You must be joking!’)
- (31) a. \*Ich **gestern** zur Party gehen?! (German)  
 b. \*Ik **gisteren** naar dat feestje gaan?! (Dutch)  
 c. \*Jeg gå på fest-en **i går?! (Norwegian)**  
 d. \*Me go to the party **yesterday?! (English)**  
 ‘Me go to the party yesterday?! (You must be joking!’)

### 3.2. Quantificational restrictions on the subject

Some languages show quantificational restrictions in their pre-infinitival position. Those restrictions are identical to the kind of restrictions imposed on quantifiers in topic position. We propose that those languages that don't permit DP subjects preceding the infinitival don't place the preverbal DPs in the canonical subject position ([Spec,TP]), but in a higher topic position (such as ([Spec,TopP])). This suggests that the relevant position is beyond TP, and therefore that the infinitival itself must have raised beyond T. The same quantificational expressions are possible after the infinitival. As it turns out, the languages identified as Group I exhibit restrictions on quantificational subjects:

- (32) a. \***Ognuno / Tutti / Nessuno** comprare una macchina?! Impossibile! (Italian)  
 b. (Non) comprare **ognuno / tutti / nessuno** una macchina?! Impossibile!  
 ‘Everyone / All / Noone buy a car?! Impossible!’
- (33) a. \***Cada uno / Todo el mundo / Nadie** comprar un coche?! Imposible! (Spanish)  
 b. (No) comprar **cada uno / todo el mundo / nadie** un coche?! Imposible!  
 ‘Each one / Everyone / Noone buy a car?! Impossible!’
- (34) a. ??**Cada professor / Tothom / Ningú** comprar un Volkswagen?! Impossivel! (Catalan)  
 b. (No) comprar **cada professor / tothom / ningú** un Volkswagen?! Impossibile!  
 ‘Every professor / All / Noone buy a Volkswagen?! Impossible!’
- (35) a. ??**Cada um / Todo o mundo / Ninguem** comprar um carro?! Impossivel! (Galician)  
 b. (Nao) comprar **cada um / todo o mundo / ninguem** um carro?! Impossivel!  
 ‘Everyone / All / Noone buy a car?! Impossible!’

These restrictions do not apply to the languages from Group II (with the exception of French *personne* and *tout le monde*):

- (36) **Cada um / todo o mundo / ninguém** comprar um carro? (European Portuguese)  
 ‘Everyone / All / Noone buy a car?! Impossible!’
- (37) **Cada um / Todo o mundo / Ninguém** comprar um carro?! (Brazilian Portuguese)  
 ‘Everyone / All / Noone buy a car?! Impossible!’
- (38) a. **Chacun** acheter un/son vélo? Je crois pas! (French)  
 ‘Each one buy a/his bicycle?! I don’t think so!’  
 b. **\*Tout le monde / Personne** acheter un vélo?  
 ‘Everyone / Noone buy a bicycle?! Impossible!’
- (39) %**Alle / Jeder / Niemand** ein Auto kaufen?! (German)
- (40) **Allemaal / Iedereen / Niemand** een auto kopen?! (Dutch)
- (41) **Alle / Enhver / Ingen** kjøpe (en) bil?! (Norwegian)
- (42) %**All / Everyone / Noone** buy a car?! (English)

These findings support our analysis in the following sense: if in the language belonging to the Group II the infinitival only raises to an TP internal position, there is no reason for the pre-infinitival subject to behave as a topic. None of the quantificational restrictions operating in Group I languages in that same context should apply here, as seems to be the case.

### 3.3. Position of the infinitival with regard to adverbs

Aspectual adverbs arguably occur relatively low in the clause structure (see e.g. Cinque, 1999) and give us an idea where the left edge of VP is situated — and whether V has raised or not. The languages that form Group I require aspectual adverbs to follow the infinitive:

- (43) a. Gianni (**\*spesso**) comprare (**spesso**) mele (**spesso**)?! (It.)  
*Gianni often buy.INF apples*  
 b. Gianni (**\*qualche volta**) comprare (**qualche volta**) mele (**qualche volta**)?!  
*Gianni sometimes buy.INF apples*  
 c. Gianni (**\*sempre**) comprare (**sempre**) mele (**sempre**)?!  
*Gianni always buy.INF apples*
- (44) a. Pedro (**\*a menudo**) comprar (**a menudo**) manzanas (**a menudo**)?! (Sp.)  
 b. Pedro (**\*a veces**) comprar (**a veces**) manzanas (**a’s veces**)?!  
 c. Pedro (**\*siempre**) comprar (**siempre**) manzanas (**siempre**)?!

- (45) a. Pedro (**??sovint**) comprar (**??sovint**) pomes (**sovint**)?! (Ct.)  
 b. Pedro (**??a vegades**) comprar (**?a vegades**) pomes (**sempre**)?!  
 c. Pedro (**??sempre**) comprar (**?sempre**) pomes (**sempre**)?!  
 (46) a. Pedro (**\*a miudo**) comprar (**a miudo**) manzanas (**a miudo**)?! (Gl.)  
 b. Pedro (**\*a's veces**) comprar (**a's veces**) manzanas (**a's veces**)?!  
 c. Pedro (**\*siempre**) comprar (**siempre**) manzanas (**siempre**)?!

Germanic languages in Group II behave in exactly the opposite way, as expected. The facts are particularly relevant for English and Norwegian, which have surface SVO order. Romance languages in Group II behave in this regard like Group I languages. Here we must assume partial raising of the infinitival verb to T or some vP-external projection (see e.g. Laenzlinger 1998 for brief discussion). Interestingly too, some adverbs are just impossible in ARIs of Group II, whatever their position. We leave this issue for further research.

- (47) a. Joao (**\*frequentemente**) biber (**frequentemente**)?! (EP)  
 b. Joao (**\*as vezes**) ir (**\*as vezes**) a restaurantes caros?!  
 c. Joao (**\*sempre**) ir (**sempre**) a restaurantes caros?!  
 ‘Joao drinks often / goes sometimes / always to nice restaurants?!’  
 (48) a. Joao (**\*frequentemente**) ir (**?frequentemente**) ao cinema?! (BP)  
 b. Joao (**\*sempre**) ir (**sempre**) ao cinema?!  
 c. Joao (**\*as vezes**) ir (**??as vezes**) ao cinema?!  
 ‘Joao go often / sometimes / always to the movies?!’  
 (49) a. Pierre (**\*souvent**) acheter (**souvent**) des pommes?! (Fr.)  
 b. Pierre (**\*de temps á autre**) acheter (**de tamps á autre**) des pommes?!  
 c. Pierre (**\*toujours**) acheter (**toujours**) des pommes?!  
 (50) a. Peter (**oft**) Äpfel (**\*oft**) kaufen?! (Gm.)  
 b. Peter (**manchmal**) Äpfel (**\*manchmal**) kaufen?!  
 c. Peter (**immer**) Äpfel (**\*immer**) kaufen?!  
 (51) a. Peter (**vaak**) appels (**\*vaak**) kopen?! (Du.)  
 b. Peter (**soms/zo en dan**) appels (**\*soms/zo en dan**) kopen?!  
 c. Peter (**steeds/alsmaar**) appels (**\*steeds/alsmaar**) kopen?!  
 (52) a. Peer (**ofte**) kjöpe (**\*ofte**) epler?! (Nw.)  
 b. Peer (**iblant**) kjöpe (**\*iblant**) epler?!  
 c. Peer (**alltid**) kjöpe (**\*alltid**) epler?!  
 (53) a. Peter (**often**) buy (**\*often**) apples?! (En.)  
 b. Peter (**sometimes**) buy (**\*sometimes**) apples?!  
 c. Peter (**always**) buy (**\*always**) apples?!

### 3.4. Position of the infinitival in control complements

This section expands on the findings first reported in Kayne (1991), who argued for a higher Infl-position in some Romance languages (Italian, Spanish), but not others (French). He proposed adjunction to T' for those languages. Uriagereka (1995) recasts this proposal in more regular phrase structural terms as adjunction to F<sup>0</sup> (arguably the lowest functional head in the C-domain). Kayne's proposal was based, among other facts, on the availability of sequences such as the ones in (54), where the infinitival seems to occupy a position immediately following the overt complementizer, but higher than the subject position, occupied by PRO. The languages in Group I all allow that configuration:

- (54) a. Io no se si **andare** al cinema. (It.)  
 b. No sé si **ir** al cine. (Sp.)  
 c. Jo no se si **anar** al cinema. (Ct.)  
 d. Eu no se si **ir** al cine. (Gl.)  
*I not know if go.INF to.the cinema*  
 'I don't know if to go to the movies.'

Group II-languages simply don't allow this kind of structure:

- (55) a. \*Eu nao sei si **ir** ao cinema. (EP)  
 b. \*Eu nao sei si **ir** ao cinema. (BP)  
 c. \*Je ne sais pas si **aller** au cinema. (Fr.)
- (56) a. \*Ich weiss nicht ob ins Kino zu **gehen**. (Gm.)  
 b. \*Ik weet niet of naar de bioscoop te **gaan**. (Du.)  
 c. \*Jeg vet ikke om **gå** på kino. (Nw.)  
 d. \*I don't know if to **go** to the movies. (En.)

We take these differences to point to only one property: Group I-languages exhibit verb raising to a high position, beyond T. This position we identify as F<sup>0</sup>, the lowest C-head. Group II languages raise the infinitival to a TP internal position.

### 3.5. Periphrastic forms

Our analysis also accounts for the fact that periphrastic perfects are generally out in ARIs:

- (57) a. \*Juan haber comprado un libro?! Imposible!  
 b. \*John have bought a book? Imposible!

In our terms, what raises to F in Spanish is the auxiliary *haber* 'have'. But the eventuality variable carried by the infinitive remains under the perfective structure — and as such should be (and is) inaccessible for quantification.

The ban against perfect auxiliaries has an exception in Galician, European Portuguese, and Brazilian Portuguese, where the auxiliary, unlike the general *habere* in Romance, is *ter*.

*Ter*-periphrastic perfects are possible in ARIs:

- (58) a.(?) Eu **ter** ido ao cinema?! (Brazilian Portuguese)  
*me have.INF gone to.the movies*  
 b. Eu **ter** gañado a final?! (Galician)  
*me have.INF won the final*  
 c. Eu **ter** ido ao cinema?! (European Portuguese)  
*me have.INF gone to.the movies*  
 ‘Me have gone to the movies / won the final?!’

A possible account of this difference is that unlike, say, Spanish *haber*, Galician/Portuguese *ter* contributes its own eventuality variable, and is in this sense akin to Spanish *tener*:

- (59) Tener yo la partida ganada?! Qué más quisiera!  
*have me the match won I wish I.had*  
 ‘That I should be already about to win the match?! I wish it were so!’

This should be related to Giorgi & Pianesi’s (1997) claim that Portuguese *ter* is a lexical verb (but see Gonçalves 1995, Schmitt 2001). But if Portuguese *ter* is a lexical verb contributing an eventuality variable itself, then this eventuality variable should be free for quantification, since it is not buried under a perfective operator. That both *ter* and *tener* may carry an eventuality variable themselves is suggested by the following contrast between *haber* and *tener* (in Spanish, where both structures should have the same interpretation):

- (60) a. [El **tener** para este domingo la liga ganada tres meses antes]  
*the have.INF by this Sunday the league won three months earlier*  
 parece un imposible.  
*looks an impossible*  
*lit.* ‘Having won the league by this Sunday three months earlier looks like an impossible thing.’  
 b. \*[El **haber** ganado la liga para este domingo tres meses antes]  
*the have.INF won the league by this Sunday three months earlier*  
 parece un imposible.  
*looks an impossible*  
*lit.* ‘Having won the league by this Sunday three months earlier looks like an impossible thing.’

We interpret this contrast as showing that Spanish *tener*, unlike *haber*, introduces a further eventuality variable which can be independently modified temporally. Galician/Portuguese *ter* allows identical cases, as illustrated with Brazilian Portuguese:

- (61) No próximo domingo o seu time já ter ganhado o  
*in next Sunday the his team already have.INF won the*  
 campeonato há três semanas!  
*league ago three months*  
*lit.* ‘His team have already won the league next Sunday three months ago!’

But if Portuguese *ter* is a lexical verb contributing an eventuality variable itself, we would expect this eventuality variable to be free for quantification, since it is not buried under a perfective operator. We would also expect then that, unlike the simple infinitives in (30) repeated here as (62b) for European Portuguese, the forms with *ter* should allow modification by a deictic temporal adverb of the past like *yesterday*. And they do:

- (62) a. Eu ter ido a la festa ontem?! (European Portuguese)  
*me have.INF gone to the party yesterday*  
 b. \*Eu ir a la festa ontem?!

In the final section, we will look at some interesting Spanish infinitival constructions.

#### 4. Tripartite quantifications and aspectual constraints

Our account of the aspectual and temporal restrictions on ARIs relies on the presence of a tripartite quantificational structure. If the account proposed is right in its more general terms, we should expect the following:

- (i) on the one hand, we should find other quantificational or operator constructions which allow RIs and where the same restrictions are operative;
- (ii) on the other hand, we should see those effects disappearing in configurations which do not involve a restricted quantification.

We will now show that, as regards Spanish, both predictions are right.

##### 4.1. Tacit conditional structures

Consider the following contrast:

- (63) a.(?)[Trabajar los obreros en domingo] sería el fin del estado de bienestar.  
*work.INF the workers on Sundays] would.be the end of.the welfare state*  
 ‘The workers work on Sundays would be the end of the welfare state.’  
 b. \*[Trabajar los obreros en domingo] es el fin del estado de bienestar.  
*work.INF the workers on Sundays is the end of.the welfare state*  
 ‘The workers work on Sundays is the end of the welfare state.’

Whereas (63a), with a shifted past in the matrix clause typical of conditional structures, admits an RI, (63b) with present tense in the matrix doesn't. One way to account for this difference is to say that (63a) involves a conditional structure, itself a canonical tripartite quantification (see Partee 1995, Chierchia 1995, and references therein).

As the data (64) illustrate, (63a) does allow deictic pasts — but perfective forms in this type of construction are disallowed, as shown in (65):

(64) a. ?[Trabajar **ayer** los obreros] habría sido el fin del estado de bienestar.  
*work.INF yesterday the workers would.have been the end of the welfare state*  
 'The workers work yesterday, that would have been the end of the welfare state.'

b. ?[Trabajar **hoy** los obreros] sería el fin del estado de bienestar.  
*work.INF today the workers would.be the end of the welfare state*  
 'The workers work today, that would be the end of the welfare state.'

c. ?[Trabajar **mañana** los obreros] sería el fin del estado de bienestar.  
*work.INF tomorrow the workers would.be the end of the welfare state*  
 'The workers work tomorrow, that would be the end of the welfare state.'

(65) \***[Haber trabajado** los obreros] habría sido el fin del estado de bienestar.  
*have.INF worked the workers would.have been the end of the welfare state*  
 'The workers have worked, that would have been the end of the welfare state.'

#### 4.2. Prepositional infinitive clauses

Spanish (and also Catalan) possesses prepositional infinitival clauses which modify the temporal structure of the matrix clause (see e.g. Hernanz 1982, 1999 and Rigau 1995):

(66) a. Al venir Pedro, todos empezaron a murmurar.  
*P.ART come.INF Pedro, everyone started to mutter*  
 'When Pedro came, everyone started to mutter.'

b. Al desmayarse Pedro, María gritó.  
*P.ART faint.INF Pedro, Maria screamed*  
 'When Pedro fainted, Maria screamed.'

As observed first by Rigau (1995), if we insert a perfect auxiliary in the prepositional infinitive clause, the infinitival is not interpreted as a temporal modifier, but as a causal one:

(67) a. Al haber venido Pedro, todos empezaron a murmurar.  
*P.ART have.INF come Pedro, everyone started to mutter*  
 'Since [= Because] Pedro had arrived, everyone started to mutter.'

- b. Al haberse desmayado Pedro, María gritó.  
*P.ART have.INF.CL fainted Pedro, Maria screamed*  
 ‘Since [= Because] Pedro had fainted, Maria screamed.’

The same happens if we insert the modal verb *poder*:

- (68) a. Al poder venir Pedro, todos empezarán a murmurar  
*P.ART can.INF come.INF Pedro, everyone started to mutter*  
 ‘Since [=Because] Pedro will be able to come, everyone will start to mutter.’
- b. Al poder desmayarse Pedro, María gritó  
*P.ART can.INF faint.INF.CL Pedro, Maria screamed*  
 ‘Since [=Because] Pedro is able to faint, Maria screamed.’

That is, in all contexts where a deictic modifier of the past like *yesterday* is not available, the infinitive cannot be linked to the matrix tense. This could be accommodated in our analysis if we consider the infinitival clause as providing a restriction for a Tense determiner, itself a binary operator which binds an eventuality variable in both its restriction and its matrix. We leave those constructions for further research.

## 5. Concluding remarks

In this paper, we looked at ARIs, or adult root infinitives — that is, infinitival structures used as root clauses by adult speakers. Presumably, ARIs occur in colloquial contexts, but we did not address the use of such structures in more detail than noting that when used felicitously, they are necessarily followed by a Coda, an exclamation of sorts that provides the assertoric force of the sentence.

We provided an analysis of ARIs by presenting them as tripartite quantificational structures akin to that of donkey sentences. The relevant binary operator in these cases is an exclamative operator with scalar properties (Grohmann and Etxepare 2003). We have explored the predictions that an unselective binding analysis makes cross-linguistically, and shown that intriguing temporal differences which cut across a number of Romance and Germanic languages can be keyed to the structural position of the infinitival in those languages.

Finally, the paper briefly sketches some future avenues of research where restrictions similar to those on ARIs are shown to hold of other binary operator constructions. Further research will show how far these different types of constructions should be assimilated to one another, or not, and whether the phenomena observed in Spanish hold for other languages — presumably of Group I — as well.

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