## On Tense, agreement, and the syntax of null and overt subjects: Evidence from Romance infinitives

Gerardo Fernández-Salgueiro, National Taiwan Normal University

As is well known, in languages like Spanish or Italian, subjects can appear in both preverbal and postverbal positions and may also be null (see e.g., Rizzi 1982), as illustrated in (1):

habla Juan a. Juan habla italiano b. Hoy c. Habla (1)italiano John speaks Italian today speaks John speaks Italian Despite the fact that this parameter has been thoroughly studied, the exact syntactic properties responsible for this variation in the realization of subject DPs remain unclear. Although previous research has focused on finite clauses, in what follows I argue that examining the syntax of adverbial non-finite clauses actually provides a better opportunity to understand these phenomena. While finite clauses in Italian, Spanish, Galician, and European Portuguese seem to be similar in terms of agreement and the properties illustrated in (1), adverbial non-finite clauses all behave differently; Italian is similar to English in that overt subjects are disallowed, Spanish and Galician allow postverbal overt subjects, Galician allows null subjects in inflected infinitives, and European Portuguese allows preverbal, postverbal, and null subjects in inflected infinitives.

Here I argue that postverbal overt subjects in non-finite clauses in Spanish, Galician, and Portuguese are licensed by a separate Agr(eement) head with a full set of  $\phi$ -features, and only when the Agr head is realized by overt  $\phi$ -features or by verb movement can a null subject be licensed. Previous proposals have assumed  $\phi$ -features in infinitival T (see e.g., Torrego 1998 for Spanish) but it is not clear how these Western Romance languages differ from Italian or how PRO is still possible in the presence of these  $\phi$ -features. Here I explore these and related issues.

The analysis I propose here assumes that T(ense) and Agr are separate heads in these languages (see e.g., Belletti 1990). The main motivation for this analysis comes from the fact that variations in tense do not affect agreement morphology (see Bobaljik 1995: 263). Moreover, in some of these languages existential verbs inflect for tense but not for agreement, and Galician and Portuguese even allow inflected infinitives. Here I make the novel proposal that non-finite clauses also involve a separate Agr head, which in regular non-finite clauses would be  $\phi$ -defective and license PRO. Evidence for this approach comes from the fact that in Spanish and Galician the infinitive of the existential verb *haber* seems to project more structure than its finite (Agr-less) counterpart. As shown in (2), a non-agreeing quantifier is allowed with *be* (2a) but not with *haber* (2b); interestingly, it is allowed post-verbally with *haber* in the non-finite adverbial clause in (2c):

(2)	a. Todo	son	hombres	en	ese	despacho (cf. son todo also okay)						
	all.sg	are	men	in	that	office						
	'It's all men in that office'											
	b. *Todo	hay	hombres	en	ese	despacho (cf. *hay todo)						
	all.sg	have	men	in	that	office						
	c. Al	haber	todo hombres	en	ese	despacho, no estaba cómoda						
	to-the	have.INF	all.sg men	in	that	office not was comfortable						
'Since it's all men in that office, I didn't feel comfortable'												

With the above considerations in mind, I propose that Western Romance differs from Italian in that the Agr head in Spanish infinitives may optionally contain a full set of  $\phi$ -features able to value nominative case on a DP, but not compatible with PRO. Historical evidence for this analysis comes from the fact that inflected infinitives were possible in Spanish in previous stages of the language (see Egido-Fernández 1992) and, consequently, overt subjects were more common in areas adjacent to Galician-Portuguese speaking territories (Maurer 1968). Novel synchronic evidence comes from infinitives whose subject DPs can be interpreted as first and second person plural. As

shown in (3), a subject DP can be interpreted as first person in a finite clause with first person plural agreement (3a) but not when the DP is a complement, unless a first person plural clitic is added to the verb (3b). Interestingly, the first person interpretation is possible in a non-finite adverbial clause (3c), which suggests that the infinitive displays  $\phi$ -features:

(3)	a. Los españ	oles estar	estamos		descontentos			(Spanish)			
	the Spani			very	unhappy						
	'We Spaniards are very unhappy'										
	b. Los otros	europeos	no	*(nos)	entienden	а	los	españoles			
	The other	Europeans	not	we.pl	understand.3p	ol to	the	Spaniards			
	Intended meaning: 'The other Europeans don't understand us Spaniards"										
	c. Al	estar	los	españo	les muy	desco	ntentos	· · · ·			
	To-the	be.INF	the	Spania	rds very	unhap	ру				
	'Since we S	Spaniards are	very unh	appy,	,						

In order to license a null subject in non-finite clauses, however, overt agreement is needed, as in Galician and Portuguese inflected infinitives. This fits in well with approaches that treat null subjects as DPs whose phonological features are deleted at PF (see e.g., Biberauer et al. 2010) and also correlates with the fact that null subjects are not possible in Spanish infinitives.

Galician inflected infinitives, however, pose the question of why preverbal overt subjects are not possible in a context in which null subjects are (both are allowed in Portuguese). An important difference, however, is that inflected infinitives are optional in Galician (but required in Portuguese), suggesting that the infinitive is morphologically complete without the agreement. A way to formalize this difference is to assume that in Portuguese infinitives the finite verb moves all the way to Agr, as in regular finite clauses in all these languages (and thus all the possibilities shown in (1) above are attested) but in Galician infinitives Agr actually lowers to T. This entails that a null subject can be licensed by overt Agr alone, but a preverbal overt subject requires T to move to Agr, possibly in order to value nominative case in Spec-Agr.

A final puzzle regarding null subject licensing concerns the fact that in some tense and aspect combinations finite clauses in these languages actually display null/zero agreement, yet a null subject is still allowed despite the ensuing ambiguity, as shown in (4):

(4) Antes salía

Before leave.IMPERF.PAST.INDICATIVE

(Spanish)

'I/he/she used to go out before'

Since the finite verb in these languages moves up to Agr, it seems then that the exact condition that licenses a null subject is that the Agr head is phonologically realized, which could be achieved either by overt  $\phi$ -features (cf. Galician inflected infinitives) or by verb movement (as in (4)).

## References

Belletti, A. 1990. Generalized verb movement: aspects of verb syntax. Turin: Rosenberg & Sellier.
Biberauer, T., A. Holmberg, I. Roberts, and M. Sheehan. 2010. Parametric Variation: Null subjects in minimalist theory. Cambridge: Cambridge University Press.

Bobalkij, J. 1995. Morphosyntax: The syntax of verbal inflection. PhD Dissertation, MIT.

Egido-Fernández, M. C. 1992. "Infinitivos conjugados en documentos Leoneses del s. XIII." *Contextos* X/19-20: 167-185.

Maurer, T. H. 1968. *O infinitivo flexionado portugués. Estudo histórico-descritivo*. Ed. Nacional e Ed. da Universidade de Sao Paulo. Sao Paulo: Biblioteca Universitaria.

Rizzi, L. 1982. Issues in Italian syntax. Dordrecht: Foris.

Torrego, E. 1998. "Nominative Subjects and Pro-Drop INFL." Syntax 1: 206-219.