B O R E A L I S
AN INTERNATIONAL JOURNAL OF HISPANIC LINGUISTICS

# IF AGREEMENT IS PRONOMINAL, THERE IS NO PRO-DROP*

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ABSTRACT. Using Irish, Spanish and English data, I argue that the null subject phenomenon is modulated by the presence/absence of unvalued φ-features in the clausal structure. This analysis is contrasted with the two most influential analyses so far: (i) The ellipsis analysis, according to which a null subject is a deleted pronoun and (ii) the rich inflection analysis, according to which an inflection with overt exponents for person and number can license and identify a silent pronoun. I discuss both analyses and present some empirical and conceptual criticisms vis-à-vis my own approach. One additional advantage of my approach is that we conclude that there are no silent subjects in Irish or Spanish-type languages.

**Keywords.** pro-drop, ellipsis, rich inflection, silent subjects

RESUMEN. Basándome en datos del irlandés, el español y el inglés, sostengo que el fenómeno del sujeto nulo está modulado por la presencia o ausencia de rasgos φ no valorados en la estructura oracional. Esta propuesta se contrasta con los dos análisis más influyentes hasta ahora: (i) el análisis de elipsis, según el cual un sujeto nulo es un pronombre borrado, y (ii) el análisis de la flexión rica, según el cual una flexión con exponentes visibles de persona y número puede autorizar e identificar un pronombre silencioso. Discuto ambos análisis y presento algunas críticas empíricas y conceptuales en relación con mi propia propuesta. Una ventaja adicional de mi planteamiento es que permite concluir que no hay sujetos silenciosos en irlandés ni en lenguas del tipo del español.

**Palabras clave.** pro-drop, elipsis, flexión rica, sujetos silenciosos

## 1. Introduction

In this paper, I discuss the connection between agreement on $T^{fin}$ and the option of apparently covert subjects in three languages that represent three canonical possibilities. (1) is an Irish example, where agreement on T and overt subject pronouns appear in complementary distribution. In (1a) the *synthetic* form of the verb includes an inflection for first person singular and (1b) shows that this inflection is incompatible with an overt pronoun. (1c) shows an *analytic* verb form accompanied by a pronoun (I indicate the position of the putative null subject with a <e>):

* I would like to thank one anonymous for *Borealis* as well as Antonio Fábregas for their useful comments on a previous version of this article. The errors all belong to me.

(1) *Irish*

| | | | | | |
|---|---|---|---|---|---|
| a. | Chuirfinn | <e> | isteach | ar an phost sin. | |
| | Put.cond.1.sg | | in | on that job | |
| | 'I would apply for that job.' | | | | |
| b. * | Chuirfinn | mé | isteach | ar an phost sin. | |
| | Put.cond.1.sg | I | in | on that job | |
| c. | Chuirfeadh | sé | | | |
| | Put.cond | he | | | |

McCloskey and Hale 1984: 489, 490

In English null subjects are generally disallowed, even when the verbal inflection gives us person and number information about the subject

(2) * I think <*e*> says that the weather is good.

The examples in (3) are in Spanish. Agreement inflection on finite T is obligatory but null subjects are generally optional, subject to some interpretive and pragmatic conditions.[1,2]

(3) *Spanish*

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| a. | Creo | que <e> | dice | que | el | tiempo | está | bueno. |
| | Think.1 | that | say.3 | that | the | weather | is | good |
| | 'I think that she/he says that the weather is good.' | | | | | | | |
| b. | Creo | que | dice | ella | que | el | tiempo está bueno. | |
| | Think.1 | that | say.3 | she | that | the | weather is good | |
| | 'I think that she says that the weather is good.' | | | | | | | |

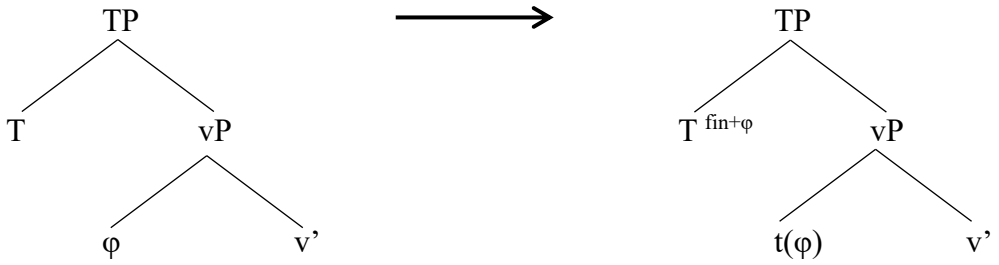
[1] An anonymous reviewer wonders why I choose to exemplify a silent subject in a subordinate clause. This is because non-null subject languages like English can delete a subject in the matrix clause, in what is sometimes called telegraphic or diary style. The grammatical and pragmatic conditions on this phenomenon are quite distinct from the null subject configurations (Haegeman 2013). An example is in (i). But diary pro-drop is not possible in subordinate clauses, as shown in (ii). An example like (3a) with a null subject in the subordinate clause helps us control for this variable:

(i) Had a good day today. Went shopping. Ordered some coffee…
(ii) * I assure you that went shopping.

[2] Null subjects are obligatory in contexts where English requires an expletive (this is explored in section 6). On the other hand, null subjects are not possible with inanimate referents. Impersonal sentences with arbitrary subjects come in different shapes, some of which do not accept overt subjects (see Holmberg 2005 for a discussion of arbitrary subjects, see also Fábregas 2025 for a detailed description of restrictions on null subjects). The pragmatic conditions on null subjects in Spanish are not the same for all dialects; in particular the Caribbean dialects use overt subjects in contexts where other speakers would not. However, it seems to me that the morphosyntactic environment is the same and therefore all dialects agree on the judgments in (3). There is one exception: the Cibaeño dialect of the Dominican Republic is not a null subject language (see Bullock and Toribio 2009 for a complete description, see also Bosque and Brucart 2019, Camacho 2016, Muñoz Pérez 2014).

I argue that there is in fact no null subject in examples (1a) and (3a): the φ-features on the verb are indeed a pronoun which acts as a fully-fledged argument of the main predicate.[3] This pronoun happens to be a bound morpheme that is merged as an argument and eventually incorporates into $T^{fin.}$ This is shown in (4). In (4a), a set of person, number and gender features (henceforth φ-features) are merged in an argument position. These φ-features are incorporated into $T^{fin}$ as shown in (4b). These φ-features end up spelled out as an affix on T. This accounts for (1a) and (3a):

(4) a. b.




Alternatively, $T^{fin}$ may be merged with a set of unvalued φ-features. These φ-features must be valued against a set of valued φ-features. Consequently, the subject is overt – which could be a pronoun, as in (1c), (2) and (3b). Thus, languages that have been described as having Spanish-style null subjects, do not in fact have null subjects. Instead, a bundle of interpretable φ-features can remain free or can be bound to $T^{fin}$.

The intuition that the absence of an overt subject in (3a) is due to the inflection on T is old (Taraldsen 1978, Chomsky 1981, Rizzi 1982). Within the generative framework, it coalesced on the notion that T, which has person and number inflection in Spanish and Irish, is pronominal, and able to license and identify the person and number features (henceforth φ-features) of an empty category, referred to as *pro* (Rizzi 1982, Chomsky 1982). The category *pro* fit beautifully within the model in Chomsky (1982), in which every silent category had a corresponding overt counterpart: *pro* was the counterpart of overt pronouns and subject to Principle B of Binding Theory, the trace of a wh-phrase was an R-expression subject to Principle C and the trace of NP-movement was an anaphor subject to Principle A. However, as the model of Chomsky (1982) collapsed in the wake of the minimalist program (Chomsky 1995 and ff), the *pro* hypothesis lost its theoretical grounding.

An alternative idea emerged in the last twenty years: there is no silent category *pro*. Instead, there is a regular pronoun that is either deleted in PF or simply does not spell-out. This is the ellipsis approach (Holmberg 2005, Roberts 2010a,b, 2019, Saab 2009, 2024, Sheehan 2006, among others.) Within this framework, the role of inflection is to act as an antecedent for the elliptical pronoun. I believe it is fair to say that this is currently the canonical analysis of null subjects against which any proposal must be measured.

This article is organized as follows. Section 2 presents the current proposal and section 3 analyses the data in the three languages. Section 4 presents the ellipsis approach to null subjects,

[3] An anonymous reviewer points out that the verb *dice* 'says' in (3a) has no visible φ-features. This is correct, *dice* consists only of the root [dic-] followed by the thematic vowel [-e] - the [-participant] feature in Spanish has no exponent. For arguments that [-participant] is a real grammatical feature and not simply the absence of [participant] see Nevins (2011).

in the Roberts (2019) and Saab (2024) versions and show that there are some empirical and conceptual objections to this approach. Section 5 goes back in time and discusses the 1980s pro-drop hypothesis as well as some developments of this approach. Section 6 is dedicated to expletives and the so-called null subject parameter. Section 7 discusses recent proposals by Koenemann and Zejlstra 2021, Saab 2024 that seek to explain why some languages with rich agreement do not allow for null subjects and shows that the present proposal can incorporate their insights. Section 8 presents the conclusions.

The literature includes a rich body of work on partial null subject languages, in which null subjects are possible with some persons or tenses; there also exist numerous languages that allow null arguments in the absence of any form of agreement on T. I have nothing interesting to add to the literature on these phenomena and I simply accept the by now widespread conclusion that these null structures are forms of ellipsis (Barbosa 2019, Duguine 2014, Neeleman and Szendroi 2007, Tomioka 2003, among many others.) For a book-length study of pro-drop varieties and analyses, see Camacho (2013).

## 2. Proposal

I adopt as general framework the basic postulates of minimalism, as presented in Chomsky (2000, 2001, 2013, 2015) as well as Distributed Morphology (see for instance the presentation in Embick 2015, as well as the original proposal in Halle and Marantz 1993).

I assume the traditional T-shaped theory of grammar, with a central computational system that inputs a Logical Form (LF) and a Phonetic Form (PF). I take it that a clause structure includes a little *v*, T and C in the usual hierarchy. I also adopt phase theory and the assumption that C-T form one phase while V-v constitute another in transitive and unergative predicates; in unaccusative sentences, presentational sentences, existential sentences and copulative sentences the C-T phase reaches down to V. External arguments are merged in Spec,v, internal arguments in Compl,V.

From Distributed Morphology I adopt the notion that the lexicon is distributed in three subcomponents. The List 1 constitutes the input to the computational system. It contains abstract feature bundles as well as lexical roots – although the latter are reduced to a numerical index that links a slice of conceptual structure with an exponent (Harley 2015). List 1 items enter the computational system via Merge. The List 2 is a list of exponents that spell out the output of the computational system in the PF section of the grammar by means of Vocabulary Insertion Rules (henceforth VI-rules) that match an exponent with a terminal node. These VI-rules follow the Subset Principle: The exponent of a functional category will not always match all the features of a syntactic terminal but only a subset of them. The List 3 consists of slices of conceptual structure and plays no role in this paper. Finally, I also assume the notion that syntactic terminals may require some adjustment before they can be fed to the VI-rules. The module that takes care of these adjustments is referred to as Morphology.

I take it that the grammar of every language includes bundles of valued ϕ-features (person and number, but sometimes also gender, noun class and case), referred to as [vϕ] in this paper. The bundles of [vϕ] that do not take a complement and spell out as free words is what we normally call pronouns. In many languages (including Irish and Spanish) [vϕ] may also spell out as affixes on T when the environmental conditions trigger incorporation. Thus, I assume that a node that consists of a bundle of [vϕ] in LF is pronominal.

In some languages, the [vϕ] bundle may select a projection of an NP (nP, NumP) and we refer to these [vϕ] bundles as determiners and the whole structure as a DP (see Postal 1969 for the original idea that pronouns and determiners are the same category). Many languages do not have

overt determiners. It is of course possible that the structure [[vϕ] [NumP/NP]] is universal but [vϕ] are silent in many languages when they select a nominal phrase - I don't have an opinion on this matter.

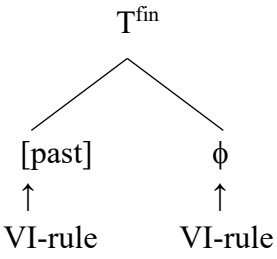
The grammars of languages may also include unvalued ϕ-features, referred to here as [uϕ]. A classic example, exemplified in the three languages discussed here, is the unvalued person and number features of $T^{fin}$. Syntactic dependencies are established by means of the Agree mechanism (Chomsky 2000, 2001), by which a terminal node with unvalued features probes in its c-command domain until it finds a goal with valued features of the same type, which are then copied on the probe. Thus, the [uϕ] of $T^{fin}$ turn it into a probe that will look for the closest set of [vϕ] in its c-command domain.

[vϕ] may receive a θ-role and this is the general case. But consider now overt expletives in English and many other languages. The mechanisms of the Agree system tell us that the expletive is a goal for the [uϕ] features of $T^{fin}$. This entails that overt expletives are a bundle of [vϕ]. We conclude that [vϕ] do not have to receive role a θ-role (see section 6).[4] Consequently, the frequent identification of valued features with interpretable features (Chomsky 1995) is mistaken.

An obvious corollary of the theory is that [uϕ] cannot receive a θ-role. Let's see why: Bobaljik (2008) argues that feature valuation takes place in the PF component of the grammar. This means that [uϕ] remain unvalued in LF. I take it that unvalued features at LF do not lead the derivation to a crash, they are simply invisible at LF (López 2007, Preminger 2014). However, [uϕ] cannot receive a θ-role: a hypothetical pronominal form without valued person or number features would fail to perform its role as an anaphor or deictic.

As a result of incorporation or head movement, a morpho-syntactic head can be complex, being made up of sub-words, each of which can be a terminal and the target of a VI-rule. For instance, we are going to see that $T^{fin}$ can be a complex head in Spanish, with a terminal for VI-rules that spell out Tense, Aspect and Mood and a separate terminal for □-features:

(5)




Taking the above preliminaries as a starting point, the parameter that separates the three languages can be defined as follows:

(6)
| | | | |
|---|---|---|---|
| a. | Irish: | There are no [uϕ] in the C-T phase. |
| b. | English: | There are obligatory [uϕ] in the C-T phase. |
| c. | Spanish | [uϕ] are possible in the C-T phase. |

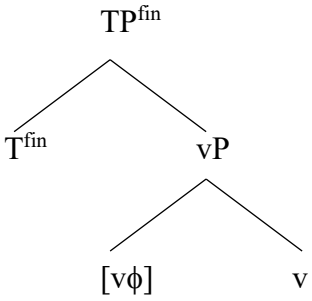
[4] An anonymous reviewer asks how this claim about [vϕ] would affect the θ-criterion. I believe the claim that [vϕ] do not need to have a θ-role leaves the θ-criterion unchanged. For comparison, the pronoun 'it' may refer to something (therefore getting a θ-role) or it may be an expletive (without a θ-role).

As I shall show, my analysis of apparent null subjects in Irish and Spanish hinges on the absence of [uϕ] in the T-C phase. English and Spanish are not differentiated by the presence or absence of an invisible feature – the D feature of Roberts', see below – their feature repertoire is the same. The only difference is whether the T-C phase requires [uϕ] or it is optional. Having [uϕ] triggering cross-linguistic differences is theoretically satisfying: [uϕ] are never interpretable, their role in grammatical structure is to trigger syntactic dependencies, and therefore it is conceivable that some languages simply do not have them. As Borer (1984) conjectured, cross-linguistic variation is tied to functional features in the syntactic structure, an insight that is incorporated in this proposal.

**3. Analysis**

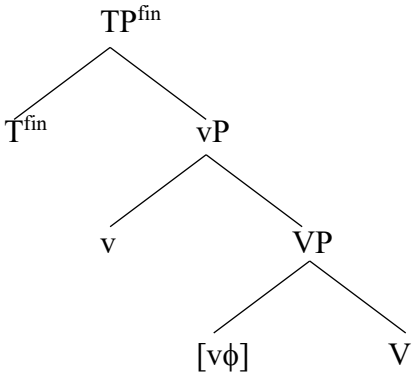
Let's assume as a starting point a structure such as the following:

(7)




That is, we have a T-C phase with an argument that consists only of ϕ-features that enter the computational system fully valued. I have placed this argument as an external argument. The analysis goes down the same way if this argument is an internal argument in a structure in which there is no external argument:

(8)




Let's start with Irish, with McCloskey and Hale (1984) as a guide. As mentioned, I hypothesize that Irish always has [vϕ] and there are no [uϕ] in the grammar. As mentioned in the introduction, the Irish finite verb paradigm includes analytic forms and synthetic forms. Analytic forms expone tense and mood, as in (1c), while synthetic forms expone person and number features, as well as tense and mood, as exemplified in (1a). As McCloskey and Hale (1984) point out, the person and number inflection on the synthetic forms behaves, to all practical purposes, as a pronoun. For instance, suffixes and enclitics that follow pronouns can also follow the person-number inflection of the synthetic form. This is exemplified in (9), with the reflexive particle *féin*:

(9) a. mé féin
I self
b. An gcuirfeá féin isteach ar an phost sin
Q put.cond.2 self in on that job
'Would you yourself apply for that job?

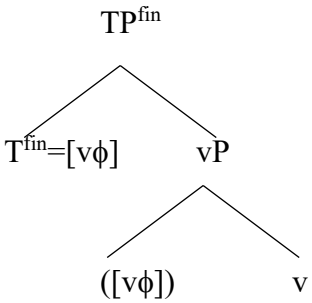
McCloskey and Hale 1984: 495

This leads me to conclude that the ϕ-feature inflection of synthetic forms and pronouns are one and the same List 1 item - a bundle of [vϕ] - each of which happens to have two different spell-out rules: one spell-out rule for the terminal [vϕ] that affixes to T when T is a bound morpheme and another rule acting as an elsewhere rule. (10a,b) show us how the feature bundle [1.sg] spells out in Irish (abstracting away from case). In (10a), T is a bound root, as represented with the symbol =. The feature bundle is an affix to T and in this context, it spells out as [-inn]. (10b) tells us that if the environment in (10a) is not present (when T is not a bound root), [vϕ] spell out as a free pronoun:

(10) a. [1.sg] ←→ [-inn] || $T^{fin}$= _____
b. [1.sg] ←→ [mé]

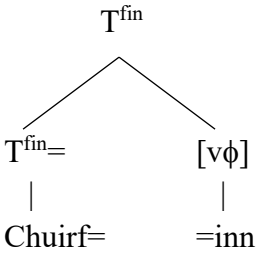
Thus, the [vϕ] that are merged in the structure have two possible derivational histories – although, in fact, the two options are dictated by properties of the T that is merged with it. If T is of the synthetic type, requiring inflection, [vϕ] incorporate into T. This gives rise to the structure of (11), where [vϕ] are spelled out as inflection:

(11)




The diagram in (12) shows the final structure of $T^{fin}$ after [vϕ] have incorporated into it. The [vϕ] form an independent terminal which is a sub-word within $T^{fin}$ :

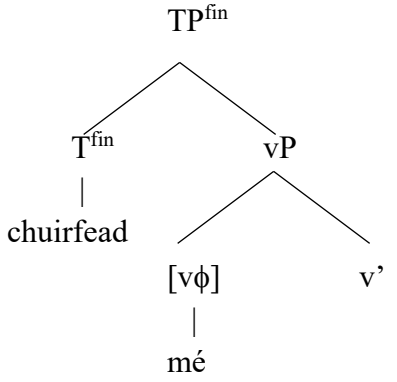
(12)




As for the lower copy of [vϕ], it will delete as copies of re-merge always do.

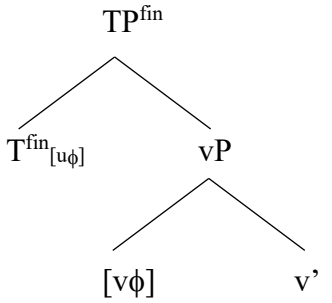
Alternatively, the T may not accept inflection. In that case, [vϕ] stays in situ. In this case [vϕ] will spell out as an independent word, i.e., a pronoun.

(13)




The analysis of English is similarly straightforward. The English T-C phase must have [uϕ], as per the parameter in (6). This means that [uϕ] must be merged with T or with C, so they can probe the [vϕ] and value its ϕ-features when the [vϕ] are sitting in Spec,v or lower. I assume that [uϕ] merge with $T^{fin}$. The end result is the following structure, with [vϕ] always spelling out as a pronoun (or determiner):

(14)




Finally, we turn to Spanish. Recall that in this language the C-T phase may include [uϕ]. Assume it does. If that is the case, the Spanish structure looks very much like the English one, represented in (14), and the process of probing and valuing the features in T would also work just the same. The result is a structure in which T presents valued ϕ-features to the VI-rules and there is an independent nominal - a DP or pronoun - that agrees with them.

Assume now that the C-T phase has no [uϕ] and only [vϕ]. In that situation, two options are theoretically available to the [vϕ]: either stay separate and spell out as a pronoun (as in Irish) or incorporate. The pronoun option is in fact not open because the Spanish $T^{fin}$ is always a bound morpheme. Therefore [vϕ] necessarily will incorporate to T. Thus, T ends up hosting LF interpretable – pronominal - ϕ-features. This captures the old intuition that null subjects are made possible by the verbal inflection, encapsulated in Rizzi's (1982) proposal that the ϕ-features of T can be pronominal: T is indeed pronominal, since it has incorporated [vϕ]; however, we contend there is no null subject.

So, in Spanish there are two strategies to build a grammatical sentence, one with [uϕ], the other one without. The question now is whether both possibilities are balanced and equally available or whether one of them is marked with respect to the other. I believe the markedness notion is more

likely. I suggest that the default strategy for T to acquire person+number inflection is by incorporation of [vϕ] – and [uϕ] only show up when [vϕ] cannot incorporate.

I suggest that [vϕ] cannot incorporate in Spanish in two specific situations. First, when [vϕ] selects a full DP/QNP. Second, when it is associated with an information structure feature that, following a long tradition, we may label [contrast] (for our purposes, this notion does not need to be made more precise, see Fábregas 2025 for discussion). Contrast is associated with a suprasegmental PF feature that (at least in Spanish) can only associate with full words, not sub-words. Let me elaborate.

Assume, as a thought experiment, a structure in which there is only [contrast] associated with [vϕ] but there is no [uϕ] in a C-T phase; in this situation [vϕ] incorporate into T and [contrast] ends up included within a sub-word of the T word ; as a consequence, the suprasegmental feature that should make [contrast] overt is absorbed and disappears; the result is that [contrast] is invisible to externalization and therefore useless. This captures the old intuition that free pronouns in Spanish carry some discourse feature, although I derive it through a different path from my predecessors (see in particular Sheehan 2006, Roberts 2010a,b, 2019, discussed below).

Continuing with the thought experiment, assume now that we have [uϕ] and no contrast on [vϕ]: this situation describes English: an overt pronoun with no additional structure. But in most dialects of Spanish this does not occur and [uϕ] in this language forms part of a C-T phase only when incorporation of [vϕ] is not possible. This reveals that merging [uϕ] with T is a marked strategy, a last resort. I take it that optional features may fossilize and become obligatory, (and so they lose their ability to affect interpretation), and this is what happened in the history of English, formerly a null subject language. The contemporary Spanish dialect Cibaeño has also undergone this process and is now a language without null subjects (see fn1).

## 4. Null subjects as ellipsis

As mentioned in the introduction, the ellipsis approach to null subjects is the most popular one nowadays (Holmberg 2005, Koeneman and Zeijlstra 2021, Roberts 2010a,b, 2019, Saab 2024, Sheehan 2006, Takahashi 2008 among others). The purpose of this section is to point out to some empirical and conceptual difficulties, all of which are avoided by my own approach.

I start the section with a mention of strict and sloppy readings of null subjects, which is the cornerstone of the ellipsis approach to null subjects. I move onto a discussion of Saab (2024) and Roberts (2010a,b, 2019). Then I present my own critique of the approach.

### *4.1. Strict and sloppy readings*

Takahashi (2008a,b) argues that the silent subject of Spanish-style languages and those of Japanese-style languages are syntactically distinct. According to this influential analysis, a silent pronominal is elided in (3a) while a silent argument in Japanese is in fact an elided DP with full internal structure. The empirical foundation for this conclusion is the absence of sloppy readings for Spanish null subjects as opposed to Japanese null arguments. This is exemplified in the examples in (15). Consider (15) first. The elliptical constituent is ambiguous, so that Ken might be musing about his own child or Taroo's:

(15) *Japanese*

| | | | | | | |
|---|---|---|---|---|---|---|
| Taroo-wa | [zibun-no | kodomo-ga | eigo-o | hanasu | to] | omotteiru |
| Taroo-TOP | self-gen | child-NOM | English-ACC | speak | C | thinks |

'Taroo$_i$ thinks that his$_i$ child speaks English.' _

| | | | | | |
|---|---|---|---|---|---|
| Ken-wa | [<e> | furansugo-o | hanasu | to] | omotteiru |
| Ken-TOP | | French-ACC | speak | C | thinks |

'Ken thinks that she/he speaks French.' _

i. Ken thinks that his own child speaks French. (sloppy)

ii. Ken thinks that Taroo's child speaks French. (strict)

[Simpson et al 2013: 104]

A long tradition in semantics attributes sloppy readings to some descendant of Barbara Partee's lambda abstraction rule (Partee 1973). This rule applies at LF and takes a constituent in the antecedent sentence like [his child] as input and lambda-abstracts the possessor resulting, in the formula λx [of(child, x)]. This is copied in the elliptical sentence. The lambda predicate can then be converted and the variable adopts the value *Ken*: λx [of(child, x)](Ken) = of(child, Ken). Leaving details aside, this approach entails that sloppy readings require a full DP structure for lambda abstraction to apply. A pronoun does not have the right structure.

Consider (16) now. (16) only accepts the strict reading: Juan also thinks that Maria's proposal will be accepted:

(16) Spanish

| | | | | | |
|---|---|---|---|---|---|
| Maria | cree | que su | propuesta | será | aceptada. |
| Maria | believes | that her | proposal | be.FUT | accepted |

'Maria believes that her proposal will be accepted.

| | | | | | |
|---|---|---|---|---|---|
| Juan | también | cree | que <e> | será | aceptada. |
| Juan | also | believes | that | be.FUT | accepted ' |

Juan also believes that it (= Maria's proposal) will be accepted.' (strict only)

[Simpson et al 2013: 104]

It follows from the lack of sloppy readings in (16) that Spanish null subjects have no internal structure. The contrast between (15) and (16) is a true empirical finding that a theory of null subjects should try to account for.[5]

*4.2. Saab (2024)*[6]

In Saab (2024) null subjects arise as the consequence of applying the following rule:

(17) Head Ellipsis (under Q-deletion):
Given a morphosyntactic word MWd, delete every Q-feature contained in MWd iff:
(i) There is an identical antecedent contained in a morphosyntactic word MWd',
(ii) MWd is adjacent or immediately local to MWd'.

[5] Duguine (2014) claims that null subjects in Spanish also accept sloppy readings. However, Saab (2020) presents some arguments against Duguine's conclusions.

[6] The proposal was presented already in Saab (2009). I base my analysis on his most recent publication, which is also technically the most detailed.

[Saab 2024:225]

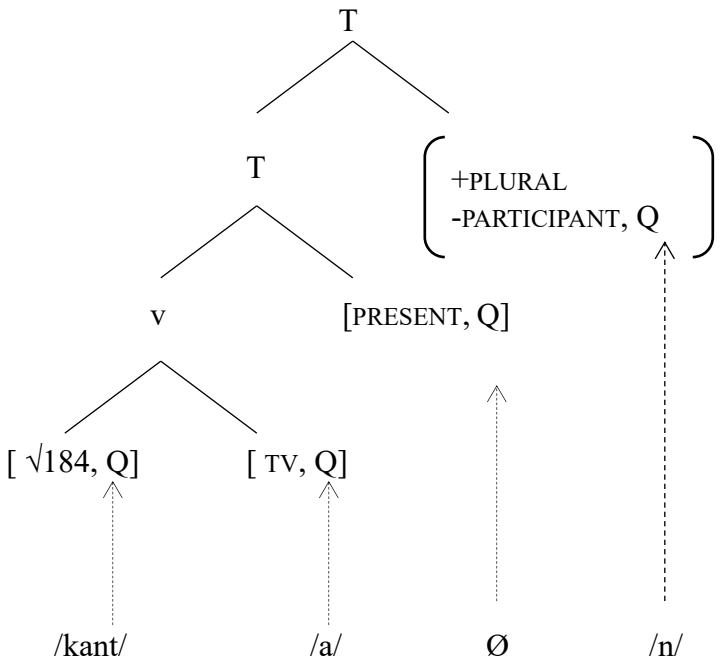
There are four concepts in (17) that need unpacking: Morphosyntactic word (MWd), Q-feature, identical antecedent and "adjacent or immediately local".

The notion of MWd is drawn from Embick and Noyer (2001). A MWd may include several adjoined morphemes each of which dominates a syntactic terminal. For instance, the head T in Spanish is a syntactic word that may include TMA morphemes as well as φ-features, the incorporated root and the verbalizing morpheme *v.* A pronoun is a MWd.

The Q-feature notion is drawn from Embick (2015), and it is a way of formalizing VI. In this system, every syntactic terminal is a pair of bundles of features [F,Q]. F is a set of syntactic/semantic features. Q is a variable that stands for a phonological exponent for the terminal. At the point of VI, an exponent from List 2 targets Q and replaces it.

The tree in (18) fleshes out the internal structure of the Spanish word *cantan* 'sing.3pl' within Embick's (2015) framework, adopted by Saab. The structure in (18) reflects the common assumption that there is v-to-T in Spanish. In this example Tense acquires the value [present], which has no exponent in Spanish. TV stands for thematic vowel.

(18)



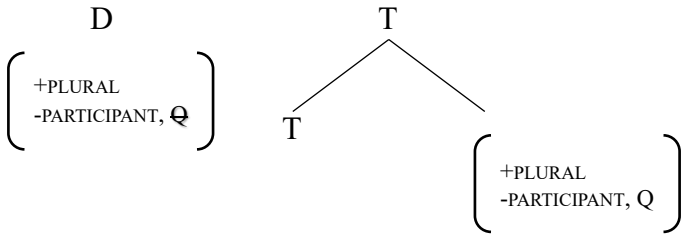

'cantan'
Sing.3pl

I take "identical antecedent" to mean literally that: the feature composition of the elliptical pronoun must be identical to the antecedent's.

The notion of "adjacent or immediately local" is probably the hardest to pin-point. The easiest thing would be to adopt the notion of linear adjacency, which is relevant for morphology. However, subjects can be separated from T by an adverb, and therefore we cannot simply assume that null subjects are adjacent to T. For the purposes of this presentation, we can just assume that the null subject and T are "immediately local" in some form that can be formally defined.

Here is how null subjects come about in Saab's system. The subject pronoun is a MWd, which means that it can be subject to deletion of Q if there is an appropriate antecedent for the ϕ-features of the subject pronoun. The ϕ-features in T are not a MWd, they are only a subword and consequently the Q feature cannot be subject to deletion; however, the ϕ-features of T can act as an antecedent for Q deletion. Since the ϕ-features of the pronoun and the ϕ-features of T are identical, the Q feature of the pronoun can be deleted. Since there is no Q feature in the pronoun at PF, there is no VI:

(19)




VI will insert the exponent [-n] in Q within T, but nothing will be inserted under D.

*4.3. Roberts (2010a,b, 2019)*

Roberts (2010a,b, 2019) is the most detailed analysis of null subject languages of the Spanish type that I am aware of. This level of detail will allow us to evaluate the solidity of an approach based on the idea that there is indeed an elliptical null subject in (3a).

Within the Roberts (2010a,b, 2019) framework, the parameter that separates English-type from Spanish-type languages is the presence of a D feature in T – this is how he formalizes the notion that T with agreement features is pronominal. In his theory, he defines the feature structures of T and of a pronominal as follows:

(20) a. Feature structure of T: {[uϕ], [uD], T, M, A}
b. Feature structure of a pronoun: {[vϕ], D, [uT]}

The [uT] is the structural case requirement on noun phrases in general. The noun phrase in the T-C phase has its [uT] valued as nominative case (Pesetsky and Torrego 2001). T has an unvalued D feature [uD], which strong agreement turns into a "quasi-pronominal". Notice this D feature gives T its pronominal character. It is not clear, at least to me, why ϕ-features by themselves do not succeed in defining a pronoun.

The inflected T and a pronoun in the C-T phase form a chain (like a movement chain). If the feature structure of a pronoun is a subset of the features of T, the pronoun is deleted at PF (like the lower copy of a movement chain).

Thus, where Saab (2024) demands identity between the ϕ-features of T and those of the pronoun, Roberts only requires that they be a subset. Although a little bit weaker, this subset condition is important in this model: if the inflection on T fails to capture the full set of features of the pronoun, then the pronoun cannot be deleted. As a consequence of Roberts' subset condition, the pronoun does not delete if it has some information structure feature (Roberts calls it [focus], following Sheehan 2006) that gives the pronoun a richer feature structure than T (cf. Chomsky's 1981 Avoid Pronoun Principle); this is an idea that I have incorporated into my approach, as

detailed in the previous section. Trivially, if instead of a pronoun we have a full DP, there is no subset relation with T, and the DP is not deleted. Finally, If T has an EPP, then there can be raising of a D to Spec,T. Notice that in this model, we need three silent categories to define a null subject language: the [uD] feature on T, the [D] feature on the pronoun, as well as the deleted pronoun itself.

*4.4. Objections*

There are empirical as well as conceptual objections that I would like to present to the ellipsis approaches.

There are numerous counterexamples to either the identity or the subset condition. That is, the features of the null subject may be a superset of the features of $T^{fin}$. For instance, the feature structure of third person Latin and Romance free pronouns includes gender, while T does not inflect for gender. Therefore, the features of a third person pronoun in these languages cannot be regarded as a subset of the features of $T^{fin}$. Example (21) gives us the third person pronouns of Latin and the verbal suffix that agrees with them. (21d) includes a glossed example:

(21) *Latin*

a. ea
   3sgf

b. is
   3sgm

c. [-t]
   3sg

d. *ea* *dic-i-t*
   3.SGF say-TV-3
   'she says'

Incidentally, gender, in the languages that have it, plays an important role in recovering antecedents in discourse. Using a pronoun with a certain gender automatically reduces the set of possible antecedents for it.

In Bangla, pronouns have distinct forms for person, gender and number but inflection on $T^{fin}$ is only for person. This does not prevent null subjects:

(22) *Bangla*

a. tin-jon SonnyaSi Abhik-er sathe dEkha korte elo.
   three-CL priests Abhik-GEN with meet do-INF come-PST.3
   'Three priests came to see Abhik.' _

b. Arun-er sathe-o <e> dEkha korte elo
   Arun-GEN with-also meet do-INF come-PST.3
   '(They) came to see Arun too.' _

[Simpson et al 2013: 108]

In Hindi, the supposedly elided pronoun may have a lexical case feature which, for obvious reasons, does not show up on T. In the following examples, *milega* 'get' governs dative case on the subject of the sentence, a feature that presumably should also be present in the elided pronoun in (23b):

(23) Hindi

a. Gita-ko lagta hai uske bete-ko puraskar milega.
Gita-DAT feel COP-PRES.3 her son-DAT prize get-FUT.M.Sg
'Gita$_{m}$ feels her$_{m/k}$ son will win the prize.' _

b. Sunitah-ko bhi lagta hai <e> milega.
Sunita-DAT also feel COP-PRES.3 get-FUT.M.Sg
'Sunita also feels (he) will.' _(strict only)

[Simpson et al 2013: 108]

As Simpson et al (2013) point out, in both (22b) and (23b) the silent subject <e> only has the strict interpretation, which entails that it belongs in the same class as the Spanish null subject.

Notice that none of these data present a problem for my approach. In my approach all we need to find is the best matching exponent for a feature matrix. Consider the following Latin VI-rules:

(24) Latin

a. [3.sg.f] ←→ /ea/
b. [3.sg.m] ←→ /is/
c. [3.sg.f] ←→ /-t/ || TV=____
d. [3.sg.m] ←→ /-t/ || TV=____

In Latin, the [vϕ] consisting of person, number and gender features constitute a syntactic terminal. In the example (24a), the terminal has the features [3.sg.f]. If there is no incorporation and the terminal remains a morphosyntactic word, these features spell out as /ea/ (and I am abstracting away from case). If this feature bundle becomes part of the $T^{fin}$ morphosyntactic word they spell out as /-t/, which is specified as [3.sg]. /-t/ has no gender, but it is selected by the VI-rules because it is the closest exponent to this particular feature bundle.[7]

Conceptually, there are aspects of the theory that require reconsideration. Recall that the difference between Japanese null arguments and Spanish null subjects is that the former have sloppy readings, which suggest a complete DP/NP structure, whereas Spanish only has strict readings, which suggest a non-branching node. This analysis begs the question: Why are the null subjects of Spanish bereft of internal structure? The other forms of ellipsis discussed in the literature – sluicing, VP-ellipsis, NP-ellipsis – involve full phrases with internal structure. Positing different types of ellipsis for Spanish and Japanese null subjects describes the empirical facts but does not explain them. My analysis, on the contrary, does explain the difference: Spanish has no null subjects, only pronouns, that is why they don't allow for sloppy readings.

Finally, I believe it is advantageous to reduce silent categories and silent features as much as possible. Not only does my analysis allow us to get rid of *pro*: Recall that Roberts argues that what makes the inflection of T rich enough to support a null subject is an invisible feature [uD], which

[7] An anonymous reader points out that ellipsis is generally optional – whether it is VP-ellipsis, Sluicing or NP-Ellipsis (the optionality is not perfect, as shown by Sluicing across islands, see Merchant 2000). If silent subjects were really the result of ellipsis, then we should expect to find an overt subject in the same contexts as the silent one: for instance, expletives or inanimate referents. I hesitate to fully exploit this argument at this time because one could argue that maybe null subjects are more like the traces of Remerge, which must delete. This is a topic worth considering in some depth which would take us too far from the main topic of this paper.

matches an invisible feature [D] on the pronoun. Without [D] a bundle of □-features is not pronominal. One should wonder why not? What if a pronoun is just a bundle of □-features and that's that?

**5. INFL is pronominal (or almost). There is *pro*.**

Let's assume φ-features on $T^{fin}$ are indeed pronominal, following a long tradition. If $T^{fin}$ is truly pronominal in Spanish, then this language would be non-configurational, as in Jelinek (1984). Jelinek argued that in non-configurational languages inflection acts as a full-fledged argument, with the consequence that all arguments are dislocated – an idea that Baker (1996) developed in depth. However, there are good reasons to suppose that Spanish-type languages are configurational – the VSO order represented in (3b) shows that Spanish subjects do not need to be dislocated. Even preverbal subjects can be argued to be sitting in an A-position such as Spec,T (see Costa 2004, Sheehan 2006 among others). My approach allows us to understand the source of the difference between Spanish, Irish and non-configurational languages. In non-configurational languages, there are no [uφ] and inflection on $T^{fin}$ is always bound; it follows that the φ-features on T are always the result of incorporation and any overt arguments must be dislocated. In Spanish, [uφ] are optional, which allows for arguments in A-positions. In Irish, the analytic forms of the verb – which do not incorporate allow for arguments in A-positions; the synthetic forms are non-configurational.

The idea that the inflection on $T^{fin}$ is pronominal and that this feature is related to the null subject phenomenon is old – I trace it at least to Rizzi (1982), who cites Chomsky (1981) and Taraldsen (1978). However, Rizzi was well aware that if $T^{fin}$ (or INFL in his terminology) is pronominal, then we need to worry about the Case Filter: in effect, the ϕ-features of T should absorb nominative Case and an overt D/DP would violate the Case Filter. On the other hand, silent categories are subject to the Empty Category Principle (ECP) instead, and the ECP can be satisfied by government of pronominal INFL. Therefore, INFL can absorb Case without yielding an ungrammatical structure because *pro* will be licensed by the ECP. Rizzi (1982: 131) proposes taking INFL to be optionally pronominal: When INFL is pronominal, it absorbs nominative case and can govern a silent pronoun. When INFL is not pronominal, then the structure must include an overt nominal. There is no visible feature that can tell you if INFL is pronominal or not.

The Case Filter has taken a beat in the decades after Rizzi wrote this essay, but it is still the case that Spanish assigns structural nominative case to only an argument of the clause. We could also add the θ-criterion as a potential difficulty to be caused by the pronominal INFL hypothesis: INFL would get a θ-role, but then *pro* would have none..

Inspired by Rizzi's work, numerous analyses of pro-drop emerged that assumed or developed the hypothesis that $T^{fin}$ with rich-pronominal agreement licensed and/or identified null subjects (see Camacho 2013 for an overview, Jaeggli and Safir 1989 for a collection of relevant papers). However, with the arrival of the minimalist program, Rizzi's original solution was seen as incoherent: Agreement within minimalism is asymmetrical, so that the features on a goal are copied on the probe. In the following formula, [uϕ] stands for unvalued person and number features while [vϕ] stands for valued features. The arrow expresses the agreement relationship between T and the DP. The unvalued ϕ-features of T become valued as a result of entering a dependency with the valued ϕ-features of the DP:

(25) $T_{[u\phi]}\ [_{vP}\ DP_{[v\phi],}\ \ldots\ ]$ → $T_{[v\phi]}\ [_{vP}\ DP_{[v\phi],}\ \ldots\ ]$

If *pro* is the goal of the probe in T, it is peculiar that the [uφ] of the probe license and identify the [vφ] of *pro*. Something is wrong (see Holmberg 2005 for an early discussion of this difficulty).

Some of the work that builds on Rizzi's insights tries to extricate us from the circularity of Rizzi's reasoning, but the results have not been very successful. One possible path is to claim that inflection in null subject languages is "rich" but not necessarily pronominal. This approach has an unwanted consequence: some person-number feature bundles are pronouns (if they are free), others are not (if they are bound) but there is no reason why this should be the case.

The "rich but not pronominal" approach has two versions. According to the first version, one can claim that some φ-feature bundles have an extra invisible feature that makes them pronouns (Cf: D-feature of Manzini and Savoia 2002, Roberts 2010a,b,2019, Holmberg 2010, ultimately an idea of Déchaine and Wiltschko 2002). In null subject languages, T can also have a [uD] feature that can turn T into a pronominal. Notice that the D feature is a direct descendant of Rizzi's optional pronominal feature. Consequently, this approach retains the same circularity that we found in Rizzi (1982).

The second version reads as follows: the φ-features on $T^{fin}$ are quasi-pronominal. This is the tack taken in Barbosa (1995) and Alexiadou and Anagnostopoulou (1998). Barbosa (1995) and Alexiadou and Anagnostopoulou (1998) split the properties of the subject among the inflection in T and *pro*. In this family of analyses, the inflection in T is pronominal enough to satisfy the EPP, but not for the purposes of θ-assignment. Thus, in example (3b), the overt subject is the external argument while the inflection satisfies the EPP requirement; consequently, the overt subject does not need to raise to Spec,T. In example (3a) the θ-role must be assigned to *pro*. This analysis maintains the essence of the 1980s framework: there is a null subject that is licensed by rich agreement on $T^{fin}$. But in this analysis, rich agreement on $T^{fin}$ is and is not pronominal, an unsatisfactory solution. Additionally, an empirical consequence of this line of thought is that all overt pre-verbal subjects in Spanish-type languages must be topicalized or dislocated, a consequence that Alexiadou and Anagnostopoulou (1998) – as well as Ordóñez and Treviño (1999) - argue for extensively. However, Costa (2005), Goodall (2002), Sheehan (2006) present arguments that pre-verbal subjects are not always dislocated; see also Camacho's (2013) summary.

My solution avoids the pitfalls of earlier approaches, including the circularity inherent to Rizzi's system. It is not the case that $T^{fin}$ is sometimes pronominal sometimes not; in fact, this question should be reformulated. Valued bundles of ϕ-features, what I refer to as [vϕ], are always pronominal. In null subject languages, these ϕ-features can incorporate into $T^{fin}$. When the [vϕ] cannot incorporate, then the bound property of Spanish $T^{fin}$ forces a bundle [uϕ] to merge with it.[8] There is no circularity because the contexts in which [vϕ] do not incorporate are properly circumscribed and the [uϕ] are only merged when morphology requires them. As mentioned, my theory also does not appeal to an invisible feature that is required to turn a bundle of ϕ-features into a pronoun. At the same time, we trivially avoid the incoherence of positing that the [uϕ] of T "licenses" an empty category

[8] An anonymous reviewer asks how this could be carried out. We can borrow from Chomsky (1995) the idea that before a derivation can proceed a subset of items from List 1 must be selected forming a set that he calls a Numeration (Num). A Spanish Num including a [vϕ] bundle that cannot incorporate will not yield a converging derivation unless a complementary [uϕ] is also included in Num.

## 6. The pro-drop parameter and expletive subjects

Rizzi (1982) argued that the appearance of null subjects in Italian correlated with other properties: (i) absence of EPP effects, which yields absence of expletives and the possibility of VS orders, (ii) the possibility of VS orders yields absence of that-t effects and having the CP(=S') and not the TP(=S) as a subjacency node. These properties together clustered around the so-called Null Subject Parameter (NSP), and the NSP was derived from pronominal agreement: Pronominal agreement licenses *pro* and satisfies the EPP, which makes raising of the subject to Spec,T unnecessary. Since wh-movement may take Spec,v as lift-off point, that-t effects are avoided. Rizzi's proposal captured the imagination of two generations of linguists. In more recent times, there has been quite a bit of debate around the existence of this parameter (see Camacho 2013, Fábregas 2025, Roberts 2019 for extensive discussions).

Leaving subjacency aside, which has undergone substantial revision since its formulation (see Rizzi 2021), we can now focus on the other properties. Our tool-kit is limited: we only have [vϕ] and [uϕ], nothing like strong agreement, or [D], or [uD] or any other features. The question is whether this limited armamentarium can yield the NSP without further ado.

I can say, upfront, that the answer is no. Irish analytical verb forms show us that VS order can obtain even if there is no agreement in $T^{fin}$. If we maintain that VS order in Spanish is the result of agreement on T, then the VS orders of Irish and Spanish are epiphenomena derived from distinct parameters.[9] It follows that the classic account of the other properties supposedly following from VS order and strong agreement in Spanish-style languages can also not be extended to Irish. Alternatively, we can adopt the assumption that the VS orders in Irish and Spanish respond to the same parameter, in which case the VS order in Spanish is unrelated to agreement on T. I will not attempt to address this issue here, which would take us too far afield.

So, only expletives are left for us to discuss. The overarching issue is whether the model presented in these pages gives us a path to account for the distribution of expletives in these languages. The linguistic facts are as follows: English has obligatory pronominal expletives when there is no argument that can agree with $T^{fin}$:

(26) a. It is raining.
b. It seems that Sean is clever.

Spanish never has expletives:

(27) *Spanish*
a. Llueve.
Rain.3sg
b. Parece que Sean es listo.
Seem.3sg that Sean is clever

[9] Moreover, as pointed out by an anonymous reviewer, Fernández-Soriano (1999) argued that locative and dative arguments raise to Spec,T in Spanish even though they do not agree with T. Fernández-Soriano concluded that EPP satisfaction is satisfied with a constituent in Spec,T, not by agreement in T.

Irish has expletives with weather verbs and extraposition structures with analytical inflection, although not in existential sentences (see McCloskey 2001, 2007).[10]

(28) *Irish*

a. Tá sé ag cur
Is it putting rain
'It is raining.'

b. Feiceann sé dom go bhfuil Seán cliste.
Seems it me that be Sean clever
'It seems to me that Sean is clever.'

I argued that Irish analytical forms have no [u□]. This means that any workable hypothesis on the availability of expletives in Irish and English must pivot around [v□] – which might surprise the reader, since expletives are meaningless. But recall that [v□] are not necessary connected to interpretability.

I propose that the following principle holds of all three languages:

(29) The C-T phase must have [v□].

The exact reason why this property should exist, and how it is connected to the interfaces, is not entirely clear to me at this point. One possible hypothesis would be to appeal to Chomsky's (2013, 2015) theory of labeling. In these papers, Chomsky argues that agreement between T and a D is required for TP to be labeled. We could reformulate this condition by saying that the label of a finite T is such that it requires merging [vϕ] with it. Be that as it may, (29) is the path open to us to account for the distribution of expletives.

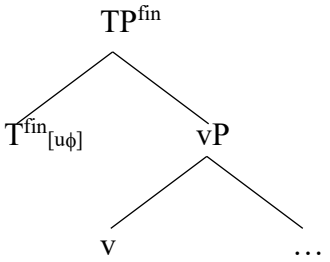
The presence of expletives in Irish follows directly from (29) without further ado. What we refer to as an expletive is simply a bundle of [vϕ] merged to satisfy (29).

Let's turn to English. Recall that English always has [uϕ] in the structure, as per (6b). It is plausible that these [uϕ] want to be valued by PF: barring ellipsis, the [Q] feature must be replaced with a phonetic matrix. There are *a priori* two strategies that could accomplish this. The first is to merge a set of [vϕ] somewhere in the C-T phase (most likely, Spec,v): this is the condition that I formulated in (29). This bundle of [vϕ] is what we call an expletive. The [uϕ] in $T^{fin}$ probe and value their features against the expletive, yielding a grammatical sentence. This accounts for the presence of expletives in English.

A second strategy is probably more marked. Assume a language like English because it has the parameter (6b) (obligatory [uϕ] in the C-T phase) but unlike English because it lacks (29). In this language, the obligatory presence of [uϕ] in the structure will not force the merge of [vϕ] in the structure – only something like the θ-criterion can force the appearance of [vϕ]. So, now sentences equivalent to those in (26) have a structure like (30), with [uϕ] attached to $T^{fin}$ and no [vϕ] to value them:

[10] I would like to thank Davis Sandefur for his help with the Irish data. I haven't been able to elicit any expletive data with synthetic forms.

(30)




In the face of a set of unvalued features on a syntactic terminal, the module Morphology simply generates a set of default features (López 2007, Preminger 2014). This terminal is now ready for VI. There are indeed some languages that fall in this category (see Holmberg 2005 on Finnish): languages without referential null subjects that do not have overt expletive subjects**.**

The lack of expletives in Spanish follows from the system directly. Recall that the default structure is one in which the [vϕ] incorporate into T. In sentences equivalent to the English (26), [vϕ] are incorporated into T and therefore there is no overt expletive, yielding (27) instead. In particular, notice that since the expletive [vϕ] do not carry contrast or select for a nominal phrase, the option of pairing them up with [uϕ] in T is ruled out. Expletives therefore confirm our conclusion that [uϕ] are only merged in the structure when the morphological structure of T requires them.

**7. Null subjects and the emancipation of ϕ-features**

It has been noticed many times that some languages with rich agreement do not allow for null subjects. Koenemann and Zejlstra (2021) and Saab (2024) observe that there is a correlation between the independent spell-out of ϕ-features on T and the possibility of null subject. On the basis of this correlation, they argue for the following generalization: ϕ-features in T license a null subject only if they spell-out independently. Here I assume that the generalization is real and show that it is derived from the analysis presented in the previous sections.[11]

In more technical terms, their argument is that what differentiates null subject languages from non-null subject languages is that the representation of the ϕ-features in T at the point of VI is different: In the non-null subject languages, the ϕ-features of T remain within the T node and do not form a sub-word, as shown in (31).

(31) Not a possible null-subject language: ϕ-features are bundled within $T^{fin}$

$T^{fin,\square}$
|
VI

[11] In Spanish, TMA and ϕ-features are indeed segmentable in many verb tenses:

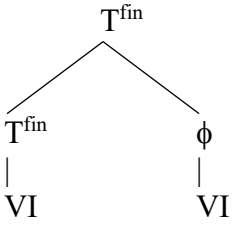
(i) Llegá-ba-mos
arrive-PAST.IND.IMP-1PL

In some verb tenses there is syncretism. For these, Koeneman and Zejlstra (2021) suggest applications of *impoverishment* or replacement with default forms. For impoverishment, see Embick (2015). For a complete analysis of Spanish verb forms in the distributed morphology framework, see Pomino (2008).

A clear example of (31) is the English [-s] affix on verbs. Although it expones the third person singular, it also expones the present tense. Thus, the □-features and Tense are bundled up in one terminal.

In the null subject languages, an additional post-syntax operation sprouts an independent node inside the T morphosyntactic-word to house the □-features of T. The resulting representation is as follows:

(32) A possible null subject language: ϕ-features are emancipated and form a sub-word




This independence of the ϕ-features in T is what allows them to license a silent subject, conceptualized as a regular pronoun that undergoes ellipsis at PF (in Saab 2024). As Saab explains, null subjects are the outcome of ellipsis and ellipsis requires a suitable antecedent. A suitable antecedent must be an independent node: a set of ϕ-features trapped within a node with other features cannot be an antecedent but a terminal node within a sub-word can be.

The sprouting operation proposed by Koeneman and Zeijlstra and Saab is not independently motivated. However, let's assume that there is a kernel of truth in the proposal, and adopt the assumption that having the ϕ-features in T in an independent node is a crucial feature of null-subject languages. If so, my proposal can incorporate the main intuition directly because the independent node shown in (32) is created without further assumption when [vϕ] incorporates into T (see also the diagram in (12) above). In this version of the Koeneman-Zeijlstra-Saab generalization, the empirical datum that null-subject languages have independent T and ϕ-features is a consequence of [vϕ] incorporation, it is not the feature that drives the presence of silent subjects (which, as pointed out above, I suggested we do not need).

There is a wrinkle that needs to be ironed out. In Spanish, the inflection on the verb is identical when there is incorporation of [vϕ] and when $T^{fin}$ is merged with [uϕ]. This leads to the conclusion that the [uϕ] also head their own sub-word. This means that [uϕ] yield the structure in (32) without incorporation. I suggest that in this case sprouting does take place. Let me elaborate on this point. The reason that the ϕ-features of T form a separate node is incorporation of [vϕ]; since incorporation of [vϕ] is part of the grammar of the language, and in a Spanish-type language [uϕ] on $T^{fin}$ must also be accommodated, the system resorts to having the [uϕ] also in a separate node via sprouting. That is, incorporation is the ultimate reason why there is a separate node for the ϕ-features even if the schema may expand for unvalued ϕ-features.

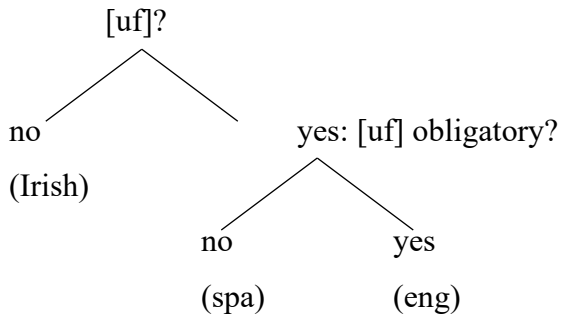
There is, of course, an alternative scenario in which a language would be like Spanish in having [vϕ] as well as optional [uϕ] on $T^{fin}$ but no sprouting for [uϕ]. In this language, the [uϕ] would be bundled with $T^{fin}$, while [vϕ] would head their own syntactic terminal. It follows that [uϕ] and [vϕ] would have distinct spell-out forms. I am not aware of any language with this property although it may well exist.

Therefore, we capture the Koeneman-Zejlstra-Saab insight while motivating it by means of the mechanism of incorporation.

## 8. Conclusion

I have argued that incorporation of [vϕ] into $T^{fin}$ yields pronominal inflection. There is therefore no null pronominal subject in languages with rich agreement like Spanish and Irish. The differences between Irish, English and Spanish regarding the availability of "null" subjects boil down to the availability of [uϕ] in combination with a morphologically bound $T^{fin}$. Obligatory [uϕ] in English yields a language that always has overt subjects; optional [uϕ] yields a language in which overt subjects are possible, such as Spanish; absence of [uϕ] in Irish ensures that [vϕ] are always incorporated into the $T^{fin}$ structure and overt subjects can only co-occur with a verb form that has no ϕ-features. The following simple diagram represents the parameters at play:

(33)




I have argued that this approach accounts for the Koenemann and Zejlstra (2021) generalization that ϕ-features in (apparent) null subject languages form a sub-word within the $T^{fin}$ MWd. Finally, I have sketched an analysis of expletives in the three languages – including Irish, a language in which the presence of expletives had been heretofore barely mentioned.

I have shown that the postulation of *pro* as in the traditional pro-drop analyses of the 1980s or an elliptical pronoun as in more recent work leads to irreparable inconsistencies. Instead, I have proposed that there is no such thing as an invisible pronoun – at least, not in the languages explored here – and shown that this option can be made coherent and does not encounter the sort of empirical problems that ellipsis does.

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