

Article

Null Subjects in Non-Pro-Drop Languages: The Lens on French

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Abstract: The contrast between languages such as Italian that allow subjects of tensed sentences to be null (i.e., pro-drop languages) and those like French that do not (i.e., non-pro-drop languages) is a classic issue for comparative syntactic research. Nevertheless, while several studies have been dedicated to pro-drop languages, distinguishing across different types, subject omission in non-pro-drop languages is generally misjudged as a marginal or substandard phenomenon. However, a more careful examination reveals that the occurrence of Null Subjects (NSs) in non-pro-drop languages is associated with distinct semantic and discourse imports. Based on a systematic corpus analysis, this work will confirm that NSs do occur in Colloquial French, especially in the case of expletive subjects. Furthermore, evidence will be provided for a crucial connection between subject omission, expletive types, and the morpho-syntactic categories of person/number for argument pronouns. This pilot work can thus open new perspectives for future research.

Keywords: null subject; pro-drop parameter; discourse categories; expletives; argument roles; phi-features

1. Introduction

The contrast between languages that allow subjects of tensed sentences to be null (like Italian, Greek, and Turkish) and those that do not (like English and French) is a classic issue for comparative syntactic research. Within the formal framework of generative grammar, the licensing of Null Subjects (henceforth, NSs) has been a major topic since the 1980s, both for its theoretical import and its connection with a parameter (cf. Jaeggli and Safir 1989 and Rizzi 1982). Indeed, several works have been dedicated to the licensing, acquisition, and interpretation of NSs (cf. Tomioka 2003; Holmberg 2005; Holmberg et al. 2009; Neeleman and Szendrői 2007; Frascarelli 2007; and Biberauer et al. 2010, among others), and different sub-types have been identified and approached.

On the other hand, few works have been dedicated to the occurrence and formal/discourse properties of NSs in languages which do not allow for subject omission in tensed sentences, as this phenomenon is generally considered marginal, substandard, or simply ungrammatical, and as such, somehow non-existent. In particular, up to the 1990s, two dominant hypotheses can be found: in one case the use of NSs is tied to (not clearly specified) ‘social attitudes’ (cf. Langacker 1985) while others believe that NSs occur in conversation for reasons of ‘temporal efficiency’ (Napoli 1982). However, though it is trivially true that deleting the subject shortens an utterance, no study could demonstrate that such efficiency is the point of NS realizations. On the contrary, later studies have shown that the shorter the conversational turn, the greater the possibility of the subject being null (cf. Section 6.3). Then, recent works (cf. Cote 1996; Haegeman 2000; Torres Cacoullos and Travis 2014; and Wagner 2012, among others) have shown that though restricted, the occurrence of NSs in non-pro-drop English is not random or the result of careless wording, but tightly connected with specific formal and discourse properties. As for French, several studies have shown that it allows the realization of NSs in some specific structural contexts and with a limited number of verbs, especially in impersonal constructions (cf. Zimmermann and Kaiser 2014 and Zimmermann 2018, among others).



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The present work aims at verifying the previous literature on the use of NSs in Modern Colloquial French, also offering a useful cross-linguistic comparison for future research in this area.

In particular, the present investigation is based on the analysis of three conversations extracted from two online corpora of Colloquial French, namely the CLAPI (<http://clapi.icar.cnrs.fr/> accessed on 1 December 2023) and the CFPP2000 (<http://cfpp2000.univ-paris3.fr/> accessed on 1 December 2023), for a total of two and a half hours of conversations between friends on different subjects (nine speakers and approximately 56,000 words).

In detail, the present paper is organized as follows: Section 2 is dedicated to the notion of pro-drop, a brief description of the NS [parameter], and a background on the studies dedicated to the interpretation of pro, whereas Section 3 presents a typology of pro-drop languages, distinguishing between consistent, partial, radical, and expletive pro-drop languages, with relevant examples from different languages. In Section 4 the lens of analysis concentrates on French, in order to present the results of previous studies, as well as providing elements of diachronic analysis that may be useful for the interpretation of phenomena found in Modern French. Section 5 introduces the research questions and illustrates materials and methodology. Then, Section 6 is dedicated to the quantitative and qualitative analysis of data and to a discussion on the most relevant trends. Finally, Section 7 is dedicated to the final conclusions and considerations for future research.

2. Null Subjects and the Null Subject Parameter

An NS is a subject that is not overtly expressed in a sentence and thus NS languages (NSLs) are those languages in which sentences can still be grammatical even if the subject is not explicitly pronounced. Conversely, in non-NSLs subjects must always be overtly realized (except in the case of imperatives, subject relatives, and some fixed expressions). For instance, in Italian, which is a quite consistent NS language, the subject can be silent in virtually any clause type context (as is shown in Frascarelli 2007 and related works), which is different from a non-NS language like French, as is shown in (1) and (2) below (cf. English as well in the translations):

(1)	<i>Leo_k</i>	<i>ha</i>	<i>detto</i>	<i>che</i>	<i>pro_k</i>	<i>uscirà</i>	<i>quando</i>
	Leo	have.3SG	say.PRT	that	NS	go out.FUT.3SG	when
	<i>pro_k</i>	<i>avrà</i>	<i>finito</i>	<i>il</i>	<i>suo</i>	<i>lavoro</i>	
	NS	have.FUT.3SG	finish.PRT	the	POSS.3SG	work	
	'Leo said that he will go out when he would have finished his work.'						
(2)	<i>Leo_k</i>	<i>a</i>	<i>dit</i>	<i>qu'</i>	<i>il_k</i>	<i>viendrait</i>	<i>lorsqu'</i>
	Leo	have.3SG	say.PRT	that	pron.3SGM	go out.FUT.3SG	when
	<i>il_k</i>	<i>aura</i>	<i>terminé</i>	<i>son</i>	<i>travail</i>		
	pron.3SGM	have.FUT.3SG	finish.PRT	POSS.3SG	POSS.3SG		
	'Leo said that he will go out when he would have finished his work.'						

Example (3) below also shows that in Italian (and in consistent NS languages in general) the person/number specification of the subject is irrelevant, as well as the tense/mood characterization of the verb:

(3)	<i>pro_z</i>	<i>penso</i>	<i>che</i>	<i>pro_k</i>	<i>andrà</i>	<i>via</i>	<i>sebbene</i>
	NS	think.1SG	that	NS	go.FUT.3SG	away	though
	<i>pro_w</i>	<i>avrebbero</i>	<i>preferito</i>	<i>che</i>	<i>rimanesse</i>	<i>qui</i>	
	NS	have.COND.3PL	prefer.PRT	that	stay SUBJ.3SG	here	
	'I think he will leave although they would have preferred him to stay here.'						

Of course, the subject of a clause in an NS language can also be overt. With an overt subject, the Italian sentences above are indeed perfectly grammatical. However, it has been argued that the overt realization of subjects in pro-drop languages is associated to discourse-related requirements; in other words, this means that an overt subject in a language like Italian is either a Focus or (some type of) Topic (as in, respectively, (4) and (5) below) (for discussion, cf. Grimshaw and Samek-Lodovici 1998; Frascarelli 2007, 2018; and Mayol 2010).

- (4) *Io vado via (non Sara)*
 pron.1SG go.1SG away not Sara
 ‘It’s me who is going (not Sara).’
- (5) *Io_k, vado via (...gli altri pro_k non lo so)*
 pron.1SG go.1SG away the others NS not OBJ.CL.3SG know.1SG
 ‘(as for me) I’m going (the others I don’t know).’

Rizzi’s Null Subject Parameter (NSP)

Building on previous studies investigating the properties of NSLs and the licensing of NSs (cf. Perlmutter 1971; Chomsky and Lasnik 1977; Taraldsen 1980; Kayne 1980; and Chomsky 1981, among others), in his 1982 seminal work, Rizzi formulated the Null Subject Parameter (NSP). This paved the way for a vast amount of cross-linguistic research and analyses, leading to an understanding of various phenomena, but also highlighting the limits deriving by positing a strict connection between NS licensing and inflection.

Leaving aside the exposition of data concerning free subject–verb inversion, rich agreement, and the absence of “that-t” effects (the interested reader can refer to Perlmutter 1971; Kayne 1980; Holmberg 2005; and D’Alessandro 2015, among many others), non-referential (expletive), NSs will be briefly treated below, since they will play an important role in the corpus analysis conducted in this paper.

As is known, expletive subjects occur in all the contexts in which the subject has no argument role, and according to Rizzi’s (1982) NSP, if a language has thematic NSs it must also have null expletives. This means that in pro-drop languages like Italian, expletive subjects are covert, whereas in non-pro-drop languages non-referential subjects must be overt, like referential ones.¹ Consider the following contrasts between Italian and French (and English, in the translations):²

- (6) *pro_{EXPL} sembra (che) pro_{EXPL} sia tardi*
 EXPL seem.3SG that EXPL be.SUBJ.3SG late
- (7) *il_{EXPL} semble qu’ il_{EXPL} soit tard*
 EXPL seem.3SG EXPL be.SUBJ.3SG late
 ‘It seems (that) it is late.’
- (8) *pro_{EXPL} sta piovendo*
 EXPL be.3SG raining
- (9) *il_{EXPL} pleut*
 EXPL rain.3SG
 ‘It is raining.’
- (10) *pro_{EXPL} è probabile che ci sia sciopero domani*
 EXPL be.3SG probable that there be.SUBJ.3SG strike tomorrow
- (11) *il_{EXPL} est probable qu’ une grève ait lieu demain*
 EXPL be.3SG probable that a strike have.SUBJ.3SG place tomorrow
 ‘There’s likely to be a strike tomorrow.’
- (12) *pro_{EXPL} bisogna sbrigarsi*
 EXPL must.3SG hurry
- (13) *il_{EXPL} faut se dépêcher*

	EXPL		must.3SG		hurry		
		'One/you must hurry.'					
(14)	PROEXPL	<i>c' è</i>	<i>un uomo</i>	<i>in</i>		<i>giardino</i>	
	EXPL	there be.3SG	a man.	in		garden	
(15)	ilEXPL	<i>y a</i>	<i>un homme</i>	<i>dans</i>	<i>le</i>	<i>jardin</i>	
	EXPL	there have.3SG	a man	iiin	the	garden	
		'There is a man in the garden.'					
(16)	PROEXPL	<i>è</i>	<i>incredibile ma</i>	<i>vero!</i>			
	EXPL	be.3SG	incredible but	true			
(17)	c'EXPL	<i>est</i>	<i>incroyable mais</i>	<i>vrai</i>			
	EXPL	be.3SG	incredible but	true			
		'It's incredible but true.'					

Comparing Italian with non-pro-drop languages, such as English and French, [Kayne \(1980\)](#) also observes that the latter must have an expletive in the canonical subject position in the case of so-called subject inversion, as is shown in (18) and (19) and the corresponding English translation.

(18)		<i>è</i>	<i>Leo</i>	<i>che</i>	<i>lo</i>	<i>sa</i>
		be.3SG	Leo	that	it.OD	know.3SG
(19)	*(c')	*est	<i>Leo</i>	<i>qui</i>	<i>(le)</i>	<i>sait</i>
	it	be.3SG	Leo	who	it.OD	know.3SG
		'*(it) is Leo who knows.'				

By looking at the data presented so far, we might be tempted to conclude that the NS status of a language is a pretty straightforward matter. You must express the subject, like in English/French, or you do not have to, like in Italian/Spanish. However, empirical evidence shows that both pure pro-drop and non-pro-drop languages are rare. In fact, most languages only feature NSs of a specific type and/or in specific structural contexts, as will be shown in the following section.

3. A Typology of Pro-Drop Languages

As we have seen so far, pro-drop languages are those languages that allow for a covert realization of the subject of a sentence. However, as mentioned at the end of Section 2, pro-drop languages do not behave consistently, and thus, they have been classified in different groups based on the nature of the NSs allowed and/or the specific contexts in which NSs can occur.

3.1. Consistent Pro-Drop Languages

As the name suggests, consistent (or 'full') pro-drop languages are those languages which present the full range of characteristics included in Rizzi's NSP, namely free subject-verb inversion, rich agreement, and the absence of "that-t" effects. For this reason, they are also referred to as 'canonical' pro-drop languages. Consistent pro-drop languages include Arabic, Basque, Berber, Greek, Hausa, Turkish, and all romance languages except French.

3.2. Radical Pro-Drop Languages

Radical pro-drop languages, also referred to as 'discourse' pro-drop languages, are those which present the same characteristics as full pro-drop languages, but they lack any verbal inflection.³ This type includes many Asian languages, such as Chinese, Japanese, Korean, Thai, and Vietnamese. The specificity of these languages is that grammar does not offer any help in identifying the covert subject, due to the lack of verb-subject agreement. Thus, it has to be retrieved from the discourse, as can be seen in the following examples (Adapted from [Huang 1984](#), p. 533):

(20)	Speaker A:	Zhangsan	kanjian	Lisi	le	ma?	[Chinese]
		Zhangsan	see	Lisi	LE	Q	
		'Did Zhangsan see Lisi?'					
	Speaker B:	pro	kanjian	ta	le		
		NS	see	he	LE		
		'[[He] saw him'					

The licensing of *pro* in radical pro-drop languages has been the object of many studies in the last decades and many proposals have been put forth. For instance, Huang (1984) argues that in discourse-oriented languages such as Chinese (cf. Tsao 1977), empty variables like NSs are bound to a 'zero-topic', which licenses the *pro*. Saito (2007) argues for "a mechanism of PF merging of arguments that are copied directly from discourse elements" (D'Alessandro 2015, p. 221). Then, Barbosa (2011a, 2011b) proposes that NSs are in fact a case of (null) NP anaphora, while for Duguine (2013) they are instead NP/DP ellipsis. Finally, in Frascarelli and Casentini (2019), a discourse-related approach is assumed and an Agree relation is proposed between NSs and a dedicated type of Topic, namely the *Aboutness-shift* (A)-Topic; radical NS languages are thus treated in line with Frascarelli's (2007) analysis of consistent pro-drop languages, although with specific restrictions.⁴

Though interesting, a more in-depth analysis of the implications triggered by different approaches goes far beyond the scope of the present paper; the interested reader is thus referred to the studies mentioned above.

3.3. Partial Pro-Drop Languages

Partial pro-drop languages are those languages in which referential subjects can be covertly realized only in some structural contexts or based on their specific features. These languages include Finnish, Marathi, Russian, Icelandic, Assamese, Hebrew, and Brazilian Portuguese (cf. Biberauer et al. 2010). For instance, Finnish only allows for first and second person subjects to be null, while omitting a third person subject yields ungrammatical sentences, as shown in (21).

(21)	a.	(Minä)	puhu-n	englantia		[Finnish]
		I	speak-1SG	English		
	b.	(Sinä)	puhu-t	englantia		
		You	speak-2SG	English		
	c.	*(Hän)	puhu-u	englantia		
		He/She	speak-3SG	English		
	d.	(Me)	puhu-t	englantia		
		We	speak-1PL	English		
	e.	(Te)	puhu-tte	englantia		
		You	speak-2PL	English		
	f.	*(He)	puhu-vat	englantia		
		They	speak-3PL	English		

(Adapted from Holmberg 2005, p. 539)

On the other hand, Holmberg (2005) shows that Finnish third person pronouns can be covert if they are bound by an overt DP, as shown in (22). In this respect, Ylinärä and Frascarelli (2021) show, in turn, that Holmberg's 'binding DP' is in fact an A-Topic, which is in line with Frascarelli's (2018) proposal for partial pro-drop languages.

(22)	Pekka _i	väittää	[että	hän _{i/j} / Ø _{i/*j}	puhuu	englantia	hyvin]	[Finnish]
	Pekka	claims	that	he	speaks	English	well	

(Holmberg 2005, p. 539)

It should be finally noticed that the possibility to covertly realize a subject in partial pro-drop languages can be restricted in the presence of a generic/indefinite subject, as is the case of Marathi.

- (23) *Unahlyat lavkar utthavla jato* [Marathi]
 summer-in early wake go-PRES.3SG.M
 'In summer one wakes up early'

(Holmberg et al. 2009, p. 125)

3.4. Expletive Pro-Drop Languages

Finally, there are the so-called "Expletive NS languages", which only allow for expletive subjects to be null. This is the case for Dutch (Gilligan 1987):

- (24) *Gisteren werd (er) door het hele dorp gedanst* [Dutch]
 yesterday be.PST.3SG there by the whole village dance.PST.3SG
 'Yesterday, there was dancing by the whole village'

As can be seen in (24), the expletive pronoun *er* can be omitted in the embedded sentence. Finnish, a partial NS language, also features some null expletives as shown in (25) (Holmberg and Nikanne 2002). (For a discussion on different expletive types and their properties, also cf. Ylinärä and Frascarelli 2021).

- (25) *Nyt (se) taas sataa* [Finnish]
 now EXPL again rain.PST.3SG
 'Now it's raining again'

4. Subject Omission in French: A Short Historical Overview

As said in the introduction, the present paper is primarily intended to verify the results of previous studies on the use of NSs in Modern Colloquial French. Nevertheless, since the pro-drop quality has different implementations (as shown in Section 3) and can vary over time (giving rise to 'cyclic variations', cf. Givón 1976), we consider it useful to check whether French has ever admitted subject omission of some kind in the past. Before turning to a corpus analysis of contemporary spoken data, this section is therefore dedicated to a brief preliminary excursus of the relevant literature concerning Old French, as well as to a brief report on the results obtained by previous research on the use of NSs in Modern French.

4.1. NSs in Old French

A long-standing problem in Old French syntax is the ability to account for the variability in subject–pronoun realization. As can be seen from the examples below, taken from early 13th century narrative prose, an overt subject pronoun could appear either before the tensed verb (26), or after it (27), if a non-subject constituent stood in first position, whereas an NS occurred only in the latter position.

- (26) *Ele vint as deus rois*
 she come.PST to.DEF.PL two king.PL
 'She came to the two kings.' (La mort le roi Artu)
- (27) *Et por ce vos vint ele veoir*
 and for this you.OBJ come.PST she see.INF
 'And therefore she came to see you.' (La queste del saint Graal)

In this line of research, Vance (1997) noticed that in prose romances first and second person pronouns, which are generally used in dialogues, were more often overt, whereas third person subjects, most commonly used in narrative parts, were more often null.

Within contemporary syntactic theory the question tends to be whether Old French was a pro-drop language typologically. Roberts (1993) and Rinke (2003) considered that it was, whereas Zimmermann (2014) argued to the contrary. However, the question should not be seen as a binary choice, since as discussed in Section 3.3 above, research has demonstrated the existence of *partial* pro-drop languages such as Finnish and Brazilian Portuguese (Holmberg and Nikanne 2002; Modesto 2008; Ylinärä and Frascarelli 2021), in which subjects may be left null in restricted contexts.

In this respect, Ingham’s (2018) corpus study provides a crucial contribution for the understanding of subject omission in Old French, since it shows that definite third person NSs are allowed only when they are coreferential with the subject–Topic of a higher clause and that NSs typically appear in chains. Ingham thus shows that these chains are headed by an element that qualifies as what Frascarelli (2007) defines the A-Topic (cf. note 4). The A-Topic was later refined by Holmberg (2010) in a Minimalist approach, by postulating that Frascarelli’s Agree relation implies the evaluation of the D-feature of the NS (inherited from T), which is thus provided with a referential index.

Furthermore, Ingham (2018) notices that the realization of NSs in Old French seems to be limited to root clauses and is associated with the appearance of the particle *si*, which is used to introduce to the content of the preceding clause, similarly to its Latin etymon *sic* (‘so’). Since similar constraints do not apply in consistent pro-drop languages, the author proposes a “partial” pro-drop characterization for Old French.

As a matter of fact, the status of NSs in Old French is generally linked to the validity of the V2 analysis of root clauses (Rinke 2007). However, while Zimmermann (2018) only focused on expressions involving V-movement to the left periphery, Ingham argued that both left-dislocated Topics and Focus elements produce V2 structures, with V moving to Fin⁰ in both cases. In this line of analysis, it can be feasibly proposed that the preposing of the particle *si* allowed for subject omission.

- | | | | | | | | | |
|------|--|--------------|-----------------|--------------------|---------------|--------------------|----------------|--------------------------------------|
| (28) | <i>Et</i> | <i>quant</i> | <i>Phariens</i> | <i>voit</i> | <i>ce,</i> | <i>si</i> | <i>saisit</i> | |
| | and | when | Phariens | see.PRES.3G | this | SI | seize.PRES.3G | |
| | <i>une</i> | <i>hache</i> | <i>qu’</i> | <i>il</i> | <i>avoit</i> | <i>en</i> | <i>la</i> | |
| | an | axe | that | he | have.IMPF.3SG | in | the | |
| | <i>tor</i> | <i>maint</i> | <i>jor</i> | <i>gardee,</i> | <i>si</i> | <i>s’escorce</i> | | |
| | tour | many | days | keep.PP.FEM | SI | REFL.rush.PRES.3SG | | |
| | <i>vers</i> | <i>son</i> | <i>niveau</i> | | | | | |
| | towards | is | nephew | | | | | |
| | ‘And when P. sees this, he seizes an axe which he had kept in the tower for a long time, and rushes towards his nephew.’ | | | | | | | (<i>Lancelot du Lac</i> . Tome I) |
| (29) | <i>Et</i> | <i>ele</i> | <i>le</i> | <i>regarde,</i> | <i>si</i> | <i>le</i> | <i>conoist</i> | |
| | and | she | him | look-at.PRES.3SGSI | | him | know.PRES.3SG | |
| | ‘And she looks at him, recognises him.’ | | | | | | | (<i>La queste del saint Graal</i>) |

As for non-argument subjects, the analysis of medieval prose texts shows that Old French expletive pronouns occurred in all types of constructions in which a thematic/referential subject was not available, that is to say, in constructions with so-called quasi-arguments as subjects and in constructions with non-arguments in subject position. Expletives occurred predominantly (but not exclusively) in embedded clauses and occasionally post-verbally in matrix clauses. Consider examples (30) to (34) below:

- (30) ...*que il ne plúve pur lur pecchié...*
 because it not rain.PRES.3SG for their sins
 "... because it does not rain on account of their sin..." (Livre Reis 3, 8, 35)
- (31) ...*se il te semble, au tuen avis, que...*
 if it to.you seem.PRES.3SG to.DET your opinion that
 "... if it seems to you, in your opinion, that ..." (Saint Graal 510, 37)
- (32) *Quant ce vint le soir...*
 when it come.PST.3SG the evening...
 "When it was dark, ..." (Saint Louis 410)
- (33) *Il nen I ad chevalier ne barun...*
 it not there have.IMPF.3SG knight nor baron
 "There was no knight nor baron..." (Roland 2418)

Through the analysis of Old French poems and prose texts from the IX to the XIV century, Zimmermann (2009) argues against an analysis of Old French as a V2 language, showing that the realization of subject pronouns was not contingent upon the V2 constraint. Importantly, Zimmermann shows that the realization of expletive pronouns in the prose texts selected increases, though not linearly, both in matrix and embedded clauses, and the same kind of evolution can be seen for thematic subjects and demonstratives. This increasing trend is at its maximum in the 14th century texts, leading the author to analyze Old French as a non-pro-drop language and NSs in Old French as relics of an earlier language stage, which could (still) be realized as long as certain specific structural conditions were met.

A full discussion of expletive subjects in Old French is far beyond the scope of this paper. What is important to underline is that null expletive subjects have been present in the French language since the Middle Ages, and as a consequence, the non-pro-drop quality of Modern French includes both argument and non-argument subjects.

4.2. NSs in Modern French

The use of NSs in Modern French has been examined in a range of studies, revealing that while French is typically categorized as a non-pro-drop language, NSs are still possible and at times even obligatory in specific contexts. Zimmermann (2018) provides a detailed overview of these contexts, indicating that prosodically weak (referential and expletive) subject pronouns can be omitted in specific environments. These include, among others, (i) comparative clauses, (ii) clauses with left-dislocated prosodically strong pronouns, (iii) imperatives and stylistic inversion in root and embedded interrogatives, and (iv) embedded subjunctives (for a detailed discussion, see Zimmermann 2018). Additionally, certain impersonal clauses allow NSs, particularly with verbs like *rester* 'to remain' and *suffire* 'to be sufficient', as well as with a limited class of passive verbs in specific syntactic configurations. The author further notes that NSs may appear more freely in particular written registers of Modern French that prioritize linguistic economy, such as diaries, text messages, and report cards.

Zimmermann and Kaiser (2014) provide instead a closer examination of the conditions under which the expletive *il* may be omitted in Colloquial French. Their analysis highlights that the omission of *il* is most frequent with a select set of impersonal verbs, such as *y avoir* 'to exist' (i.e., existential constructions) and *falloir* 'to have to', which are more likely to appear without the overt expression of *il*. Other verbs like *valoir mieux* 'to be better' and *faire* 'to make' + adjective (+infinitive) exhibit a lower frequency of null *il*, while verbs such as *paraître* 'to appear', *sembler* 'to seem', and *suffire* 'to be sufficient' show the least frequent occurrences of null *il*.

Together, these studies illustrate that while French generally adheres to a non-pro-drop pattern; the presence of NSs in certain syntactic and stylistic contexts reflects a more nuanced distribution. The present work aims at verifying these results, as we will describe in detail in the following section.

5. Materials, Methods, and Goals

Given the above background, the question is whether the results reported in Section 4.2, coming from different studies and based on different methodologies, can be confirmed by a systematic and comprehensive corpus analysis. In addition, we considered the significant differences between non-pro-drop languages attested in the literature, and a cross-linguistic comparison seems to be in order. Hence, the main goal of the present study is to provide an answer to the following research questions:

1. What types of subjects (and how often) are indeed allowed to be omitted in Modern Colloquial French?
2. Does the use of NSs in French have patterns similar to other non-pro-drop languages such as English?

In order to accomplish this objective, we will discuss the results of a corpus analysis of spoken data in face-to-face spontaneous conversations taken from two spoken French corpora:

- a. The CFPP2000 corpus (<http://cfpp2000.univ-paris3.fr/index.html> accessed on 1 December 2023), containing 58 interviews collected after 2000 on the territory of Paris and the nearby suburbs. This is a very well-organized corpus, providing very detailed descriptions of speakers.
- b. The CLAPI corpus, containing 194 transcripts documenting oral language in different types of linguistic situations (informal, professional, institutional, commercial, etc.; <http://clapi.icar.cnrs.fr> accessed on 1 December 2023).

These corpora have been examined with the collaboration of two senior students who devoted about 200 h to this work. The transcripts used for the analysis have been selected based on the following criteria: (a) informal communicative situations, so as to favor naturalness; (b) significant presence of long conversational turns, so as to avoid interruptions and have the possibility of examining the realization of subjects both in matrix and subordinate clauses; (c) medium–high education of the speakers, in an effort not to associate subject omission to diastatic factors; (d) speakers aged between 18 and 30–35, to focus on the age group most open to linguistic changes; and finally, (e) recordings occurred from 2000 onward, in order to examine the current situation.

Three transcripts were thus selected: (1) “*Auréane L’huissier et Pierre-Fabien Benoît*” from the CFPP2000 corpus (<http://cfpp2000.univ-paris3.fr/Corpus.html> accessed on 1 December 2023) and (2) “*Apéritif entre ami(e)s—chat*” (http://clapi.icar.cnrs.fr/V3_Feuilleter.php?num_corpus=107 accessed on 1 December 2023) and (3) “*Montage meuble*” (http://clapi.icar.cnrs.fr/V3_Feuilleter.php?num_corpus=102 accessed on 1 December 2023), both from the CLAPI corpus. For the sake of convenience, in the rest of the article we will refer to these three conversations as, respectively, “*Auréane*”, “*Montage*” and “*Apéritif*”.

Auréane is a one-and-a-half hour interview with three speakers: two young people in their 20s from the 18th arrondissement of Paris and the interviewer who is about 50 years old. *Apéritif* portrays a friendly conversation of about half an hour between four young men, also in their 20s. Finally, *Montage* records the conversation, also half an hour long, of two girls in their 20s struggling with the assembly of an Ikea piece of furniture. The sub-corpus thus created for this study consists of two and a half hours of conversation for a total of 56,272 words (specifically, 25,709 from *Auréane*, 15,440 from *Apéritif*, and 15,123 from *Montage*) and 4996 sentences (3179 from *Auréane*, 956 from *Apéritif*, and 861 from *Montage*).

Then, fearing shortcomings or “normalizations”, we proceeded to listen carefully to the audios and check the fidelity and accuracy of the transcriptions against the speech. This fear proved to be well founded, as listening to these passages revealed several instances in which the transcribers had not remained entirely faithful in their recording of speech, making arbitrary corrections or omitting elements.

Thus, several other cases of NSs have been detected, both expletive and referential, although the latter only in restricted contexts (cf. Section 6.2). Significant phenomena of the “morphological collapse” of pronouns were also noticed, especially regarding the first singular pronoun *je* (cf. Section 6.4). The data found have been reported in Excel files and categorized in detail according to the different types, also reporting their contexts of occurrence.

The results have been statistically analyzed, primarily through the Chi-squared test, for a rigorous examination of the frequency distributions within the data, particularly when comparing the occurrence of null and overt subjects across different syntactic constructions. Additionally, due to the presence of small sample sizes in certain instances, the Fisher Exact test has been utilized to ensure robust statistical inference. Finally, when necessary, a z-test for one proportion has been employed to further investigate specific patterns or trends within the dataset.

6. Results and Discussion

As mentioned in Section 5, the analyzed sub-corpus contains a total of 4996 sentences. Of these, 4600 (92.07%) feature an overt subject, while only in 396 cases (7.93%) the subject has been left unexpressed. This result confirms what has been found in previous studies (cf. Section 4.2), namely, that although French is classified as a non-pro-drop language, there are certain contexts in which NSs can occur. More specifically, results vary significantly among the three transcripts, as shown in Table 1.

Table 1. Null vs. overt Subjects.

Transcript	NULL		OVERT		Tot
	#	%	#	%	
<i>Auréane</i>	294	9.25	2885	90.75	3179
<i>Apéritif</i>	49	5.13	907	94.87	956
<i>Montage</i>	53	6.16	808	93.84	861
TOT	396	7.93	4600	92.07	4996

As can be seen in Table 1, the first transcript presents a significantly higher proportion of NSs compared to both the second ($X^2 = 16.4, p < 0.001$) and the third ($X^2 = 8.2, p = 0.004$). This (relatively small) difference between the occurrence of NSs in the three transcripts could suggest a potential inclination towards a more elliptical or context-dependent speech by the speakers of the first conversation compared to those of the other two. Conversely the rate of NSs in the other two transcripts is not significantly different ($X^2 = 0.9, p = 0.341$).

As it will be shown in the next subsections, the semantic nature of the subjects seems to be a key factor in determining the likelihood of their covert realization. Indeed, 367 (92.68%) of the 399 identified NSs are expletives, while only 29 (7.32%) are referential.

6.1. Expletive NSs

The analysis of the sub-corpus showed that 1789 sentences out of 4996 (35.81%) feature an expletive subject, and as mentioned above, the absolute majority of the NSs are expletives. Indeed, null expletives constitute 20.51% of the total expletive subjects, while only 0.9% of the referential subjects are left unexpressed.

Specifically, null expletives have been identified in different syntactic contexts, namely existential (*il y a* constructions (34a), impersonal (*il faut* and (*il arrive* sentences (34b–c), light verb structures featuring (*il fait* (34d), and fixed expressions such as *s’(il) vous plaît* (34e)⁵ and (*il vaut mieux* (34f):

- (34) a. (*Il y a plein de gens*
EXPL there have.3SG plenty of people
'There are plenty of people' (Auréane)
- b. (*Il faut qu'on y aille*
EXPL need. 3SG that one there go.SUBJ.3SG
'We need to go there' (Apéritif)
- c. (*Il peut m'arriver de m'adonner à d'autres produits*
EXPL may.3SG to.me happen.INF of my.self devote.INF
to of other products
'I may occasionally indulge in other products' (Auréane)
- d. (*Il faisait vraiment chaud*
EXPL make.PST.3SG really hot
'It was really hot' (Apéritif)
- e. *T' enlève ça s’(il) te plaît*
PRON.DAT.2SG remove.IMP.2SG that please
'Please take it off' (Montage)
- f. (*Il vaut mieux avoir l'air de bien vouloir engager la conversation*
EXPL be.worth.3SG better have. INF DET air of
well want. INF engage. INF det conversation
'It's better to look like you want to start the conversation' (Apéritif)

Furthermore, it is important to note that these structures have varying rates of occurrence within the sub-corpus examined, as reported in Table 2.

Table 2. Occurrence rate of expletive structures.

Structure	#	%
(il) y a	380	79
(il) faut	78	16.22
(il) arrive	3	0.62
(il) fait	13	2.7
s’(il) vous plaît	4	0.84
(il) vaut mieux	3	0.62
TOT	481	100

Data show that existential (*il y a* constructions constitute the great majority, accounting for 79% of the occurrences. Impersonal expressions featuring (*il faut* follow with 16.22%, while sentences with (*il fait* represent a smaller proportion at 2.7%. Light verb constructions with (*il arrive* and fixed expressions such as *s’(il) vous plaît* and (*il vaut mieux* exhibit minimal occurrences in the dataset. These varying rates of occurrence underscore the differential distribution and usage patterns of expletive structures in French colloquial speech, reflecting the diverse linguistic contexts in which they appear.

Turning to the analysis of NSs across these syntactic constructions, results show significant variations in their frequency and distribution, as shown in Table 3.

Table 3. Null vs. overt expletives.

	NULL		OVERT	
	#	%	#	%
(il) y a	315	82.89	65	17.11
(il) faut	42	53.85	36	46.15
(il) arrive	2	66.67	1	33.33
(il) fait	2	15.38	11	84.62
s’(il) vous plaît	3	75.00	1	25.00
(il) vaut mieux	3	100.00	0	0.00

As can be seen in Table 3, speakers tend to realize most Null Subjects in existential (*il y a* constructions (82.89%). Conversely, impersonal (*il faut*) sentences show a more balanced distribution, with no significant difference between null and overt realizations ($z = -0.68$, $p = 0.496$). Interestingly, light verb structures featuring (*il fait*) display a stark contrast, with NSs representing only 15.38% of instances. Finally, impersonal (*il arrive*) sentences and fixed expressions such as *s’(il) vous plaît* and (*il vaut mieux*) present no significant differences with respect to (*il y a*) constructions (a Fisher’s Exact test yielded, respectively, $p = 0.433$, $p = 0.531$, and $p = 1$). However, it is important to note that the results concerning these three structures should be interpreted cautiously due the already mentioned small sample size, which may impact the reliability and generalizability of the findings and warrant further investigation to validate these trends.

On the one hand, the results presented so far are in line with what has been found in previous studies (cf. Section 4.1), in which (*il y a*) and (*il faut*) constructions appear to be the most likely to occur with an NS, while other verbs present a lower frequency of NSs. On the other hand, our analysis identified a few instances of NSs occurring with verbs which, as far as we know, have not been mentioned in the literature. This seems to suggest that a definitive list of specific verbs allowing an NS in Colloquial French is far from being completed (if it ever will be) and that it might be more fruitful to look at the specific linguistic context which triggers the realization of an NS in a non-pro-drop language such as French.

In this respect, it is interesting to notice that the absolute majority of the expletive subjects identified in the corpus (1301, that is 72.72%) are those occurring in non-predicational copular sentences (Den Dikken 2006a), namely the *ce* in *c’est* constructions. Please consider the following examples:

- (35) a. *C’ est une amie à moi*
EXPL be.3SG DET.INDEF.F friend F to pron.ACC.1SG
qui m’ avait dit
pron.REL.NOM.1SG CL.ACC.1SG have. PST.3SG tell. PP
 ‘It’s a friend of mine who told me...’ (Apéritif)
- b. *Mais c’ est vraiment genial*
but EXPL be.3SG really brilliant
 ‘But it’s really brilliant!’ (Montage)
- c. *C’ est une soupe populaire musulmane*
EXPL be.3SG DET.INDEF.F soup common Muslim
 ‘It’s a Muslim kitchen-soup.’ (Auréane)
- d. *C’ est pour ça qu’ J’*
EXPL be.3SG for that that pron.NOM.1SG
disais le carton
say.PST.IMPF.1SG DET.F box
 ‘That’s why I said the box.’ (Auréane)

Interestingly, not a single one of this type of expletive has been omitted by speakers. This result may be explained by the fact that, while existential (*il*) *ya* constructions predicate the existence of the following entity, impersonal (*il*) *faut* sentences predicate a need, and (*il*) *arrive* sentences predicate possibility,⁶ “*c’est*” constructions are non-predicational in nature. In short, the different behavior shown by the two French expletives, *il* and *ce*, seems to show that the crucial factor for the licensing of NSs in Colloquial French is whether an expression is predicative in nature or not.

This proposal is supported by recent analyses in which the different (information) structural functions of the relevant expletives have been highlighted. In particular, we refer to Frascarelli (2010a, 2010b) and Frascarelli and Ramaglia’s (2013) works on (pseudo-) clefts and existential ‘there’ sentences.

Trying to briefly set out a long and complex argument, in the above-mentioned works Frascarelli and Ramaglia consider specificational sentences as copular sentences, based on Den Dikken’s (2006a) influential proposal. As such, the structure of copular sentences implies a Small-Clause (SC) construction in which one of the two constituents specifies the value of the variable represented by the other. In this line of analysis, Belletti (2005) and Frascarelli (2010b) propose a monoclausal specificational study of cleft sentences in which the clefted phrase and the relative clause are merged as independent constituents within a SC. In particular, the clefted phrase is merged as the predicate, while the relative clause (i.e., presupposed information) can be assumed to play the subject role.

Hence, a cleft sentence can be described as a Focus-Presupposition structure (Krifka 2006), including a copular element, a focused constituent (i.e., the clefted phrase), and a subordinate clause.

- (36) It is a book that I gave John
 COP [SC [DP *that I gave John*] [DP *a book*]]

Frascarelli and Ramaglia (2013, 2014) took this proposal, and based on syntax–prosody interface evidence, proceeded a step further in the analysis of specificational sentences, showing that the relative clause should be analyzed *as a Topic*. Specifically, in line with Frascarelli and Hinterhölzl (2007), the authors assume that Topics must be distinguished according to their formal and discourse properties and that different types of Topics are located in dedicated functional projections in the (split) C-domain. As the relative clause in a cleft sentence is associated with a [+given] semantic property, it qualifies as a so-called ‘Familiar Topic’. As such, it is subject to Merge in the lowest left-peripheral Topic position (FamP) and is realized with a deaccented prosodic contour. Its final right-peripheral position is derived through IP-inversion to the Spec position of the Ground Phrase (GP; cf. Poletto and Pollock 2004; for details, cf. Frascarelli 2007).

The derivation of a sentence like (38) is thus the following (please, note the position and the co-indexing of the expletive *it*, highlighted in bold):⁷

- (37) a. [GP [FocP [TopP [DP OP_k that I gave John e_k]_z [IP is [SC **it**_z [DP a book]]]]]] →
 b. [GP [FocP [DP a book]_k [TopP [DP OP_k that I gave John e_k]_z [IP **it**_z is [SC t_z t_k]]]] →
 c. [GP [IP **it**_z is [SC t_z t_k]] [FocP [DP a book]_k [TopP [DP OP_k that I gave John e_k]_z t_{IP}]]

As can be seen, in this line of analysis the subject pronoun *it* in the SC is *not an expletive* but a *resumptive pronoun* of the right-hand topicalized relative DP, which is merged as the subject of the SC (39a) and moved to Spec, IP (39c). A final note concerns the copula, which, according to this approach, has no semantic content (also cf. Stowell 1981). It is just a functional element (i.e., a “linker”; cf. Den Dikken 2006b) of the two major constituents of the sentence, triggering the movement of its complement to the Spec position.

To conclude, according to this semantic and IS-approach that we assume, specificational constructions are realized as copular sentences in which new information serves as the predicate of a SC, and the presupposed part of the sentence is topicalized and resumed by a subject pseudo-expletive pronoun in the subject position.

Given this resumptive function, the subject of a specificational sentence (i.e., *ce* in French) is *not an expletive* but a referential pronoun, and as such, it can be hardly silent in a pro-drop language like French. This proposal provides a feasible explanation for the fact that the pronoun *ce* is always present in the corpora examined. As a matter of fact, even when a co-indexed Topic is apparently not realized, it is in fact present, albeit silently, as it can be deduced from the context (it can thus refer to something being talked about, as in the case of sentence (37b) above).

On the contrary, the expletive *il* in predicational sentence is indeed an expletive pronoun, which is merged in the subject position because no argument can move there to meet EPP requirements. In particular, this happens when the theme argument is propositional (hence, too ‘heavy’ to move in subject position, as with a raising verb like *seem* in English), or in presentational sentences, in which new information is a theme selected by the verb. This is exactly the case of the expletive *il* in *il y a* constructions in French.

Indeed, the French language has maintained the proto-Indo-European form of existential sentences, so that what is now generally realized through the auxiliary *be*, it is still realized in the original ‘have+LOC’ form (cf. Freeze 1992).

Following Den Dikken (2006a), the basic difference with respect to specificational sentences is that existential constructions are analysed as copular structures of the predicative type and, as such, characterized by the non-referentiality of the second nominal. The locative argument is realized in the VP through a clitic pronoun (*ci* in Italian and *y* in French; also cf. La Fauci and Loporcario 1997), which is co-indexed with the topicalized locative constituent. The expletive pronoun (*there* in English and *il* in French), does not consequently have an anaphorical function and is only inserted to meet the EPP requirement and predicate the *property* of the first nominal (its subject; cf. Ramaglia and Frascarelli 2019 for details).

The basic semantic and informational distinction characterizing expletives in specificational and predicational sentences can be thus feasibly assumed to be the explanation for their different behaviour and allow for a principled distinction of expletive drop in a non-pro-drop language like French.

As a final support to this proposal, it can be noticed that expressions such as *s’(il) vous plaît* and *(il) vaut mieux* can be considered examples of phrasemes, namely fixed expressions whose meaning is not directly derived from the meanings of their individual components. In these expressions, the expletive *il* does not contribute an independent semantic value to the overall meaning of the expression but is instead part of a formulaic structure that expresses a particular meaning as a whole. It can thus be argued that this lack of individual semantic contribution makes the presence of the subject *il* optional or redundant, thus contributing to its omission. This semantic distinction across syntactic structures underscores the complex interplay between formal realizations, semantics, and discourse in the possibility of subject omission, even in a non-pro-drop language like French, shaping the distribution of the Null and overt Subjects observed in the analysed data.

6.2. Referential NSs

As mentioned at the beginning of Section 6, out of 3207 referential subjects found within the sub-corpus, only 29 are null. Specifically, three types of referential NSs have been identified, namely, canonical NSs (cf. *infra*) (38a), NSs within repetitions (38b), and NSs referring to an extra-linguistic entity (38c). As can be seen in Table 4, the absolute majority of referential NSs are canonical NSs, while only a few cases of the other two types have been identified.

Table 4. Types of referential NSs.

Type of NS	#	%
Canonical	22	75.86
Repetitions	6	20.69
Extra-linguistic	1	3.45
TOT	29	100

In order to provide a comprehensive analysis of each of the above-mentioned types of NSs, let us now turn to some illustrative examples from the sub-corpus.

- (38) a. *Celui sur le pont là je ne sais plus*
the one on DET bridge there I not know.1 SG more
comment pro s'appelle
how (he) be.named.3SG
'The one on the bridge there, I don't know his name anymore' (Auréane)
- b. *Ils attrappent... ouais. pro attrappent des maladies*
they catch.3PL yeah (they) catch.3PL some disease.PL
pas possibles
not possible
'They catch... yeah. They catch some impossible diseases' (Apéritif)
- c. *pro se cache sous les meubles*
(it) hide.3SG under DET furniture.PL
'It hides under the furniture' (Montage)

As can be seen in (38a), the speaker omits the subject of the verb *s'appelle*, which is a third person pronoun coreferent with the entity introduced at the beginning of the sentence (i.e., *Celui sur le pont* 'the one on the bridge'). This is a 'textbook example' of how NSs occur in consistent pro-drop languages (hence the label 'canonical'), in that the third person NS is linked via Agree to the DP *Celui sur le pont là* which is a specific type of Topic heading a Topic chain (i.e., the A-Topic, cf. Frascarelli 2007). In (38b) the speaker overtly realizes the subject of the verb *attrappent* but then he hesitates and starts again the sentence, omitting the subject that would have been exactly the same. Finally, with the sentence in (38c), the speaker suddenly interrupts his interlocutor, who is talking about something else, referring to a cat that is present in the extralinguistic context, without realizing the relevant overt subject pronoun.

In all these examples, the omitted subjects are linked to a referent that is strongly active in the current discourse context, since they have been introduced as a Topic (38a), uttered mere seconds before (38b), or they are literally in front of the speaker's eyes (38c). Be that as it may, in these cases subject omission can be explained by the presence of an A-Topic, either explicitly introduced as in (38a-b) or silent as in (38c), which establishes an Agree relation with the sentential subject and thus enables speakers to omit it. This result is coherent with what has been proposed in previous studies (cf. Section 4.2), since the A-Topic, which is linked to a canonical NS (cf. 39a), is indeed a left-dislocated prosodically strong constituent. What is more, our analysis suggests that these dislocated constituents may not only be pronouns, but full DP as well (e.g., *Celui sur le pont là*).

In the light of these results and relevant reflections for proposals, it can be now interesting to consider a comparison with another non-pro-drop language. And, this is what we are going to do in the next section, in which a comparison with English will be proposed using the results reported in Cote's (1996) spoken corpora investigation.

6.3. Null Subjects in Non-Pro-Drop Languages: A Comparison Between English and French

Even though different scholars have dealt with subject omission in non-pro-drop languages, focusing on specific contexts of realization, very few works have been systematically dedicated to the possibility and the properties of NSs in a single non-pro-drop language. Among these few studies, Cote’s (1996) work on NSs in English represents a precious point of reference for an effective comparison, since relevant results are based on the systematic investigation of a corpus of spoken data.

In particular, Cote used some 10 per cent of the Switchboard Corpus (telephone conversations performed by pairs of native speakers of English adults aged 20–40 on a variety of everyday topics), thus collecting a total of 190 NSs (out of 243 conversations), which have been examined taking into consideration several factors: (a) the form of the subject, (b) the person/number of the subject, (c) the source of the subject (i.e., whether it is referential, deictic, discourse deictic, or expletive), (d) the so-called “centering” transition of the utterance, (e) the turn position of the utterance (i.e., either initial or final), (f) the discourse segment position of the utterance, and (g) the clause type and the sentence type.

Turning to results, it is interesting to notice that the most frequent type of NSs in Cote’s corpus of English conversations is not that of expletives, but of referential pronouns (63%). Indeed, null expletives are only 37% of total NSs. However, even if null expletives are not as frequent as in French, they are still much more frequent than their explicit realization even in English, which, in fact, are only 8.9% of total expletive subjects.

Unfortunately, since the author was mainly interested in the discourse-related aspects of subject omission, no specific distinction is provided between expletives. Therefore, no one-to-one comparison can be carried out with respect to our French data. On the other hand, an interesting comparison can be provided between expletive and referential NSs. Indeed, the omission of 1sg and 3sg pronouns appears to be rather frequent in English phone calls, which is contrary to French face-to-face conversations. In particular, null 1sg deictics reach 26% of the total NSs and null 3sg referential pronouns reach 16.6%. In this latter case, it might be interesting to notice that null third person referential subjects were noticeably lacking in animate referents: only 3 out of 30 examples referred to animate entities.

As for discourse-related factors, in Cote (1996) it is reported that 32% of the referential NSs referred to the same entity as did the subject of the previous utterance. Notably, referential NSs in English were mostly used in a continuing function (26.3%); consequently, they served as Given Topics in Topic chains.

As far as their position in the sentence is concerned, Cote’s data show that the NS utterances occurred much more frequently in one-utterance turns (38.9% for NSs vs. 6.42% for overt pronominal subjects). Specifically, it seems that NSs in English tend to occur at discourse boundaries (i.e., turn-taking boundaries), while they are rare turn-internally (21.1%). Hence, their function seems to be that of marking a discourse boundary. In this respect, the situation that emerged from our corpus research on Colloquial French is completely different: NSs occur in one-utterance turns only in 14% of total cases and their position is eminently internal, as is shown in Table 5 and the corresponding figure (Figure 1).

Table 5. NSs position (total).

Position	#	%
Initial	39	9.58
Internal	271	66.59
Final	40	9.83
One utterance turn	57	14

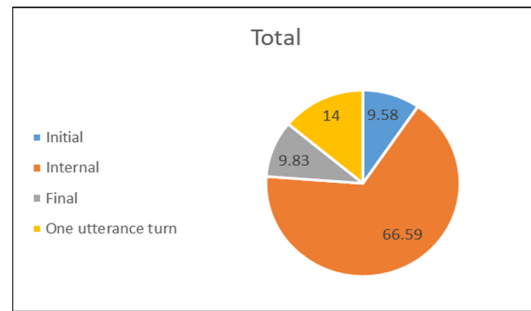


Figure 1. NS position (total).

The dominant preference of NSs for an internal position does not make great distinctions between referential and expletive pronouns, as is shown in Tables 6 and 7 and the corresponding figures (Figures 2 and 3).

Table 6. Position of referential NSs.

Position	#	%
Initial	4	10.26
Internal	24	61.54
Final	3	7.69
One utterance turn	8	20.51

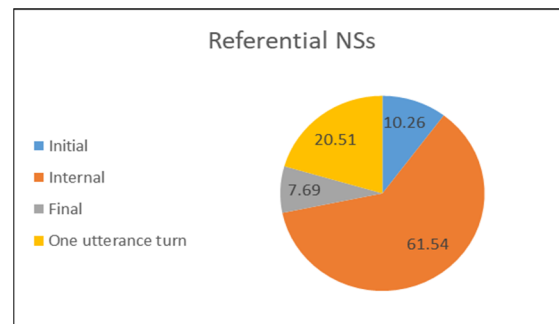


Figure 2. Position of referential NSs.

Table 7. Position of expletive NSs in (il) y a constructions.

Position	#	%
Initial	30	9.49
Internal	219	69.3
Final	27	8.55
One utterance turn	40	12.66

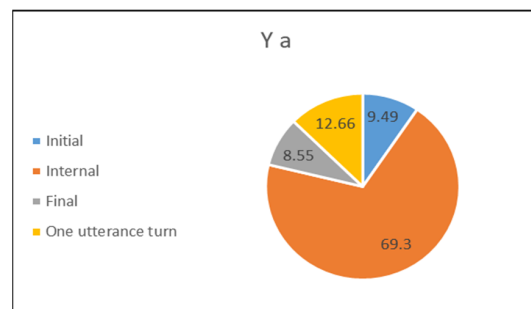


Figure 3. Position of expletive NSs in (il) y a constructions.

Indeed, as can be seen in Table 7 and Figure 3, the percentages attested for the *(il) y a construction* (which represents the most frequent realizations for expletive NSs in the corpus examined) show that expletive NSs also prefer an internal position.

In light of the present comparison, we can thus confirm that subject omission is possible in non-pro-drop languages and it is neither sporadic nor occasional. In particular, expletives appear to be the most frequently omitted type of pronouns. Nevertheless, a crucial distinction emerges between French and English, according to which the omission of referential subjects seems to be significantly more frequent in the latter.

Nevertheless, we surmise that this distinction can be attributed to the different context of conversations examined in the relevant corpora: face-to-face (French) vs. phone call conversations (English). Indeed, it is plausible to suppose that a phone conversation between two persons is dedicated and thus concentrates on some specific entity which is taken as the Topic of the relevant discourse and maintained as continuous, somehow “stimulating” its repetition across sentences. On the other hand, Topics can vary during a conversation among friends or be missing while building a piece of furniture.

Of course, these are just feasible assumptions which need to be resumed and confirmed in future comparative studies.

6.4. Coalescence: Corpus Support for a Restricted but Highly Frequent Phenomenon

A side note is reserved in this section to highlight the high frequency of morpho-phonological reduction phenomena occurring in conjunction with specific person–verb inflection associations. We refer to the incorporation of the 1sg subject *je* into the following verb, with the consequent creation of a single lexical form, with related morpho-phonological changes.

Consider the following sentences and the morpho-phonological realization of the subject–verb sequence (IPA transcription in square brackets):

- (39) *Moi j’suis [ʃʰi] pas sûr qu’ elle aille*
 pron. 1SG 1SG.CL-be.1SG NEG sure that pron. 3SGF have.SUB.3SGF
trop avec les meubles
 much with the.PL furniture
 “I’m not sure it goes too well with the furniture” (Apéritif)
- (40) *Moi j’ trouve ça intéressant parce-que moi*
 pron. 1SG 1SG.CL find.1SG it interesting because pron. 1SG
j’suis [ʃʰi] vraiment nulle en géo
 1SG.CL-be.1SG really nothing in geography
 “I find it interesting because I’m really bad at geography” (Apéritif)
- (41) *Chomsky j’suis [ʃʰi] un spécialiste de Chomsky*
 Chomsky, 1SG.CL- be.1SG a expert of Chomsky
 “Chomsky, I’m an expert of Chomsky” (Apéritif)
- (42) *Julie je sais [ʃe] pas qu’ elle va prendre*
 Julie, 1SG.CL know.1SG NEG what pron. 3SGF go.3SG take
 “As for Julie, I don’t know what she’s going to take” (Apéritif)
- (43) *Je sais [ʃe] pas pourquoi j’ ai pas très faim*
 1SG.CL know.1SG NEG why 1SG.CL have.1SG NEG much hunger
 “I don’t know why I’m not very hungry” (Apéritif)

As we can see, in these sentences the 1sg subject (weak) pronoun *je* is pronounced as part of the following verb (*suis* ‘am’ or *sais* ‘know’). This fact might be simply ascribed to the fall of the “obsolete” *e* (/ə/ *schwa*), a well-known phenomenon in French, which is often mentioned among scholars and in grammars (also cf. Abeillé and Godard 2021 among others). Nevertheless, based on its specific context of occurrence, we are rather inclined to consider it a particular case of consonant assimilation.⁸

Indeed, corpus analysis shows that this phenomenon does not occur for all the occurrences of the 1sg pronoun and that when it occurs assimilation proceeds in *both* directions. Specifically, the postalveolar fricative [ʒ] of the pronoun *je* determines a change in the place of articulation of the following dental fricative [s], which, in turn, determines the regressive assimilation of the voiceless quality, thus obtaining a postalveolar fricative [ʃ]. On the other hand, the mode of articulation (fricative) remains unchanged.

In such cases, it is therefore appropriate to refer to the notion of ‘coalescence’ (cf. Zaleska 2020, among others); that is to say, it is a type of assimilation whereby two sounds fuse to become one, and the fused sound shares similar characteristics with the two fused sounds. Some examples in English include ‘don’t you’ -> /dəʊnt ju/ -> [dəʊntʃ u]. In this instance, /t/ and /j/ have fused to [tʃ]. /tʃ/ is a palato-alveolar sound; its palatal feature is derived from /j/ while its alveolar is from /t/. Another English example is ‘would you’ -> /wʊd ju/ -> [wʊdʒ u]. There are examples in other languages, such as Chumburung where /iwú ʔsá/ -> /iwúʔsá/ becomes [iwíʔsá]—‘three horns’. In this case, /ɪ/ is retained in the coalescence and the rising tone on /u/ appears on the coalesced sound.

Resuming the cases of French illustrated above, corpus analysis shows that these realizations occur almost exclusively with the auxiliary *être* ‘to be’ and with the verb *savoir* ‘know’ (occasional occurrences have been found with *je serre* [ʃɛr] ‘I squeeze’ (1 out of 2) and *je dis* [ʒi] ‘I say’ (1 out of 1)). Nevertheless, though restricted to these verbs, their frequency is remarkably high: 95% for *je suis* (74 occurrences out of 83), and 73% for *je sais* (45 out of 70). Additional evidence that this phenomenon cannot be (solely, at least) attributed to the fall of the final *schwa* is provided by the presence of a few occurrences of the 2sg pronoun *tu* ‘you’ and the verb *savoir* ‘know’ (5 out of 9), obtaining [tɛ] from *tu sais*.

The type of verbs with which this phenomenon occurs seems to support what has been argued in recent works concerning the faster and clearer occurrence of variation phenomena with words of high frequency, as ‘to be’ and ‘to know’ undoubtedly are. In particular, in Connine (2004) it is claimed that the representation of auditory form includes explicit representations of the frequently heard variant. Listeners encode surface detail from the speech that they hear and develop lexical representations that match their experience. One consequence of this view is that theoretical accounts of phonological variant processing will be informed by corpus analyses and variant frequency statistics will serve a critical role in theory development for auditory word recognition.

7. Conclusions

This pilot study aimed to investigate the occurrence of NSs in French, trying to provide an answer to two main research questions:

1. What types of subjects (and how often) are indeed allowed to be omitted in Modern Colloquial French?
2. Does the use of NSs in French have patterns similar to other non-pro-drop languages such as English?

Through a corpus study based on three conversations from online corpora of French spoken data, amounting to over 56,000 words, this paper confirms that although French is classified as a non-pro-drop language, there are certain contexts in which NSs do occur. Specifically, *(il) y a* and *(il) faut* constructions have been found to be the most likely to occur with a null expletive *il*, while the other verbs were present a lower frequency of NSs. Interestingly, our analysis identified a few instances of NSs occurring with verbs which are not associated with the possibility of subject drop, leading us to suggest that a “list approach” should be abandoned in favour of a more context-oriented approach, aimed at identifying the trigger(s) for the licensing of NSs in a non-pro-drop language like French. In this line of analysis, results show the existence of a crucial distinction between *il* in existential *il y a* constructions, which predicates the existence of the following entity, and *ce* in non-predicational (specificational) sentences, which introduces entities realized as predicates or ‘kind events’ (Chierchia 1998), since the former is very often omitted while the latter never is.

This difference has been interpreted in light of the fact that *il* is indeed an expletive, and as such devoid of semantic content, whereas *ce* is a referential pronoun. The latter establishes a long-distance Agree relation with a Topic which is thus interpreted as the subject of the SC in a specificational construction. Hence, it cannot be deleted for interpretive requirements at the interfaces. On the other hand, *il* does not have an anaphorical function and is only inserted to meet the EPP requirement.

The relevance of an Agree relation for subject omission also seems to be supported by the few occurrences of referential subject drop attested in the corpus. As proposed in Section 6.2, relevant NSs are all interpreted by virtue of a Topic chain, that is to say, an Agree relations with an A-Topic. This also confirms that in Colloquial French, referential NSs are indeed possible in clauses with a left-dislocated prosodically strong constituent, and as our data indicate, these dislocated constituents may not only be pronouns, but full DP as well.

As for the comparison between French and English, we confirmed that subject omission is possible in both languages, with expletives being the most frequently omitted type of pronouns. Nevertheless, a crucial distinction emerged, according to which the omission of referential subjects seems to be significantly more frequent in English than in French.

Finally, the cases of coalescence found in the corpus (cf. Section 6.4) also support another possible (perhaps concomitant) explanation for the frequent omission of the expletive *il*. As we have shown, the morpho-phonological reduction of the subject only concerns atonic and monosyllabic subjects, hence phonologically defective pronouns. Their transition from clitics to embedding morphemes is a frequent phenomenon in world languages (cf. Givón 1976 and Baker 1998). It is therefore plausible to assume that the third person subject *il*, first reduced to *i-*, incorporating into the locative clitic *y* and giving rise to a long [i:], which, over time, reduced.

These hypotheses clearly need future and more extensive research (also involving phonological analysis) to be supported and eventually corroborated.

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Notes

- ¹ Notice that according to Rizzi's (1982) formulation, if a language has thematic NSs it must also have null expletives. Subsequent analyses, however, have shown that this is only partially true. As Camacho (2013) shows, there are languages that contradict this generalization, like for instance Dominican Spanish, which is an NS language but tends to have overt expletives rather than null ones.
- ² The different types of expletives shown below will be resumed in detail in Section 6.
- ³ Providing support to the fact that there is not a necessary association between the pro-drop quality and rich agreement.
- ⁴ The A-Topic connects Reinhart's (1981) aboutness ("what the sentence is about") with the property of being newly introduced or reintroduced to propose a shift in discourse. Assuming with Reinhart that the Common Ground is divided into subsets of propositions that are stored under defining entries (so-called 'file cards'), the A-Topic can be defined as the entry identifying the file card under which the proposition expressed in the sentence is stored. Syntactically, the A-Topic is merged in the highest Topic position in the C-domain (and, from an intonational viewpoint, it is associated with the complex L*+H tone (following the ToBi notation)); i.e., the Topic shift is signaled by a rise in the F0 contour that is aligned with the tonic vowel in its full extension, while the highest point is reached on the post-tonic vowel (cf. Frascarelli 2007).
- ⁵ From what we can hear in the recording, the pronoun *il* is not pronounced at all, and thus it qualifies as a case of subject omission. However, as suggested by an anonymous reviewer, in expressions like *s'il vous plaît*, it might be difficult to distinguish a NS from a phonologically reduced one, in which the [l] has been deleted. In any case, due to only two occurrences being found in the corpus, we are unable to make any claim on this issue.
- ⁶ In this regard, it may be of interest to note that both necessity and possibility correspond to verbal (hence, predicative) categories, which are realized as formal features in dedicated functional projections in the split-IP cartographic approach (cf. Cinque 1999).
- ⁷ In (38), we will use the "trace" notation to indicate positions left empty by movement operations. This is because, although traces have been replaced by "copies" in the Minimalist program, their graphical representation is simpler and more familiar to readers and scholars from the non-generative fields.
- ⁸ The literature on assimilation processes is extremely rich (cf. Ohala 1990; Holst and Nolan 1995; Connine 2004; Dilley and Pitt 2007; and Shockey 2008, among many others) and two types of assimilation can be distinguished: progressive and regressive. Regressive assimilation occurs when a following sound has an effect on a preceding one, as in pronouncing 'have to' as 'haf to' for the influence of the voiceless /t/ following /v/. In progressive assimilation the preceding sound has an effect on the following one, as in reverse happens in the plural morpheme /s/ following a voiced consonant (dogs → [dogz]).

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