

CONVERGENT EVIDENCE FOR CATEGORIAL CHANGE IN FRENCH: FROM SUBJECT CLITIC
TO AGREEMENT MARKER

Author(s): Jennifer Culbertson

Source: *Language*, Vol. 86, No. 1 (MARCH 2010), pp. 85-132

Published by: Linguistic Society of America

Stable URL: <https://www.jstor.org/stable/40666300>

Accessed: 03-03-2020 04:24 UTC

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



Linguistic Society of America is collaborating with JSTOR to digitize, preserve and extend access to *Language*

CONVERGENT EVIDENCE FOR CATEGORIAL CHANGE IN FRENCH: FROM SUBJECT CLITIC TO AGREEMENT MARKER

JENNIFER CULBERTSON

Johns Hopkins University

The status of subject clitics in French has been heavily debated (Kayne 1975, Rizzi 1986, Roberge 1990, Auger 1994b, Miller & Sag 1997, De Cat 2007b, and many others). Distributional properties of French subject clitics have led Kayne (1975), Rizzi (1986), and others to analyze them as argument-bearing elements occupying canonical subject position, cliticizing to the verb only at the level of the phonology. While this hypothesis enjoys a wide following, a growing body of evidence suggests that it fails to capture patterns of subject-clitic use in colloquial French dialects/registers (Roberge 1990, Auger 1994b, Zribi-Hertz 1994, Miller & Sag 1997). Using new evidence from prosodic and corpus analyses, speaker judgments, and crosslinguistic typology, this article argues that (i) European Colloquial French exhibits differences from Standard French that impact how subject clitics are best analyzed, and more specifically (ii) subject clitics in European Colloquial French are affixal agreement markers, not phonological clitic arguments.*

Keywords: clitics, agreement, subject doubling, French, language change, language acquisition, prosody

1. INTRODUCTION. The status of French subject clitics (see Table 1 below) has been heavily debated by morphologists and syntacticians, particularly in the context of crosslinguistic work on Romance languages (Kayne 1975, Rizzi 1986, Roberge 1990, Auger 1994b, Miller & Sag 1997, De Cat 2007a, and many others). Although they are clearly phonologically weak elements—they cannot appear without their host, the finite verb—distributional properties of French subject clitics led Kayne (1975, 1991), Rizzi (1986), and others to analyze them as argument-bearing subjects occupying canonical subject position, only cliticizing to the verb at the level of the phonology (so-called PHONOLOGICAL clitics).¹

	SG	PL
1st	je	nous/on
2nd	tu	vous
3rd m.	il	ils
3rd f.	elle	elles

TABLE 1. The subject-clitic paradigm of French (orthographic forms).²

* This work was made possible by an NSF Graduate Research Fellowship and by an IGERT grant to the Johns Hopkins University Cognitive Science Department. I would like to thank Géraldine Legendre, Thierry Nazzi (and the Laboratoire Psychologie de la Perception, l'Université Paris Descartes), Natalie Filippin, Bernard Laks (and the Laboratoire Modyco, l'Université Paris Ouest Nanterre la Défense), Paul Smolensky, Colin Wilson, Cecilia Poletto, Julie Auger, Bob Frank, Kyle Rawlins, Ruth Kramer, Paul Hagstrom, Greg Carlson, Mark Baker, two anonymous referees, and the audiences at LSRL38 in Urbana-Champaign and Meeting Clitics 2008 in Barcelona for valuable comments. Thanks also to Annabel Boeke, Davis Anderson, Seth Levine, and Katie Buckheit. All mistakes remain my own.

¹ I employ the widely used designation SUBJECT CLITIC throughout this article, but it is intended in a theory-neutral way—the precise hypotheses about their status below make use of more explicit terminology. In glossed examples I use SCL as an abbreviation. I use PHONOLOGICAL CLITIC to refer to elements with the syntactic status of an autonomous word, which are cliticized to the verb in the phonology.

² The first-plural subject clitic in the more formal Standard French register is *nous*. In Colloquial French, the form is *on* (used as the indefinite third singular in Standard French); *nous* is not used (Fonseca-Greber & Waugh 2002).

While clitic elements are found in many Romance languages, their behavior is not uniform. Differences between French subject clitics and other Romance clitics, particularly subject clitics in some dialects of Northern Italy, seem to follow from a fundamental difference in syntactic status; the relationship between the French subject clitic and its verb host is hypothesized to be identical at the level of the syntax to the relationship between full nominal subjects and the verb. By contrast, subject clitics in the Northern Italian dialects are taken by many to be crucially different from lexical subjects. They are generated as inflectional elements and are attached to the verb by some mechanism in the syntax, or by the morphological component (Rizzi 1986, Brandi & Cordin 1989, Poletto 2000). Particularly strong evidence for this analysis comes from sentences like those in 1 and 2 below, where both a lexical DP subject and a subject clitic are present. In some Northern Italian dialects, subject clitics appear to function as agreement markers and are obligatory in such contexts, whereas in French the appearance of a subject clitic is optional (as in 1a) and in some cases ungrammatical (e.g. 1b). Sentences like 1 in French have been claimed to involve left-dislocation of the DP subject with the subject clitic acting as a resumptive pronoun.

- (1) a. Jean (il) parle.
‘John speaks.’
- b. Personne (*il) n’a rien dit.
‘Nobody said anything.’
- (2) Fiorentino
a. Mario *(e) parla.
‘Mario speaks.’
- b. Nessuno *(gl’)ha detto nulla.
‘Nobody said anything.’

(Brandi & Cordin 1989)

While this hypothesis for French subject clitics enjoys a wide following, a growing body of evidence suggests that surface differences cited in support of it do not adequately capture patterns of subject-clitic use in colloquial French dialects/register, which differ substantially from Standard French (Roberge 1990, Auger 1994b, Zribi-Hertz 1994, Miller & Sag 1997). This article presents additional evidence from prosodic and corpus analyses, speaker judgments, and crosslinguistic typology that support the hypothesis that (i) European Colloquial French exhibits differences from Standard European French that impact how subject clitics are best analyzed, and (ii) subject clitics in European Colloquial French are inflectional agreement markers, not phonological clitic arguments. More specifically I argue that:

- Empirical evidence cited AGAINST an analysis of French subject clitics as inflectional affixes ACTUALLY SUPPORT it when Colloquial French data are closely examined. The morphophonological and distributional properties of Colloquial French subject clitics are expected only if they are affixes (e.g. they undergo fusion with the verb, no nonaffixal material can intervene between them and the verb, they are always prefixed to the verb, they cannot take wide scope over conjoined VPs; see §2).
- Analysis of the prosodic contours of sentences like 1a, supported by speaker judgments, suggests that these constructions do NOT involve left-dislocation but are monoclausal. Colloquial French subject clitics thus function as agreement markers, not true subject arguments or resumptive pronouns (§§3.1–3.11).
- The cooccurrence of subject clitics with lexical DP subjects in Colloquial French is extremely frequent, particularly in speech to children, providing strong support

to learners for the hypothesis that subject clitics are inflectional elements (§3.12). Independent evidence suggests that learners in fact treat them as such (§3.13).

The article proceeds as follows: I first outline a more precise definition of European Colloquial French as well as some theoretical issues in the analysis of clitics and affixes that must be dealt with explicitly at the outset, and then the arguments listed above are set out in detail. Next, I discuss relevant crosslinguistic evidence from Romance, situating Colloquial French subject clitics typologically. Finally, I provide an analysis of the constraints on the cooccurrence of DP subjects and subject clitics in Colloquial French.

The goal of this article is to combine the new data outlined above with existing arguments (in some cases further strengthened, and made more explicit where necessary) in order to provide a full picture of how alternative hypotheses about the status of subject clitics in Colloquial French fare given all the evidence available. Much previous work has been done on French subject clitics, and many of the arguments made here lean heavily on past observations and analyses. However, rather than lay out this prior work at the beginning, it will be integrated into the discussion of relevant issues as I present them in the hope that the weight of the evidence may have its full impact.

1.1. WHAT IS EUROPEAN COLLOQUIAL FRENCH? Before proceeding, in this section I provide a more explicit characterization of what is meant by the two registers of French referred to above. Standard French is used here to mean the register of European French that is generally taught in school, employed in writing, and used in formal speech situations. As such, it is generally characterized as ‘good usage’ (e.g. by Zribi-Hertz (1994)). Various names have been given to the register of French that is typically used in more familiar speech situations, including ‘non-standard French’ (e.g. Lambrecht 1988), ‘conversational European French’ (e.g. Fonseca-Greber & Waugh 2002), ‘colloquial French’ (e.g. Roberge 1990, and Auger 1994a, although for Quebec French), ‘advanced French’ (e.g. Zribi-Hertz 1994), and ‘spoken French’ (e.g. De Cat 2007a, or *français parlé*, e.g. Blanche-Benveniste 1997). Various features have been cited to exemplify the relevant register, including the use of *ça* ‘that’ instead of Standard French *cela* ‘that’, *on* ‘we’ instead of Standard French *nous* ‘we’, and higher deletion rates, relative to Standard French, of the impersonal pronoun *il* ‘it’ and the negative particle *ne* (of the compound negation, e.g. *ne ... pas*). Several key features that have been mentioned as useful diagnostics are in fact discussed more thoroughly below. The specific terms used throughout this article are EUROPEAN STANDARD FRENCH (abbreviated to Standard French) and EUROPEAN COLLOQUIAL FRENCH (abbreviated to Colloquial French). These particular terms were chosen for several reasons. First, the evidence presented here is restricted to European varieties of French (although many of the arguments can be made for Quebec Colloquial French as well; see Auger 1994a). In addition, ‘advanced’ and ‘nonstandard’ are eschewed here because the designation ‘colloquial’ seems to be the better description; Colloquial French is taken to be a register rather than a dialect (nonstandard seems to suggest the latter),³ and it is not clear in what sense the register is ‘advanced’ (without in large part assuming exactly what this article seeks to show).

1.2. THE BROADER RELEVANCE OF FRENCH FOR CATEGORIAL CHANGE. In this article I argue that Colloquial French subject clitics have lost their status as syntactically inde-

³ According to Ferguson (1994), for example, differences in register correlate with different occasions of use, while differences in dialect correlate with different users. As is discussed further below, speakers of Colloquial French are almost certainly also speakers of Standard French.

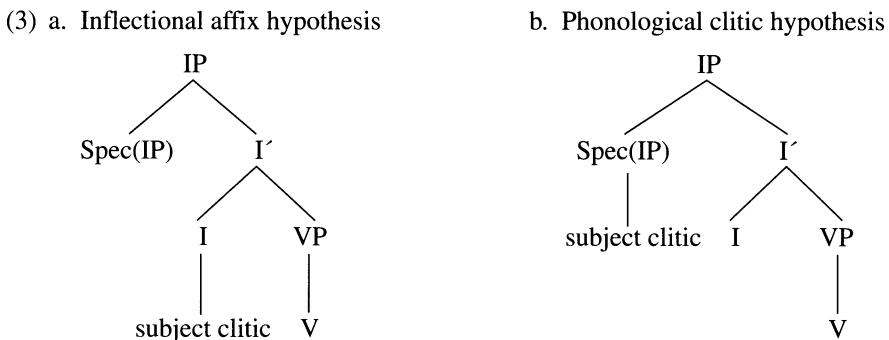
pendent pronouns and have become affixal agreement markers. I also suggest that they differ categorially across the grammars of Colloquial and Standard French. It is well established that new agreement morphology often has a pronominal element as its source (Givón 1976, Ariel 2000, Corbett 2006). The trajectory taken by such an element as it changes its morphological status and function is often referred to as a continuous cline (Hopper & Traugott 1993) rather than a discrete change. The cline begins with a syntactically and phonologically independent pronoun and ends with a ‘canonical’ agreement marker—an affix that is triggered unconditionally and appears on its host obligatorily (Corbett 2006). Case studies that describe clear endpoints are therefore likely to find distinguishing a former pronoun from its current agreement instantiation to be a relatively easy goal. By contrast, studies that attempt to classify a given element at some midpoint on the cline will necessarily face a more nuanced task. One risk is that a discrete classification in such an instance is in principle impossible. Below I argue that this is not the case for subject clitics in French. The extent to which relevant properties of the clitics, which I discuss at length below, can be shown to cluster differently in Colloquial French and Standard French provides convincing evidence that in individual cases, even elements that do not find themselves on either endpoint of the diachronic cline can be distinguished. The proposition that individual speakers have, as I argue, access to grammars of both registers is an additional challenge in this circumstance. However, using quantitative evidence and statistics from a wide range of sources, including spoken language corpora, allows us to evaluate competing hypotheses with reasonable certainty even under these conditions.

1.3. DISTINGUISHING AFFIX STATUS FROM AGREEMENT FUNCTION. Although most analyses of Romance subject clitics do not distinguish them, two dimensions must be resolved when classifying these elements: their STATUS as independent words, phonological clitics, or affixes on the one hand, and their FUNCTION as syntactic arguments or agreement markers on the other hand. This separation is motivated by the existence of languages with clearly affixal elements exhibiting argument-like properties, for example, affixal arguments in the so-called pronominal incorporation (polysynthetic) languages (Jelinek 1984, Baker 1996), or the Celtic languages, where so-called ‘subject agreement’ affixes are in complementary distribution with lexical noun-phrase controllers (Siewierska 2004). Likewise, there are cases of independent forms that exhibit characteristics attributed to agreement markers, for example, obligatory cooccurrence with full argument controllers (e.g. Woleaian; see Siewierska 2004:163). However, in the context of an extensive survey of person markers, Siewierska (2004) admits a correlation between the two that she attributes to the parallel processes of phonological and semantic reduction that person elements often undergo over time (Hopper & Traugott 1993, Fuß 2005). In light of this, although I treat the two issues separately (status in §2, and function in the remainder), it is likely that any diachronic changes to the pronominal system in French have affected both in parallel. The time line of French subject clitics is one that is quite common crosslinguistically, as I alluded to in the preceding section: in Old French, a series of strong subject pronouns were phonologically weakened to become clitics (Adams 1987), and are here argued to have undergone further weakening to become affixes in Colloquial French only, not Standard French.

Though many proposals exist for how to characterize a given element on these dimensions, some of them more theoretically motivated than others, most essentially involve clusters of properties exhibiting a crosslinguistic association with one class or another (Zwicky & Pullum 1983, Klavans 1985, Bresnan & Mchombo 1987, Cardinaletti & Starke 1999, Siewierska 2004, Anderson 2005, Corbett 2006, and others).

Roughly speaking, the more of these properties a person marker is shown to instantiate, the more confidence one can have in its classification. In the following sections, however, I attempt to focus on diagnostics that have clear theoretical implications for how subject clitics are best analyzed.

1.4. THEORETICAL FRAMEWORKS FOR MORPHOSYNTAX. This article argues against the claim that subject clitics in Colloquial French are syntactically equivalent to lexical subjects. Precisely this claim has been made most recently by De Cat within the MINIMALIST framework (De Cat 2004, 2005, 2007b), but its foundations were established in work on Standard French by Rizzi (1986), Brandi and Cordin (1989), and Kayne (1975) in earlier generative frameworks. Important work on this topic has also been completed within other frameworks, for example, HEAD-DRIVEN PHRASE STRUCTURE GRAMMAR (HPSG). Therefore, while I do not take a strong stand with respect to a particular morphosyntactic framework, I specifically discuss several in order to provide a broad illustration of the theoretical impact of the arguments put forward here. The basic structural representations for the hypotheses under debate are shown in 3a,b. The structure in 3a is an approximate representation of the hypothesis argued for here, where French subject clitics are inflectional heads. The structure in 3b represents the alternative hypothesis that subject clitics are true subject arguments housed in subject position and cliticized at the level of phonology.



The mechanism for attachment of the subject clitic to the verb is not specified in 3a, but is discussed at some length throughout the following sections. Crucially, I do not assume that all affixes **MUST** be attached to the verb presyntactically; rather, inflectional elements can undergo morphological attachment by different mechanisms, as made precise by a particular framework. I entertain two possible routes of affix attachment for the purposes of this article. The first assumes that if subject clitics are affixes, then they are heads in the syntax, like **SOME** types of inflection (e.g. tense or aspect). Combination with the verb occurs either by movement of the verb in the syntax or attachment in the morphological component (as in **DISTRIBUTED MORPHOLOGY**, Halle & Marantz 1993). The second assumes that affixes are attached to verbs in the lexicon, following either minimalist arguments for the treatment of agreement (e.g. Chomsky 2000) or the hypothesis of **STRONG LEXICAL INTEGRITY** as in HPSG (Pollard & Sag 1994).

2. AFFIXAL PROPERTIES OF COLLOQUIAL FRENCH SUBJECT CLITICS. In this section I highlight morphophonological (§2.1) and distributional (§§2.2–2.5) patterns that show that Colloquial French subject clitics are best analyzed as affixes, not phonological clitics. Although some of these patterns exist in Standard French as well, overall the evidence supports the conclusion that Colloquial French subject clitics have undergone significant changes that distinguish them from their Standard French counterparts (al-

though see Miller 1991, Miller & Sag 1997). The forces behind language change are often claimed to often involve factors present in the input during language acquisition (Lightfoot 1999, Croft 2000, Yang 2002). In this section, data is provided not only from adult-directed Colloquial French, but also from child-directed Colloquial French. The latter in particular suggests that the input to French learners encourages the interpretation of subject clitics as affixal elements, and underscores likely directions for further change in Colloquial French.⁴ All child-directed speech discussed here comes from the Lyon corpus (Demuth & Tremblay 2008), which includes roughly 106,000 utterances from four French-learning children and their caregivers from the Lyon region. Adult-directed speech data, when not cited from previous research, comes from twenty-three speakers from Paris and Lyon in the PFC corpus (*Phonologie du français contemporain*, Durand et al. 2002, 2005).

2.1. LEXICAL AND PHONOLOGICAL IDIOSYNCRASIES. The set of criteria most often cited to distinguish phonological clitics from affixes is a list of diagnostics based on crosslinguistic trends collected in Zwicky & Pullum 1983. According to Zwicky and Pullum, for example, idiosyncratic morphophonological properties are more common for inflectional elements than independent words and phonological clitics (see also Siewierska 2004). For Zwicky and Pullum, this follows from the lexicalist theory they assume, which treats affixes as attached in the lexicon while phonological clitics are placed in the syntax and attached to the host at the level of phonology. On their account, idiosyncratic or lexically specific morphophonological properties are not predicted to affect clitics that are attached to their hosts only at the level of the phonology, since cliticization at this level is not expected to be sensitive to lexical information. Further, phonological rules affecting only word-level affixes are not predicted to affect clitics. Since alternative hypotheses to presyntactic affixation are also being considered here, this diagnostic needs to be stated in more theory-neutral terms; every framework for morphology must account for the idiosyncratic properties common to morphological elements like affixes. In order to capture the typological facts, any relevant mechanisms should not, for example, apply to syntactically independent words (including those that are clitics at the phonological level). For example, DISTRIBUTED MORPHOLOGY (DM) makes use of two different types of Merger in the morphological component that make different predictions about the sensitivity of combinatory processes to specific vocabulary items, and the ability of these processes to trigger word-internal phonological rules. I outline how these predictions impact the analysis of Colloquial French subject clitics after presenting the relevant data.

The majority of the data presented in this subsection is not in fact new, but has been pointed out by previous authors, in particular Morin (1979), Miller (1991), Auger (1994a,b), and Fonseca-Greber and Waugh (2002). Morphophonologically idiosyncratic patterns involving subject clitics in Colloquial French include the well-known pattern of fusion between the first-person singular subject clitic *je* and certain verbs shown in 4a,b. This is NOT a general phonological process but a lexically specific one, as can be seen in 4c with a verb homophonous to that in 4a.

- (4) a. Je suis. → [ʃui]
‘I am.’
- b. Je sais. → [ʃe]
‘I know.’

⁴ Of course, speech of caregivers to children is also most likely to be colloquial and familiar, and as such is a good source of Colloquial French on its own. I present adult-directed speech in addition since there are potentially important differences between this and child-directed speech.

- c. Je suis. → [ʒøsɥi]

'I follow.'

In addition, Colloquial French subject clitics are extremely reduced phonologically, a factor cited by Siewierska (2004) and Hopper and Traugott (1993) as indicative of a high level of fusion between an element and its host, as well as the possible loss of semantic features. As shown in Table 2, compared to Standard French subject clitics, those of Colloquial French show considerable variation and in particular reduction with respect to their phonological realization. Colloquial French clitics regularly drop final and medial vowels before vowel-initial verbs, and final consonants before consonant-initial verbs, where Standard French does not. Neither is a general phonological process. Although vowel elision applies to clitics and the definite article in Colloquial French, consonant elision applies to clitics only. These and additional such processes have been identified and discussed by Morin (1979) and Miller (1991).

		STANDARD FRENCH		COLLOQUIAL FRENCH	
		before vowel	elsewhere	before vowel	elsewhere
SG	1st	3	3œ	3	3œ, 3. ſ
	2nd		ty	t	ty
	3rd m.		il	il	i
	3rd f.		ɛl	ɛ	ɛ
PL	1st	ɔ	ɔn	ɔn	ɔ
	2nd	vuz	vu	vuz, vz	vu
	3rd m.	ilz	il	iz	i
	3rd f.	ɛlz	ɛl	ɛlz, ɛz	ɛ, ɛl

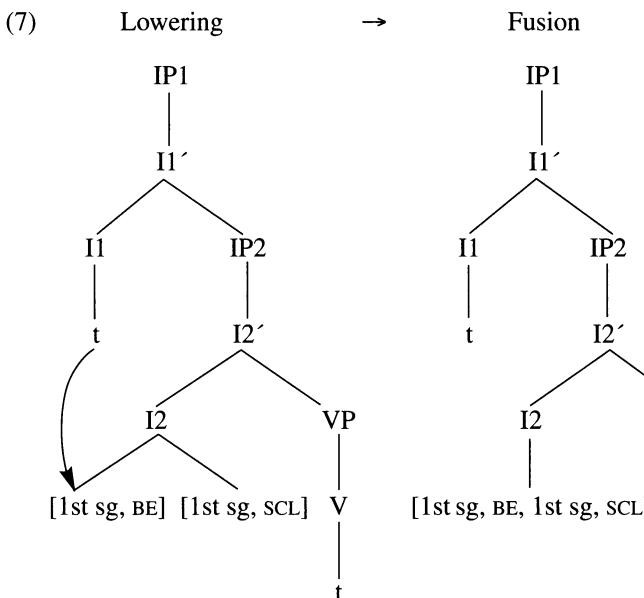
TABLE 2. Comparison of subject-clitic variants in Standard and Colloquial French (see also Morin 1979, Fonseca-Greber & Waugh 2002).

French has liaison, which can be characterized as OBLIGATORY for some elements, and OPTIONAL for others. Plénat (1986) and Miller (1991) argue that obligatory liaison indicates lexical attachment and show that it affects only clitics and other affixes in French. For example, liaison of the nasal consonant [n] is obligatory for the subject clitic *on* and affixes such as *en-* and *un-* (as in 5a and 5b), but is not possible in other contexts (e.g. 5c). Subject clitics also resist the Règle de Littré (Plénat 1986), which blocks optional liaison from occurring between a consonant preceded by [r] or [l] and the following word (e.g. optional liaison is blocked in 6a but liaison must occur in 6b; cf. 6c and 6d, which are not in a context where the Règle de Littré applies). This suggests that the phonological domain of subjects clitics is the word, rather than the phrase, another criterion for affix status listed by Zwicky and Pullum (1983). Phrase-level attachment is typically claimed to be a property of true phonological clitics (Klavans 1985, Legendre 2000).

- (5) a. on ira → [ɔnɪra]/*[ɔɪra] ‘we will go’
- b. envirer → [ãnvire]/*[ãvire] ‘to make drunk’
- c. selon un médecin → *[slõnẽmedcĩ]/[slõẽmedcĩ] ‘according to a doctor’
- (6) a. il court encore → *[ilkurta̯kor]/[ilkurãkor] ‘he’s still running’
- b. court-il → [kurti̯l]/*[kuril] ‘is he running?’
- c. lourd accent → *[lurdaksã]/[luraksã] ‘heavy accent’
- d. lourdeur → [lurdœ̯r]/*[lurœ̯r] ‘heaviness’

These empirical patterns illustrate properties of subject clitics that, according to Zwicky and Pullum (1983), are typical of affixes rather than phonological clitics. Theories of morphology have been designed to accommodate these types of patterns. For example, in lexicalist theories, combinations of morphemes (e.g. a particular subject clitic

and verb) are built in the lexicon and thus could be subjected to appropriate constraints on word formation that may be lexically specific. In DM, which takes morphology to operate on the output of syntax, the combination of a subject clitic with its host could be accomplished via a Merger operation. In DM, morphology operates cyclically, and different Merger operations take place at different levels of representation. The two types of Mergers considered here are LOWERING and LOCAL DISLOCATION (see Embick & Noyer 2001, Embick 2007 for a more complete discussion of these processes). Lowering takes place before the operation of Vocabulary Insertion and would allow the subject clitic and verb, which in the syntax are independent feature bundles, to combine as such in the morphology. Only SUBSEQUENTLY are vocabulary items chosen and inserted, allowing this process to interact with the particular feature bundles that have been combined. At Vocabulary Insertion, rules can dictate the exact phonological spell-out that corresponds to a feature bundle in a specific context. An important case is the combination of the first-person singular subject clitic and the first-person singular form of the verb *être*, which is realized as [ʃui]. This form is not derived as the result of a general phonological operation, and I take it to be a single vocabulary item, a fused combination of *je* and *suis*. If this is the case, the DM operation of Fusion (Halle 1997) can take the two sister nodes created by the Lowering operation and combine them into a single feature bundle as shown in 7. At Vocabulary Insertion, this bundle will be spelled out as [ʃui].



The alternative Merger operation, Local Dislocation, would also be a candidate for combining subject clitics with their host; this process takes two string-adjacent elements and combines them. If Colloquial French subject clitics are housed within a specifier, Local Dislocation could combine them with the verb. This operation, however, occurs AFTER Vocabulary Insertion (and linearization of the syntactic structure, which allows it to make reference to string-adjacency), and thus while it would allow the subject clitic to be sensitive to which vocabulary items it chooses as a host, it cannot in this case change the form of the vocabulary item chosen (since this cannot be accomplished by a general phonological process in the phonological component).⁵ Thus the fused

⁵ Although Embick and Noyer (2001) and Embick (2007) state that Local Dislocation functions as I have described above, Embick does suggest in a footnote that there may be 'cases in which an element moved by LD acquires its phonological form only after moving' (2007:9).

form [ʃqi] cannot be created by Local Dislocation. We saw above, however, that Lowering can produce the fused form. Crucially, Lowering combines only heads, and is limited to Merger between a head and the head of its complement. If the Lowering analysis is on the right track, then Colloquial French subject clitics can be treated as heads at the level of the syntax, which combine with a verb that has raised to occupy a head position immediately below.

Regardless of the exact theoretical approach, the idiosyncratic morphophonological properties of Colloquial French subject clitics have implications for the level at which they must be combined with the verb.⁶ Capturing these features while analyzing subject clitics as mere phonological clitics requires positing some mechanism that operates on both affixal elements and certain special syntactic words; how this might be accomplished is at best yet to be worked out.

2.2. *Ne*-RETENTION IN COLLOQUIAL FRENCH. In this section I evaluate the importance of the negative marker *ne* for the analysis of subject clitics, and conclude that the distribution of *ne* in Colloquial French can be best explained under the hypothesis that subject clitics are affixes. Both Rizzi (1986) and Brandi and Cordin (1989) cite the French negative scope marker *ne* as an important indication of the structural position of subject clitics, a view that is adopted by Zanuttini (1997) in an extensive study of Romance negation. Standard French negation is discontinuous, as shown in 8 below, and involves a marker *ne*, which follows DP subjects and subject clitics, as well as an additional negative element, typically the negative adverb *pas*, which follows the verb.

- (8) a. Jean/il ne mange pas de viande.
‘Jean/he does not eat meat.’
- b. Jean/il ne la mange pas.
‘Jean/he doesn’t eat it.’

The fact that *ne* intervenes between the subject clitic and its host verb, but not between object clitics and the verb (as shown in 8b), is taken as evidence for the higher structural position of the subject clitic (Rizzi 1986, Brandi & Cordin 1989, Zanuttini 1997, Poletto 2000). Although it does not immediately follow that this position must be the canonical subject position, the intervention of *ne* is interpreted by some as an additional confirmation that French subject clitics are arguments housed in a specifier position. The strength of this evidence is in part dependent on the status of *ne* itself. For example, De Cat (2007b) argues within a lexicalist theory of morphology that *ne* is not an affix, and therefore its intervention between the subject clitic and verb is evidence that the subject clitic itself is not an affix.⁷

In Standard French, on which Rizzi (1986) and Brandi and Cordin (1989) base their claims, *ne* is consistently used (particularly in the written register); however, in Colloquial French, it is widely recognized that *ne* is used less regularly (Ashby 1981,

⁶ Lowering with Fusion may also work if subject clitics start out as D heads in the specifier of VP (or vP) and move to a higher inflectional node before being combined with the verb, as argued in Cardinaletti & Starke 1999. I do not evaluate this analysis further here; however, it is worth noting that it requires allowing incorporation from internal subject position, which is widely argued to be impossible on independent grounds, for example, in those languages that exhibit regular noun incorporation (Jelinek 1984, Baker 1988).

⁷ Within the cartographic framework, it is less clear how the nonaffixal status of *ne* would impact the analysis of subject clitics as inflectional heads. I return to this point below, but it is worth noting that in some Northern Italian dialects, ‘weak’ negative elements (those that, like *ne*, cannot negate a clause on their own) may intervene between what have been analyzed as agreement subject clitics treated as heads and the verb. Zanuttini (1997) proposes an additional projection between subject (agreement) clitics and the verb, to which weak negative markers are adjoined. Object clitics, which FOLLOW negation, are then given a position even closer to the verb.

Coveney 2002, and many others). Nevertheless, De Cat (2007b) claims that *ne* is still obligatory in Colloquial French under certain conditions, suggesting it is still an active part of the language. The sentence given in 9 contains a negative subject (from De Cat 2007b:16) and represents a context that is claimed to force *ne*-retention (this would also apply to subjects modified by negative expressions like *jamais* ‘never’, *rien* ‘nothing’, *aucun(e)* ‘none’, *personne* ‘nobody’).⁸

- (9) Personne *(n')a chanté ni crié.
‘Nobody sang or shouted.’
- (10) a. Paul accepte de ne renvoyer personne.
‘Paul agrees not to fire anyone.’
- b. Paul n'accepte de renvoyer personne.
‘Paul does not agree to fire anyone.’
- (11) a. Jean semble ne souvent pas être d'accord.
‘Jean seems to be not often in agreement.’
- b. Jean avoue ne jamais lire de journal.
‘Jean admits to never reading a newspaper.’

De Cat (2007b) follows Kayne (1984), Godard (2004), and others in treating *ne* as a marker of negative scope (as shown in 10, the scope of negation cannot be interpreted higher than the clause containing *ne*) and argues that its relationship to negative expressions in a different clause is syntactically restricted. For example, the clause containing the negative expression (e.g. *personne*) must be nonfinite, and the relation is sensitive to syntactic islands. De Cat (2007b) takes these facts as an indication that *ne* should not be treated as an affix. Perhaps a more obvious obstacle to analyzing *ne* as a verbal affix is that in infinitival clauses, *ne* can take an adverb or bare quantifier as its phonological host rather than a verb (as in 11). Previous analyses of French negation have generally posited two versions of *ne*—one that attaches to finite verbs, and another that attaches to a phrasal category (e.g. Haegeman 1995, Godard 2004). This leaves open the possibility that *ne* is in fact a verbal affix at least in those cases where it intervenes between the subject clitic and the verb. As pointed out by De Cat (2007b), however, it is somewhat undesirable to have to posit two distinct *ne* forms; therefore I take as my working assumption that *ne* is not an affix.

To sum up, De Cat (2007b) as well as Rizzi (1986) and Zanuttini (1997) argue that the intervention of *ne* between subject clitics and the verb in French is best explained by the hypothesis that subject clitics are housed in a higher structural position, specifically the same specifier position in which DP subjects appear. The support garnered by this hypothesis, however, is only relevant for Colloquial French insofar as *ne* still appears between subject clitics and the verb. In fact, as I show, the pattern of *ne* use is sensitive to the presence of a subject clitic in a way that can be explained by the hypothesized affixal status of the latter in this register. First, in Colloquial French, *pas* is regularly used alone in place of *ne* or *ne pas* when negative scope must be explicitly marked, as in 12a,b.

- (12) a. Tu essaies de pas colorier sur le jaune. (Tim20)⁹
‘You’re trying not to color on the yellow.’
- b. Tu essaies pas de colorier sur le jaune.
‘You aren’t trying to color on the yellow.’

⁸ This is perhaps better stated as a strong preference; the sentence in (i), spoken by a mother in the Lyon corpus, shows the possibility of omitting *ne* in precisely this context in Colloquial French.

(i) Personne ici veut jouer à la poupée.
‘Nobody here wants to play dolls.’ (Tim34)

⁹ The notation indicates the file name in the CHILDES Lyon corpus from which each example was taken.

Further, evidence from adult-directed speech suggests that the overall rate of *ne*-retention in the spoken language is very low; Ashby (1982) reports 16% *ne*-retention in a corpus of Parisian speakers, Coveney (2002) reports 18.8% in a corpus of speakers from the Picard region, and Armstrong (2002) reports 1.1% for speakers from the Lorraine region. The relatively wide range of frequencies in these reports is likely due to the mixture of registers represented in the various corpora. For example, the corpus reported in Coveney 2002 is comprised of interviews in which the two speakers did not know each other, whereas the corpus analyzed in Armstrong 2002 includes both interviews of this kind and conversation between familiar peers.

The frequency of *ne*-retention in child-directed speech (that is, the speech of ADULT caregivers to children) in the Lyon corpus is 7.6%, placing it in the lower range of previous findings.¹⁰ The overall rate of *ne*-retention was calculated by dividing the actual number of *ne* uses by the number of possible contexts for *ne*. This denominator included negatives formed with *pas*, as well as negative expressions like *jamais*, *rien*, *aucun*, and *personne*. A simple report of overall frequency, however, masks a more intriguing effect: *ne*-retention is clearly affected by the properties of the preceding subject. Crucially, *ne*-retention exhibits the following pattern of decreasing frequency (shown in detail in Table 3):

full DP subject > no DP or subject clitic > subject clitic

	<i>ne</i> ...	TOTAL
DP subject	83.3%	20
No DP or subject clitic	14.1%	104
Subject clitic	6.3%	323
DP + subject clitic	6.7%	9
TOTAL	7.6%	456
		5,990

TABLE 3. *ne*-retention in negative contexts in spontaneous speech (Lyon corpus).

The *ne*-retention rates shown in Table 3 are calculated using the same method described above for the overall retention rate, except here the type of subject present in the negative context is taken into account. Contexts where neither a DP subject NOR a subject clitic is used include imperatives and constructions where an impersonal subject clitic has been dropped (this is very common in Colloquial French, particularly with existential (*il*) *y'a* ‘there is’ and (*il*) *faut* ‘it is necessary’). As Table 3 shows then, *ne* is preferentially dropped just in the cases where it would intervene between the subject clitic and the verb.¹¹ This is particularly striking when the *ne*-retention rate in clauses

¹⁰ Only mother speech is used here and elsewhere as it makes up the vast majority of caregiver speech in the corpus. The *ne*-retention rates differed slightly by mother when it came to retention with subject clitics. One mother’s rate was higher than the rest, 268/2,144, 12.5%; this mother was generally found to be more conservative—for example, see n. 15 and 28. The next highest rate was 62/1,904, 3.3%, and the lowest rate was 8/1,084, 0.7%.

¹¹ A similar pattern is mentioned by both Ashby (1981) and Armstrong (2002). Ashby (1981) shows that *ne* is sensitive to the type of subject present—in his corpus *ne* is retained categorically with DP subjects, and is dispreferred with subject clitics. Many other variables are also examined that I do not mention here.

Below, I provide relatively more sophisticated statistical confirmation, by model comparison, of the pattern described here. A simple chi-square test, however, confirms that the pattern is statistically reliable: the rate of *ne*-retention with DP subjects (alone) is significantly higher than the rate in each other context (No DP or subject clitic, $\chi^2(1) = 32.28, p < 0.0001$; Subject clitics, $\chi^2(1) = 226.37, p < 0.0001$; DP subject + subject clitic, $\chi^2(1) = 81.49, p < 0.0001$). The rate of *ne*-retention is also significantly higher in No DP or subject clitic contexts than with either a subject clitic ($\chi^2(1) = 57.22, p < 0.0001$) or a DP + a subject clitic ($\chi^2(1) = 5.84, p < 0.02$). There is no difference between the rate in the Subject clitic (alone) context and contexts with a DP + subject clitic.

with DP subjects alone is compared to the rate in clauses where the DP subject cooccurs with a subject clitic (as in 1a). The rate of *ne*-retention for the former is around 83%, but for the latter, where a subject clitic is present, the rate drops to 7%. These frequency statistics suggest that a driving factor in Colloquial French *ne*-retention is sensitivity to the presence of a subject clitic.¹² In Standard French it may be the case that no asymmetry of the sort shown in Table 3 exists. For example, no significant difference was found between the *ne*-retention rate with DP subjects and the rate with subject clitics in speech read to children (from children's books) in the Lyon corpus.

The rate of *ne*-retention when a subject clitic is absent confirms De Cat 2007b in showing that *ne* is still used productively in some contexts in Colloquial French. In fact in the Lyon corpus, it seems that *ne*-retention is preferred when a DP subject is present. The hypothesis that subject clitics are true syntactic subjects (merely phonological clitics, as proposed by De Cat (2007b) and others), however, does not predict any asymmetry between DP subjects and subject clitics; the striking pattern of *ne*-retention is unexplained on this account. By contrast, under the hypothesis that Colloquial French subject clitics are inflectional affixes, this pattern can be explained. On a lexicalist view of morphology, if *ne* is not part of the verbal inflectional material, then although it may freely intervene between lexical subjects and the verb, it may not do so between the verb and the subject-clitic prefix.

If affixation is not assumed to take place in the lexicon, the results here have a more complex interpretation. Zanuttini (1997) interprets crosslinguistic variation in the position of negative elements like *ne* with respect to subject clitics as suggesting the differential status of those clitics. Subject clitics occurring after negative elements (and thus closer to the verb) are likely part of the agreement morphology of the verb, while those occurring outside of negation are more likely to be true syntactic subjects. What is most interesting in light of the data presented here are cases mentioned by Zanuttini (1997), including Paduan (also discussed in Benincà 1983), where the subject clitic and negative marker have actually switched positions over time, with the subject clitic moving from the more peripheral prenegative position to a more internal postnegative position. This is taken to suggest the reanalysis of the relevant subject clitics as verbal agreement markers, since the position of the negative marker is assumed to be static. The Colloquial French case is closely parallel: subject clitics occupy a position reserved for agreement heads, by assumption lower than the weak-negation; therefore to realize *ne* following the subject clitic would be impossible. Instead of switching the order to one in which *ne* precedes the subject clitic to reflect the latter's change in status, the negative scope marker *ne* is simply dropped, since it is not needed. In fact, according to Polletto (2000:16), some Friulian dialects show complementary distribution between agreement subject clitics and negative markers, similar to what is found for Colloquial French according to the data presented.

A possible explanation within a nonlexicalist framework for the relationship described above between negative markers like *ne* and subject clitics may be found within the framework of DM. This is based on an analysis of the interaction between constituent negation and *do*-support in English by Embick and Noyer (2001), who note that

¹² A referee wonders whether there is direct evidence from the historical record that a change in the status of subject clitics (e.g. from phonological clitics to verbal affixes) triggered the loss of *ne*. I do not know of any such evidence, but it seems likely that the sensitivity of *ne*-retention to subject clitics represents the interaction of relatively independent factors; the now basically redundant *ne* (the dropping of which has been noted since the sixteenth century, according to Blanche-Benveniste 1997) is in a good position to be dropped in the service of a continuing change in the French clitic system.

constituent negation is impossible in both 13a and 13b (although possible elsewhere, as in 13c).

- (13) a. *John always not agrees.
- b. *John does always not agree.
- c. John can always not agree.

Embick and Noyer (2001) claim that this type of negation blocks the combination of Tense with the verb through morphological Lowering. The structure of constituent negation, according to Embick and Noyer, involves the adjunction of a Neg head to vP (rather than the presence of a full NegP). When Lowering takes place, the T head must combine with the head of its complement. However, the Neg head intervenes, causing the derivation to crash. Assuming that *ne* is analyzed as an adjoined head (Zanuttini 1997), if Colloquial French subject clitics have a similar requirement forcing them to undergo Lowering in the morphological component, as I argued in §2.1, the French marker *ne* may block the subject clitic from combining with the verb.

The data presented in Table 3 above include a residue of around 6% of cases where *ne* does in fact intervene between the subject clitic and the verb. I argue that rare cases of *ne* found with subject clitics indicate that speakers maintain grammars encoding both the Standard French and Colloquial French registers of their language, either of which may be drawn upon to produce (or comprehend) an utterance. The claim that speakers maintain more than a single grammar has been independently proposed many times to account for variation within and across populations of speakers (Croft 2000, Yang 2002, Zribi-Hertz 2006). The proportion of *ne* (or any other pattern that exists in one register but not another) found will then depend on the social and discourse context, and on which register dominates. With this in mind, I argue that residual cases of *ne* intervening between subject clitics and the verb come from the Standard French register, and therefore only in that register can they furnish a valid piece of evidence against the analysis of subject clitics as word-level affixes.

The proposal so far then consists of two main claims: (i) the rate of *ne*-retention is affected by the affix status of subject clitics in Colloquial French, and (ii) the full range of data is best analyzed by positing a mixture of two grammars. One way to provide support for this proposal is to show that a model instantiating (i) and (ii) is statistically superior to an alternative model that does not. The standard way to do this involves using the LIKELIHOOD RATIO test, a general method for model comparison (in this case the competing models will be grammars or mixtures of grammars), shown in 14 below (Lehmann 1986). The test is used here to determine which of two proposed models (described in detail below) is able to better account for the data reported in this section. In the context of this test, one model is able to better account for the data if the maximum likelihood value (or probability) it assigns to the data is significantly higher. This criteria not only rewards models that generate the observed forms in the data; it also penalizes accounts that generate forms that are not observed. This allows comparison of two models that differ in complexity (as is the case here), since the more complex model must receive sufficient reward for the observed data that it generates to compensate for the penalty it incurs for generating additional forms that are not observed.

The likelihood-ratio statistic approximately follows a chi-square distribution; therefore, we can use this distribution to determine whether a difference in likelihood is statistically significant.

$$(14) LR = 2 \log \left(\frac{\text{Likelihood}_{\text{Model1}}}{\text{Likelihood}_{\text{Model2}}} \right)$$

As I mentioned above, the two models compared here differ in complexity. The first corresponds to the simple hypothesis that subject clitics are in subject position (specifier of IP), as argued by De Cat (2007b), Rizzi (1986), and others. The second corresponds to the more complex hypothesis I have advocated above that speakers actually have two possible analyses of subject clitics and thus two grammars, the first according to Standard French (as in the simpler model), the second according to Colloquial French (where the subject clitic is an inflectional affix that must be adjacent to the verb). One relatively straightforward way to instantiate the more complex model is with two binary features, one determining the position of the subject clitic or DP, and the other determining the presence or absence of *ne*. The first feature may have the value +high or -high, where +high represents the higher subject position (e.g. SpecIP), and -high represents the lower inflectional head position (which I have suggested subject clitics occupy in Colloquial French). The second feature may have the value +*ne*, if *ne* is present, or -*ne*, if it is dropped. If a subject clitic is used, the model allows the +high value (i.e. places the subject clitic in the higher position), representing the Standard French residue, or the -high value, representing the Colloquial French grammar. If a DP is used, only the +high value is available. The combination of the two features allows the model to take advantage of the different positional possibilities of subject clitics compared to DPs in order to explain the discrepancy in the rate of *ne*-retention. Probabilities of sentences are conditioned on whether a DP or subject clitic is chosen. The model is described schematically in Table 4, where gray entries are impossible combinations of feature values, α is the probability of the +high value, and β is the probability of the +*ne* value. The parameters α and β will be used to calculate the likelihood value for the model.

DP SUBJECT (ONLY)					SUBJECT CLITIC (SCL)				
high	<i>ne</i>	structure	prob*		high	<i>ne</i>	structure	prob*	
+	+	[_{IP} DP [_{NegP} <i>ne</i> ...]	$\alpha\beta$		+	+	[_{IP} SCL [_{NegP} <i>ne</i> ...]	$\alpha\beta$	
+	-	[_{IP} DP [_{NegP} Ø...]	$\alpha(1-\beta)$		+	-	[_{IP} SCL [_{NegP} Ø...]	$\alpha(1-\beta)$	
-	+	[_{IP} [_{NegP} <i>ne</i> [_{AgrP} DP...]	$(1-\alpha)\beta$		-	+	[_{IP} [_{NegP} <i>ne</i> [_{AgrP} SCL...]	$(1-\alpha)\beta$	
-	-	[_{IP} [_{NegP} Ø [_{AgrP} DP...]	$(1-\alpha)(1-\beta)$		-	-	[_{IP} [_{NegP} Ø [_{AgrP} SCL...]	$(1-\alpha)(1-\beta)$	

TABLE 4. Model instantiating mix of two grammars: feature values and corresponding unnormalized probabilities (impossible combinations of feature values are in gray).

The simpler model, described in Table 5, can be thought of as corresponding to a Standard French-only grammar; it has a fixed value of +high for the parameter encoding position, following the hypothesis that this differentiation of subject clitics from DPs is not crucial in accounting for the data (in other words, subject clitics and DP occupy the same syntactic position). This essentially means that the model has only a single parameter β (α cancels out).

DP SUBJECT (ONLY)					SUBJECT CLITIC				
high	<i>ne</i>	structure	prob*		high	<i>ne</i>	structure	prob*	
+	+	[_{IP} DP [_{NegP} <i>ne</i> ...]	$\alpha\beta$		+	+	[_{IP} SCL [_{NegP} <i>ne</i> ...]	$\alpha\beta$	
+	-	[_{IP} DP [_{NegP} Ø...]	$\alpha(1-\beta)$		+	-	[_{IP} SCL [_{NegP} Ø...]	$\alpha(1-\beta)$	

TABLE 5. Model instantiating simple Standard French model: feature values and corresponding unnormalized probabilities (+high feature value is blocked).

Predicted (normalized) probabilities of sentence types are calculated by dividing the value of *prob** by the total counts of all (possible) sentences types, shown in Table 3.¹³ For each model, the values of the parameters (α and β , or β alone) were chosen to provide the maximum likelihood value for the *ne*-retention data.¹⁴ Recall that this value is an indication of how well the models are able to account for (or fit) the data. The maximum likelihood values from each model were then compared using the likelihood-ratio test. The test showed a significant improvement by the more complex model over the simpler model ($\chi^2(1) = 88.1, p < 0.001$). This result shows that the interaction between the choice of DP or subject clitic and the retention of *ne* in negative sentences is an important factor in explaining these data. Unlike the more complex model, the simpler model has the +high parameter value fixed and thus has no way of distinguishing DPs from subject clitics; it does not have recourse to two possible positions for subject clitics in order to explain the greater rate of *ne*-drop when they are present, and as a consequence assigns lower probability to the data. The likelihood-ratio test therefore provides statistical support for the existence of a mixture of grammars, one responsible for the Colloquial French pattern in which the subject clitic is an inflectional head (and *ne* must be dropped), and the other responsible for the Standard French residue found in the corpus (where *ne* can be retained in the presence of the subject clitic).

2.3. INVERSION IN COLLOQUIAL FRENCH. In this section I dispute another commonly cited argument against analyzing subject clitics as affixes—that they are available for syntactic movement without their host verb (De Cat 2007b). Within a lexicalist approach (e.g. Zwicky & Pullum 1983), affixes cannot move alone in the syntax since they are attached to the verb presyntactically. De Cat (2007b) cites evidence from yes/no- (e.g. 15) and WH-question (e.g. 16) formation, which, at least in Standard French, can involve inversion of the subject clitic and the verb as in 15b and 16b. This pattern led both Miller (1991) and Auger (1994b) to postulate two versions of (at least some) subject clitics in the lexicon, one specified as prefixal and the other as suffixal. The subject clitic is linearized depending on the features of the verb (in this case +WH or –WH). De Cat (2007b) is critical of this kind of analysis and argues that a simple choice of prefix or suffix based on the +/–WH feature is insufficient to account for an asymmetry she finds in her corpus between WH- and yes/no-type questions. Although she asserts that a more economical explanation would not involve treating subject clitics as affixes, her arguments apply only straightforwardly to a lexicalist view of affixation.¹⁵

- (15) a. Il veut du café?
- b. Veut-il du café?
- c. Est-ce qu'il veut du café?
 ‘Does he want any coffee?’

¹³ Note that the count data used include only DP subjects or subject clitics, not cases where neither are present, since these cases are not crucial for the argument, nor do they distinguish between the two models compared. Cases where both the DP and the subject clitic are present are also treated here since I deal with them at length below.

¹⁴ The values were calculated using the general-purpose optimization function in the R statistical package.

¹⁵ It is worth noting that there are languages that have (clear) affixes that alternate between suffixal and prefixal attachment position, for example, Arabic (Fontana 1993), Huave (Noyer 1994), and Afar (Fulmer 1991). Therefore, a lexicalist theory of morphology would have to account for this option independent of French.

- (16) a. Il veut quoi?
 b. Que veut-il?
 c. Qu'est-ce qu'il veut?
 'What does he want?'

Traditional analyses of this inversion construction in Standard French in fact involve movement of the verb rather than the subject clitic (Kayne 1972, 1975, Sportiche 1999, Poletto 2000). If morphological attachment of the subject clitic (housed in an inflectional head) to the verb occurs postsyntactically, inversion cannot be treated as clear evidence against the affixal status of subject clitics. It is worthy of note that many Northern Italian dialects also show inversion of subject clitics argued to be inflectional heads, and these have received an analysis as such in a CARTOGRAPHIC FRAMEWORK (see Poletto 2000). Analyses of inversion have been proposed by, for example, Kayne (1972), Rizzi and Roberts (1989), and Sportiche (1999). Kayne (1972), for example, points out that although inversion of a subject clitic or a full subject DP is possible, the position to which subject clitics and full subjects move is structurally distinct, as suggested by the examples in 17 below. In light of these differences, Kayne (1972) proposes that French subject clitics are a sort of nominal affix (generated along with a full subject that is subsequently deleted in most cases). Sportiche (1999) concludes based on the same data that postverbal subject clitics are in fact verbal inflection attached to the verb in the lexicon (although he does not extend the same analysis to preverbal subject clitics). However, Rizzi and Roberts (1989) provide an account of French inversion that treats subject clitics as DPs housed in subject position. They explain the asymmetry between subject clitics and lexical DP subjects by claiming that case assignment can be achieved in French by Spec-head agreement or incorporation of the subject clitic with the verb. Lexical DP subjects cannot undergo incorporation, and therefore cannot appear in the same position as subject clitics, ruling out 17b.

- (17) a. A qui a parlé Jean?
 b. *A qui a Jean parlé?
 c. A qui a-t-il parlé?
 'To whom did Jean/he speak?'

The theoretical implications of subject-clitic inversion for the status of subject clitics thus appear mixed. The variation present in corpora of spontaneous speech, which De Cat (2007b) and Auger (1994b) imply must be accounted for, is not at issue for Kayne (1972), Sportiche (1999), or Rizzi and Roberts (1989). Presumably the latter are interested in the categorical rules of Standard French, whereas De Cat and Auger are both interested in hypotheses specific to Colloquial French. In general, corpus data reveal that in spontaneous Colloquial French inversion involving subject clitics is vanishingly rare. Frequencies of inversion-type questions in corpora of adult-directed speech are typically reported to be extremely low. Coveney (2002) reports that in his corpus from the Lorraine region, no examples of yes/no inversion-type questions were found, and 6.6% of WH-questions featured inversion. De Cat (2007b) reports no examples of yes/no inversion-type questions and 2% in WH-questions in her sample of European Colloquial French speakers from France; the frequencies in the PFC corpus are nearly identical.

Analysis of the Lyon corpus reveals frequencies that are even lower, as shown in Table 6. Inversion is used in just 0.1% of yes/no questions; two examples from the corpus are provided below: 18a involving a DP subject and 18b an inverted subject clitic. As for WH-questions, inversion is used only 1.4% of the time, with 46/112 of these cases involving an inverted full DP subject as in 18c, leaving only 66/7,862 (0.8%) cases

where the subject clitic was inverted, as in 18d.¹⁶ Outside of a very small residue then, subject clitics never appear following the verb in child-directed Colloquial French. As with *ne*-retention, I advocate the hypothesis that the residual use of subject-clitic inversion implies the need for multiple grammars available to each speaker. Inversion is generated by the grammar of the Standard French register, which traditionally has this strategy available in question formation.

	YES/NO QUESTIONS	TOTAL	WH-QUESTIONS	TOTAL
Subject clitic	0.1%	9	13,015	0.9%
DP subject	2.4%	1	41	88.5%
DP + subject clitic	0%	0	197	0%
TOTAL	0.1%	10	13,253	1.4%
			112	7,862

TABLE 6. Frequency of inversion in yes/no and wh-questions.

- (18) a. Fait dodo ton bébé?
 make sleep your baby
 ‘Is your baby sleeping?’
- b. Dois je comprendre que tu veux aller dans mes bras?
 must I to.understand that you want to.go in my arms
 ‘Am I to understand that you want to be held?’
- c. Où est la veste?
 where is the jacket
 ‘Where is the jacket?’
- d. Que va t’il manger?
 what goes he to.eat
 ‘What’s he going to eat?’

These results present a similar pattern to those reported for *ne*-retention; the grammar of Colloquial French appears to be sensitive to the status of subject clitics as verbal affixes, and more specifically PREFIXES. When the subject is a full DP, inversion is still clearly available and in fact seems to be the preferred strategy for wh-question formation. As in the case of asymmetrical *ne*-retention, these findings are predicted under the view that the status of subject clitics as verbal prefixes is fixed in Colloquial French. Under the alternative hypothesis that these subject clitics are syntactically parallel to full DP subjects, this asymmetry remains to be explained.

2.4. SUBJECT-CLITIC REPETITION IN CONJOINED VPs. Perhaps one of the most widely cited factors in determining the status of clitics in general, and French subject clitics in particular, has been their behavior in the context of conjoined verb phrases (Kayne 1975, Rizzi 1986, Brandi & Cordin 1989, Miller 1991, Sportiche 1992, Auger 1994b, Poletto 2000, Fonseca-Greber & Waugh 2002). Whereas object clitics in French (as in 19a) and subject clitics in many Northern Italian dialects (as in 19c) cannot take wide scope over a conjunction of VPs but must be repeated with each finite verb, it has been claimed that subject clitics in French need not be repeated in these contexts (as in 19b).

- (19) a. Jean les a préparé et *(les) a mangé.
 ‘John prepared them and ate them.’
- b. Elle chante et (elle) danse.
 ‘She sings and dances.’

¹⁶ A single mother actually accounted for 43/66 cases of inverted subject clitics; this same mother is found to be conservative in both *ne*-retention (see n. 9) and subject doubling (see n. 28).

- c. La canta e *(la) balla. (Trentino)
 'She sings and dances.'

At first glance, this is a serious blow to the analysis of subject clitics as inflectional affixes. First, verbal inflection is generally expected to appear each time a finite verb that licenses it appears (although see §4 below). Further, the possibility of wide scope is exactly what is predicted by a phonological-clitic analysis since it is clearly possible with lexical DP subjects, and all syntactically independent words should show the same coordination possibilities. Kayne (1975), Brandi and Cordin (1989), Cardinaletti and Starke (1999, although see their n. 33), and Poletto (2000) all use the possibility of wide scope of Standard French subject clitics over conjunction to support the claim that these elements occupy a higher structural position than object clitics. This higher structure containing the subject may be omitted, whereas object clitics, which are more closely tied to the verb, must be repeated.

Contrary to the empirical claims made by Kayne (1975) and others for Standard French, COLLOQUIAL FRENCH subject clitics in fact behave precisely as expected under an affixal analysis in contexts of VP conjunction. Previous work on Colloquial French subject clitics suggests that repetition of subject clitics in coordinated VPs is either strongly preferred or required (Ashby 1980, Miller 1991, Pierce 1994, Fonseca-Greber & Waugh 2002); but no previous quantitative analyses exist to my knowledge. In the Lyon corpus, only three cases (provided in 20) were found where the subject clitic was not repeated when VPs were conjoined, as shown in Table 7, yielding a repetition rate of 98.4% (181/184). A similar frequency of subject-clitic repetition in conjoined VPs (32/33 examples, or 97%) was found for speakers from the PFC corpus, suggesting that this preference is not limited to child-directed Colloquial French.¹⁷

	REPEATED	TOTAL
1st/2nd	99.2%	126
3rd	96.5%	55
TOTAL	98.4%	181
		184

TABLE 7. Percentage of subject clitics repeated in spoken coordinated VPs.

These results clearly support the hypothesis that subject clitics MAY NOT take wide scope in conjoined VPs, as expected if subject clitics are prefixal agreement markers. This pattern again puts Colloquial French subject clitics into the same category, in terms of status with respect to the verb, as has been more generally granted to French object clitics, as well as subject clitics in many Northern Italian dialects. It is once again not clear how to explain the behavior of subject clitics if they are mere phonological clitics, syntactically parallel to subject DPs, which clearly do not have to be repeated in conjoined VPs. The Colloquial French pattern can here be roughly contrasted with the corresponding pattern in Standard French by observing the frequency in speech read to these same children from books, where only 38% (14/37) of conjoined VPs showed repetition of the subject clitic. This is likely another reflection of the different status of subject clitics in that register. Examples from spontaneous and read speech are given in 21a and 21b respectively, and provide a good picture of the register contrast (the verb *dé-*

¹⁷ For comparison, English child-directed speech shows lower repetition rates of pronouns (around 75% in speech to four children from the Providence corpus (Demuth et al. 2006), $\chi^2(1) = 34.6, p < 0.001$). An analysis of Colloquial French subject clitics as phonological clitics but syntactic words predicts no difference between Colloquial French and English in terms of behavior of subject pronominal elements in conjoined VPs.

posa appears in the ‘passé simple’, a past tense used exclusively in the formal or written register).

- (20) a. Il roule et tourneboule. (Tim18)
‘He rolls and flips.’
 - b. Fais attention, je vais t’ attraper et vais te chatouiller. (Nat05)
‘Be careful, I’m gonna get you and tickle you.’
 - c. Ça a bougé et s’ est cassé? (Mar26)
‘It moved and was broken.’
- (21) a. Il va ouvrir la porte et il va rentrer. (Nat1)
‘He’s gonna open the door and he’s gonna go in.’
- b. Elle déposa son panier dans l’herbe et se mit à cueillir des fleurs. (Nat31)
‘She put her shovel down on the grass and began to cut flowers.

2.5. COMPLEMENT CLITICS. French subject clitics necessarily precede all complement clitics (e.g. object, reflexive, and locative clitics); therefore, under the hypothesis that the former are affixes, the latter must be as well. In fact, it is more widely accepted that French (both Standard French and Colloquial French) complement clitics are affixal in some sense. *Kayne* (1975) argues that these clitics are incorporated into the verb at the syntactic level (although he generates them first in canonical object position), and subsequent proposals by *Rivas* (1977), *Jaeggli* (1982), and *Sportiche* (1992), among others, all base-generate these clitics in the inflectional field of the verb. *Miller* (1991) and *Auger* (1994b) depart from these only in the sense that in their respective frameworks, French clitics are affixes attached to the verb in the lexicon rather than being treated as inflectional heads in the syntax. Some of the properties discussed in §2.1 apply to complement clitics, and many more such properties can be found in *Miller* 1991. In addition, even in Standard French these clitics always appear directly adjacent to the verb, following *ne*, and they can never take wide scope in conjoined phrases (although just as subject clitics may take wide scope in Standard French, complement clitics could do so in French up to the seventeenth century; see *Miller* 1991). There are cases of object-clitic inversion, as mentioned in §2.3 above, but these have been convincingly analyzed within a morphological treatment of these clitics (*Hirschbühler* & *Labelle* 2000). We can then state that subject clitics attach to the combined verb + object-clitic unit.

One remaining question relates to object-clitic climbing in French, which occurs with auxiliary verbs (as in 22a) and in causative constructions (as in 22b), but not in many other cases (e.g. 22c). In clitic climbing constructions, the clitic’s morphological host is not the verb that assigns its theta role, but a higher verb. *Sportiche* (1992) argues that these facts severely hinder a lexical-attachment analysis of complement clitics, since they must appear attached to a verb that does not license the argument they represent. However, analyses in *Abeillé* & *Godard* 2002, *Miller* & *Sag* 1997, and *Monachesi* 2005 show that this problem can in fact be overcome. These authors convincingly analyze cases of clitic climbing as argument sharing or projection, and although they are working within various lexicalist frameworks, *Abeillé* and *Godard* (2002) provide arguments that are essentially independent of the particular framework. They argue that clauses involving an auxiliary and past participle in French (as well as causatives) have a flat structure and thus force argument sharing, while other verbs (such as in 22c) take a separate VP complement and thus do not show clitic climbing. Working in the cartographic framework, *Cardinaletti* and *Shlonsky* (2004) present arguments for an analysis of Italian restructuring that relies instead on multiple positions for the functional head that the clitic is associated with. The position where the clitic is generated is dependent upon

how much restructuring has taken place. Although explicitly extending Cardinaletti & Shlonsky 2004 to French is beyond the scope of this article, it is clear that several possible solutions exist for analyzing complement clitics as affixes either base-generated in functional heads, or combined with the verb at a lexical level. Note that their status as affixal is independent of their function; they are likely (incorporated) arguments rather than agreement markers.¹⁸

- (22) a. Jean il les a mangés.
‘John ate them.’
- b. Tu le fais tomber.
‘You make it fall.’
- c. Il peut le faire.
‘He can do it.’

2.6. INTERIM SUMMARY. Based on the distributional and morphophonological properties of subject clitics that have been discussed here, I contend that in Colloquial French, subject clitics are best analyzed as inflectional prefixes rather than independent syntactic words in subject position (cliticized at the level of the phonology only). The phonological processes that they undergo cannot be treated as general processes, but are specific to affixes and clitics, clitics alone, and in some cases even specific to particular combinations of subject clitics and verbs. This led Miller (1991) and Auger (1994b), for example, to propose that these patterns be accounted for in the lexicon by rules governing the combination of morphological elements (stems and affixes). I have suggested above that this can also be handled by the morphological process of Lowering in distributed morphology, which combines a head with the head of its complement (followed by Fusion of the features of the relevant heads). Alternative proposals that argue that French subject clitics are phonological clitics are based on empirical arguments from Standard French rather than Colloquial French (e.g. Labelle 1985, Rizzi 1986, Brandi & Cordin 1989) and often do not consider the types of morphophonological patterns discussed above. Further, several constructions that have been prominently featured in these analyses, the intervention of *ne* between subject clitics and the verb, inversion of subject clitics, and wide scope of subject clitics over conjoined VPs, may apply to Standard French, but do not hold up under scrutiny for Colloquial French. De Cat (2004, 2007a,b) does in fact make arguments based specifically on Colloquial French; the data presented here, however, are not consistent with her hypothesis, but are explained if subject clitics are inflectional affixes—regardless, I argue, of whether attachment occurs presyntactically or postsyntactically. In my view there remains no principled reason to maintain that subject clitics in Colloquial French are NOT verbal affixes while granting this status to complement clitics and subject clitics in those Northern Italian dialects that show similar properties. If it is clear that the elements in question (together with inflectional affixes crosslinguistically) exhibit similar patterns not commonly found for syntactically independent words, then only very strong evidence to the contrary should force a categorial distinction among them.¹⁹ This evidence may be available for Standard French (a grammar that, I have argued, Colloquial French speakers also have access to), but it is not present for Colloquial French, especially not in speech to children, a critical fact from the viewpoint of language learning and change.

¹⁸ The status of complement clitics as agreement markers is a separate question that I do not address here. It is generally claimed that these clitics cannot cooccur with overt DP complements, which would suggest that they are not markers of agreement. However, this claim has not been adequately verified for Colloquial French.

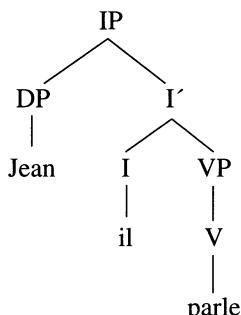
¹⁹ Although space considerations prevent a full illustration, Colloquial French subject clitics do in fact show ALL of the diagnostic behaviors discussed in Zwicky & Pullum 1983 for affixes.

3. SUBJECT DOUBLING IN SPOKEN FRENCH. The preceding sections provided evidence for the hypothesis that Colloquial French subject clitics have the status of affixes. I argue in the remainder of this article for the further hypothesis that they function as markers of subject-verb agreement rather than as subject arguments. This claim is based on evidence of their cooccurrence with full DP subjects in subject-doubling constructions. Doubling of a true argument DP by a clitic in the same simple clause can be taken as the critical diagnostic for differentiating agreement clitics from arguments (Miller 1991, Siewierska 2004), since basic constraints on syntax dictate that only a single argument for any particular theta role is licensed within a clause (e.g. Chomsky 1981). Theoretical analyses of clitic doubling typically treat such clitics as inflectional heads (moved to INFL as in Kayne 1975 and others, or base-generated there as was originally proposed in Rivas 1977 and Jaeggli 1982), and I have presented independent evidence for that conclusion above.

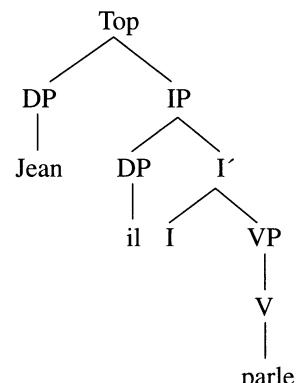
While there is a consensus that subject doubling is allowed in several languages closely related to Standard French and Colloquial French (including Pied Noir French according to Roberge 1990, and Picard according to Auger 2003), whether either register allows it is debated.²⁰ More specifically, sentences like 23a have been claimed by some (Rizzi 1986, Brandi & Cordin 1989, De Cat 2007b) to be instances of left-dislocation (involving the clitic as a resumptive element in canonical subject position with the DP outside the clause as in 24a) rather than ‘true’ doubling (involving the clitic as an agreement marker with the DP in canonical subject position as in 24b). This is based on the observation that French allows 23a but not 23b, where the latter involves a quantified subject that cannot be dislocated. The impossibility of dislocating quantified DPs is independently verified in 23c, and is explained by Rizzi (1986) according to a principle that states that pronominal elements can function as variables only if they are bound by a licit primary variable left by the application of QR (Quantifier Raising). This is violated in 23c since *personne* is in an A-bar position, not a licit position for a primary variable. The pattern in French is contrasted with that found in Northern Italian dialects like Trentino and Fiorentino, which do allow doubling of quantified subjects.

- (23) a. Jean il parle.
‘John speaks.’
- b. Personne (*il) ne parle.
‘Nobody speaks.’
- c. *Personne, je ne le connais.
‘Nobody, I know him.’

(24) a. Left-dislocation structure



b. Subject-doubling structure



²⁰ See Auger 1994b for arguments that true subject doubling is also possible in Quebec Colloquial French. However, as with European Colloquial French, this has been debated (De Cat 2007b).

In French then, but not in the relevant Northern Italian dialects, the cooccurrence of a DP and a subject clitic seems to be possible only if the DP may independently be dislocated. The further conclusion drawn by Rizzi (1986) and others is that this restriction is best explained if sentences like 23a require dislocation in French.²¹ The claim that French has left-dislocation rather than true doubling is in line with a hypothesis that puts subject clitics in competition with full subjects for the subject argument role (and possibly for position in SpecIP, although not necessarily). Evidence from a variety of sources, however, supports the claim that Colloquial French does in fact allow true subject doubling, consistent instead with the claim that subject clitics are agreement markers in this register. In §§3.1–3.4, experimental evidence is presented that contradicts previous claims in the literature that the prosody of this construction clearly marks it as a dislocation structure. In §§3.5–3.10, a study of speaker judgments shows more precisely the contexts in which DP subjects may cooccur with subject clitics in Colloquial French. Finally, in §§3.11–3.13, empirical data from the Lyon and PFC corpora are presented that underscore the frequency of the relevant construction in Colloquial French, particularly in speech to child learners.

3.1. PROSODIC CUES OF LEFT-DISLOCATION AND SUBJECT DOUBLING. Special prosodic cues associated with sentences like 23a above have been frequently alluded to in the literature on dislocation and doubling, often in service of determining the most likely structural analysis of these constructions in a given language (Jelinek 1984, Brandi & Cordin 1989, Baker 1996, De Cat 2007b, among others). Research on patterns of French prosody likewise suggests that a unique prosodic signature exists for left-dislocated elements (Deshaies et al. 1993, Rossi 1999, Doetjes et al. 2002). Finding this signature in constructions with a cooccurring DP subject and subject clitic would therefore be very suggestive of their underlying syntactic structure (Selkirk 1986), although the connection is not necessarily direct.²² How speakers—and in particular learners—perceive doubling is key to their analysis of these constructions and hence to the grammar they acquire. A first step in understanding such perception is to understand the acoustical structure of the signal being perceived.

Doetjes and colleagues (2002) analyzed read speech containing left-dislocated elements and found evidence for two important prosodic/acoustic cues: (i) an F0 rise over the dislocated element (target F0 being realized at either the nucleus or the end of the final syllable), and (ii) an increase in the duration of the final syllable of the dislocated elements.²³ Dislocated adjunct, object, and subject elements were analyzed together, and were not qualitatively or quantitatively differentiated in this study. A crucial feature of the new study I now present is the specific comparison of dislocated objects with DP subjects cooccurring with a subject clitic. In addition, Doetjes and colleagues (2002) do not make any claims about the robustness of the patterns they find in their study. This study also attempts to establish statistically reliable prosodic patterns across the quantitative measures taken on test sentences.

²¹ Note that this conclusion does not necessarily follow. In fact, I argue below that the impossibility of doubling with subjects that also cannot be dislocated is related to features of this type of subject rather than structural requirements on subject doubling.

²² Baker (1996) argues that special prosodic cues for dislocation are not necessarily a reliable diagnostic. Baker's analysis of polysynthetic languages places all noun phrases in a dislocated position, and yet according to him, prosodic marking of this dislocation is not necessary; as he points out, in these languages there is no need to cue dislocation structure since it is the default structure and has no special meaning.

²³ French stress is word- or phrase-final, so the final syllable of a dislocated word or phrase is also stressed.

As discussed above, if Colloquial French subject clitics are true subject arguments, this construction necessarily involves left-dislocation (as in 24a). The prediction from this hypothesis is therefore that not only dislocated objects but also DP subjects cooccurring with a subject clitic will show the distinctive prosodic/acoustic features of left-dislocation. By contrast, if subject clitics mark subject-verb agreement, they should be allowed to cooccur with a full DP subject in the same simple clause, as in the doubling structure in 24b. This hypothesis then makes the opposite prediction, namely that a DP subject cooccurring with a subject clitic should have prosody similar if not identical to clauses with nonduplicated DP subjects, while left-dislocated objects alone will bear prosodic features characteristic of left-dislocation.

3.2. EXPERIMENT DESIGN AND PROCEDURE. Stimuli were designed to create near-minimal pairs of three test sentence types: (a) DP subjects with no subject clitic as in 25a, (b) DP subjects with a cooccurring subject clitic as in 25b, and (c) left-dislocated DP objects as in 25c.

(25) a. DP subject

- David l' a déjà invité.
 $\text{David}_{\text{subj}}$ him has already invited
 'David already invited him.'

b. DP subject + subject clitic

- David il l' a déjà invité.
 $\text{David}_{\text{subj}}$ SCL him has already invited
 'David already invited him.'

c. DP object

- David il l' a déjà invité.
 $\text{David}_{\text{obj}}$ SCL him has already invited
 'David, he already invited.'

The test sentences were individually embedded in nearly identical sets of scenarios. Each scenario was a short conversational exchange of information between two friends. Five scenario sets were created, with three versions of each scenario designed to set up the correct interpretation of the test sentence. This was crucial since type (b) and type (c) sentences are identical on the surface and therefore potentially ambiguous.

Participants were eight native speakers of French, students under thirty years of age who had recently arrived in the United States. Testing took place at Johns Hopkins University in Baltimore, Maryland. Participants took part in the experiment in pairs, each acting out a part in the scenario. For each pair, only one participant read the part containing actual test sentences, yielding test data from four speakers total. Participants were given the scenario scripts, and were instructed to read through them and ask any questions prior to recording. They were also explicitly instructed to act out the scenarios as if they were having a casual conversation with a friend (in this case the other participant). In some cases the participants were acquaintances. The printed scenarios included various features encouraging the spoken, colloquial register.²⁴

The initial DP (either subject or object) of each recorded test sentence was acoustically analyzed using Praat software (Boersma 2001). Each of the four subjects produced five of each of the three test sentences, yielding twenty of each type and sixty

²⁴ For example, casual words/phrases were used, the negative marker *ne* was omitted, and the subject clitic *il* was written as *i*, a spelling convention typically used to represent Colloquial French pronunciation. An example scenario can be found in Appendix A.

total DPs for analysis. Three main measures were taken: duration of the final syllable, F0 rise over that syllable, and intensity rise over that syllable. The third measure, intensity, is mentioned as an additional factor of potential significance for differentiating dislocated from nondislocated elements by several researchers (Deshaises et al. 1993, De Cat 2007b). Both F0 and intensity-rise measures were taken by locating the initial lowest F0 or intensity value (minimum) within the final syllable and subtracting this value from the highest following F0 or intensity value (maximum). Duration measurements included the final syllable only; any pauses following that syllable were not included. A supplementary acoustic analysis specifically targeted any pause between the DP and the remainder of the phrase, and also investigated the use of *enchaînement* (resyllabification as in *sept amis* > [se.ta.mi]). These are discussed in §3.4.

3.3. MAIN PROSODIC/AcouSTIC MEASURES. Results for each measure were subjected to ANOVA as well as planned comparisons. The ANOVA revealed a significant effect of sentence type on final-syllable duration ($F(2,57) = 17.4, p < 0.001$), shown in Figure 1 below. Contrasts confirmed that the mean duration for dislocated objects was significantly higher than the mean durations for DP subjects in sentence types (a) and (b)—that is, with or without a cooccurring subject clitic ($F(1,57) = 35.5, p < 0.01$). No significant difference was found between DP subjects with and without a cooccurring subject clitic ($F(1,57) = 0.14, p = 0.71$). These results suggest that in terms of final-syllable duration, only dislocated object DPs show the lengthening effect expected for dislocations, while DP subjects cooccurring with a subject clitic DO NOT show this effect.

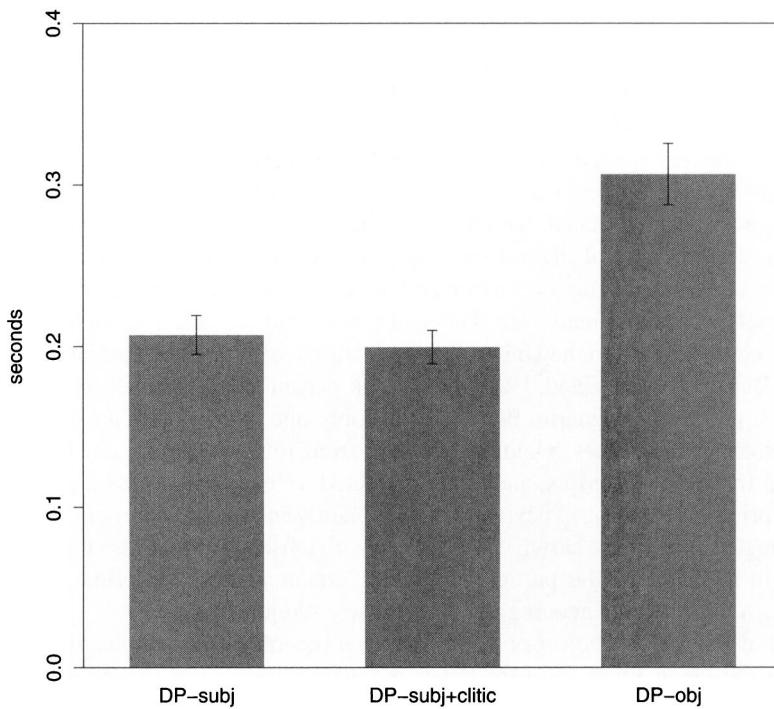


FIGURE 1. Duration of DP final syllable.

The ANOVA revealed no significant differences across test sentence types for measures of both F0 ($F(2,57) = 0.63, p = 0.54$) and intensity rise ($F(2,57) = 0.27, p = 0.67$). The means for F0 and intensity rise across the final syllable of the DP for each type are shown in Figure 2 below.

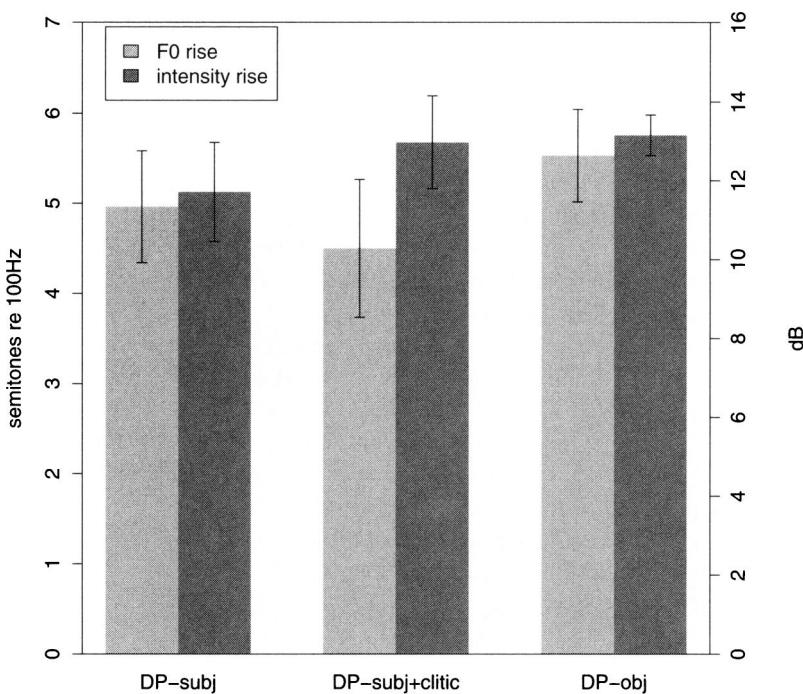


FIGURE 2. F0 rise in semitones (light gray) and intensity rise in dB (dark gray) over DP final syllable.

These findings suggest that the most reliable cue differentiating left-dislocated DPs from nondislocated DPs is increased duration of the final syllable. This conclusion is in fact suggested by De Cat (2007b) but has not been tested quantitatively outside of the present study. Further, the prediction made by the true doubling hypothesis for subject clitics cooccurring with a subject DP is clearly supported by the results. Left-dislocated objects, but NOT DP subjects cooccurring with a subject clitic, showed lengthening effects. This finding is contrary to the prediction made by an argument analysis, that DP subjects with a cooccurring subject clitic should pattern with clearly left-dislocated phrases.

3.4. SUPPLEMENTARY ACOUSTIC FEATURES. Two additional diagnostics for dislocation that have been reported in the literature were also investigated: the presence of a pause following a dislocated element, and the impossibility of enchaînement (resyllabification) between a dislocated element and a following vowel-initial word. These are clearly related in the sense that a pause following a dislocated element entails a lack of resyllabification. It has often been claimed that dislocation involves the presence of a pause between a dislocated element and the remainder of the intonational phrase (e.g. Deshaies et al. 1993). Various researchers have since claimed that such a pause is not in fact reliably present in dislocations, particularly in fluent speech, although lengthening of the final syllable duration may still give the impression of a pause (Rossi 1999, De Cat 2007b). The test data were examined to rule out the presence of systematic pauses between the subject DP and remainder of the clause. Acoustic analysis revealed no pauses following a DP subject regardless of whether a subject-clitic double was present. Over half (55%) of dislocated object DPs, however, were followed by a pause (the discrepancy between DP subjects with a cooccurring clitic and dislocated objects in terms of a following pause was confirmed by a chi-square test, $\chi^2 = 16.13$, $p < 0.001$). Al-

though a pause is clearly not obligatory for these speakers, it was an option for left-dislocated objects only.

Deshaires and colleagues (1993) also report that *enchaînement* (resyllabification) between the final consonant of a dislocated DP and a vowel-initial word is impossible if the two are in separate intonational phrases, but possible (although optional) within the same simple clause. The relevant context is shown in 26a, where 26b is the resyllabified pronunciation (the final coda [d] of *David* is produced as the onset of the following vowel-initial subject clitic), and 26c is the nonresyllabified pronunciation. The presence of *enchaînement* was determined for each data point by two blind coders (inter-coder agreement was 96%). There were twenty-four possible cases of *enchaînement* within the data set (twelve left-dislocated objects, and twelve DP subjects with a cooccurring subject clitic). Just 33% of dislocated objects exhibited *enchaînement*, whereas 92% of doubled subjects did ($\chi^2 = 8.71, p < 0.01$). The 33% of dislocated objects exhibiting *enchaînement* with the following word in this study suggests that resyllabification across intonational phrases is in fact possible in fast speech (see also Zellner 1998). The relatively more frequent use of resyllabification between subjects and cooccurring subject clitics, however, provides further evidence that these two elements are regularly treated by speakers as being within the same simple clause.

- (26) a. David il l'a déjà invité.

'David already invited him.' or 'David, he already invited.'

- b. resyllabified pronunciation: [da.vi.di.la]

- c. nonresyllabified pronunciation: [da.vid.i.la]

Speakers' use of pause and *enchaînement* are in line with the overall findings of the study, which reveals that DP subjects cooccurring with subject clitics pattern acoustically with nondoubled subjects rather than with left-dislocated objects. This result follows if DP subjects cooccurring with a subject clitic are true, nondislocated subjects, and subject clitics are agreement markers. It is worth noting, however, that an alternative interpretation of these findings might reduce them to a frequency effect. Constructions with a subject DP and clitic may represent a more frequent type of dislocation than object left-dislocation, therefore yielding different or less marked prosody.²⁵ Additional independent evidence is presented in the following sections to support the conclusion that subject clitics do in fact cooccur with full subjects in simple clauses.

3.5. THE EFFECT OF DISCOURSE CONTEXT. Following an observation made by Ashby (1982) and others, De Cat (2004) claims that DP subjects with a focus interpretation cannot cooccur with subject clitics. She cites this as a key piece of evidence that subject clitics cannot occur in the same simple clause as a full subject DP. This is illustrated in 27 where a contextual set-up question (27a) forces a narrow-focus interpretation of the subject in the answer (27b), making the presence of a subject clitic ungrammatical. The example is taken from De Cat 2004:6.

- (27) a. Qui a fini son travail?

'Who finished their work?'

- b. Ceux du groupe A (*ils) ont fini leur travail.

'Those in group A have finished their work.'

²⁵ Also, as a referee points out, marking a distinction between dislocated DP objects and DP subjects doubled by a clitic might be especially likely given the design of the experiment: speakers are potentially aware of the ambiguity and the test set includes string-identical sentences, like 25b and 25c above. Thus they may have been more likely to use otherwise optional cues to distinguish these two structures. Note, however, that this does not detract from the significance of WHICH structure these speakers chose to mark prosodically, namely object dislocations.

Whereas languages like Italian use (right-)dislocation constructions in focus contexts, French has been claimed to have *in-situ* focus, where stress and a distinctive boundary tone are used to mark the discourse role of a focused phrase rather than dislocation (De Cat 2004, Marandin 2004, Samek-Lodovici 2005). According to De Cat (2004), the impossibility of phrases like 27b then follows straightforwardly if focused DP subjects are *in situ*, and subject clitics are in competition with the DP for argument role (and subject position). If speakers do not accept subject clitics in contexts with a focused DP subject, an alternative explanation must be provided under an agreement analysis of Colloquial French subject clitics. Below, I discuss potential problems with the judgment task used by De Cat (2004) to confirm the possible contexts where DP subjects can cooccur with subject clitics, and present results from a new task addressing these issues. The findings of the study suggest that the analysis put forth in De Cat 2004 underpredicts the contexts where subject doubling is found in Colloquial French.

3.6. NATIVE-SPEAKER JUDGMENTS. De Cat (2004) reports acceptability-judgment data from fourteen native French speakers (of unknown age, from Belgium, Canada, and France). Participants were presented with recordings of question-answer sets wherein the question forced a narrow-focus interpretation of the subject in the corresponding answer (as in 27). Each question was presented with three different possible answers—one in which the DP subject cooccurred with a subject clitic, one in which the DP subject occurred alone, and one clearly ungrammatical distracter answer. Participants were told to choose one as their preferred answer. Participants chose the answer with a DP subject and cooccurring subject clitic in only six of 126 possible cases. De Cat (2004) uses these findings to support the claim that subject clitics cannot cooccur with full DPs in nondislocated contexts. She makes the further claim that subject doubling is impossible in broad-focus (or *thetic*) contexts, where the entire phrase is focused. This is predicted on her account since broad focus is assumed to have the same *in-situ* structure as other focus constructions in French. Her account also predicts that a DP cooccurring with a subject clitic is grammatical (in fact obligatory) when the subject is a discourse topic, since she assumes that all such topics are dislocated. Experimental verification of the latter two predictions is missing as the study presents only narrow-focus contexts. Yet both are critical to determining the success of the analysis. In addition, drawing conclusions about specific contexts that prohibit a cooccurring subject clitic depends on discovering a context where such a clitic is in fact acceptable for participants. If speakers do not accept DP subjects cooccurring with a subject clitic in any context tested, or perhaps more accurately no CONTRAST in acceptability can be discovered, either the stimuli are failing to set up the correct context, or the participants are using a register/dialect of French where this is severely dispreferred or impossible across the board.

3.7. EXPERIMENT DESIGN AND PROCEDURE. The present study tests the relative acceptability of DP subjects with and without cooccurring subject clitics in contexts that vary the information status of the subject. Three such contexts were tested: (i) where the subject is a topic (discourse-old) as in 28a,²⁶ (ii) where the subject is narrowly focused (discourse-new) as in 28b, and (iii) where the subject is in a broad-focus context as in 28c, using spoken stimuli. For each context, half the sentences included a subject clitic, and half did not. As in De Cat 2004, each test sentence was preceded by a question set-

²⁶ In the stimuli here topic subjects were always discourse-given, and focused subjects were always discourse-new. Although De Cat (2004) refers specifically to ABOUTNESS TOPIC, which does not by definition require discourse-givenness or familiarity, it is well known that topichood is often constrained by discourse-givenness and thus the two are often conflated (Gundel & Fretheim 2004).

ting up the appropriate context. Test sentences also varied by subject definiteness: half of the subject DPs were definite, and half were indefinite (e.g. *un garçon* ‘a boy’). This manipulation was used since it is typically claimed that quantified subjects do not tolerate doubling in any register of French, and that indefinites and quantifiers behave the same with respect to the constraint on dislocation: both are ungrammatical as left-dislocated objects. Finally, distracter sentences featuring clear grammatical errors were added.

(28) a. Topic

- | | |
|---|--|
| Q: Jean a embrassé qui?
‘Who did Jean kiss?’ | A: Jean (il) a embrassé Marie.
‘Jean kissed Marie.’ |
|---|--|

b. Narrow focus

- | | |
|---|--|
| Q: Qui a embrassé Jean?
‘Who kissed Jean?’ | A: Marie (elle) l'a embrassé.
‘Marie kissed him.’ |
|---|--|

c. Broad focus

- | | |
|---|--|
| Q: Qu'est-ce qui s'est passé?
‘What happened?’ | A: Jean (il) a embrassé Marie.
‘Jean kissed Marie.’ |
|---|--|

Participants were thirty-eight native speakers of French between seventeen and thirty years of age. Testing took place at Université Paris Descartes and Université Paris X Nanterre. Instructions provided to participants explained that the study was interested in the colloquial register rather than prescriptive rules. Participants were provided with an explanation of the judgment scale, which scale appeared each time participants were required to provide a judgment: the scale ranged from perfect (rating 1) to terrible (rating 5). The scale and explanation can be found in Appendix B.

3.8. RESULTS: MAIN EFFECTS. The data were subjected to a three-way ANOVA (information status of the subject \times definiteness of the subject \times presence of a cooccurring subject clitic). The analysis revealed a main effect of subject-clitic presence ($F(1,432) = 341.7, p < 0.001$), indicating that participants had a general preference for test sentences in which the DP was not accompanied by a subject clitic. This is not too surprising if cooccurring subject clitics are acceptable only in certain contexts (as is shown in more detail below) and for the most part only in Colloquial French. Plain DP subjects by contrast are ‘ALWAYS acceptable in Standard French; thus if some speakers judged the test sentences according to more prescriptive usage, they would rate sentences including a DP subject and cooccurring subject clitic lower across the board. Note, however, that the context in which these sentences were judged best received an average rating of 2.7, as compared to ungrammatical distracters, which averaged 4.7 (recall 5 is the lowest rating). This suggests that the goal of establishing an acceptable context for these constructions was achieved. Because the aim of this study is to distinguish contexts where this construction is more acceptable or less acceptable, further descriptive discussion of the speaker judgments gathered here refer to RELATIVE judgment scores for the construction across sentence types rather than referring to raw scores. Main effects were also found for both subject information status ($F(2,432) = 7.615, p < 0.001$) and subject definiteness ($F(2,432) = 27.5, p < 0.001$). The interpretation of these results is discussed below in the context of the interaction effects.

3.9. RESULTS: INTERACTIONS. The results of the experiment include several significant interactions that help to explain the main effects. The interaction between the information status of the subject and the presence or absence of a cooccurring subject clitic, shown in Figure 3, was significant ($F(2,432) = 8.9, p < 0.001$). Contrasts (cor-

rected for multiple comparisons using Sheffé's critical F) evaluating mean scores for topic and broad-focus subjects with a cooccurring clitic as compared to narrow-focus subjects with a cooccurring clitic revealed a significant difference ($F(1,32) = 15.7, p < 0.05$). No significant difference, however, was found between topic and broad-focus subjects with cooccurring clitics ($F(1,32) = 0.71, p = 0.4$). This indicates that participants judged this construction to be more acceptable when the subject of the answer sentence was either a topic or in a broad-focus context, rather than in a narrow-focus context.

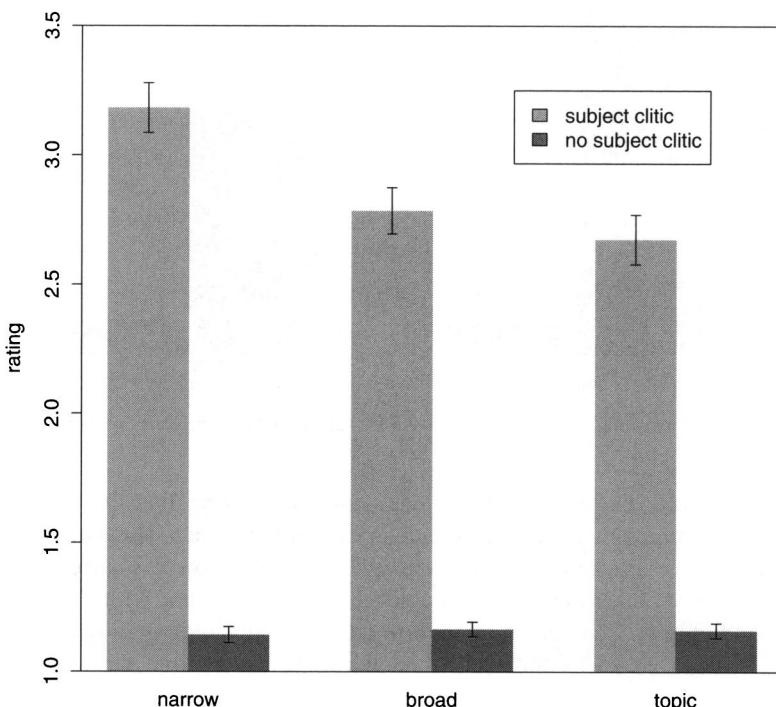


FIGURE 3. Interaction between information status of DP subject and presence of subject clitic.

The interaction between the presence of a cooccurring clitic and the definiteness of the subject DP was also found to be significant ($F(1,432) = 27.8, p < 0.001$), as shown in Figure 4. This indicates that participants found this construction more acceptable when the subject DP was definite and less so when it was indefinite, regardless of the information status of the DP subject. An example minimal pair of sentences is shown below: 29a, where the subject is an indefinite DP, and 29b, where the subject is a definite DP. No other interactions were significant.

- (29) a. Indefinite subject
 ?*Une française (elle) a gagné le match.
 'A French woman won the match.'
- b. Definite subject
 La française (elle) a gagné le match.
 'The French woman won the match.'

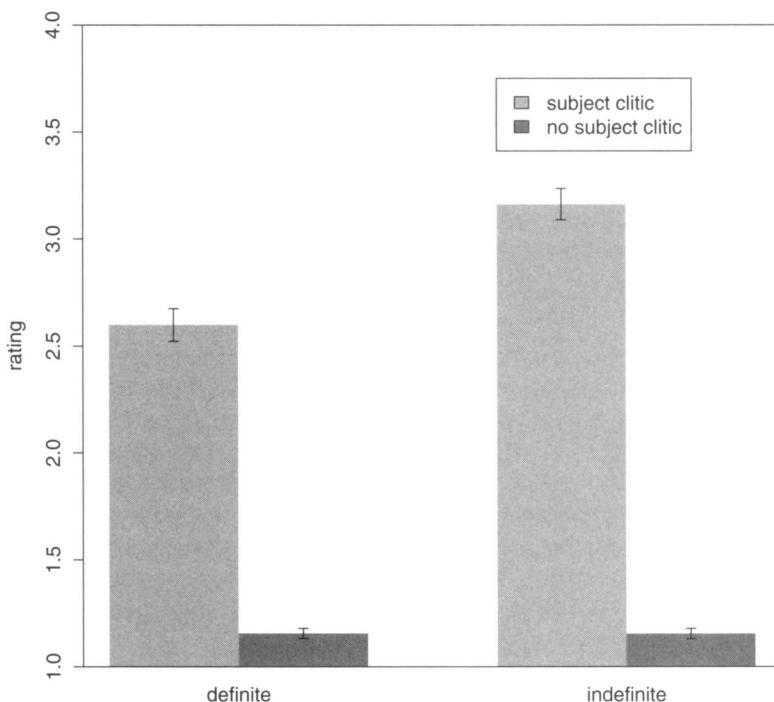


FIGURE 4. Interaction between definiteness of DP subject and presence of subject clitic.

3.10. DISCUSSION. The results of the judgment task confirm that the possibility of using a DP subject along with a subject clitic in Colloquial French is sensitive to a number of factors. The construction is less acceptable when the subject is narrowly focused (in line with De Cat 2004) and when the subject is indefinite (in line with Rizzi 1986, De Cat 2004, and others). The construction, however, is acceptable not only in topic contexts, but also in broad-focus contexts, where the subject is just one part of the focused verb phrase. This finding is not easily reconcilable with the analysis provided by De Cat (2004, 2007b). De Cat (2004) and others (e.g. Samek-Lodovici 2005) argue that neither narrow- nor broad-focus constructions involve dislocation in French. Further, answers to broad-focus questions are generally taken to be the unmarked word order in a language. Thus the general structure of French focus phrases and crosslinguistic claims about broad-focused phrases suggest that these are best analyzed as simple IPs. If subject clitics are true subject arguments, competition between them and full subject DPs (for a position or a single theta-role) should prevent their cooccurrence in broad-focus contexts. Together with the lack of prosodic cues reported above, these results confirm that STRUCTURAL restrictions on the cooccurrence of DP subjects and subject clitics do not govern when subject-doubling constructions are acceptable. The exact formulation of the relevant constraints within an agreement analysis is the goal of §5 below, following the discussion of several additional arguments, including empirical evidence for the frequency of constructions involving a DP subject and a cooccurring clitic (§3.12), discussion of child learners' acquisition of subject clitics (§3.13), and typological evidence from other Romance languages (§4). In light of the findings presented up to now, however, the label subject doubling is used for the remainder of the article.

3.11. SUBJECT DOUBLING WITH STRONG PRONOUNS. Results from the acceptability-judgment task reported above suggest that, generally speaking, subject doubling is un-

acceptable in narrow-focus constructions. There is one context, however, where subject doubling is in fact obligatory in Colloquial French, namely with strong pronouns, as in 30a. Examining this construction further will therefore provide a more complete picture of the circumstances under which subject doubling is used in Colloquial French. Before discussing spontaneous usage of subject doubling with LEXICAL DPs then, I briefly discuss subject doubling with strong pronouns.

Fonseca-Greber and Waugh (2002) find no instances of strong pronouns without a cooccurring subject clitic in their corpora of Colloquial French. Moreover, just a single instance of the strong pronoun *lui* without a subject clitic occurs in 589 cases of strong-pronoun subjects used by mothers in the Lyon corpus.²⁷ Standard French, by contrast, allows at least *lui* to occur without a subject clitic, and as late as the nineteenth century, first- and second-person strong pronouns could also occur without a subject clitic.²⁸ Crucially, according to native-speaker consultants, subject doubling of strong pronouns occurs even when that pronoun appears in a narrow-focus context, as in 30b where the subject clitic cannot be omitted.

- (30) a. Moi je mange beaucoup.
‘ME, I eat a lot.’
- b. Q: Qui a appelé Jean?
‘Who called Jean?’
- A: Moi *(je) l’ai appelé.
‘I called him.’

Obligatory doubling with strong pronouns in Colloquial French, including when they are used in focus constructions, further confirms that subject clitics CAN cooccur with full subjects in simple clauses. Again, this pattern is predicted if subject clitics do not occupy the same structural position as DP subjects or fill the same argument role.

3.12. SUBJECT DOUBLING IN SPONTANEOUS COLLOQUIAL FRENCH. Prosodic cues and adult acceptability judgments of subject doubling suggest that when Colloquial French subject clitics are present, they function as agreement markers rather than arguments. In spontaneous speech, subject doubling is therefore expected to occur frequently, and obligatorily in certain contexts (informally characterized as when the subject is a pronoun, or a definite DP that is not focused, although this is made more explicit in §5). In the remainder of this section I show that (i) subject doubling is very common in adult-directed speech, occurring in the predicted contexts, but as expected is dependent on the register being used, and (ii) subject doubling is EXTREMELY common in speech to children. Alongside the patterns in child-directed speech discussed in §2 concerning the status of subject clitics as affixal elements, the frequency of subject doubling in child-directed speech adds significant evidence to learners’ input favoring an agreement analysis.

In child-directed speech, doubled DPs are strikingly frequent—the overall rate of doubling with DP subjects by mothers in the Lyon corpus is 81% (889/1,103, shown in

²⁷ Not all strong pronouns are distinct from their corresponding subject clitic phonologically. For homophonous pairs nondoubling would be indistinguishable from the simple occurrence of the subject clitic alone; therefore these are excluded from this count. The series of strong pronouns that are distinct include *lui* ‘he’, *moi* ‘I’, *toi* ‘you’, *nous* ‘we’, and *eux* ‘they_{masc}’. Nondistinct strong pronouns include *elle* ‘she’ and *elles* ‘they_{fem}’. Note that *nous* is the strong pronoun that corresponds to *on* ‘we’, the subject clitic used for second plural in Colloquial French. The Standard French first plural is *nous* and its corresponding strong pronoun *nous* would be included in the homophonous set.

²⁸ For example:

- (i) Moi suis rentré et ai trouvé une reconnaissante lettre. (J. D’Aurevilly, 1929. *Memorandum*:201)
‘As for me, I returned and found a thank-you letter.’
- (ii) Lui dort, calme, la bouche entr’ouverte. (H. Bataille, 1904. *Maman Colibri*:26)
‘As for him, he sleeps, calm, his mouth half-open.’

	DOUBLED	NONDOUBLED	TOTAL
declarative	79.1%	655	20.9%
question	85.1%	234	14.9%
TOTAL	80.6%	889	19.4%
read (total)	2.6%	12	97.4%
			450
			462

TABLE 8. Doubling in spontaneous and read speech of all mothers in the Lyon corpus.

Table 8).²⁹ Subject doubling is known to be impossible with indefinite and quantified subjects; accordingly, the frequency of subject doubling with DEFINITE subjects is slightly higher, at 82% (887/1,079). These statistics, however, do not include strong-pronoun subjects, which, as discussed in §3.11, show a doubling rate close to 100% (588/589) in the same corpus. Much lower rates of subject doubling in corpora of adult-directed speech are often reported, ranging from 20% to 35% (Ashby 1980, Nadasdi 1995, Coveney 2005); but these frequencies are from a broad range of French varieties as well as sociolinguistic contexts.³⁰ The frequency of subject doubling in the PFC corpus is 60% with nonpronominal DP subjects overall. For speakers in this corpus, age plays a role in the rate of doubling; speakers younger than thirty-five years of age show nonpronominal subject-doubling rates of almost 70%, while those over thirty-five used subject doubling in only 50% of possible nonpronominal contexts (Table 9). Rates of subject doubling with strong-pronoun subjects were near 100% across speakers in the PFC (67/68 total, the single exception being an instance of nondoubled *lui* by a forty-five-year-old speaker). The overall effect of speaker age is not surprising if the change in subject-clitic status is ongoing; older speakers may have a grammar of these elements that is closer to what is found in Standard French than do younger speakers.

	DOUBLED	NONDOUBLED	TOTAL
+35	49.4%	43	50.6%
35–	67.3%	37	32.7%
Total	56.3%	80	43.7%

TABLE 9. Doubling in adult-directed spontaneous speech from the PFC corpus.

The very high rate of subject doubling in child-directed speech presumably plays a critical role in determining the grammar acquired by learners of Colloquial French. The especially high rates found in caregivers' speech may be due to several factors. The Colloquial French register is likely used more consistently in speech to children compared to adult-directed speech. Alternatively, one might speculate that caregivers use doubling constructions to provide extra information or to facilitate children's comprehension. Regardless, learners necessarily create their grammar based on the input they receive. If

²⁹ So-called right-dislocations (where a DP subject is postposed to the right edge of the clause) were not included, nor were cases where some nonclitic element not part of the DP subject (e.g. a clause) intervened between it and the subject clitic. Mothers differed from one another, ranging from 94% doubled DP subjects to 73% (for a mother who is overall somewhat more conservative; see n. 9 and 15).

Along with QPs, wh-phrase subjects cannot be doubled, and thus are not included in these counts. These cases aside, subject doubling in declaratives and nondeclarative contexts did not show any asymmetry. Subject doubling in questions deserves a more detailed discussion than I am able to provide in this space, especially regarding the extensive relative ordering possibilities of wh-words, full DP subjects, and subject clitics.

³⁰ As previously discussed, the most likely explanation for low subject-doubling rates in these corpora is the presence of multiple registers. Especially relevant are corpora with interview-style conversations between strangers, as this is likely to promote the use of the more socially accepted Standard French register. This would include the subject-doubling results from Coveney 2005 and Nadasdi 1995, for example.

the typical input to children learning Colloquial French provides particularly strong evidence that subject doubling is obligatory for all (definite) subjects, then language acquisition may be a major force continuing the change of subject-clitic status in French. This is exactly what is expected according to Givón (1976), who proposes that grammaticalization of pronominal forms as agreement affixes is triggered by the overuse of stylistic constructions like dislocation. The extent of the register differences children are exposed to is again worth noting; the strong asymmetry between spontaneous speech of caregivers to children in the Lyon corpus and the register children hear from books read aloud to them is exemplified in the case of subject doubling. There are VERY FEW instances of doubling in read speech (Table 8). Although it remains to be understood precisely how learners reconcile these disparities, it is well established that children are able to encode multiple grammars of different registers (or dialects, or languages; see Kroch 2000, Yang 2002).

3.13. ACQUISITION OF SUBJECT CLITICS AND SUBJECT DOUBLING. Previous work on the acquisition of subject clitics in French suggests that learners treat them as categorially different from DPs and strong pronouns (Pierce 1994, Ferdinand 1996, Legendre et al. 2002). One critical piece of evidence comes from children's use of pronouns in root-infinitives—nonfinite (or default-marked) verbs used by children in root clauses that do not match the target language (Wexler 1994). Pierce (1994) argues that while English learners (from the CHILDES database) are equally likely to place full DPs and subject pronouns next to nonfinite verbs in root-infinitive contexts, French children (four children in CHILDES) use strong pronouns and full DP subjects in root-infinitives, but rarely if ever generate subject clitics with nonfinite verbs.³¹ This finding clearly supports the hypothesis that, even at early stages, French learners treat subject clitics as markers of agreement, present only on finite forms. The asymmetry between English and French learners remains unexplained if English subject pronouns and French subject clitics are functionally identical. Hulk (1987) extends this asymmetry, showing that while English-speaking children's early speech is characterized by the frequent omission of subjects (both lexical and pronominal), French-speaking children use subject clitics regularly from a very early age, omitting primarily lexical subjects. Legendre and colleagues (2002) successfully account for early variability in French children's use of tense and agreement in terms of competition between the realization of TP and AgrP projections. A critical piece of this analysis is that production of subject clitics is treated as the realization of AgrP. That subject clitics interact with other inflectional features during the acquisition process, while full DP subjects do not, is again exactly what is expected if French learners are treating subject clitics as part of the agreement system.

The acquisition of subject doubling by French learners has received relatively little attention; but given the high rates of subject doubling shown above for child-directed speech, it is most certainly of interest to determine whether child learners use subject doubling with similar frequency. This is in fact the case; subject-doubling rates for the children in the Lyon corpus (whose ages ranged from 0;11.17–4;06) were comparable to those of their caregivers. Overall, 70% (261/375) of nonpronominal DP subjects were doubled, and 71% (258/363) of definite nonpronominal DPs were doubled. When usage statistics were binned by age and examined longitudinally, children's subject doubling with both lexical and pronominal DP subjects was initially lower, but grew to

³¹ See also Legendre et al. 2002, where only three possible instances in more than three thousand tokens of child speech are found.

match (or even slightly exceed) the level of subject doubling used by their mothers. A similar pattern was found with strong-pronoun subjects; the children's early speech included doubling of strong-pronoun subjects at a high rate. However, some very early utterances using the strong pronoun *moi* 'I, me' omitted the subject-clitic double, as in 31a below, where adults would obligatorily use it. Children never omitted the subject clitic with any other strong-pronoun form. The data also suggest that while children are sensitive at an early age to restrictions on subject doubling with indefinite DPs, their behavior may not be totally adult-like. Although very few indefinite subjects were found, two were doubled out of eight total; these are shown in 31b and 31c. Ferdinand (1996) also points to similar cases of children's overgeneralization of subject doubling to non-adult-like contexts as additional evidence that subject clitics are agreement markers in child grammar.³²

- (31) a. Moi aussi vais chercher. (Tim41)
 'Me too, gonna look.'
- b. Un couteau il est là. (Ana33)
 'A knife is here.'
- c. Le cube, un cube il est tombé. (Tim25)
 'The block, a block fell.'

In this section, I have outlined several reasons to suspect that learners of Colloquial French treat subject clitics as agreement affixes. The lack of special prosodic cues for subject doubling in adult speech and the frequency with which subject doubling is used in speech to children likely strengthen this conclusion, and may in fact lead to even more widespread use of doubling at the population level. Although the data provided here show that subject doubling is used frequently by children throughout the acquisition process, the results are preliminary. Of particular interest for further research is the relationship between the extremely high frequency of subject doubling in speech to children, and the evolution of subject clitics as agreement markers. The possibility that children may (at some stage) boost the frequency of doubling over what is found in caregivers' speech, or overregularize the use of doubling to indefinites, is extremely suggestive.

3.14. INTERIM SUMMARY: COLLOQUIAL FRENCH SUBJECT CLITICS ARE NOT ARGUMENTS. Evidence from a variety of sources supports the claim that true subject doubling is available in Colloquial French, in line with the hypothesis that subject clitics are agreement markers in that register. Subject DPs doubled by a subject clitic pattern prosodically with nondoubled subjects rather than with left-dislocated objects, contrary to what is expected if subject doubling necessarily involves dislocation. Further, although it is impossible in some contexts, the constraints on subject doubling are not accurately captured by appealing to the availability of dislocation; subject doubling is allowed in certain in-situ focus contexts argued not to involve dislocation in French, specifically in broad-focus clauses and with narrowly focused strong-pronoun subjects. Evidence from Colloquial French shows a high frequency of subject doubling, particularly in child-directed speech. The frequency of subject doubling in speech to children is likely to affect the grammar of subject clitics they acquire. More specifically, the fact that across

³² Note that the characterization of subject doubling with indefinites in Ferdinand 1996 has been challenged. For example, Côté (2001) argues that instances of (surface) indefinites with subject-clitic doubling are actually either biclausal or instances of nonquantificational indefinites (i.e. indefinites that are identifiable in the discourse context). She admits, however, that NO SUCH EXAMPLES are found in the caregiver speech.

all contexts the vast majority of finite verb tokens occur along with a subject clitic must encourage learners to treat these elements as morphological markers of agreement. A more precise account of the constraints on subject doubling in Colloquial French remains to be given. Section 4 below sets the stage for the analysis of subject doubling proposed in §5 by comparing the descriptive constraints on subject doubling in Colloquial French to those found in other Romance languages.

4. FEATURAL RESTRICTIONS OF SUBJECT DOUBLING: A TYPOLOGICAL PERSPECTIVE. One typical feature of agreement is that it is in some sense obligatory;³³ De Cat (2007b) and others (e.g. Fuß 2005) have argued that discourse context (which we saw in §3.9 plays a role in licensing subject doubling) should not generally play a role in determining the presence or absence of agreement. However, Siewierska (2004) provides ample evidence that, '[w]hile in many languages person agreement on a given target and for a given syntactic function is obligatory, in many others it depends on the properties of the controller ... most of the properties in question may be seen as being related in one way or another to the inherent and/or discourse saliency of the controller' (Siewierska 2004:148). Constraints on doubling in French and other Romance languages are sensitive to remarkably similar such features, and parallel patterns are found in agreement systems crosslinguistically. An agreement analysis of Colloquial French subject clitics therefore does not preclude constraints on when subject doubling may occur, but a stronger case could be made if the apparent optionality of doubling were shown to be a surface property. In other words, subject-clitic agreement should be obligatory whenever the correct relation between agreeing elements holds. In this section, Colloquial French subject doubling is considered within a broader set of languages in order to support its characterization as an agreement relation similar to others found crosslinguistically.

Subject-doubling constructions are found in many dialects of Northern Italy. The fact that some Northern Italian dialects allow subject clitics to double quantified (and indefinite) subjects is the cornerstone of claims that these dialects have agreement subject clitics (Rizzi 1986, Brandi & Cordin 1989). As discussed above, the reasoning behind this claim is that quantified DPs cannot be dislocated, and therefore any subject clitic cooccurring with such a DP cannot be in canonical subject position. In a more comprehensive study of Northern Italian dialects, however, Poletto (2000) highlights the extent of the variation across dialects with respect to subject doubling. Specifically, constraints on subject doubling in these dialects are based on specific features of the subject that find striking parallels in French. According to Poletto (2000), the following implicational hierarchy captures the possible patterns of subject doubling found in the dialects of Northern Italy.

(32) strong pronouns > DPs > quantified phrases > wh-variables

The hierarchy applies to these dialects in the following way: some Northern Italian dialects show doubling with strong-pronoun subjects only, but if subject doubling occurs with DP subjects, subject doubling with strong-pronouns is necessarily found as well. Similarly, if one of these dialects has subject doubling with indefinite or quantified subjects it will also have subject doubling with both DP and strong-pronoun subjects. Finally, if subject doubling occurs with wh-variables (e.g. wh-phrases or relative pronouns) it will have subject doubling with all other subject types. These facts suggest that crosslinguistically, patterns of subject doubling cannot be captured solely by structural

³³ This is not always the case (see Corbett 2006 for general discussion; for a particular example see Kramer 2009 on optional definiteness marking and gender agreement on Amharic adjectives).

restrictions such as the possibility of dislocating the subject. In fact, a successful analysis of these patterns that maintained the argument status of subject clitics would be forced to relate possible (and required) dislocation with position on the hierarchy in 32. This would amount to the claim that in some languages only strong pronouns can and MUST be dislocated, whereas in others DP and strong-pronoun subjects can and must be dislocated, and in yet another set of languages, all subjects including QPs and WH-variables can and must be dislocated. The distinction found between WH-variables and QPs in particular highlights the complications for positing a cross-dialectal distinction in the categorial status of subject clitics (as either arguments or agreement markers) based in large part on the availability of QP subject doubling (as in Rizzi 1986, Brandi & Cordin 1989, De Cat 2007b). Further, focused DP subjects in many Northern Italian dialects pattern with WH-variables (Cecilia Poletto, p.c.; see also Suñer 1992) in being excluded from subject-doubling constructions despite the fact that focus in these Northern Italian dialects likely involves right-dislocation (as has been argued for Standard Italian; see e.g. Vallduví 1992, Samek-Lodovici 1996). Accounting for subject-doubling patterns cross-linguistically thus cannot be accomplished solely by positing differences in the structural position or argument status of the subject clitics.³⁴

Information status is predicted by the hierarchy in 32 to play a role in subject doubling regardless of syntactic structure. The possible asymmetry between strong-pronoun and nonpronominal DP subjects makes this especially clear since the difference between the two types of subjects is generally stated in terms of discourse accessibility rather than structural position (Ariel 2000). In some Northern Italian dialects, an exception to the general treatment of focused subjects along with WH-variables may be granted when the focused element is a strong first- or second-person pronoun (Cecilia Poletto, p.c.), although additional research would be needed to verify this. Colloquial French clearly behaves in this way (see §3.11 above). Suñer (1992) also capitalizes on accessibility to explain patterns of agreeing and nonagreeing subject clitics in Fiorentino and Trentino, the same dialects whose subject clitics are analyzed as agreement markers by Rizzi (1986) and Brandi and Cordin (1989). Further empirical evidence from Spanish dialects suggests that other features of nominal elements may play a role in doubling. For example, the availability of object doubling in Spanish (and Spanish dialects, as well as in Portuguese, Romanian, Macedonian, and Bulgarian among others) is clearly related to animacy, specificity, and definiteness features of nominal objects. At least in some languages, then, doubling is clearly governed by the same well-established hierarchies constraining agreement crosslinguistically, such as the NP-type, definiteness, and animacy hierarchies shown in 33, 34, and 35 (Greenberg 1966, Siewierska 2004, Corbett 2006). These are often referred to collectively as the ACCESSIBILITY OR TOPICALITY HIERARCHY.

- (33) pronoun > common noun
- (34) definite > specific indefinite > nonspecific indefinite
- (35) animate noun > inanimate noun

The NP-type hierarchy clearly predicts the distinction made between strong pronouns and nonpronominal DPs in the Northern Italian dialects and Colloquial French. The definiteness hierarchy further predicts the different constraints on subject doubling among DP types. The animacy hierarchy in 35 does not constrain subject doubling in

³⁴ Poletto (2000) suggests several possible analyses to account for the hierarchy, which revolve around the idea that subjects on the right part of the scale have more features that must be checked than those on the left side. I do not adopt the analysis here, but refer the reader to Poletto's discussion.

Colloquial French (although see Nadasdi 1995), but it does play a role in object doubling in Spanish dialects (Suñer 1988).

Striking similarities between the Northern Italian dialects and Colloquial French suggest a specific typology of subject-doubling systems (although here restricted to Romance). Based on the hierarchy in 32, Table 10 illustrates these possibilities and provides example languages for each. According to the analysis of Colloquial French subject doubling argued for in this article, doubling occurs with strong pronouns and definite DPs, but not with QPs or WH-variables (I return to the issue of focused DPs in §5.1 below). This situates it in the typology as more permissive than languages with strong-pronoun subject doubling only like the Central Veneto dialect, but less permissive than languages like Trentino, which have subject doubling with all DPs but not QPs, and languages like Fiorentino and Picard, which have subject doubling with all subject types (see Poletto 2000 for Central Veneto, Trentino, Fiorentino; see Auger 2003 for Picard).³⁵

LANGUAGE	PRONOUN	DEFINITE DP	QP	WH-VARIABLE
Standard French	-	-	-	-
Central Veneto	+	-	-	-
Colloquial French	+	+	-	-
Trentino	+	+	+	-
Fiorentino/Picard	+	+	+	+

TABLE 10. Partial typology of subject doubling.

The picture provided by Table 10 is in fact quite similar to one proposed by Roberge (1990:138, table 143), who argued that Romance doubling can be characterized by whether it permits WH-extraction or extraction at LF. The former is, of course, dependent on the availability of doubling with WH-phrases (since this shows that WH-elements can be extracted out of clitic-doubling constructions), and the latter on the availability of doubling with quantified indefinite DPs, which are extracted at LF. Although Roberge (1990) does not describe his typology as a scale, it is in fact parallel to Table 10; there is simply no distinction made between pronouns and definite DPs.

5. THE MATCHING HYPOTHESIS FOR SUBJECT DOUBLING IN COLLOQUIAL FRENCH. Based on these crosslinguistic observations, I analyze the constraints on subject doubling in Colloquial French by appealing to the MATCHING HYPOTHESIS, proposed in Suñer 1988, 1992, which states that an agreement marker and its argument controller must match featurally. I argue that in Colloquial French, subject-clitic agreement is present when the subject DP features match the features of the subject clitic, and is phonologically null otherwise.³⁶ The central claim of this hypothesis is that Colloquial French subject clitics are specified for phi features, including person, gender, and number, but also the

³⁵ The doubling pattern in Fiorentino is more complex than Table 10 suggests; although a subject-clitic double is always present, the particular features it instantiates in WH-contexts vary by the specificity of the WH-phrase; see Suñer 1992 for more details.

³⁶ Although I use the intuition from Suñer's matching hypothesis here, it is also possible to restate this as a morphological operation that spells out some features of the relevant inflectional head (resulting from an Agree relation in the syntax with the subject DP) as the subject clitic if those features take on certain values, and as phonologically null otherwise. Note that in some Northern Italian dialects (e.g. Fiorentino), DEFAULT agreement in the form of a neuter clitic is used in cases of feature mismatch, whereas in others (e.g. Trentino, which lacks a neuter subject clitic) a phonologically null clitic is assumed (Suñer 1992; see also Preminger 2009, which proposes to distinguish clitic doubling from agreement based on whether a failure of the Agree relation results in a default form).

features [+definite] and [+accessible]. The definiteness feature can be preliminarily defined in the following way: a DP controller bears the [+definite] feature value if it contains a definite article, or is a pronoun or proper name, whereas the indefinite article is taken to indicate that a DP is [−definite]. The definiteness of particular controllers is discussed further below. ‘Accessible’ here means familiar or active in the discourse context. I show below that feature-matching requirements that hold between subject clitics and argument subjects can explain the conditions on subject doubling in Colloquial French.³⁷

5.1. CONTEXTS FOR SUBJECT DOUBLING. Under this analysis, the impossibility of subject doubling with indefinite and quantified subjects is due not to the inability of these subjects to be dislocated but to the fact that they clash featureally with the set of subject clitics. Indefinite and quantified DPs are [−definite] (Heim 1982) and thus clash with the corresponding [+definite] value of the subject clitics. The lack of doubling with relative and interrogative pronouns (36a,b) can be similarly explained since they are [−definite] (Karttunen 1977), although the specificity of relative pronouns and WH-phrases may differ depending on the context (see Suñer 1992).³⁸

- (36) a. La femme qui (*elle) est belle ...
‘The woman who is pretty ...’
- b. Qui (*il) est là?
‘Who’s there?’

The discourse-related restrictions on subject doubling can be derived similarly, but the relevant feature must be determined. I use the term ‘accessible’ here to pick out DPs that are given, familiar, or active in the discourse context (see Schwarzschild 1999 for a more detailed definition of givenness that requires a salient antecedent). The feature [+/-accessible] will capture the fact that not merely formal definiteness but also the status of the subject as discourse-given rather than new plays a role in licensing a subject clitic. I claim that Colloquial French subject clitics are endowed with the feature [+accessible]. The restriction on subject doubling in focus contexts can then be explained by the fact that most focus phrases introduce new information that is [−accessible]. If the subject DP is narrowly focused, its feature specification will block doubling, regardless of definiteness. This analysis further predicts that whereas ANY [−accessible] referent will not allow overt subject-clitic agreement, the presence of a [+accessible] referent implies that subject doubling will surface so long as that referent is [+definite]. A test case for this is the use of strong pronouns in focus contexts (as in §3.11 above), which do in fact require subject doubling. Strong pronouns are [+definite] and are necessarily given in the discourse (Heim 1982); thus they are [+accessible].

³⁷ I aim here to provide a synchronically adequate analysis of subject doubling in Colloquial French; note, however, that additional features will be necessary to account for all of the distinctions in the hierarchy in 16. A theory of agreement that incorporates this hierarchy should specify the relevant features and universally constrain agreement markers to be specified for those features only. For example, here I have proposed [+accessible] and [+definite]; I then predict that no [−accessible] or [−definite] agreement markers can exist. I leave these issues to further research, but see Poletto 2000 and Suñer 1992 for related discussion.

³⁸ Following Déprez (1990), I take *qui* to function as a true relative pronoun in relative clauses (contra Kayne (1974), who analyzes this *qui* as a complementizer). Positing a formal feature, here [−definite], that relative pronouns have in common with WH-phrases can perhaps be independently justified by the phenomenon of Antiagreement (where agreement is blocked in certain constructions involving WH-movement, for example, subject WH-questions, relative clauses). Work on Antiagreement may also shed light on the underlying mechanism preventing agreement with this type of controller (Ouhalla 1993, Baker 2008).

Speaker judgments revealed that in addition to subjects that are topics, those in broad-focus contexts can be doubled as well. This is somewhat unexpected given that one generally expects to find new information, and thus potentially [-accessible] DPs, in such contexts. According to Sasse (1987), however, broad-focus phrases have no internal information structure; instead, the [-accessible] feature marks the phrase as a whole but does not percolate onto the individual pieces of the phrase (see also Schwarzschild 1999, which takes givenness as a default and proposes that if a constituent is not explicitly marked as in focus, then it is given). Subject DPs in broad focus are then [+accessible] by virtue of the fact that only the larger sentence in which they are contained is specified as focused new information. Such a subject will be doubled by a subject clitic provided that it is also [+definite]. However, a follow-up study may be necessary to determine in a more controlled way whether the acceptability of subject doubling in these contexts is absolute or is determined by a more complex set of factors.³⁹

To summarize up to this point, I argue that subject-clitic agreement will be present unless blocked by a [-definite] or [-accessible] feature borne by the subject. The precise instantiation of this argument depends on the framework, but in DM terms for example, there would simply be no phonologically overt morpheme to match a feature specification of [-definite] or [-accessible]. Doubling is thus present with definite discourse topics (the best subject-doubling candidates according to the acceptability-judgment task) and strong pronouns (which are necessarily [+accessible]). All DPs that are nonquantificational in the discourse context are eligible to be [+accessible], and thus may trigger subject doubling.⁴⁰

One additional class of subjects that I have not discussed up to now, but that can be doubled, are generics. Generics in French can use the indefinite determiner as in 37a or the definite determiner as in 37b. In the Lyon corpus, generics that appear with the indefinite determiner are doubled only by the clitic *ça*.⁴¹ Generics that take the definite determiner can be doubled using the series of subject clitics I have claimed are [+definite, +accessible]. Following Carlson (1977) and others, I take such generics to refer to unique kinds, and following Gundel and Fretheim (2004) I assume these are always familiar, and thus designate them as [+definite, +accessible].

- (37) a. Un blaireau ça a des rayures noires et blanches sur la tête. (Tim34)
‘A badger has black and white stripes on its head.’
- b. Les p(e)tits chiens i(ls) savent pas compter. (Mar41)
‘Puppies don’t know how to count.’

A feature that does not seem to play a prominent role in Colloquial French, but that clearly plays a role in agreement and clitic-doubling systems crosslinguistically, is specificity. For example, Suñer (1992) uses specificity to explain why some Northern

³⁹ It is worth noting that subject doubling is also used in contrastive-focus constructions, where subjects are picked out of a set (overt established or assumed). Arguments in both contrastive and neutral focus are mentioned by Siewierska (2004) as more likely triggers for agreement than those under narrow focus crosslinguistically.

⁴⁰ The use of subject doubling with subjects that appear to be indefinite or quantificational but that actually function as nonquantificational has been noted by Côté (2001) and De Cat (2007b), among others. This would include examples such as *Toute cette pluie-là elle me rend malade* ‘All that rain makes me sick’ (Côté 2001:1324).

⁴¹ See Auger 1994b for a treatment of *ça* as an affixal marker of genericity in Colloquial Quebec French. Generics marked by the indefinite determiner are classified as [-definite] by Farkas and de Swart (2007), among others; they follow Carlson (1977) in treating generics marked with the definite determiner as [+definite].

Italian dialects allow subject-clitic agreement to surface with [+specific] wh-phrases only (e.g. ‘which of the girls’). The Colloquial French data suggest that a [–definite] feature is sufficient to block subject doubling regardless of specificity.⁴²

The feature-matching analysis of subject-clitic agreement markers shows that it is possible to characterize the contexts for subject doubling in Colloquial French in a way that is consistent with the claim that subject clitics are agreement markers. More detailed corpus analysis, however, is needed to determine whether in fact subject doubling occurs in all cases where the subject clitic and subject controller match featurally.⁴³ Any optionality that remains (after controlling for the set of features that block doubling) must then be treated in the same way that I have suggested for any residue of the Standard French grammar that is available to speakers. Whether this residue matches the level of, for example, *ne*-retention or inversion, I leave for further research.⁴⁴

An important consequence of this analysis is that Colloquial French is treated as a null-subject language, as has been claimed for Northern Italian dialects with agreement subject clitics (Rizzi 1986, Brandi & Cordin 1989, Poletto 2000).⁴⁵ Roberge (1990), in fact, explicitly argues that this is the case for French. Colloquial French does in fact exhibit some of the properties that have been claimed to cluster crosslinguistically with null subjects (Rizzi 1986); for example, null nonreferential subjects are allowed (as described above in §2.2, for example, *Faut que* ‘it is necessary that’), postverbal subjects are quite frequent (e.g. *Elle va dessus la vache* ‘It goes above, the cow’), and ‘that’-trace effects are not found (e.g. *Qui tu crois qui viendra?* ‘Who do you think (who) will come?’).

Further, Colloquial French is a language that allows redundant marking of subject-verb agreement, since both prefixal and suffixal agreement can cooccur (although phonologically overt suffixal agreement is somewhat rare in Colloquial French). This is the case for many Northern Italian dialects as well as Picard (a language in which subject doubling is obligatory for all subject types, and yet suffixal morphology is still fairly rich; see Auger 2003). Although this redundancy is used by De Cat (2005) to argue against the type of analysis proposed here for Colloquial French subject clitics, and on the face of it, considerations of economy might favor limiting redundancy, Corbett (2006) points out that in fact some languages allow UP TO FOUR such redundant markers. This phenomenon is often called MULTIPLE EXPONENCE. An example from the Daghestanian language Archi is provided in example 38 (taken from Corbett 2006:77) where the same features are repeated four times (II stands for gender II singular agree-

⁴² A possible exception could be partitives like ‘one of the girls’, which may permit doubling; further research, however, is needed since these are relatively uncommon. Also see Nadasdi 1995 on doubling in Ontario French.

⁴³ This is related to the claim put forth in De Cat 2004, which would also require more detailed corpus analyses, that a topic interpretation necessarily implies left-dislocation, while all undoubled DPs are necessarily focused. In fact, De Cat (2004) notes that endowing clitics with something like a [+topic] feature would predict very similar behavior; this is not so different in spirit from the analysis I have argued for here.

⁴⁴ If the level of residual nondoubling were disproportionately higher than that found in the other patterns discussed here, it might suggest optionality in the Colloquial French grammar itself. This would mean that the Colloquial French agreement system is less canonical (according to Corbett 2006), but as noted in n. 28, cases of optional agreement are in fact found crosslinguistically. For a relevant discussion of French diglossia, see Zribi-Hertz 2006. For an alternative perspective that treats variable agreement as lexical feature variation within a single grammar, see Adger & Smith 2005.

⁴⁵ It seems logically possible to suggest that Colloquial French subject clitics are agreement markers only when they cooccur with a DP subject argument, but not when they appear alone. First of all, however, they would still be affixes by my arguments above, and second, it is not clear how to distinguish the hypotheses based on the evidence available.

ment; the agreeing morphemes are indicated in bold), first with the prefix *d*, then on two suffixes used to form the reflexive (*a-r(-u)*) and *ej-r-u*), and then the final suffix *-tu-r*, which derives the modifier and itself has an agreement slot.

- (38) Archi (Kibrik 1977)

d -as-a- r -ej- r -u-tu- r	łanna
II-of.me-self-II-SUFFIX-II-ADJ-II	wife
'my own wife'	

6. CONCLUSION. There is a long tradition within Romance linguistics of categorizing French subject clitics as true syntactic subjects generated in canonical subject position and cliticized at the level of the phonology. By contrast, it has been generally accepted that subject clitics in many Northern Italian dialects (and Romance object clitics as well) are inflectional affixes incorporated into the verb at the level of the syntax or in the lexicon. The evidence put forth in §2 shows that maintaining this distinction is not tenable for Colloquial French. Although a number of constructions have been argued to support a nonaffixal analysis of subject clitics in Standard French, I have shown that these either are vanishingly rare in spontaneous Colloquial French, or are clearly avoided by speakers specifically when subject clitics are present. The negative particle *ne* in Standard French may intervene between DP subjects or subject clitics and the verb. In Colloquial French, however, *ne* is dropped precisely when it is predicted to be impossible under the hypothesis that subject clitics are affixes. The fact that *ne* is retained elsewhere, but dropped when a subject clitic is present, indicates that speakers are sensitive to the status of subject clitics as verbal prefixes in the grammar of this register. Similarly, inversion of the subject clitic in questions is no longer found in Colloquial French, whereas inversion of the DP is still used by some speakers. Further, close examination of Colloquial French data reveals a requirement for subject clitics to be repeated in conjoined VPs, where in Standard French they can take wide scope over conjunction. This feature has been frequently cited as crucial to establishing the affixal status of subject clitics in various Romance languages (Rizzi 1986, Brandi & Cordin 1989, Miller 1991, Auger 1994b, Poletto 2000). Finally, subject clitics exhibit idiosyncratic morphophonological properties of the sort common to affixal elements crosslinguistically, which are more straightforwardly captured if they are inflectional heads rather than independent syntactic words.

Experimental evidence from Colloquial French supports the further hypothesis that subject clitics function as agreement markers cooccurring with a certain class of DP subjects. This conclusion follows from the finding (in §3) that subject-doubling constructions produced by Colloquial French speakers do not exhibit any prosodic indication of dislocation, whereas the structure of dislocated object DPs is indicated by increased final-syllable duration. This finding is predicted if subject clitics do not have the status of arguments, since it suggests that they occur with full DP subjects in simple IP clauses. Critically, although subject doubling is not possible with all DP subjects in Colloquial French, the pattern of subject doubling found in spontaneous speech and accepted by speakers in the grammaticality-judgment task can be explained by a set of crosslinguistically motivated constraints on agreement. These constraints were laid out in detail in §5 and were stated in term of the matching hypothesis (Suñer 1988, 1992), which dictates that the features of agreement markers and agreement controlling DPs must match.

The results presented here pertain to Colloquial French in general; particularly strong evidence in favor of the analyzing subject clitics as agreement affixes, however, was found in child-directed speech (for example, a relatively high frequency of subject dou-

bling). This leads to the expectation that children acquiring Colloquial French will show evidence of treating subject clitics as agreement markers. Accordingly, §3.13 showed that learners do not use subject clitics with nonfinite verbs in root-infinitive contexts, their use of subject clitics interacts with other inflectional features, and they use subject doubling at an early age. Although in the adult grammar of Colloquial French, subject clitics mark agreement with definite, accessible DP subjects only, the possibility that children might extend doubling to other types of subjects is especially intriguing. Under the matching hypothesis, the presence of subject doubling is dependent on the features of the subject clitic; therefore, if learners acquired a reduced set of features, fewer restrictions on doubling would obtain. A likely next step for Colloquial French in light of the diachronic development of subject doubling in Romance would be the loss of the [+accessible] feature of subject clitics such that subject doubling would be allowed with all definite DPs regardless of information context. Eventually the loss of the feature [+definite] could allow doubling with an even wider range. Auger (2003) describes a similar trajectory for Picard, which in the seventeenth century had a subject-clitic system like that of Standard French, but progressed over time to allow subject doubling with all definite DPs, then with QPs, and finally reached its present state where all subject types including WH-variables are doubled.

The differences revealed in this article between Standard French and Colloquial French with respect to subject clitics and related constructions come from detailed analyses of corpora, speaker judgments, experimental investigation of speaker prosody, and crosslinguistic variation. The results strongly argue for an approach to the phonological clitic/affix distinction that takes into account evidence from multiple sources, and clearly differentiates registers that might show meaningful differences with respect to the elements in question. I have also attempted to highlight that resolving the status and function of subject clitics is a learning problem; the data, including the statistical patterns and prosody of the input, will necessarily influence the grammar learners converge on. The hypothesis argued for here is that the input to learners of Colloquial French strongly favors a grammar wherein subject clitics are affixal markers of agreement.

APPENDIX A: EXAMPLE SCENARIOS

Tests sentences are in brackets. The scene setup is two friends who have just returned from vacation and want to go out to the movies together with a couple of other friends.

SCENARIO A. (Nondoubled subject DP)

B: C'est calme dans le coin. Je suppose que tout l' monde est pas encore revenu.

'It's quiet around here. I guess everyone's not back yet.'

A: Non j'crois pas, David et moi, on est revenus qu'hier.

'No, I don't think so, David and I just got back yesterday.'

B: Eh ben on peut aller au ciné c' soir si tu veux. Tu crois pas que David pourrait inviter Kévin, je l'ai vu ce matin?

'Well, we could go to the movies tonight if you want. You think David could invite Kevin, I saw him this afternoon?'

[A: Ah bonne idée, David l'a déjà invit  la derni re fois mais i' pouvait pas. P't-être qu'il est libre ce soir.]

[‘Oh, good idea, David, he invited him the last time, but he couldn’t come. Maybe he’s free tonight.’]

SCENARIO B. (Doubled-subject DP)

B: C'est calme dans le coin. Je suppose que tout l' monde est pas encore revenu.

'It's quiet around here. I guess everyone's not back yet.'

A: Non j'crois pas, David et moi, on est revenus qu'hier.

'No, I don't think so, David and I just got back yesterday.'

B: Eh ben on peut aller au ciné c' soir si tu veux. Tu crois pas que David pourrait inviter Kévin, je l'ai vu ce matin?

'Well, we could go to the movies tonight if you want. You think David could invite Kevin, I saw him this afternoon?'

[A: Ah bonne idée, David i' l'a déjà invité la dernière fois mais i' pouvait pas. P't-être qu'il est libre ce soir.]
 ['Oh, good idea, David, he; invited him; the last time, but he; couldn't come. Maybe he's free tonight.']}

SCENARIO C. (Dislocated object DP)

B: C'est calme dans le coin. Je suppose que tout l' monde est pas encore revenu.

'It's quiet around here. I guess everyone's not back yet.'

A: Non j' crois pas, j'suis revenu hier et j'ai parlé qu'à Kévin.

'No, I don't think so, I got back yesterday and I haven't talked to anyone but Kevin.'

B: Eh ben on peut aller au ciné c' soir si tu veux, et Kévin pourrait inviter quelqu'un d'autre, non?

'Well, we could go to the movies tonight if you want, and Kevin could invite someone else?'

[A: Ah bonne idée, David i' l'a déjà invité la dernière fois mais i' pouvait pas. P't-être qu'il est libre ce soir.]

['Oh, good idea, David, he; invited the last time, but he; couldn't come. Maybe he's free tonight.']}

APPENDIX B: JUDGMENT SCALE

Scale provided during the instruction phase:

1. Parfaite: La phrase vous paraît parfaite. 'Perfect: The sentence sounds perfect to you.'
2. Acceptable: La phrase n'est pas parfaite mais vous pourriez l' utiliser comme réponse à la question qui la précède. 'Acceptable: The sentence is not perfect, but you could use it as an answer to the preceding question.'
3. Je ne sais pas: Vous ne savez pas si vous pourriez l' utiliser comme réponse à la question qui la précède. 'I don't know: You do not know if you could use it as an answer to the preceding question.'
4. Maladroite: La phrase est bizarre comme réponse à la question qui la précède. Il est peu probable que vous pourriez l' utiliser. 'Awkward: The sentence is bizarre as an answer to the preceding question. It is not very likely that you could use it.'
5. Atroce: Jamais vous ne pourriez utiliser cette phrase comme réponse à la question qui la précède. 'Terrible: You could never use that sentence as an answer to the preceding question.'

Scale provided during testing:

1: Parfaite 2: Acceptable 3: Je ne sais pas 4: Maladroite 5: Atroce

REFERENCES

- ABEILLÉ, ANNE, and DANIELE GODARD. 2002. The syntactic structure of French auxiliaries. *Language* 78.404–52.
- ADAMS, MARIANNE. 1987. From Old French to the theory of pro-drop. *Natural Language and Linguistic Theory* 5.1–32.
- ADGER, DAVID, and JENNIFER SMITH. 2005. Variation and the minimalist programme. *Syntax and variation: Reconciling the biological and the social*, ed. by Leonie Cornips and Karen Corrigan, 149–78. Philadelphia: John Benjamins.
- ANDERSON, STEVEN. 2005. *Aspects of the theory of clitics*. Oxford: Oxford University Press.
- ARIEL, MIRA. 2000. The development of person agreement markers: From pronouns to higher accessibility markers. *Usage-based models of language*, ed. by Suzanne Kemmer, 197–260. Stanford, CA: CSLI Publications.
- ARMSTRONG, NIGEL. 2002. Variable deletion of French *ne*: A cross-stylistic perspective. *Language Sciences* 24.153–73.
- ASHBY, WILLIAM J. 1980. Prefixed conjugation in Parisian French. *Italic and Romance linguistic studies in honor of Ernst Pulgram*, ed. by Herbert Izzo, 195–207. Amsterdam: John Benjamins.
- ASHBY, WILLIAM J. 1981. The loss of the negative particle *ne* in French: A syntactic change in progress. *Language* 57.647–87.
- ASHBY, WILLIAM J. 1982. The drift of French syntax. *Lingua* 57.29–46.
- AUGER, JULIE. 1994a. More evidence for agreement-marking in Colloquial French. *Linguistic perspectives on the Romance languages*, ed. by William Ashby, Marianne Mithun, Giorgio Perissinotto, and Eduardo Raposo, 177–98. Amsterdam: John Benjamins.
- AUGER, JULIE. 1994b. *Pronominal clitics in Québec Colloquial French: A morphological analysis*. Philadelphia: University of Pennsylvania dissertation.
- AUGER, JULIE. 2003. Le redoublement des sujets en picard. *French Language Studies* 13.381–406.
- BAKER, MARK. 1988. *Incorporation: A theory of grammatical function changing*. Chicago: University of Chicago Press.
- BAKER, MARK. 1996. *The polysynthesis parameter*. Oxford: Oxford University Press.

- BAKER, MARK. 2008. On the nature of the antiagreement effect: Evidence from wh-in-situ in Ibibio. *Linguistic Inquiry* 39.615–32.
- BENINCÀ, PAOLA. 1983. Il clítico ‘a’ nel dialetto padovano. *Scritti linguistici in onore di Giovan Battista Pellegrini*, ed. by Paola Benincà, Manlio Cortelazzo, Aldo Prosdocimi, Laura Vanelli, and Alberto Zamboni, 25–35. Pisa: Pacini Editore.
- BLANCHE-BENVENISTE, CLAIRE. 1997. *Approches de la langue parlée en français*. Paris: Ophrys.
- BOERSMA, PAUL. 2001. Praat, a system for doing phonetics by computer. *Glot International* 5.341–45.
- BRANDI, LUCIANA, and PATRICIA CORDIN. 1989. Two Italian dialects and the null subject parameter. *The null subject parameter*, ed. by Osvaldo Jaeggli and Kenneth Safir, 111–42. Dordrecht: Kluwer.
- BRESNAN, JOAN, and SAM MCHOMBO. 1987. Topic, pronoun, and agreement in Chichewa. *Language* 63.741–82.
- CARDINALETI, ANNA, and UR SHLONSKY. 2004. Clitic positions and restructuring in Italian. *Linguistic Inquiry* 35.519–57.
- CARDINALETI, ANNA, and MICHAEL STARKE. 1999. The typology of structural deficiency: A case study of the three classes of pronouns. *Clitics in the languages of Europe*, ed. by Henk van Riemsdijk, 145–234. Berlin: Mouton de Gruyter.
- CARLSON, GREG. 1977. A unified theory of the English bare plural. *Linguistics and Philosophy* 1.413–57.
- CHOMSKY, NOAM. 1981. *Lectures on government and binding*. Dordrecht: Foris.
- CHOMSKY, NOAM. 2000. Minimalist inquiries. *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, ed. by Roger Martin, David Michaels, and Juan Uriagereka, 89–156. Cambridge, MA: MIT Press.
- CORBETT, GREVILLE G. 2006. *Agreement*. Cambridge: Cambridge University Press.
- CÔTÉ, MARIE-HÉLÈNE. 2001. On the status of subject clitics in Child French. *Research on child language acquisition: Proceedings of the 8th conference of the International Association for the Study of Child Language*, ed. by Margareta Almgren, Andoni Barreña, María-José Ezeizabarrena, Itziar Idiazabal, and Brian MacWhinney, 1314–30. Somerville, MA: Cascadilla.
- COVENEY, AIDAN. 2002. *Variability in spoken French: A sociolinguistic study of interrogation and negation*. Exeter: Elm Bank.
- COVENEY, AIDAN. 2005. Subject doubling in spoken French: A sociolinguistic approach. *The French Review* 79.96–111.
- CROFT, WILLIAM. 2000. *Explaining language change: An evolutionary approach*. London: Longman.
- DE CAT, CÉCILE. 2004. On the impact of French subject clitics on the information structure of the sentence. *Romance languages and linguistic theory 2002*, ed. by Reineke Bok-Bennema, Bart Hollebrandse, Brigitte Kampers-Manhe, and Petra Sleeman, 33–46. Amsterdam: John Benjamins.
- DE CAT, CÉCILE. 2005. French subject clitics are not agreement markers. *Lingua* 115. 1195–219.
- DE CAT, CÉCILE. 2007a. French dislocation without movement. *Natural Language and Linguistic Theory* 25.485–534.
- DE CAT, CÉCILE. 2007b. *French dislocation: Interpretation, syntax, acquisition*. Oxford: Oxford University Press.
- DEMUTH, KATHERINE; JENNIFER CULBERTSON; and JENNIFER ALTER. 2006. Word-minimality, epenthesis and coda licensing in the early acquisition of English. *Language and Speech* 49.137–74.
- DEMUTH, KATHERINE, and ANNIE TREMBLAY. 2008. Prosodically-conditioned variability in children’s production of French determiners. *Journal of Child Language* 35.99–127.
- DÉPREZ, VIVIANNE. 1990. Two ways of moving the verb in French. *MIT Working Papers in Linguistics* 13.47–85.
- DESHAIES, DENISE; CHRISTIAN GUILBAULT; and CLAUDE PARADIS. 1993. Prosodie et dislocation à gauche par anaphore en français québécois spontané. *Actes du XVe Congrès international des linguistes*, ed. by André Crochetière, Jean-Claude Boulanger, and Conrad Ouellet, 31–34. Québec: P.U.L.

- DOETJES, JENNY; ELIZABETH DELAIS-ROUSSARIE; and PETRA SLEEMAN. 2002. The prosody of left detached constituents in French. *Proceedings of the Speech Prosody 2002 conference, Aix-en-Provence*, 247–50.
- DURAND, JACQUES; BERNARD LAKS; and CHANTAL LYCHE. 2002. La phonologie du français contemporain: Usages, variétés et structure. *Romance corpus linguistics—Corpora and spoken language*, ed. by Claus Pusch and Wolfgang Raible, 93–106. Tübingen: Gunter Narr.
- DURAND, JACQUES; BERNARD LAKS; and CHANTAL LYCHE. 2005. Un corpus numérisé pour la phonologie du français contemporain. *La linguistique de corpus*, ed. by Geoffrey Williams, 205–17. Rennes: Presses Universitaires de Rennes.
- EMBICK, DAVID. 2007. Linearization and local dislocation: Derivational mechanics and interactions. *Linguistic Analysis* 33.303–36.
- EMBICK, DAVID, and ROLF NOYER. 2001. Movement operations after syntax. *Linguistic Inquiry* 32.555–95.
- FARKAS, DONKA, and HENRIETTE DE SWART. 2007. Article choice in plural generics. *Lingua* 117.1657–76.
- FERDINAND, ASTRID. 1996. *The development of functional categories: The acquisition of the subject in French*. Dordrecht: ICG Printing.
- FERGUSON, CHARLES A. 1994. Dialect, register, and genre: Working assumptions about conventionalization. *Sociolinguistic perspectives on register*, ed. by Douglas Biber and Edward Finegan, 15–30. Oxford: Oxford University Press.
- FONSECA-GREBER, BARBARA, and LAURA WAUGH. 2002. The subject clitics of Conversational European French: Morphologization, grammatical change, semantic change, and change in progress. *A Romance perspective on language knowledge and use*, ed. by Rafael Núñez-Cedeño, Luis López, and Richard Cameron, 99–117. Amsterdam: John Benjamins.
- FONTANA, JOSEPH. 1993. *Phrase structure and the syntax of clitics in the history of Spanish*. Philadelphia: University of Pennsylvania dissertation.
- FULMER, S. LEE. 1991. Dual-position affixes in Afar: An argument for phonologically-driven morphology. *West Coast Conference on Formal Linguistics* 9.189–203.
- FUB, ERIC. 2005. *The rise of agreement: A formal approach to the syntax and grammaticalization of verbal inflection*. Amsterdam: John Benjamins.
- GIVÓN, TALMY. 1976. Topic, pronoun, and grammatical agreement. *Subject and topic*, ed. by Charles N. Li, 149–88. New York: Academic Press.
- GODARD, DANIELE. 2004. French negative dependency. *Handbook of French semantics*, ed. by Henriette de Swart and Francis Corblin, 351–89. Stanford, CA: CSLI Publications.
- GREENBERG, JOSEPH. 1966. *Language universals*. The Hague: Mouton.
- GUNDEL, JEANETTE, and THORSTEIN FRETHEIM. 2004. Topic and focus. *Handbook of pragmatic theory*, ed. by Laurence Horn and Gregory Ward, 175–96. Oxford: Blackwell.
- HAEGEMAN, LILIANE. 1995. *The syntax of negation*. Cambridge: Cambridge University Press.
- HALLE, MORRIS. 1997. Distributed morphology: Impoverishment and fission. *MIT Working Papers in Linguistics* 30.425–49.
- HALLE, MORRIS, and ALEC MARANTZ. 1993. Distributed morphology and the pieces of inflection. *The view from Building 20: Essays in linguistics in honor of Sylvain Bromberger*, ed. by Kenneth Hale and Samuel Jay Keyser, 111–76. Cambridge, MA: MIT Press.
- HEIM, IRENE. 1982. *The semantics of definite and indefinite noun phrases*. Amherst: University of Massachusetts dissertation.
- HIRSCHBUHLER, PAUL, and MARIE LABELLE. 2000. Evolving Tobler-Mussafia effects in the placement of French clitics. *New approaches to old problems: Issues in Romance historical linguistics*, ed. by Steven Dworkin and Dieter Wanner, 165–82. Amsterdam: John Benjamins.
- HOPPER, PAUL J., and ELIZABETH CLOSS TRAUGOTT. 1993. *Grammaticalization*. Cambridge: Cambridge University Press.
- HULK, AAFKE. 1987. L'acquisition du français et le paramètre pro-drop. *Etudes de linguistique française offertes à Robert de Dardel*, ed. by Brigitte Kampers-Manhe and Co Vet, 53–62. Amsterdam: Rodopi.
- JAEGGLI, OSVALDO. 1982. *Topics in Romance syntax*. Dordrecht: Foris.

- JELINEK, ELOISE. 1984. Empty categories, case, and configurationality. *Natural Language and Linguistic Theory* 2.39–76.
- KARTTUNEN, LAURI. 1977. The syntax and semantics of questions. *Linguistics and Philosophy* 1.3–44.
- KAYNE, RICHARD. 1972. Subject inversion in French interrogatives. *Generative studies in Romance languages*, ed. by Jean Casagrande and Bohdan Saciuk, 70–119. Rowley, MA: Newbury House.
- KAYNE, RICHARD. 1974. French relative ‘que’. *Current studies in Romance linguistics*, ed. by Marta Luján and Fritz Hensey, 255–99. Georgetown: Georgetown University Press.
- KAYNE, RICHARD. 1975. *French syntax: The transformational cycle*. Cambridge, MA: MIT Press.
- KAYNE, RICHARD. 1984. *Connectedness and binary branching*. Dordrecht: Foris.
- KAYNE, RICHARD. 1991. Romance clitics, verb movement, and PRO. *Linguistic Inquiry* 22.647–86.
- KIBRIK, ALEKSANDR. 1977. *Opyt strukturnogo opisanija arčinskogo jazyka*, vol. 2: *Taksonomičeskaja grammatika*. Moscow: Nauka.
- KLAVANS, JUDITH. 1985. The independence of syntax and phonology in cliticization. *Language Learning & Development* 61.95–120.
- KRAMER, RUTH. 2009. *Cyclicity and agreement at the syntax-morphology interface*. Santa Cruz: University of California, Santa Cruz dissertation.
- KROCH, ANTHONY. 2000. Syntactic change. *Handbook of syntax*, ed. by Mark Baltin and Chris Collins, 699–729. Oxford: Blackwell.
- LABELLE, MARIE. 1985. Caractère post-lexical de la cliticisation française. *Lingvisticae Investigationes* 9.83–96.
- LAMBRECHT, KNUD. 1988. Presentational cleft constructions in Spoken French. *Clause combining in grammar and discourse*, ed. by John Hajnal and Sandra A. Thompson, 135–79. Amsterdam: John Benjamins.
- LEGENDRE, GÉRALDINE. 2000. Positioning Romanian verbal clitics at PF: An optimality theoretic analysis. *Clitics in phonology, morphology and syntax*, ed. by Birgit Gerlach and Janet Grijzenhout, 219–54. Amsterdam: John Benjamins.
- LEGENDRE, GÉRALDINE; ANNE VAINIKKA; PAUL HAGSTROM; and MARINA TODOROVA. 2002. Partial constraint ordering in Child French syntax. *Language Acquisition* 10.189–227.
- LEHMANN, ERICH. 1986. *Testing statistical hypotheses*. New York: Wiley.
- LIGHTFOOT, DAVID. 1999. *The development of language: Acquisition, change, and evolution*. Oxford: Blackwell.
- MARANDIN, JEAN-MARIE. 2004. Formatage de l’information: Focus et contexte. *Interpréter en contexte*, ed. by Francis Corblin and Claire Gardent, 31–80. Paris: Hermès.
- MILLER, PHILIP. 1991. *Clitics and constituents in phrase structure grammar*. New York: Garland.
- MILLER, PHILIP, and IVAN SAG. 1997. French clitic movement without clitics or movement. *Natural Language and Linguistic Theory* 15.573–639.
- MONACHESI, PAOLA. 2005. *The verbal complex in Romance: A case study in grammatical interfaces*. Oxford: Oxford University Press.
- MORIN, YVES-CHARLES. 1979. La morphophonologie des pronoms clitiques en français populaire. *Cahiers de linguistique* 9.1–36.
- NADASDI, TERRY. 1995. Subject NP doubling, matching, and minority French. *Language Variation and Change* 7.1–14.
- NOYER, ROLF. 1994. Mobile affixes in Huave: Optimality and morphological wellformedness. *West Coast Conference on Formal Linguistics* 12.67–82.
- OUHALLA, JAMAL. 1993. Subject-extraction, negation and the anti-agreement effect. *Natural Language and Linguistic Theory* 11.477–518.
- PIERCE, AMY. 1994. On the differing status of subject pronouns in French and English Child language. *Syntactic theory and first language acquisition: Cross-linguistic perspectives*, vol. 2: *Binding, dependencies and learnability*, ed. by Barbara Lust, Margarita Suñer, John Whitman, Gabriella Hermon, Jaklin Kornfilt, and Suzanne Flynn, 319–33. Hillsdale, NJ: Lawrence Erlbaum.
- PLÉNAT, MARC. 1986. Lexique et phonologie: Observations sur la liaison, la nasalisation, et le comportement des liquides en français standard. *Lexique et traitement automatique*

- des langages. Actes du séminaire ‘Lexique et traitement automatique des langages’, Université P. Sabatier, Toulouse, 16–17 janvier 1986*, 163–85.
- POLETTI, CECELIA. 2000. *The higher functional field: Evidence from Northern Italian dialects*. Oxford: Oxford University Press.
- POLLARD, CARL, and IVAN SAG. 1994. *Head-driven phrase structure grammar*. Stanford, CA: CSLI Publications.
- PREMINGER, OMER. 2009. Breaking agreements: Distinguishing agreement and clitic doubling by their failures. *Linguistic Inquiry* 40.619–66.
- RIVAS, ALBERTO. 1977. *A theory of clitics*. Cambridge, MA: MIT Press.
- RIZZI, LUIGI. 1986. Null objects in Italian and the theory of *pro*. *Linguistic Inquiry* 17. 501–57.
- RIZZI, LUIGI, and IAN ROBERTS. 1989. Complex inversion in French. *Parameters and functional heads: Essays in comparative syntax*, ed. by Adriana Belletti and Luigi Rizzi, 91–116. Oxford: Oxford University Press.
- ROBERGE, YVES. 1990. *The syntactic recoverability of null arguments*. Montreal: McGill-Queen’s University Press.
- ROSSI, MARIO. 1999. L’intonation. *Le système du français: Description et modélisation*. Paris: Ophrys.
- SAMEK-LODOVICI, VIERI. 1996. *Constraints on subjects: An optimality theoretic analysis*. New Brunswick, NJ: Rutgers University dissertation.
- SAMEK-LODOVICI, VIERI. 2005. Prosody-syntax interaction in the expression of focus. *Natural Language and Linguistic Theory* 23.687–755.
- SASSE, HANS-JÜRGEN. 1987. The thetic/categorical distinction revisited. *Linguistics* 25. 511–80.
- SCHWARZSCHILD, ROGER. 1999. Givenness, AVOIDF, and other constraints on the placement of accent. *Natural Language Semantics* 7.141–77.
- SELKIRK, ELIZABETH. 1986. *Phonology and syntax: The relationship between sound and structure*. Cambridge, MA: MIT Press.
- SIEWIERSKA, ANNA. 2004. *Person*. Cambridge: Cambridge University Press.
- SPORTICHE, DOMINIQUE. 1992. Clitic constructions. *Phrase structure and the lexicon*, ed. by Johan Rooryck and Laurie Zaring, 213–76. Dordrecht: Kluwer.
- SPORTICHE, DOMINIQUE. 1999. Subject clitics in French and Romance: Complex inversion and clitic doubling. *Beyond principles and parameters: Essays in memory of Osvaldo Jaeggli*, ed. by Kyle Johnson and Ian Roberts, 189–221. Dordrecht: Kluwer.
- SUÑER, MARGARITA. 1988. The role of agreement in clitic-doubled constructions. *Natural Language and Linguistic Theory* 6.391–434.
- SUÑER, MARGARITA. 1992. Subject clitics in the northern Italian vernaculars and the matching hypothesis. *Natural Language and Linguistic Theory* 10.641–72.
- VALLDUVÍ, ENRIC. 1992. *The informational component*. New York: Garland.
- WEXLER, KENNETH. 1994. Optional infinitives, head movement and the economy of derivations. *Verb movement*, ed. by David Lightfoot and Norbert Hornstein, 305–50. Cambridge: Cambridge University Press.
- YANG, CHARLES. 2002. *Knowledge and learning in natural language*. Oxford: Oxford University Press.
- ZANUTTINI, RAFFAELLA. 1997. *Negation and clausal structure: A comparative study of Romance languages*. Oxford: Oxford University Press.
- ZELLNER, BRIGITTE. 1998. Fast and slow speech rate: A characterisation for French. *Proceedings of the 5th International Conference on Spoken Language Processing* 7.3159–63.
- ZRIBI-HERTZ, ANNE. 1994. The syntax of nominative clitics in Standard and Advanced French. *Paths towards universal grammar: Studies in honor of Richard S. Kayne*, ed. by Guglielmo Cinque, Jan Koster, Jean-Yves Pollock, Luigi Rizzi, and Raffaella Zanuttini, 453–72. Washington, DC: Georgetown University Press.
- ZRIBI-HERTZ, ANNE. 2006. Français standard et francilien commun: Conséquences du phénomène diglossique pour la description et l’enseignement du français. Paris: Université Paris-8, MS.
- ZWICKY, ARNOLD, and GEOFFREY PULLUM. 1983. Cliticization vs. inflection: English *n’t*. *Language* 59.502–13.

Johns Hopkins University
Department of Cognitive Science
Room 237 Krieger Hall
3400 North Charles Street
Baltimore, MD 21218
[culbertson@cogsci.jhu.edu]

[Received 29 January 2009;
accepted 22 September 2009]