

DEVELOPMENTAL PATTERNS IN THE ACQUISITION
OF COMPLEMENT CLITIC PRONOUNS
COMPARING DIFFERENT ACQUISITION MODES
WITH AN EMPHASIS ON FRENCH

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1. Introduction

Recent research has highlighted the particular status of pronominal clitics in first language acquisition of French. Hamann et al. (1996) and Jakubowicz et al. (1997) have indicated the delay of complement clitics as opposed to subject pronouns. Studies on bilingual and early L2 acquisition have reached a similar conclusion (Belletti and Hamann (2004), White (1996), Hulk (1997), Crysman and Müller (2000), Kaiser (1994)) as did studies on SLI children acquiring French (Jakubowicz et al. (1998), Hamann et al. (2003), Paradis et al. (2003)). In this paper we reconsider the issue, survey data available in the literature, provide new data on French and for comparative purposes also on Italian. We undertake a fine grained comparison of the developmental patterns in this domain of acquisition which will allow us to uncover subtle distinctions hidden under the global term of delay and possibly reveal properties of the different modes of acquisition. At the same time, we point out that the error types and stages in the different modes of acquisition can reveal properties of different grammatical systems, which may remain unnoticed if solely the adult system and L1 acquisition data are considered. Our comparison can therefore serve as a special tool to enhance our general understanding of subtle properties of different grammatical systems.

In this perspective, the analysis of different kinds of clitic placement errors, typically found in L2 and sometimes in bilingual acquisition data, but missing in monolingual and SLI data constitutes a domain on which we focus our attention. Although the brute numbers and percentages of these types of errors are relatively limited throughout the literature we review, still we take their existence to be meaningful and possibly illuminating for the comparisons undertaken here, concerning both the modes of acquisition and the properties of the languages involved. A

comparison of these error types in French, especially in combination with German or Italian, and in Italian, especially in combination with German, proves to be particularly revealing.

Our main proposal is that the delay in the acquisition of complement clitics, which is found across all acquisition modes, is primarily due to the more complex and articulated syntactic derivation that syntactic clitics undergo as compared to other classes of pronouns, weak or strong (assuming Cardinaletti and Starke's (1999) typology; see the discussion below). Characteristically, the delay gives rise to stages where the clitic complement is omitted (in obligatory contexts), across the different modes.

However, a specific interpretation is required for placement errors in (early and adult) L2 and some bilinguals, which are lacking in monolinguals and SLI. We propose that these errors are crucially linked to the coexistence of different grammatical systems which can occasionally make available a uniform analysis of object pronouns.¹ Finally, for those placement errors which do not find a reasonable source in the possible interaction or contact between different grammars, we suggest a direct active role of UG making different options available in principle.

1.1. Structure of the Article

Section 2 is devoted to spelling out our general background assumptions. In 2.1. we present properties of the Romance pronominal systems, focusing on the difference of complement clitics and subject pronouns in French and its syntactic source. This section also introduces some facts about Italian and contrasts the Romance pronoun systems with Germanic pronouns, especially the German system. In section 2.2 we outline our assumptions about the different modes of acquisition. The theoretical assumptions lead to certain expectations, outlined in section 2.3. Section 3 describes the methods under review involving spontaneous and elicited production and some grammaticality judgements. Section 4 presents the results on complement clitics. In section 4.1. we first present data on the delay of complement clitics, discussing, monolinguals, bilinguals and L2 learners (early and adult) and the findings for SLI children. Different types of placement errors observed in our early L2er will be further investigated in section 4.2 with respect to different modes of acquisition; a comparison with Italian data in section 4.3 rounds off the result section. A summarizing discussion concludes the article in section 5.

¹ Naturally, SLI who are also L2ers may display a different behavior than monolingual SLI in this respect. We are not in a position to supply significant data bearing on this subtler distinction.

2. General Background: Complement Clitics, Derivation, and Modes of Acquisition

2.1. Assumptions on Derivation

Romance complement² clitic pronouns are assumed to fill a special functional head position in the clause structure. According to different implementations of the basic account of their distribution, clitics are assumed to fill a head in the high part of the clausal functional structure dedicated to clitic pronouns (Sportiche's (1996) "clitic voice"); they can be taken to move to an Agr-type head in the high part of the clause (Kayne (1991), Belletti (1999) and references cited there). The characteristic of Romance complement clitic pronouns resides in the fact that they are nominal arguments strictly connected to the verbal domain. Clitics are DPs which undergo a computation whose crucial step only concerns the head of the DP. Clitic heads and the head ultimately hosting the verb are intimately interrelated or actually coincident with both the clitic and the verb filling the same functional head position, as in the case of cliticization into finite verbs in French, Italian and other Romance languages. Whatever the exact implementation of the cliticization process we want to adopt, a functional head ultimately hosting the clitic is assumed to be present and active in the high part of the clausal functional structure. We can assume that languages differ as to whether such a functional head is activated or not: in languages with clitics it is, in languages which do not have clitic pronouns it is not.

In finite clauses, Romance complement clitics are attached to the finite part of the verbal construction. If the finite verb is lexical, this results in the order Cl V_{fin} in declaratives. In both French and Italian, in periphrastic complex tenses involving an auxiliary and a past participle, the complement clitic pronoun ends up attached onto the auxiliary which carries the features related to finite morphology (e.g. person, number and tense) and which is the highest verbal form in the clause structure, yielding the order Cl Aux Past Participle (Cl Aux PPart). This is a typical ordering in Romance. To our knowledge, an order Aux Cl PPart is admitted (only) in Brazilian Portuguese (Bianchi and Figueiredo (1994)), where the status of object clitics is probably different and closer to that of weak pronouns of the Germanic type (Cardinaletti and Starke (1999; 2000)). For complement clitics the cliticization process ultimately involves movement of the clitic as a head (D^o)³, whereas weak pronouns move as maximal projections (DP) from the complement position to some

² Under the cover term complement clitics, we here include both direct and indirect object clitics (e.g. *le, lui* and reflexive clitics *me te, se...* in French) and prepositional clitics (e.g. *en, y*, in French).

³ In the last step of the derivation, in a movement analysis of cliticization (Belletti (1999) and references cited there).

intermediate dedicated position in the clause structure. Hence, the host of a weak pronoun is not a verbal head as in the case of typical Romance object cliticization. The overall computation affecting syntactic clitics is more complex than that affecting weak (and also strong) pronouns as a final further head movement step is included in the former but not in the latter. Throughout, we discuss the possible relevance of these distinctions in interpreting different outcomes in the acquisition of complement clitics. Our central hypothesis is that the complexity of the computation affecting complement clitics is precisely at the source of the difficulty manifested in the different modes of acquisition.⁴

A peculiar distributional property concerning complement clitics is that in various Romance languages, including e.g. Italian, but excluding French, a complement clitic can be attached to the finite matrix verb of a complex sentence. In this kind of structures, the complement clause is an infinitival and the clitic belongs to the embedded clause (e.g. Italian: *Lo voglio leggere* 'I it(cl) want to read'). This option, often referred to as "clitic climbing", is characteristically conditioned by the nature of the matrix verb typically including modals and aspectuals (e.g. Italian: *Lo finisco di leggere* 'I it(cl) finish to read'). The size of the verb classes allowing "clitic climbing" varies from one Romance language to the other, with French disallowing it altogether, Italian allowing it with modals, aspectuals and some raising verbs, with differences among speakers and varieties, and, e.g., Spanish allowing it with partly different classes of verbs taking an infinitival complement (Cinque (2004) and references cited therein for relevant recent discussion). As climbing of the clitic into the matrix verb is generally an option, often a much preferred one, the hypothesis has been undertaken at least since Rizzi's (1978) original work, that the option comes as a consequence of analyzing an originally biclausal structure as a monoclausal one. Whence, the name Restructuring for the process leading to reanalysis. Indeed, cliticization is a very local process and a clitic normally cliticizes onto the verb

⁴ See Zesiger *et al.* (2006) for a subtler hypothesis whereby complement clitics may be considered problematic since they give rise to a particular instance of crossed chains, typically hard at some (initial) stages of acquisition. This factor may be particularly relevant for the different profiles observed in elicitation studies (though not necessarily in spontaneous production) for the development of the reflexive *se* and accusative clitics but does not concern us here. For concreteness, in this paper we do not elaborate on this alternative and assume the hypothesis presented in the text, according to which the complexity of the derivation counts as the primary source of difficulty in the acquisition of complement clitics. In the same vein, we adopt the working hypothesis that the internal structural make up of the different classes of pronominal DPs, with clitics corresponding to a more reduced (deficient in Cardinaletti & Starke's terms) internal structure than weak (and strong) pronouns, does not directly bear on the acquisition issues addressed in this paper. We assume that the different external computations rather than the possibly different internal make ups are the crucial differential factor in acquisition. See also Hamann (2003) for further discussion of this point.

which has it as its complement or onto the aspectual auxiliary, as in the case discussed above⁵. It is only in Restructuring contexts that the clitic climbs higher than the clause to which it belongs. For the purposes of our discussion here, it suffices to have identified the basic descriptive properties of the restructuring phenomenology; in this context, it is not crucial to take a stand on whether restructuring should be considered a process, as in the original account, or whether a clause displaying a climbed clitic should be analyzed as monoclausal altogether as in some more recent accounts (Cinque (2004)).⁶ In the course of our discussion below we will use the term Restructuring to refer to structures where the clitic has climbed onto a matrix modal or aspectual verb, the core cases of restructuring in the languages displaying the phenomenon.

Although the main focus of our discussion in this paper will be the acquisition of complement clitics in French, we will also provide some comparative considerations on the acquisition of French subject clitics. Some preliminary terminological and theoretical considerations are in order here. Although French personal pronominal subjects (*je, tu, il, elle, on, nous, vous, ils, elles* ‘I, you, he, she, one, we, you, they (m), they (f)’) are often referred to as clitics, their status is not the same as that of object complement clitics. Both object and subject clitics are phonological clitics in that they do not bear an independent stress and form a phonological word with the verb they combine with (directly or in a cluster with other pronominal clitics); however, only complement clitics can be properly analyzed as syntactic clitics. If complement clitics ultimately count as heads and behave according to this status syntactically, subject clitics behave as maximal projections (DP) throughout the entire syntactic derivation (Kayne (1991), Cardinaletti and Starke (1999), Laenzlinger and Shlonsky (1997)).⁷

According to the distinction mentioned above between weak and clitic pronouns, we then assume that French object clitics are syntactic (as well as phonological)

⁵ The clitic can also be the complement of the head noun of a DP complement of the verb or be an adjunct. We make abstraction of these distinctions which are not directly relevant for the point at issue here.

⁶ See also the references cited there for a rich bibliographical information on restructuring. For different versions of the more traditional account see Rizzi (1978; 1982), Burzio (1986), Zubizarreta (1985).

⁷ We assume the status of weak pronouns for subject clitics in Standard French, (and also in Colloquial French where the facts are less clear; see Friedemann (1995), Hamann (2002) for discussion). See Auger (1995), Zrib-Hertz (1994) and references cited there for an alternative view according to which also French subject pronouns should be analyzed as filling a head inflectional position, hence ultimately as syntactic heads. This analysis essentially assimilates French subject pronouns to the subject clitics of Northern Italian dialects; see Brandi & Cordin (1989), Poletto (2000) and references cited there for critical discussion.

clitics, while subject clitics are syntactic weak pronouns and clitics just phonologically. In the course of our discussion we will occasionally refer to the French pronominal subjects as subject clitics following current practice. However, the theoretical and distributional distinction concerning their syntactic nature should be kept in mind as it directly bears on the different outcomes known from the literature on the acquisition of subject vs. object complement clitics.

Note here that other Romance languages such as Standard Italian do not have conspicuous instances of weak pronouns (neither subjects nor complements).⁸ For the interpretation of our findings in French we exploit this difference in the pronominal systems of the two languages. In this connection, we refer to recent results on the acquisition of Italian object clitics by bilingual/L2 speakers and point out differences in error patterns in French and Italian, most typically emerging when the first or concomitant language is German (Ferrari (2006); Leonini and Belletti (2004); Leonini (2006)).

To round off our discussion of pronominal systems, we summarize here some facts about Germanic pronoun systems which we will refer to throughout, using German as our main example. In contrast to French/Romance clitics, German personal pronouns are ambiguous between strong and weak use and behave differently accordingly. As strong pronouns they can be stressed, and coordinated, provided they are referring to [+human] arguments. Inanimate subject and object pronouns cannot be strong and cannot be coordinated. As weak pronouns they can phonologically cliticize to nouns and complementizers. Crucially, they are not verbal clitics as the Romance clitics are.

German also has a series of so called demonstrative pronouns (*der, die das, den,* etc.) which are identical in form to the definite determiners. These d-pronouns are again ambiguous between weak and strong use but always show up in the same positions as full DPs. (*Ich hab' den schon gesehen* 'I have this (the, him) already seen' / *Ich hab' den Film schon gesehen* 'I have the film already seen'). 3rd person French accusative clitics also coincide in form with the definite determiners. They cannot occur in DP-positions, however, but must attach to a functional head, as discussed above (*Je l'ai déjà vu* 'I it have already seen' / *j'ai déjà vu le film* 'I have already seen the film').

2.2. Different modes of acquisition

Our point of departure is the parametric approach to L1 acquisition according to which invariable properties of Universal Grammar (UG) are activated by input data which also contain the relevant triggers for the different parametric choices that the

⁸ Weak pronouns are limited to the obsolete subject pronoun *egli* 'he' and dative pronoun *loro* (Cardinaletti (1991)) for detailed discussion.

child has to make. Parametric choices are supposed to concern functional heads and their feature specifications.

We also assume that simultaneous bilingual acquisition of more than one language from birth follows essentially the same pattern as monolingual acquisition for each of the languages involved, thus presupposing early separation of their different grammars, as originally proposed by Meisel (1989) (see also Genesee et al. (1995), Salustri (2003), and Meisel (2006) for recent discussion). In this view interference/contact of the two languages is allowed –if at all– only in the special circumstance when input from one of the languages can be reasonably, though incorrectly, analyzed by the grammar of the other language (Hulk and Müller (2000), and some of the discussion below). In contrast, L2 acquisition, early and adult, presupposes by its very nature the existence of an L1 grammar in the language learner’s mind. A major issue in L2 acquisition therefore is to make precise the impact, if any, of the L1 grammar with its parametric choices on the L2 acquisition process. Following proposals on this issue by White (1989; 2000; 2003), Schwartz (1998) and related work, we adopt the view that the L2 initial state is the L1 grammar, that areas of difficulties in L2 acquisition are typically expected in cases where the two languages differ in parametric choices leading to misparsing of the L2 input through the L1 setting. Thus, L2 acquisition characteristically manifests Transfer phenomena. However, parametric choices are likely not to be automatically transferred, but transfer is characteristically expected in cases of ambiguous input prompting an analysis through the L1-grammar.⁹ In addition, we also assume an active role of UG so that parameters, more specifically the functional feature specification they involve, can be reset and functional features not instantiated in the L1 can be acquired (Schwartz and Sprouse (1996), Duffield et al. (2002)) in the course of L2 acquisition.¹⁰

We maintain that in L2 acquisition by young children, here referred to as early L2, cases of transfer can be overcome quickly, presumably because UG is more readily accessible. In fact, it has been argued that early L2 resembles L1 acquisition

⁹ In this sense the interference/contact situation in bilingual acquisition and transfer phenomena in L2-acquisition may show important similarities. If the input clearly contradicts the L1-setting, the transferred setting will typically be very short-lived; see Haznedar (1997) for relevant evidence of a short-lived transferred parameter; Haberzettl (2005) for relevant discussion reaching partly different conclusions.

¹⁰ The view on adult L2 acquisition referred to above has been labeled the “No impairment” hypothesis and stands in contrast to a different view according to which parameters in L2 acquisition cannot be reset and UG is not operational beyond a critical period (Hawkins (2001), Towell and Hawkins (1994), Hawkins and Franceschina (2004), Meisel (2006)). L2 grammars are thus “impaired” grammars (see White (2000) and Duffield et al. (2002) for discussion).

(White (1996)). However, precisely as for some specific transfer phenomena, early L2 seems to rather resemble adult L2 acquisition (Belletti and Hamann (2004)). Some of the discussion below bears on this issue.

Specific language impairment (SLI) has been approached from two similar basic points of view. On the one hand, it is assumed that language development in children with SLI may be substantially delayed but is essentially the same as in normal L1 acquisition, which could be interpreted as SLI children having an operational UG but needing more trigger experiences to arrive at the valid parameter settings. On the other hand, it has been proposed that this type of acquisition is deviant from L1 acquisition, which indicates that UG is not fully functional. As it has been claimed that error patterns in L2 and SLI resemble each other (see Hakansson and Nettelblatt (1996)), we might expect to gain insights into the underlying mechanisms of L2 acquisition and SLI by a close comparison of development and error patterns in a well investigated area such as clitic use, where robust results on L1 acquisition can form the background for investigations of early L2, adult L2 and SLI.

The particular interest of comparing SLI and young L2 learners lies in the possibility of teasing apart which phenomena of L2 acquisition are due to transfer and which are due to a developmental difficulty with a particular area of grammar, as has recently been pointed out by Paradis (2004). Such comparative studies have been undertaken only recently, however, and tend to focus on a particular phase of development. We maintain, and hope to provide evidence for the claim, that though similarities during certain stages of both types of acquisition can be observed (Hakansson and Nettelblatt (1996), Paradis (2004)), differences are revealed by a consideration of developmental/longitudinal data: SLI ultimately shows a developmental pattern closer to that of monolinguals (though slower), whereas early L2ers rapidly overcome the difficulties in those cases where they resemble SLI.

2.3. Main expectations

Given the above assumptions about the different modes of acquisition and the linguistic outline of the pronominal systems in French, Italian/Romance, on the one hand, and the Germanic languages on the other hand, we come back to the proposals briefly outlined in the introduction. If French object/complement clitics are syntactic clitics and are therefore computationally more complex than subject pronouns, which are weak pronouns, then we expect a delay and omissions for complement clitics in all modes of acquisition. This is so because avoidance and omissions can alleviate processing load induced by computational complexity - if only because no phonological matrix must be spelled out. Placement errors, however, cannot solely be motivated by the greater computational complexity; we propose that in some

instances they are due to the coexistence of grammars leading to misclassifications and in other instances to the exploitation of UG options.

In particular, our assumptions about the role of the L2 system, which may allow an analysis in terms of the L1 parameter settings, make us expect that a German child learning French may try out an analysis whereby (all) pronouns are treated as weak. This analysis would be suggested by the existence of weak pronouns in both her L1 and in French (see the status of subject pronouns) and would be aided/strengthened by the similarity in form of object pronouns and determiners, found in both languages (2.1.).

Though such a similarity in form also exists in Italian, the basic absence of weak pronouns in the Italian system (footnote 8) should indicate to L2-learners that such an analysis is not tenable. Hence it should not be entertained in the typical case. If transfer were a stage regardless of properties of the L2, we would expect German(ic) learners of Italian and French to manifest the same placement errors. In contrast, we propose that the L2 system plays an active role and thus we expect placement errors, with pronouns showing up in DP positions, to be more likely when the target/second language is French than when it is Italian.

As for the role played by UG in L2-acquisition, we also expect that Restructuring errors may occur during the acquisition of French as a target language, Restructuring being a UG option. Furthermore, this option could also be tried out in some bilingual settings.¹¹

3. The Method

The core of the French data considered in our discussion is taken from the L1, SLI and bilingual/early L2 corpora collected in the framework of the Geneva project on “Language and Communication: Acquisition and Pathology”. The Italian data (spontaneous and experimental) referred to here were collected in different projects within the frame of the research activities undertaken at the Interdepartmental Center of Cognitive Studies on Language at the University of Siena.¹² We will also refer to examples and, where available, quantitative analyses from the literature in order to round off the picture.

The basis and measure of comparison for this investigation are longitudinal studies of the spontaneous production of normally developing monolingual French

¹¹ To the extent that Restructuring errors are not attested in monolingual L1 acquisition, we can speculate that the possible UG option is not equally entertained as it is overwhelmingly disfavored on the basis of unambiguous positive evidence, see discussion in section 5.

¹² Many of the results we will be referring to with respect to the Geneva and Siena data have been published or have given rise to dissertations. Here they are considered from a fresh comparative perspective.

speaking children: Augustin: 10 recordings (2;0- 2;9); Marie: 17 recordings (1;8-2;6), Louis: 12 recordings (1;9 - 2;3) as described in Hamann et al. (1996) and Rasetti (2003). We also use data from Daniel (1;8-1;11), Nathalie (1;9-2;3), Gregoire (1;9-2;3), and Philippe (2;1-2;6) from the Lightbown corpus, and the Leveillé and Champaud corpora known from Childes.

As for impaired language we primarily use the spontaneous productions of 11 monolingual French children clinically diagnosed as SLI as recorded in Geneva/Lausanne with an age range of 3;10-7;11 at the beginning of recording. For these data we make reference to Hamann et al. (2003) and to Baranzini (2003) (see also Cronel-Ohayon (2004)). We will also refer to data from Jakubowicz et al. (1998), Jakubowicz (2003), Paradis et al. (2003) and Paradis (2004) and others.¹³

Our main source for bilingual/early L2 data is a corpus recording two young children with different source languages (exposure from birth), who are communicating with each other in French: Elisa, whose first language is German and who was recorded between the ages of 4;0-5;5 and Lorenzo, who is of Italian origin and who was recorded between the ages of 3;5-4;11. Belletti and Hamann (2004) showed that Elisa's speech exhibits phenomena which are also discussed in the literature on (adult) L2, she will therefore be called "early L2er" here. Lorenzo, on the other hand, shows a development parallel to that of monolingual French acquisition, so that he will henceforth be termed "bilingual". Systematic exposure to French was roughly the same for these two children, and there are 5 recordings, distributed as shown in table 1 (see Belletti and Hamann (2004) for further details).

Table 1: *Recordings and ages of Lorenzo and Elisa*

recording	Lorenzo	age	Elisa	age
1		3;5		4;0
2		3;7		4;2
3		3;8		4;3
4		4;4		4;10
5		4;11		5;5

¹³ The typically developing children and the SLI children considered here are in comparable developmental stages as they fall roughly into the same MLU range (Hamann (2004)). The mean ages of the groups of SLI children discussed in the literature and which we use for comparison here are 7;6 (Paradis (2004)), 7;8 and 9;1 (Jakubowicz (2003)), allowing comparisons in some cases and projections of further development in others.

The corpora collected in Geneva were transcribed and analyzed by the same procedure for all acquisition modes. In particular clitic omissions and placement errors were counted in the same way. All judgments have been verified by native speakers, which is especially relevant for the identification of omissions. For details on the counting and analysis procedures see Hamann et al. (1996), but also White (1996), Jakubowicz et al. (1997, 1998), Hulk and Müller (2000) who all identify omissions on the basis of the verb's argument structure and the discourse context.¹⁴

In addition to our data from the bilingual/early L2 children, we will use data on Anouk (Dutch/French bilingual) as discussed in Hulk (1997; 2000), and data on Ivar and Caroline (both German/French bilingual) as discussed in Crysman and Müller (2000). For clear cases of early L2 acquisition we also consult the productions of Kenny and Greg (L1:English and L2:French) as reported in White (1996) and in Prévost and White (2000). Ages and amount of exposure will be provided in the context of the relevant discussion.

As to adult L2-learners of French, we will refer to the literature, especially Prévost and White (2000), Herschensohn (2004), and Granfeldt and Schlyter (2004) and the speakers they studied. We will occasionally refer to the study of Landow (2002) conducted in Geneva with 25 adult L2-learners of French (with Chinese, German, English and Romance languages different from French as their L1) to strengthen tendencies already observed.

The Italian data used for comparison are taken from the work by Leonini & Belletti (2004), Leonini (2006) for adult L2 acquisition and Ferrari (2006) for bilingual acquisition.

A word of caution is in order before we proceed. Although our comparisons will consider data and results obtained in different studies through different procedures, including spontaneous production, elicited production and also some grammaticality judgments, we believe that the comparisons are revealing and significant as they illustrate consistent trends throughout.

As for placement errors, the different data sources are not specially problematic as the errors are clearly manifested. With respect to omissions, the differences in data taking may raise the issue of defining what counts as an obligatory clitic context. In elicited production all contexts are by definition obligatory, whereas in spontaneous production, although for native speakers it may be clear that what is missing is a clitic pronoun, there will always remain a doubt that what is being omitted could be a lexical complement or a licit omission (see Pirvulescu (2006) for discussion). Native speakers' judgments guided us in the identification of obligatory complement clitic pronoun contexts. Although a certain amount of indeterminacy is unavoidable in this connection, especially in spontaneous production, many of the

¹⁴ Note especially that omissions which several native speakers judged legitimate are not included in our counts.

studies we use for complementation of our data have employed the same procedures for the identification of omissions (see references above), so that we work under the assumption that the relevant cases of omission from the literature can also be classified as pronominal clitic omissions.

4. Results on Complement Clitics

4.1. The 'Delay' of Complement Clitics and Error types in different modes of acquisition

Complement clitics display a delay in acquisition with respect to subject clitics which is rather significant and has given rise to several studies (see the references quoted above, and also Schmitz and Müller (in press), Pirvulescu (2006)). In monolingual, typical children it concerns a time span of about six months, and in SLI children the absence or very rare use of object clitics may persist for several years (Jakubowicz et al. (1998), Hamann et al. (2003), and Paradis et al. (2003)). Bilinguals seem to show the delay also observed in monolinguals (see Hulk (2000), Crysman and Müller (2000), and Schmitz and Müller (in press)), whereas early and adult L2 speakers produce their first object clitics even more than six months later than subject pronouns. In comparison to SLI children, the period of non-use of object clitics is much shorter in early L2 speakers, however, and they quickly evolve in their use as documented also in their error patterns.

4.1.1. Monolinguals

The general consensus on subject clitics in monolingual acquisition is that they are used from roughly the second birthday, whereas complement clitics are omitted till they occur tentatively about 4 months later and more systematically about 6 months later. Augustin, the child investigated by Hamann et al. (1996) shows this clearly in his development between 2;0 and 2;10, see table 2. Louis, one of the Geneva children studied by Rasetti (2003) with respect to clitic use, shows the same profile. He produces 29.4% subject clitics at the age of 1;9,26, the beginning of recording, (Rasetti 2003,155). At this time, he produces no complement clitics. He starts using them at a rate of only about 5% from 2;0,8 till 2;1,20 and shows a rise to about 11% between 2;2,20 and 2;3,29 (Rasetti 2003,257). Marie, another child studied by Rasetti already uses 66.7% subject clitics at the age of 1;8,26, which is a rate attained by Augustin at the age of 2;9,30 (p. 155). So it comes as no surprise that she uses complement clitics at a rate of 16.7% at that early age already (p. 257). Still, even if complement clitics are not radically absent in her early recordings, they are much rarer than subject pronouns and her speech also shows a high percentage of object omissions at the same time (58.3% at the beginning and 16.7% at 2;5,26). Studies on elicited production (Jakubowicz et al. (1996; 1997) and Zesiger *et al.* (2006)) show roughly the same picture, and the recent study on spontaneous

production conducted by Schmitz and Müller (in press) shows an initial absence and about the same delay (5 months) for the child Gregoire from the Childes database (see also Friedemann (1992) and Rasetti (2003) for the same conclusions regarding this child).

Table 2: *Occurrences of subject and complement clitics
in relevant utterances in the Augustin-corpus*

age (y;m,d)	verbal utterances	subject clitics	% of verbal utterances	complement clitics	% of relevant utterances
2;0,2	57	17	29.8	0	0
2;0,23	30	4	13.3	0	0
2;1,15	22	4	18.2	0	0
2;2,13	55	16	29.1	1	3.8
2;3,10	45	12	26.6	0	0
2;4,1	62	10	16.1	0	0
2;4,22	54	11	20.4	1	5.0
2;6,16	116	25	21.6	2	3.9
2;9,2	175	80	45.7	10	14.3
2;9,30	115	99	63.4	22	33.9
Total	771	278	36.1	36	10.5

Moreover, table 3 indicates that if complement clitics are radically absent in Augustin's speech at the beginning of recording, they reach a level of around 30% occurrence, the level found for subject clitics at the very beginning, only in the last recording where we observe a concomitant decrease in the rate of the occurrence of lexical complements as well as in the rate of clitic omissions. The same is true for Louis (Rasetti (2003, 257)).¹⁵

¹⁵ See also Wexler, Gavarró, Torrens (2004), Babyonyshev and Marin (2004) for recent discussion on the different omission rates in different Romance languages (Spanish, Catalan, Romanian in particular) in L1 acquisition.

Table 3: *The use of complement clitics in comparison with lexical complements and omissions in the Augustin corpus*

age	comp.			complement		lexical	
	contexts	omissions	%	clitics	%	complements	%
2;0,2	12	4	33.3	0	0	8	66.6
2;0,23	20	5	25	0	0	15	75
2;1,15	10	4	40	0	0	6	60
2;2,13	19	5	26.3	1	3.8	13	69.9
2;3,10	23	9	39.1	0	0	14	60.9
2;4,1	20	5	25	0	0	15	75
2;4,22	21	4	19.0	1	5.0	16	76
2;6,16	50	10	20	2	3.9	38	76.1
2;9,2	69	10	14.4	10	14.3	49	71.3
2;9,30	65	14	21.5	22	33.8	29	44.7
Total	309	70	22.7	36	11.6	203	65.7

A clear fact that has emerged from recent research is that object/complement clitics are placed correctly from their first occurrences as was pointed out by Hamann et al. (1996) for Augustin. This finding was recently corroborated by Rasetti (2003, 293) who states that “no placement error is attested in the entire Geneva corpus”, i.e. of the monolingual children Augustin, Marie and Louis.¹⁶

4.1.2 Early L2/bilingual children

The child called early L2er, Elisa, shows a delay of complement with respect to subject clitics which is similar to Augustin’s development, as shown in table 4. Note specifically that complement clitics tend to be absent in the early recordings.

¹⁶ As to the order of acquisition of particular complement clitics, it is interesting to note that appearance of clitic *en* generally coincides with the stages where complement clitics begin to be systematically produced by the different children analyzed. (Hamann et al. (1996, 324f), Rasetti (2003, 293)), see also footnote 21 below.

Table 4: *Elisa's quantitative development of clitic use*

age	%subjects in finite contexts				%complements in complement contexts			
	lexical subject	clitic subject	omission	total	lexical compl.	clitic compl.	omission	total
4;0	1/4.2	23/95.8	0	24	4/100	0	0	4
4;2	2/4.7	41/95.3	0	43	4/50.0	4/50.0	0	8
4;3	2/9.1	19/86.4	1/4.5	22	4/100	0	0	4
4;10	0	100/100	0	100	22/55.0	16/40.0	2/5.0	40
5;5	11/7.3	139/92.7	0	150	38/50.7	33/44.0	4/5.3	75
total	16/4.7	322/95.0	1/0.3	339	72/55.4	52/40.0	6/4.6	130

A similar delay has been reported by White (1996) for the early L2 children Kenny (5;10-8;1) and Greg (5;6-7;9), both with English as source language (recording started after two months of exposure for both children). Kenny produces subject but no object clitics between month 7 and month 11 of exposure which is not due to lack of complement constructions because he does produce lexical complements. White further reports that complement clitics are often omitted in the period when they start being produced.

Paradis (2004) reports similar findings. She investigated 10 Canadian learners of French with English as their source language whose mean age is 7.3 years and who had been exposed to French for two years in French schools before data taking began. She reports that at this stage of acquisition the L2-learners supplied object clitics in only 41.5% of the contexts which required pronominalization (i.e. when the referent of the clitic had been mentioned in the discourse). Calculating the omission rate in all clitic contexts from Paradis' analysis of particular errors, gives a percentage of 37.4% omissions in obligatory contexts.

In contrast to Augustin and the other monolingual children described so far, Elisa's early recordings show placement errors of a specific kind. We note that either complement clitics are absent or that they are found in non-clitic positions, notably positions that appear to coincide with those of lexical DPs or strong pronouns. This is illustrated in (1) where the clitic appears in isolation (and with stress) or, and more systematically so, in the position of lexical DP complements (2a, b), an error which has also been reported by White (1996) concerning the early L2er Greg (2c). We will call these particular errors the '*Cl in isolation' and the

‘*Cl in object position’ error¹⁷. Note that Elisa does not use complement clitics in the recordings made at the ages of 4;0 and 4;3. In between, at the age of 4;2, we find 4 uses of object clitics, which all occur in non-clitic positions. At the same time, she does not omit complements, but uses lexical DPs, something which has also been observed by Paradis (2004) for her early L2-ers of French.¹⁸

- (1) E: c’est à moi, le L: le quoi? Elisa 4;2 in isolation, with stress
it’s to me, him/the the what
‘it’s mine, that one the what?’
- (2a) alors, tu joue avec le Elisa 4;2 after a preposition (2 occurrences)
so, you play with him
‘so, you play with it’
- (2b) non, on laisse le Elisa 4;2 in canonical object position
no, one leaves him
‘no, we leave him/it alone’
- (2c) moi, j’ai trouvé le Greg (month 14 of exposure)
me, I have found him/it
‘Me, I’ve found it’

Seven months later, at 4;10, she uses complement clitics at a rate of 40% and the particular errors exemplified in (1) and (2a,b) have vanished. However, we still find placements errors, albeit of a different kind: the clitic is now sometimes located between auxiliary and past participle, an error also observed by Hulk (1997) for the (Dutch/French) bilingual child Anouk (at age 3;6 and 3;9)¹⁹. There are 8 contexts with auxiliaries in the last recording of Elisa at the age of 5;5, and two uses are erroneous: instead of the correct order Cl-Aux-PPart, we find (3a) and (3b) which show ‘*Aux-Cl-PPart’, which will henceforth serve as a name for this error²⁰.

¹⁷ We keep them distinct for ease of reference although they may actually be instances of the same error type.

¹⁸ This tendency also emerged in a clitic elicitation task with adult L2ers of Italian discussed in Leonini & Belletti (2004) discussed in 4.2.5. below. The tendency to use full lexical DPs in place of a pronominal clitic also appears to be present in monolingual acquisition, during the omission stage (Jakubowicz et al (1997), Schaeffer (2000)).

¹⁹ Clitic in object position errors are also signaled by Anouk’s mother, as we point out in section 4.2.3.

²⁰ Note the interesting lack of change of auxiliary (from “have” to “be”) in (3b). Similar data are reported in Crysmann & Müller (2000), see section 4.2.3.

Note particularly that with respect to omissions, placement errors and clitic use we find strong development for Elisa, our younger, longitudinally followed L2er, as discussed in Belletti & Hamann (2004,161; Table 6).

The child of Italian origin whom we call bilingual, Lorenzo, shows no problems with clitic use (see Table 5). Subject pronouns are used correctly and are the predominant subjects occurring with finite verbs (see Belletti and Hamann (2004) for a discussion of the significance of this finding with respect to the Italian null subject option). Complement clitics are present from the beginning in contrast to Elisa. Note also that we find no placement errors in Lorenzo's speech, in particular none of the three error types identified for Elisa.

Table 5: *Lorenzo's quantitative development of clitic use*

	% subjects in finite contexts				% complements in complement contexts			
	lex-s	cl-s	o-s	total	lex-o	cl-o	o-o	total
3;5	1/1.6	56/87.5	7/10.9	64	13/72.2	4/22.2	1/5.5	18
3;7	2/2.0	97/96.0	2/2.0	101	25/64.1	14/35.9	0	39
3;8	7/6.1	105/92.1	2/1.8	114	21/84.0	4/16.0	0	25
4;4	1/1.5	64/98.5	0/0	65	13/56.5	10/43.5	0	23
4;11	6/3.9	146/94.2	3/1.9	155	24/53.3	21/46.7	0	45
Total	17/3.4	468/93.8	14/2.8	499	96/64.0	53/35.3	1/0.7	150

As to the order of acquisition of particular complement clitics, Lorenzo shows a similar pattern to the early L2er Elisa (Belletti & Hamann (2004, 165; Table 11). Note that for Elisa, Lorenzo as well as monolingual Augustin and Louis the appearance of clitic *en* ('of that') seems to coincide with an overall high rate of clitic use.²¹

²¹ *En* appears late in Lorenzo as well as in Elisa. This data is reminiscent of the remark in footnote 16 concerning monolinguals. Moreover, *en* 'of that' seems also prone to omission. It is the only clitic which is omitted by Lorenzo (twice, once at the age of 3;7 and once at the age of 3;8, not counted in table 7 where only verbal complement clitics are considered). It is also omitted by Elisa, at the age of 4;2, though she later also omits *le* 'him', at 4;10 and 5;5. We leave open speculations on the seemingly particular status of *en* in this respect.

4.1.3. Adult L2

For adult L2ers it has been noted that placement errors and omissions occur frequently, (see Towell and Hawkins (1994), Granfeldt and Schlyter (2004) and Herschensohn (2004) for a recent discussion). Interestingly, the stages identified by these authors, 1. 'Pronoun in object position', 2. 'Object Omission' and 3. 'Pronoun in intermediate position' are also observed for Elisa (examples (1), (2) and (3)); the three types of placement errors produced by Elisa, '* Clitic in isolation', '*CI in object position', and '*Aux-CI-Ppart', are the same as described for adult L2. The examples in (5) and (6) taken from Granfeldt and Schlyter (2004) illustrate the two placement errors occurring in the different phases:

- (5) On prend le gaz et refroidir le Karl, 8 mths exposure *CI in object position
one takes the gas and cool him/it
'you take the gas and cool it'
- (6) j'ai le vu Karl, 10 mths exposure *Aux-CI-Ppart
I have him/it seen
'I have seen him/it'

In addition, in adult L2 productions errors of clitic placement in modal contexts have been found, where instead of the French order 'Modal CI Infinitive', the order 'CI Modal Infinitive' with the clitic climbed onto the modal occurs. This is the error we call Restructuring error, illustrated in (7) below. In a grammaticality judgement experiment conducted by Landow (2002), Restructuring errors as in (7) were also found and the 'Clitic in isolation' error illustrated in (8) also occurred confirming the results obtained from production studies:

- (7) *Il nous peut parler Restructuring
He us can talk
'He can talk to us'
- (8) *Qui regardes-tu? LA *CI in isolation
Who look at you? HER
'Who are you looking at? HER'

A closer discussion of these misplacements is taken up in section 4.2.4.

4.1.4. Children with SLI

In comparison to the general mastery of subject clitics by children with SLI, complement clitics appear extremely delayed. The mastery of subject clitics has been observed by Jakubowicz et al. (1998) for elicited production and was corroborated in Hamann et al. (2003) with an investigation based on the spontaneous speech of the children recorded in Geneva. In the first recordings of these 11 children,

subject clitics occur between 58.9% and 96.0% for the individual children.²² For further analysis the authors group the participants under and up to five years of age into the “younger group” (age range 3;10-5;0) and call the children older than five years, the “older group” (age range 5;7-7;11, mean age 7.3).

The younger group has an average omission rate of 16% and an average object clitic use of 18%. The older group has fewer omissions, average 8%, but still produces complement clitics on average only in 23% of the contexts which require a complement (see also Hamann et al. (2003,155, figure 3)). While omissions are replaced (in part) by the use of lexical DPs, no real increase in the use of clitics can be observed.

In this first cross-sectional survey, the comparison of the younger and the older group indicated that there is no dramatic development in clitic use as found for the monolinguals, the bilingual, and the L2 children.²³ Paradis (2004) corroborates the rather low percentage of clitic suppliance found for the “older group”. Her 10 SLI children are of almost the same age (mean age 7.6 years) and supply clitics in only 47.3% of obligatory contexts. However, an increase in clitic use has been found for older SLI children (mean age 9;1) as discussed in Jakubowicz (2003).

Placement errors of the types discussed here were not observed in our SLI population. Note that Paradis (2004) observes a higher suppliance of lexical objects in pronominalization contexts for her SLI children than for her other groups. She also reports absence of the ‘Cl-in-object-position’ error and rare occurrence of the ‘strong pronoun in object position’ error which she found in her L2 speakers.

4.1.5. The delay of complement clitics in normal development, SLI, L2, and bilingual acquisition

In order to highlight the difference of normal development and SLI on the one hand and the similarity of normal and early-L2/bilingual development with respect to the described delay, a further comparison can be made. Hamann et al. (1996) found that though complement clitics are expected to occur less than subject clitics in adult speech, they occur at a ratio of 1:3 on average, i.e. about 75% of all clitics used are subject clitics and the remaining 25% are complement clitics. On the basis of this adult ratio, the authors showed that Augustin’s clitic use undergoes a dramatic

²² This holds generally with the exception of 2 children with high infinitive rates. Corentin uses only 6.2% and Rafaele only 15.8% subject clitics whereas their rates of subject omission are particularly high. Lexical subjects or strong pronouns without a clitic are not frequently used, neither by the younger children (3;10-5;0), nor by the older children (5;7-7;11).

²³ The delay in the production of complement clitics as evidenced by a high omission rate is particularly pronounced in the child Rafaele who was followed in her development till the age of 5;1. At this age she still produces less complement clitics than the monolingual child Augustin at the age of 2;10.

development: Whereas only 7.3% of his clitics are complement clitics at the beginning of recording, he is close to the adult ratio with 18.2% at the end. The same sort of analysis conducted by Hamann et al. (2003) shows that there is no development from the younger to the older group of the SLI children they investigated (age range 3;10-7;11): the rate of complement clitics remains constant and resembles Augustin’s before the ‘clitic-spurt’ as shown in table 6. As for this ratio then, SLI children stagnate in the use of complement clitics, at least in the age bracket investigated here.

Table 6: *The use of subject and complement clitics in the speech of adults from the Augustin corpus, of Augustin and of the younger and older group of SLI children*

	adults	%	Aug	%	Aug	%	SLI	%	SLI	%
			2;0-2;9		2;10		3;10-5;0		5;7-7;11	
sub-cl	2.332	76.4	179	92.7	99	81.8	333	91.7	681	92.5
comp-cl	791	23.6	14	7.3	22	18.2	30	8.3	55	7.5
total	3.123		193		121		363		736	

We performed the same analysis for our two bilingual/early-L2 children (see table 7) and found that Elisa’s development resembles Augustin’s in showing a clear rise in complement clitic suppliance. Lorenzo does not show much development but could be considered proficient from the beginning. A closer analysis of his ‘complement contexts’ in the last recording revealed that they often involved lexical expressions like *faire la cuisine* ‘do the kitchen – cook’ where pronominalization is impossible. Clitics are actually used at a rate of 100% in contexts which require pronominalization.

Table 7: Ratio of subject to complement clitic use in Lorenzo and Elisa

file	Lorenzo			Elisa		
	sub-cl	comp-cl	total	sub-cl	comp-cl	total
1	56/93.3	4/6.6	60	23/100	0/0	23
2	97/87.4	14/12.6	111	45/91.8	4/8.2	49
3	105/96.3	4/3.7	109	19/100	0	19
4	64/86.5	10/13.5	74	100/86.2	16/13.8	116
5	146/87.4	21/12.6	167	139/78.5	38/21.5	177
total	468/89.8	53/10.2	521	326/84.9	58/15.1	384

4.1.6. Intermediate Summary

Summarizing what has been observed so far, L2 development emerges as different from impaired language development. We have pointed out that the delay of complement clitics can be observed for monolinguals, for bilingual and early L2 children, for adult L2 and for children with SLI. However, monolinguals, bilinguals and early L2 learners show a clear rise in the use of complement clitics, whereas the SLI children we analyzed do not show a comparable development (even if their omission rates drop)²⁴. With respect to development therefore, SLI children exhibit a different, slower profile than monolinguals, bilinguals, and early L2 children.²⁵

We also observed that early and adult L2 learners show typical error patterns which are totally absent in the productions of monolinguals as well as in the productions of children with SLI. With respect to the placement of object clitics, we thus find that monolinguals pattern with SLI children and both differ from L2 learners, early or adult.

²⁴ See also Henry (2006), who found that 10-15 year old adolescents with a childhood diagnosis of SLI produced significantly less object clitics than a control group of typical 6-year olds in an elicited production task; but see Jakubowicz (2003) who observes a rise of clitic suppliance in children with SLI between a mean age of 7;8 and a mean age of 9;1.

²⁵ These observations must be refined and enriched with Paradis's (2004) findings which indicate that, even if a delay is found for all these modes of acquisition, yet omission rates in her L2 children pattern with those of SLI children and are significantly different (higher) from the omission rates found in monolingual 7-year olds and in monolingual 3-year olds. Thus at a certain stage L2 may resemble SLI with respect to clitic omission.

4.2. Placement errors in different modes of acquisition in more detail: analysis and discussion

We now focus more closely on the placement errors identified above by also providing further data from the literature and a closer analytical discussion.

4.2.1. *Cl in isolation (and separation) errors

Errors of this type are not found in monolinguals nor in SLI children.

Our early L2 child showed this error type which we repeat below as (9). Even though *le* ‘him’ was clearly stressed in Elisa’s erroneous utterance, note here that Lorenzo’s response shows his interpreting the utterance as incomplete, as a DP starting with the article but missing the noun.

- (9) Elisa: c’est à moi, LE Lorenzo: le quoi?
 it’s to me, him/the the what
 ‘it’s mine, that one the what?’

A similar error has not been reported by other authors for early L2 children. It did not occur in Kenny’s and Greg’s speech (White (1996, 357)). It also seems to have been absent in the bilingual Dutch/French Anouk (Hulk (2000)).

It occurs in adult L2 learners, however, in a grammaticality judgement task, even if their language of origin is a Romance language. Landow (2002) tested 25 adult L2 learners of French who had different source languages. She found that 5 of 8 Spanish speakers accepted examples like (9) above, and 4 of 9 speakers from a non-clitic language did not reject it.²⁶ We speculate that in the case of the German child Elisa and, possibly, the Spanish speakers the misanalysis could be induced by properties of the L1. As pointed out in 2.2. in German the paradigm of articles coincides with that of demonstrative pronouns which in colloquial speech tend to replace personal pronouns. Articles and third person object clitics also coincide in form in French, so that an initial misanalysis is possible. A similar argument can be made for the adult L2ers of Spanish origin, considering the shape of the pronominal forms in e.g. relative constructions such as *lo que (necissito saber* ‘What I need to know’) where the demonstrative-like head of the relative has the same form as an object clitic.

A related error clearly indicating that the pronoun is not treated as cliticized to the verb but is probably treated as a Germanic pronoun occurs in cases where the clitic is separated from the verb. Such an error has been reported for the bilingual Anouk (Hulk (2000)) as shown in (10a,b) and occurs in the late recordings of the early L2er Greg with a subject clitic (White (1996)) as shown in (11a,b). This type

²⁶ 1 of these was German, 1 English, and 2 Chinese speakers were not certain.

of error is rare, however, for early L2ers and bilinguals, and we did not find it reported for adult L2ers in the literature.²⁷

- (10a) Je la aussi mets dans la boîte Anouk 3;10,07
I her/it also put in the box
'I also put it in the box'
- (10b) Tu peux le très bien faire Anouk 4;06
You can him/it very good do
'You can do it very well'
- (11a) On juste veut pas Greg month 20
one just wants not
'we just don't want (that)'
- (11b) On juste peut voir Greg month 20
one just can see
'we just can see'

4.2.2. *Cl in object position

This error concerns the location of the clitic in a non-clitic, argument like position. It is absent from the spontaneous production of monolinguals, and also from the speech of SLI children.

We found it to be the predominant error in the speech of the early L2er Elisa in her early recordings (100%) and argued in Belletti and Hamann (2004) that Elisa, misled by the coincidence in the form of articles and clitics described in 2.2. and referred to in 4.2. above, is assimilating French clitics to German pronouns which can be weak or strong. Analysing French complement clitics as weak pronouns allows her to entertain one uniform hypothesis about pronouns in both her languages. This error has also been discussed by White (1996) for her two early L2 learners of French. Although White did not find a clitic as the complement of a preposition in these children's speech, and Kenny never produces a clitic in the position of a DP complement, Greg does produce some such errors as shown in (2c) repeated here as (12).

- (12) moi, j'ai trouvé le Greg month 14
me, I have found him/it
'Me, I've found it'

²⁷ Landow (2002) reports of her L2ers that the sentence **Je lui aussi telephone* is judged as grammatical by about 50% of the participants, even those of Romance origin.

White's (1996) table 7 shows that Greg produces more such errors in later recordings (at 20, 25, 27 months). At month 14, Greg omits 4 complement clitics, he produces 15 correctly placed complement clitics and one case of '*Cl in object position'. At month 20 he omits 6 clitics, uses 31 correctly and has two errors of the type discussed here; at month 25 he omits 12, places 23 correctly and has 1 error, and at month 27 he has 15 omissions, 19 correctly placed clitics and 3 such errors. Especially the concomitant high omission rate shows that at this stage, he has not fully mastered complement clitics so that the occurrence of this error at this stage seems to correspond to Elisa's production of this error after 16 months of systematic exposure.

For bilingual children the picture is more articulated. Crysmann and Müller (2000) do not find this error in their two French/German bilinguals. However, the error has been reported for Anouk (Hulk (2000)), the child with a language combination (French/Dutch) very similar to Elisa (French/German) and the children discussed by Crysmann and Müller (2000). We find (13a,b,c) as examples, though we cannot estimate how important this error is in percentages. Hulk (2000) mentions that 10% of Anouk's complement clitics are placed incorrectly but her list also includes the separation error (10) quoted in 4.2.1 and some '*Aux Cl PPart' errors to be mentioned in 4.2.3.

- | | | | |
|------|----|---|---------------|
| (13) | a. | Je prends la
I take her/it
'I take it' | Anouk 3;03,23 |
| | b. | Je veux la comme ça
I want her like that
'I want her like that' | Anouk 3;03,17 |
| | c. | Je couper le pas
I cut (inf) him/it not
'I don't cut him/it' | Anouk 3;04,28 |

This particular error has been discussed often in the literature on adult L2 acquisition, and we take examples (14a,b,c,d) from Hulk (2000) who quotes Connors and Nuckle (1986), Zobl (1980), Gundel and Tarone (1983), Grondin and White (1996), van der Linden (1985). Examples (15a,b) and (16a,b) are taken from Granfeldt and Schlyter (2004). Percentages of the occurrence of this error are not available from the references, but it is noted as being striking and frequent in a certain period.

- (14) a. Il veut les encore
He wants them still
'He still wants them'
- b. Le chien a mangé les
the dog has eaten them
'the dog has eaten them'
- c. Moi j'ai trouvé le
me I have found him/it
'me, I have found it'
- d. Il ne pas prend le
he (ne) not takes it
'he does not take it'
- (15) a. Elle demande la Petra, 5 months of exposure
She asks it/her
'she asks for it'
- b. Elle croit la Petra, 5 months of exposure
she believes her/it
'she believes her/it'
- (16) a. On prend le gaz et refroidir le Karl, 8 months exposure
one takes the gas and cool him/it
'you take the gas and cool it'
- b. On refroidir le dedans Karl, 8 months exposure
one cool him/it therein
we cool it in there

4.2.3. *Aux Cl PPart

As it is generally the case with clitic placement, no error of this type is found in monolingual acquisition. See Rasetti (2003) on the monolingual children of the Geneva corpus, and see also Zesiger *et al.* (2006) on elicited production. Neither has it been observed in the speech of the 11 SLI children under investigation.

This error was observed in the early L2er Elisa as noted in 4.1.2., but is not mentioned for the two early L2ers of English origin discussed by White (1996). It is not observed in our bilingual child Lorenzo, but has been frequently observed for bilingual children with Germanic/Romance language combinations.

In Hulk (2000) we find examples (17a,b) and also (18a,b,c,d,e,f) from Anouk's mother's diary occurring at around 4;06. Comparing Anouk's age of production of the '*Cl in object position' errors cited in (13a,b,c) and of these examples of '*Aux Cl PPart', we find that the latter occur later and persist for about a year. (Percentages are not available for this error type in Anouk's speech; the error in (18a,b) can be considered of the same type).

- (17) a. T' as le mis trop chaud Anouk 3;06,25
you have it put too hot
'you have made it too hot'
- b. Il a le mis à l' envers Anouk 3;09,01
He has it put to the wrong side
'he put it on wrong'
- (18) a. On a les tous Anouk around 4;06
one has them all
'we have them all'
- b. Quand t' as les tous, tu peux jouer
when you have them all, you can play
'when you have them all, you can play'
- c. Pourquoi t' as me reveillé?
why you have me woken up
'why did you wake me up?'
- d. Pardon, j'ai pas le vu
pardon I have not it seen
'pardon, I did not see it'
- e. Toi t' avais le bu!
you you have it drunk
'you drank it'
- f. T' as le pas donné
you have it not given
'you did not give it'

Crysmann and Müller (2000) describe problems in this particular area for their bilingual French/German children, Ivar (19a,b,c) and Caroline (20a,b).

- (19) a. Après il a se réveillé Ivar 3;02,14
afterwards he has himself woken up
'afterwards he woke up'
- b. Il a se fait mal Ivar 3;02,8
he has himself done bad
'he has hurt himself'
- c. Il il faut que t' as te garé sur la rue Ivar 4;00,4
it it must that you have yourself parked on the street
'it's necessary that you have parked in the street'
- (20) a. La maman elle a – elle avait se fait mal Caroline 3;08,11
the mom she has she had herself done bad
'the mother has hurt herself'
- b. Il a- il a se caché Caroline 3;09,22
he has he has himself hid
'he has hid himself'

They point out that this kind of placement error concerning the reflexive clitic *se* 'him/her/itself' always cooccurs with the choice of the wrong auxiliary. Crysmann and Müller (2000) show that after age 4;04,4 Ivar stopped making the placement mistake and he also stopped using "avoir" with the reflexive clitic. Note here that Crysmann and Müller (2000) observe the mistake only arising with reflexive clitics and that they assume a principled reason for that. Indeed, they found the same mistake only involving reflexives also in an experiment of elicited production run with 6 different bilingual children (Crysmann and Müller (2000,227)). However, the reason cannot be too principled as the same error is also found with non reflexive object clitics as illustrated by the examples (17) and (18) above from bilingual Anouk. We also observe that such a misplacement concerning reflexives does not occur with monolinguals (Rasetti (2003,298) and Zesiger *et al.* (2006) on elicited production). Our early L2er Elisa produced the error with a reflexive accompanied by the wrong choice of auxiliary (3b), but also with an accusative clitic (3a), repeated below.

- (3a) ça a m'étranglé, Elisa 5;5 (repeated)
that has me strangled
'that strangled me'

- (3b) regarde, là j'ai m'étranglé Elisa 5;5 (repeated)
look, there I have me strangled
'look, there I strangled myself'

The error has been discussed for adult L2 by, Granfeldt and Schlyter (2004) as mentioned in 4.1.3, example (6). These authors also quote (21) as such an error and point out that this type of error occurs later than the '*Cl in object position' error illustrated in (15) and (16) for the same speakers.

- (21) il a lui assis (Petra, 7 months of exposure)
he has him sat down
'he sat him down'

We also find this error in the adult L2 errors quoted from Connors and Nuckle (1986), Zobl (1980), Gundel and Tarone (1983), Grondin and White (1996), van der Linden (1985) by Hulk (2000), Towell and Hawkins (1994), and in Herschensohn (2004,224) it ranges between 25% and 29% of the relevant configuration, see (22) as an example. It also occurred in the grammaticality judgment task administered by Landow (2002) particularly in speakers with German as their source language.

- (22) Vous avez la pris Emma II, from Herschensohn (2004)
you have her taken
'you have taken her'

In conclusion, we see that this error type does not occur with monolinguals or SLIs neither with accusative clitics nor with reflexives. In contrast, it does occur with both clitic types for some bilinguals, for others it only occurs with the reflexive, and for the bilingual child in two Romance languages it has not been observed. The error also occurs for our early L2 child (German/French), and is attested in adult L2, particularly in learners of French with German as their source language, and it also occurs in speakers with English as L1 (Herschensohn (2004)). This error may stem again from a misanalysis of the pronoun allowing for a uniform treatment of pronouns in both the learners' languages, much as in the case of '*Cl in object position' discussed in 4.2.2.

4.2.4. Restructuring errors

Errors of the type '*Cl Mod Infinitive' have not been reported for monolinguals nor for children with SLI. We did not observe such errors in our early L2er either (see 4a,b) and can claim that in this respect she conforms to the French pattern from the beginning. Such errors have not been reported by White for her early L2 children, either.

As to bilinguals, the picture is somewhat mixed. Crysmann and Müller (2000) observe the absence of this error type in Ivar and Caroline, but among the errors

quoted by Hulk (2000) for Anouk there are several examples of this kind, one with a modal (23a), one with *savoir* 'know' (23b) and one in a periphrastic construction with *aller* 'go' (23c). (23a,b) are from Anouk's mother's diary and occur at around 4;06, the periphrastic example occurs earlier in the same file in which some '*Aux Cl PPart' errors were found.

- (23) a. Je n' en veux jamais manger Anouk 4;06
I ne of that want never eat
'I do not ever want to eat that'
- b. Je le sais pas faire Anouk 4;06
I it know not do
'I can't do that'
- c. Tu le va fermer Anouk 3;07,29
you it will close
'you will close it'

We noted earlier that our bilingual child, Lorenzo, never misplaces his complement clitics. This is also true for Restructuring contexts, where errors could be expected through interference of his other language, Italian, which has 'Clitic Climbing', i.e. Cl-Mod-Inf structures. There is only one context of a clitic with a modal, but significantly this occurs early (first recording) and is correct (see (24)), thus indicating the same pattern as monolinguals also found, for this child, with other aspects of cliticization such as proclisis/enclisis, as discussed in Belletti and Hamann (2004,166).

- (24) No, c'est pas moi qui devrais l'amener Lorenzo 3;5
No, it is not me who should it bring
'No, it's not me who should have brought it'

The restructuring error has been found in adult L2 and we point here to the findings of Landow (2002) obtained through grammaticality judgments who observes that all of her speakers accepted examples (25a,b). This includes Spanish speakers for whom this could be interpreted as transfer because Spanish, like Italian, has Clitic Climbing: 5 out of 8 Spanish learners of French accepted (25a) and 4 out of 8 accepted (25b). But it also includes English speakers, speakers of German origin (who find the French order in their language) and Chinese speakers who do not have (clitic) pronouns at all.²⁸

²⁸ Interestingly, even speakers with the source language Brazilian Portuguese accepted (25a,b), though Brazilian allows for the French order.

- (25) a. *Il nous peut parler
 He us can talk
 ‘he can talk to us’
- b. *Je te veux aider
 I you want help
 ‘I want to help you’

There are three things to be noted here. First, whereas adult L2ers systematically show this error, it is not necessarily documented for early L2. Second, in language combinations like Italian/French or Spanish/French we might expect interference or transfer in all learner modes. However, our bilingual French/Italian child did not produce this error, whereas it is systematically produced by Spanish adult L2 learners of French, highlighting the difference in these learner modes. Third, adult L2 learners who do not have clitics nor Restructuring in their source language but also the bilingual child Anouk accept or produce such errors. As the erroneous order has neither been in the input nor in the other/source language, we speculate that at this point we see UG at work. Restructuring is a valid hypothesis that might be entertained once the learner has realized that the pronouns of the new/other language are not quite of the same type as in her other language.²⁹

4.2.5. Aspects of the acquisition of Italian complement clitics

In the discussion of error types we have up to now focused on French as the target language and have looked for the origin of certain errors in the possibly different systems of the source languages. In order to test our assumption about the role of the L2 system, we now turn to Italian as the target language, looking at learners with source languages considered also for French. We make reference here to the similarities and differences discussed in 2.3. which we summarize briefly in the following.

French and Italian have complement clitics of the same nature which share morphosyntactic properties of various kinds the most important one being that pronominal complement clitics are verbal clitics which cliticize as heads onto the (functional head containing the finite) verb. Different from French, however, Italian does not have conspicuous instances of weak pronouns comparable to French subject pronouns.

Interestingly, we find that, despite their similar, possibly identical, nature, the acquisition of complement clitics appears to differ in part in Italian from what we

²⁹ In an elicited production task administered to adult L2 speakers of Italian with English and Spanish as the other languages, Bennati and Matteini (2006) found that the Clitic climbing option was entertained by both groups.

have seen in the preceding sections on French.³⁰ We concentrate here on the placement errors discussed above. While monolingual and SLI acquisition of object clitics in both languages appears to be essentially faultless (as can be deduced from the literature; references throughout and, for Italian, Guasti (1992), Schaeffer (2000), Bottari et al. (1998)), abstracting away from differences in the delay of acquisition and omission rates, bilingual and early/adult L2 acquisition reveal an important difference: no placement errors have been so far documented in these modes of acquisition of Italian object clitics. Although the literature on the topic is not particularly rich, from what is known, no placement errors of the ‘Clitic in isolation’, ‘Clitic in object position’ and of the ‘Aux CL Ppart’ kind are instantiated in bilingual and L2 Italian, neither in elicited production (e.g. Leonini & Belletti (2004)), nor in spontaneous production (Ferrari (2006)).

Leonini and Belletti (2004) investigated 26 adult L2 speakers of Italian where 16 speakers were of German origin, 3 were French, 2 were Polish, 1 was Dutch, 1 Russian, 1 Greek, 1 Albanian and 1 was Bosnian. On average, these speakers supplied clitics at a rate of 39%, omitted clitics at a rate of 14%, and supplied lexical complements at a rate of 40% whereas the control group supplied clitics in 91% of the cases, used only 7.7% lexical complements and never omitted the complement. These errors strongly resemble our findings for French monolinguals and SLI children. They also correspond to some of the error types (omission and suppliance of lexical complements) found in our early and adult L2ers. However, Leonini and Belletti (2004) observe that no placement errors occurred³¹.

As to early L2/bilingual speakers of Italian, Ferrari (2006) analyzed two German/Italian bilingual children, Vincenzo (2;5-3;0) and Elisa (2;10-3;5), and found that the overuse of lexical complements is the most frequent error. Vincenzo supplied clitics in 57% of the cases, omitted clitics in 9% and used lexical complements in 34% of the cases, her participant Elisa (not to be confused with the early German/French L2 child we were investigating) supplied clitics in 59% of the cases, omitted

³⁰ See also Schmitz and Müller (in press) who point out a further distinction between the two languages showing up in both monolingual and bilingual acquisition, i.e. the fact that Italian object clitics seem to appear earlier in Italian than in French. See also results in Leonini (2006) on child monolingual acquisition of complement clitics in Italian, which are coherent with this conclusion. This is a potentially interesting asymmetry for which some of the considerations below and in section 5 may be relevant.

³¹ Similar results are discussed in Leonini (2006) for adult L2 and monolingual child Italian. The absence of placement errors is confirmed in corpora of spontaneous production put together at the University of Siena.

clitics in 12% and supplied lexical complements in 29% of the cases. Placement errors of the kind discussed for French did not occur.³²

This difference in the typical error patterns in the acquisition of two closely related Romance languages like French and Italian might at first glance be surprising. We suggest, however, that it may not be due to hazard but principled once the role of L2 is taken into account. We speculated that the origin of the placement errors in early and adult L2 French could be the occasional misanalysis of the clitic as a weak/strong pronoun. This analysis, however, is not favored by the target language Italian which does not instantiate weak pronouns systematically. We will explore this idea further also for its theoretical ramifications concerning the comparative issue in the following, concluding, section.

5. Concluding summary and remarks

We recapitulate here the main findings of our overview, also introducing some further element of discussion. For complement clitics we have observed a delay in all modes of acquisition, with some variation in the omission rates across groups, thus highlighting an area of French grammar which is particularly hard to acquire. Adding the developmental perspective, it reveals that impairment gives rise to a longer delay.

Focussing on placement errors, SLI patterns with L1 in not showing placement errors in spontaneous data. Placement errors are documented for L2 acquisition, early and adult, and for some bilinguals. We particularly discussed four error types: ‘Clitic in isolation’, ‘Clitic in object position’, ‘Aux CL PPart’ and the Restructuring error.

We propose that the ultimate reason for the detected placement errors of the first three kinds in bilingual and L2 French is to be recognized in an occasional misanalysis of the object clitic as a “weak” pronoun rather than a syntactic clitic (or possibly a “strong” pronoun for the ‘Clitic in isolation’ case).

We further assume that this misanalysis be favored by the very existence of weak pronominal subject pronouns in French, usually referred to as subject clitics (see discussion in 2.1.1.), whose nature is more readily compatible with properties of the pronominal system of the other language of the learner (e.g. a Germanic language in the typical case discussed here). We submit that our L2 Italian data from 4.2.5. indirectly support this interpretation. Lack of an analogous misanalysis for Italian

³² A peculiar misplacement occurred in Restructuring contexts, producing the order ‘*Mod Cl Vinf’, discussed in detail in Ferrari (2006), where it occurred at a rate of 63% for Vincenzo and a rate of 27% for Elisa. Ferrari interprets this error as stemming from Verb syntax rather than from a misanalysis of the Italian clitic pronouns by the two children. Especially significant in this connection is the lack of the ‘Aux Cl Ppart’ error in both these children.

complement clitics may be expected as standard Italian lacks conspicuous instances of overt weak pronouns which could mislead the learner in the treatment of real syntactic (complement) clitics. If this proposal is on the right track, it suggests that both, properties of the target second language and of the first/other language may influence the analysis adopted by the learner. In such a case, the option shared by both languages and covering more data in the target second language will be privileged at some initial stage of acquisition. (See also the discussion along similar lines in Granfeldt and Schlyter (2004)). The interaction of properties of the grammatical systems of the source and the target second language thus plays a crucial role. Hence, this leads us to the expectation that placement errors should not be found in typical and atypical monolingual acquisition. This is precisely what the results from different sources systematically show.

Our L2 and bilingual data from French and Italian – once taken as suitable theoretically relevant empirical evidence - indicate that L2/bilingual results may reveal subtle differences between closely related languages in closely related domains (see Belletti (2007) for relevant discussion). One such domain discussed here is the pronominal system of weak and clitic pronouns in French and Italian. The differences between the two pronominal systems are made more visible through the peculiar lenses of bilingual and L2 modes of acquisition which thus contribute a special means of comparison. Seen from this perspective, the discussed contrasts between French and Italian L2-data may supply a further indirect indication for an analysis of French subject pronouns as weak pronouns, not as syntactic clitics.

The “Aux CL PPart” type error as well seems to identify a phase in L2 acquisition where the hypothesis is being entertained that the complement clitic is a weak pronoun. We may further note here that the ‘Aux CL PPart’ which is found in the German child Elisa occurs in a phase where subject clitics are clearly acquired. Assuming that this means that their nature as weak pronouns is recognized, it could again be suggested that the same classification is tentatively extended and tried out for complement pronouns. As noted, this would allow Elisa to adopt the same analysis for both the French and the German pronoun systems. Arguably, this analysis constitutes an overall more economical UG option involving a less complex syntactic derivation (see 2.1.) which is directly prompted by properties of both the L1 and the L2. The fact that this error is also found in adult L2ers with English as L1 corroborates this interpretation as English also has weak pronouns. Again, the weak pronoun hypothesis may be entertained given the interaction of the two grammatical systems - L1 and L2.

Clitic Climbing occurring in Restructuring contexts in French is (possibly) attested as a transfer phenomenon in adult L2, but interestingly it also occurs in adult L2 speakers whose L1 does not have clitics, as mentioned in section 4.2.4. As there are cases reported in (23a,b,c)) also for the bilingual Dutch/French child, we suggest that the child and, for that matter, the adult L2 learners as well, are here trying out an

option which is available through UG. As we are not aware of this type of error in L1 (a)typical monolingual acquisition of French, we further suggest that this could be a consequence of the fact that the bilingual setting provides an input which is at the same time richer and poorer than a monolingual one. On the one hand, there is arguably less input data for each single language. On the other hand, more UG options manifest themselves through the input data of the two (or more) languages. In consequence, different UG hypotheses are likely to be tried out more readily in these particular conditions of language acquisition. Note that this is not denying that also monolingual acquisition can involve stages corresponding to UG options other than the ones implemented in the target (L1) language (see Crain & Thornton (1998), and Rizzi (2005), UdDeen (2006), for recent discussion). The suggestion here is that the bilingual setting favors the “trying out” yet more.

We conclude by highlighting the general features of our overview which has compared different modes of acquisition in the same empirical domain in French. We have suggested that the higher complexity of the syntactic derivation involving complement clitics as compared to subject pronouns is responsible for the attested delay in the acquisition of complement clitics in all modes of acquisition. We have also suggested that complement clitics may be analysed as weak pronouns in some modes (early and adult L2), leading to misplacement errors. The latter case is interpreted as motivated by two complementary economy considerations: i. the fact that the analysis allows for a uniform treatment of pronouns in both the languages involved; ii. the fact that the analysis implements a less complex syntactic derivation. Furthermore, we have proposed that, although limited in absolute number of instances, the very existence of misplacement errors can highlight the role of the different grammatical systems involved.

Finally, the Restructuring error discussed appears to be particularly interesting in that it ultimately suggests a direct role of UG. Overall, the study of the various error types in the different acquisition modes of complement clitics in French has offered a further novel illustration of the reciprocal contribution that linguistic theory and acquisition data can provide to each other to enhance their respective understanding.

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