



**The acquisition of object clitics and  
definite articles:  
Evidence from Italian as L2 and L1**

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Il linguaggio è il linguaggio dell'essere, come le nuvole sono le nuvole del cielo  
Martin Heidegger, Wegmarken-HB.194

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# The acquisition of object clitics and definite articles: Evidence from Italian as L2 and L1.

## Abstract

This thesis examines the mastering of 3<sup>rd</sup> person object clitics and definite articles in Italian first (L1) and second (L2) language acquisition. It will primarily focus on a case study of L2 Italian conducted with a group of German adult learners of Italian at different levels of L2 proficiency, specifically intermediate, advanced and near native. On the basis of empirical data involving different methodologies, i.e. elicited vs. spontaneous production, it will be demonstrated that L2 learners investigated here show a differential pattern of acquisition with regard to these elements, despite the fact that 3<sup>rd</sup> person Romance clitics and definite article share the same categorial status D°. While they display a high competence of definite articles they do not master object clitics at the same level.

Our data provides evidence for the fact that the L2rs investigated here are able to restructure their grammars: they can reset the parameter values which are not instantiated in their L1, although cases of L1 transfer are individuated in the data.

The L2 data reported here also help to shed light on the topic of ultimate attainment of L2 acquisition, thus demonstrating that optionality is a property also of the near native learners participating in our study.

Furthermore, original data from L1 acquisition of Italian will be investigated in the present work. A comparison of the results from the two modes of acquisition reveals that there are differences in the way in which object clitics and definite articles are acquired by the two modes.

It is in the spirit of this work, therefore, to demonstrate that comparative acquisition data can be considered as a potential contribution which can support a better understanding of linguistic speculations.

In the course of this thesis a comparative approach will be adopted: our findings will be discussed along the lines of previous research on L2 and L1 acquisition of determiners and cliticization in Italian and other languages.

## 0. Introduction

In this thesis we present a study in which we investigate the nature of the grammars developed by Italian learners in different acquisition contexts, namely first language acquisition (L1) and second language acquisition (L2), with respect to their mastering of functional categories (FCs). Specifically we will be concerned with the acquisition of object clitics and determiners by a group of 21 adult L2 learners of Italian with German as L1, who are at intermediate, advanced and near native levels of proficiency, as determined by standardized proficiency tests.

Results will then be compared with original data from a monolingual Italian child (age 1,6; 2,8).

As will be shown in the introductory chapters access to FCs is a prerequisite both for cliticization and for the determiner system, hence it is reasonable to explore evidence for their existence in the child and adult grammars.

We ask whether there are differences in the process of acquisition of L2 and L1 as far as these two elements are concerned. The relation between the acquisition of object clitics and of determiners is made possible by the fact that in Romance systems, clitics are often formally close to determiners: specifically, in Italian, feminine forms of 3<sup>rd</sup> person accusative pronominal clitics are identical to definite articles, and the masculine forms are close or identical. Moreover, as shown by much recent research on the topic (see, a.o. Belletti 1999, Rizzi 2000, Cardinaletti & Starke 1999, 2000), third person Romance clitics and determiners belong to the D<sup>o</sup> category, being the clitic assigned an impoverished DP structure which contains nothing but the clitic.

The aim of this study is thus to determine what different acquisition contexts and learner populations can tell us about the acquisition of determiners and cliticization and their related syntactic structures and how different investigation methods can be used to compare the results, within the spirit of

current work on acquisition of functional categories (see, for example, the studies edited by Prévost and Paradis 2004. See also Belletti 2005 for an analysis of how empirical data from different modes of acquisition can provide a special kind of evidence for linguistic theory).

For this purpose two different methodologies have been used to investigate the L2 mastering of cliticization and determiners: an elicitation task procedure and spontaneous production data.

Results on L2 will finally be compared with original data from a monolingual Italian child, Denis (1,6; 2,8).

This thesis is organized as follow:

Section 1 will review some of the proposals and hypotheses which have been made in recent research on (first and second) language acquisition. We will be mainly concerned with the issue of functional categories, considering the fact that they have been claimed to play a crucial role in grammatical knowledge. As a matter of fact, functional categories have been singled out as an area of difficulty for language learners in all contexts, namely at early stages of first language acquisition, in child and adult second language acquisition, as well as in children with specific language impairment SLI or other pathology.

Regarding the issue on second language acquisition specifically, we will focus on syntactic optionality/variability, a phenomenon that has received increasing attention in linguistic theory and in developmental studies.

As for child acquisition, we will report on data from previous studies which have focused on the acquisition of object clitics and determiners in different contexts: namely, first language acquisition, bilingualism and language disorders (see, a.o. Hamman & Belletti 2005).

Section 2 will be concerned with theoretical background and will present some proposal developed in recent studies which have focused on the pronominal system in Romance and Germanic Languages. Specifically, we will take into account the analysis proposed by Cardinaletti and Starke (1999) on the existence

of three classes of pronouns across languages – strong, weak and clitic pronouns with different degrees of semantic, syntactic and morpho-phonological richness. It will be shown that while the three classes are attested in Italian, German has only strong and weak pronouns.

Furthermore, as far as object clitics in Italian are concerned, we will adopt the analysis presented by Belletti (1999), Cardinaletti and Starke (2000), Hamann (2002) according to which clitic pronouns are head D°s of impoverished DPs containing nothing else but the clitic. The parallelism between object clitics and determiners is thus made possible; moreover, in Romance, clitic systems are formally close to determiner systems as 3<sup>rd</sup> person clitic pronouns have the same morphological form as the material generated DP-internally. As far as definite articles are concerned, a more complete analysis of these elements will be given in chapter 3.

Finally, chapter 3 will present the study on the acquisition of object clitics and determiners in Italian as first and second language.

In the first part of the chapter, we will present the results on L2: more specifically, we will first analyse the elicitation data, secondly data from spontaneous speech will be taken into account. Then, we will compare the results from the two methodologies.

In the second part, we will present the study on acquisition of Italian as L1: we will be first concerned with object clitics and secondly with determiners.

The final part serves as concluding section: a comparison of the results from the two different modes of acquisition will be given there and the extent to which our empirical findings can constitute a special kind of evidence for the overall general linguistic theory will be discussed.

In the course of chapter 3, our findings will be also compared with data presented in recent research on language acquisition (L1, L2, bilingualism and pathology) which has focused on functional categories.

## 1. Some issues on Language acquisition

In this chapter we will report on the main topics which have been discussed in recent research on first and second language acquisition.

We will first review some of the hypotheses which have been proposed in the literature to characterize and explain the linguistic systems that second language (L2) learners develop.

Secondly we will be concerned with L1 acquisition, and we will focus in particular on two features of early grammars which are specifically relevant for the present study, i.e. article omission and object omission. For this purpose, we will present results from research on L1 acquisition of Italian and other languages which have dealt with these phenomena.

### 1.1 The acquisition of a second language (L2)

Recent research on second language (L2) acquisition over the last two decades has focused on the nature of the mental representations, or interlanguage grammars (ILGs), attained by L2 learners<sup>1</sup>.

L2 research drawing on the Principles and Parameters framework (Chomsky, 1981) has examined various L2 linguistic structures, thereby investigating variation among languages, the role of language transfer, and parameter (re)setting in L2. More recently, L2 research has looked in detail at the nature of developing grammars, from the initial to the final states, and the kind of grammatical knowledge that characterizes stages of development (White 2000). A further issue is the extent to which the L1 grammar contributes to the L2 initial state.

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<sup>1</sup> The concept of interlanguage grammars was proposed early in 1970s by researchers (Corder 1967, Selinker 1972, a.o.) who observed that L2 acquisition is systematic and learners do not produce random mistakes. Similarly to L1 acquisition, L2 acquisition is thus governed by specific rules.

As far as this last point is concerned, three possibilities have been investigated: the first is the Minimal Trees Hypothesis (Vainikka & Young-Scholten 1994) according to which only lexical categories and their linear orientation transfer from the L1 grammar. The L2 learners' early grammar is thus incomplete and lack functional categories. The second approach is the Valueless Feature Hypothesis (Eubank 1994), according to which the L2 initial state comprises all of the L1 grammar, except for the values of features under functional heads, which are initially unspecified or inert<sup>2</sup>. The last approach is the Full Transfer/Full Access Hypothesis (Schwartz 1998; Schwartz & Sprouse 2000; White 2000), which assumes that the whole of the L1 grammar, including functional projections, determines the initial state of L2 acquisition. The learner initially adopts a representation based entirely on the L1 grammar; however, when this grammar cannot assign a representation to the input, restructuring takes place.

Although these three accounts differ greatly in terms of what they attribute to the L2 initial state, they all hypothesize that L2 acquisition is constrained by UG. As for this last point -namely whether Universal Grammar remains available in non primary acquisition, thus whether adult L2 acquisition is constrained by the linguistic principles that determined L1 acquisition- alternative accounts have been proposed.

Evidence of the fact that children have no problem in fully acquiring their L1, while L2 learners do not often succeed in completely acquiring their L2, has lead some authors to argue for an age effect on L2. Johnson and Newport (1989), for example, claimed for the Critical Period Hypothesis for L2-acquisition, according to which the ability to acquire a language declines with age<sup>3</sup>.

On the basis also of such evidence, the No-Access Hypothesis (Clahsen & Muysken 1986, Clahsen 1988, Meisel 1991, 1997), has been proposed, according

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<sup>2</sup> During the L2 development the acquisition of inflectional morphology drives the appropriate L2 values.

<sup>3</sup> Other researches however have shown an absence of age effects on L2 acquisition (see, for example, White and Genesee (1996)).

to which adult L2 acquisition is substantially different from child L1 acquisition, since UG in the former is no longer involved<sup>4</sup>.

As has been shown in the literature, however, there is considerable evidence to suggest that interlanguage grammars are constrained by principles of UG, since learners are sensitive to subtle properties of the L2 that are undetermined by the input<sup>5</sup>.

The fact that L2 acquisition is constrained by UG is therefore uncontroversial and fully adopted in the present work.

## 1.2 Optionality

One of the central topics under investigation in the recent literature on language acquisition has been optionality, which appears to be a characteristic of developing grammars (see, among others: White (1992), Eubank (1994, 1996), Sorace (1999, 2000), Prévost & White (2000)). As a matter of fact L2 learners at any stage of development show variability in the use of verbal and nominal inflection and associated lexical items. Morphology related to Tense, Agreement, Number, Case, Gender, etc. and functional words like determiners, auxiliaries and complementizers are sometimes present and sometimes absent in L2 production data, in contexts where they would be obligatorily produced by native speakers. Moreover, certain forms are not necessarily correctly produced when they are present, or they can be overused in contexts where they would not be

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<sup>4</sup> According to this view L2 acquisition is guided by distinct cognitive principles, such as “general learning strategies” (Clahsen 1991), linear sequencing (Meisel 1997), or inductive learning (Carroll 2001).

It is important to note, however, that this view of SLA does not necessarily imply that the knowledge of a target language acquired by L2 learners is not constrained by UG. As claimed in Meisel (1998), indeed, invariant UG principles of UG continue to shape acquisition in L2, but learners do not have access to parameter values which have not been instantiated in their L1, nor can they reset parameters to a new value.

<sup>5</sup> One could not exclude that this knowledge come from L1, denying any new access to UG in L2 acquisition with the only exception of that determined by L1 (see, a.o the Failed Functional Features Hypothesis proposed by Hawkins and Chang 1997, according to which L2 learners have access only to the functional features instantiated in L1). Adopting this view, the aspects of the language where L1 and L2 differ (in terms of parameters setting) could not be acquired by L2 learners. But this is not the case. (See White (2003) for evidence of parameter resetting in the study of Hawkins and Chang).

possible in the native speakers' productions. These properties of interlanguage grammars seem then to be related to functional categories.

Underspecification is a source of optionality in Eubank's valueless features approach, according to which at initial stages of development all functional categories can be transferred from the L1 but not their specification. Functional features are then valueless (inert), rather than strong and weak, until the learner acquires their particular value in the target language, thus resulting in more than one option possible in the same context. Prévost and White propose a different view of optionality, which is seen as a surface phenomenon. According to their Missing Surface Inflection Hypothesis, optionality is caused by difficulties in the (language-specific) morphological realization of L2 features, rather than to an impaired representation of them. There is therefore a breakdown between one part of the grammar and another, as the learner not always seems to be able to access the relevant morphology (see also Haznedar and Schwartz 2000)<sup>6/7</sup>.

Optionality is also attested in advanced L2 grammars and also at steady state grammars (Sorace 1999, 2000) Lardiere (2000). Beck (1998) proposes an extension of Eubank's Valueless Features Hypothesis, claiming that interlanguage grammars suffer from some kind of permanent grammatical deficit as far as feature strength is concerned. This results in optionality which does not disappear. Lardiere (2000) claims that optional and fossilized forms at ultimate states of L2 acquisition cannot be attributable to the underlying grammar of L2 learners. Rather, they depend on differences in how morphological forms are accessed in the lexicon. This account shares Prévost and White's assumption - although they do not deal with end states - that L2 learners have abstract

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<sup>6</sup> There is therefore a divergence between surface inflection and more abstract syntactic features. L2 learners of various languages show relatively inconsistent, sometimes even random use of certain kinds of morphology, while being very accurate on related syntactic properties which depend on properties of Infl, such as Nom case, the presence or absence of Verb raising, the requirement of overt subjects. These characteristics appear to be present in initial and end states grammars, as well as in developmental stages. (in grammars undergoing development).

<sup>7</sup> Hawkins (2000) refers to this kind of approach as implying a breakdown in computation, rather than representation.

morpho-syntactic features (syntactic knowledge) but display an absence of surface manifestation of morphology (morphologic knowledge). The problem thus results in the morphology/syntax interface and reflects a problem in mapping from abstract categories and features to their particular surface morphological manifestations (Lardiere 2000; Lardiere e Schwartz 1997). As Lardiere (2000:121) points out:

<<The most coherent explanation for the L2 data is that ... learners already have knowledge of functional categories and features via prior language knowledge ...; the problem lies in figuring out how and whether to spell out morphologically the categories they already represent syntactically, i.e. the 'mapping problem'>>.

Optionality attested in Lardiere's study is quite extensive, whereas Sorace (1999) reports on a different form of optionality found in end state grammars, which is much more restricted, as the non target option surfaces in some circumstances:

<<what can be observed for L2-optionality is that, as in L1 acquisition, the pattern of preferences for one option over the other changed over time, until a potentially permanent stage is reached at which the target option is strongly, but not categorically, preferred and the dispreferred non-target option is never completely expunged, but still surfaces in some circumstances>> (Sorace 2000: 98).

Moreover, she attributes the non-target option to the L1 grammar (see also Robertson & Sorace 1999). Again, optionality is explained in terms of the relationship between two different parts of the grammar, the interlanguage syntax and the interlanguage lexicon, and it is assumed here that inappropriate lexical entries (abstract strong features) enter the derivation, thus causing variability which reflects on syntax<sup>8</sup>.

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<sup>8</sup> Note that Sorace's assumption of optionality is slightly different from what proposed by Lardiere. She claims that features are fully specified in the syntax and that these forms are entered in the lexicon, but sometimes the fully specified entry cannot be accessible - i.e. the learner may not always be able to retrieve the appropriate form for lexical insertion into a syntactic representation - hence allowing certain non-target (default) forms to be inserted.

Such results are consistent with the Separation Hypotheses which state that syntactic knowledge does not depend on overt morphology in any way<sup>9</sup>.

Finally, Ionin (2003) proposes that optionality in L2-acquisition is captured by the Fluctuation Hypothesis, according to which L2-learners have access to UG principles and parameters, but fluctuate between different parameter settings until the input leads them to set the parameter on the target value. This proposal can account for the phenomenon of multiple parameter setting in L2, which has been mostly evidenced in the syntactic domain (Wexler & Ionin, 2002) but which occurs also in the semantic domain -of article choice- (Ionin, 2003)<sup>10</sup>.

## L1

Morphological variability has also been attested at early stages of first language acquisition. However, optionality in L2 acquisition is clearly different from L1. Optionality in L1 is indeed a characteristic of transitional stages and is developmental in nature. Different theoretical assumptions about the L1 acquisitional process have been proposed in literature. They vary with respect to

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<sup>9</sup> Such Hypotheses contrast with the Reach Agreement Hypotheses which assume a close relationship between overt morphology and interlanguage syntax and relate the emergence of syntax to prior morphology. One of these Hypotheses, is the Minimal Trees Hypothesis of Vainikka & Young-Scholten (1994) which, as pointed out above, was relevant also for the debate on the nature of the initial state of L2 acquisition and the extent of L1 influence (see White 2003 for a complete overview and analysis of this and related issues). According to this hypothesis, overt morphology (related to functional categories) is not present in L2 initial grammars and functional categories are not projected. Morphology is thus the trigger for the acquisition of functional projections.

<sup>10</sup> According to Ionin (2003) the Fluctuation Hypothesis predicts the distribution of articles in L2 English. She proposes an Article Choice Parameter which governs whether articles in a given language are distinguished on the basis of specificity or on the basis of definiteness. For example, English has the definiteness setting of this parameter, while Samoan has the specificity setting. Note that such parameter is discourse-related, “which dictates whether articles encode the state of hearer knowledge or the state of speaker knowledge” (Ionin 2003, pag.29); and it does not deal with syntactic properties of the article. Hence, articles choice is not random but reflects access to the two settings of the Article Choice Parameter. Thus, L2 –English errors of article use should come in two types: overuse of *the* with specific indefinites and overuse of *a* with non-specific definites. The prediction is confirmed by empirical data from adult speakers of Russian and Korean acquiring English as L2. It is shown, moreover, that L2 learners have access to UG-based semantic distinctions which governs the choice of articles, but are not able to know which one is appropriate for English.

Note that The Fluctuation Hypothesis proposed by Ionin provides a principled way of looking at optionality in L2 acquisition.

what they see as the source of optionality. According to Structure-building approaches, such as Radford's (1990), only a subset of the adult grammar is available in the child's initial grammar. Some segments of the adult grammars, specifically functional projections, may be absent and as long as the projection is not well established the child may produce defective forms. This claim is made in the context of the Weak Continuity Hypothesis (Clahsen, Penke and Parodi 1993/1994; Vainikka 1993/1994). According to this hypothesis, while functional categories are available in the UG inventory, initial grammars lack functional categories, containing lexical categories and their projections (VP; NP; PP; AP). Clahsen (1991) and Clahsen et. al (1996) claim that one functional underspecified projection FP is available, and this underspecification causes variability. Def, Infl, Comp and associated functional projections (DP, IP, CP) emerge gradually, triggered by input.

Underspecification is also what causes optionality in Wexler (1994) and Hyams (1996) accounts according to which the whole phrase structure is available to the child from the beginning but it is underspecified. Wexler claims that is T to be underspecified, while Hyams suggests that Num is not specified in early child grammar. This results in the Optional Infinitive Stage, where an alternation between finite and non-finite verb forms is attested. Rizzi's (1994) in Root clauses Truncation Theory shares the same vein, according to which the Root Principle, whereby all matrix declaratives are CPs, is not fully operational initially in child acquisition. This means that the structural root of main declaratives can vary – it can be CP, IP or VP – and that main verbs appearing in RIs are truly non-finite<sup>11</sup>.

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<sup>11</sup> Note that variation in the use of functional morphology attested in L1 acquisition reflects a structural deficiency. Proposals along these lines are currently assumed to account for variability in L1 acquisition and child L2 acquisition as well (Prévost and White 2000), but they are probably not appropriate to account for adult L2 variability. As shown above, indeed, variability in L2 acquisition stems from difficulties in supplying the exact morphology, i.e. it derives from morphological uncertainty, rather than being structurally determined.

### 1.3 Functional categories and language acquisition

Functional categories seem thus to play a crucial role in grammatical knowledge: as briefly reviewed above they have been at the centre of the debate in both L1 and L2 which have tried to determine how much functional structure is present in early grammars; moreover properties of interlanguage grammars, such as variability, seem to be related to functional categories.

Functional categories have been noted as an area of difficulty for language learners in all contexts: optionality and variability in the use of functional categories as shown at early stages of first language acquisition, in child and adult second language acquisition, as well as in children with specific language impairment SLI or aphasia. Looking at functional categories in acquisition, results thus at central interest, since, as pointed out by Paradis and Prévost (2004), it means looking at the formal structures underlying aspects of the morpho-syntax that is problematic for language learners in general.

Under current proposals in generative grammar, moreover, parametric differences between grammars are associated with properties of functional categories (Borer 1984; Pollock 1989; Chomsky 1995). Linguistic theory distinguishes between lexical categories – verb (V), noun (N), adjective (Adj), adverb (adv), preposition (P) – and functional categories such as complementizer (Comp or C), inflection (Infl or I) often split into Agreement (Agr) and Tense (T) (Pollock 1989, Belletti (1990)), Negation (Neg), Determiner (Det), Number (Num), etc. Certain formal features (such as tense, number, person, gender, case) are associated with functional categories of a language's grammar, and form part of the UG inventory.

Crosslinguistic variation is thus related to functional categories. In a minimalist framework, movement takes place to satisfy certain requirements, the most important of which is feature checking (Chomsky 1995). Head movement is motivated by feature strength, which can vary among languages: a feature can be

strong in one language and weak in another, this having syntactic consequences and resulting in parametric variations, i.e. word order differences<sup>12</sup>.

For example, differences in adjective placement between Romance languages and Germanic languages can be accounted for in terms of the strength of the Num feature: specifically, Italian has strong Num(ber) features and nouns must raise overtly from N to Num in order to check its features, thus resulting in the N Adj surface order (“*La casa rossa*” *The house red*). German, on the contrary, has weak Num features and the movement is covert, thus resulting in Adj N order (“*Das rote Hause*” *The red house*). We will go back to this point in chapter 3, section 3.2.

It is evident, therefore, that looking at functional categories in language acquisition means also to understand some underlying grammatical properties of interlanguage grammars related to functional categories. In addition to this, as it will be shown in the present study, functional categories provide a unified base of comparison among different acquisitional contexts, which can largely contribute to a unified theory of syntactic acquisition. Comparative studies of this type provide in fact a crucial device in better revealing differences and similarities between the developmental behaviours/pattern of acquisition among different populations. In this sense, empirical data on the acquisition of functional categories in different modes of acquisition can contribute to better understanding formal aspects of linguistic theory<sup>13</sup>.

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<sup>12</sup> Therefore functional categories play a central role in minimalist syntax, since they are held to be the locus of parametric variation among languages.

<sup>13</sup> See Belletti (2005) for detailed discussion of the source of evidence that linguistic data from different modes of acquisition and from pathologies can provide to formal linguistic theory.

#### 1.4. Some phenomena of early grammars

In this section we want to deal with some phenomena related to object clitics and determiners which have been reported in the literature on child first language acquisition. Specifically we will be concerned with object omission, article omission, as well as with the so called ‘delay of object clitics’. These phenomena are known to be features of early grammars, although they do not affect all child languages to the same extent.

Object omission, for example, has occasionally been documented to occur more frequently in the earliest productions of children speaking German or Dutch than in those of children speaking French or Italian (see among other studies, Müller et al. (1996), Jakubowicz et al. (1997). See also Hamann (2002) for a review of recent studies investigating the object omission in early stages of acquisition in different languages).

Adult Dutch and German are topic drop languages and allow the constituent in first position (SpecCP) of finite clauses to be dropped, under certain contextual conditions. The dropped element requires a discourse referent. Being German and Dutch V2 languages topic-drop results in V1 sentences, as shown in the examples in 1) below (a. and b for German, c. and d. for Dutch), where the dropped element is an object (the examples are adapted from Müller & Hulk (2001):

1.

- a. Kommst du mit zur Titanic?  
Come you with to-the Titanic?  
‘You’ ll come (to see) Titanic?
- b. \_Hab ich schon gesehen  
\_have I already seen  
‘I have already seen it’

- c. Ga je mee naar de Titanic?
- d. \_Heb ik al gezeigt

Recent research has shown that monolingual Dutch and German children omit objects very frequently<sup>14</sup>. Object omission, then, results in target-deviant clauses in which V doesn't appear in first position, as in 2a) or more than one arguments have been omitted 2b) (adapted from Müller and Hulk, 2001, pag 4):

2.

- a. Da reißt Baroudi ab (Baroudi, 2:3.29)  
'There tears Baroudi off'
- b. Auch mach (ValJrie, 2:5.7)  
'Also make'

It has been observed, moreover, that during the period in which target-deviant clauses occur, structures related to the adult C-system, which are evidenced by wh-questions and embedded clauses, are lacking or are used very rarely<sup>15</sup>.

As for German and Dutch children, object omission is in fact attested as long as the C-system is lacking and the decrease of deviant object drop sentences parallels the increase of C-related constructions.

In the light of this fact, Müller et al. (1996) propose the structure in 3) which underlies the childrens object drop's construction:

- 3. [IP PRO<sub>i</sub> [IP Ivar répare ti ]  
'Ivar repairs'

In their account, children analyze null objects as in 3), wher the null object is identified by a null topic operator PRO, situated in the first IP-adjoined position.

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<sup>14</sup> Jakubowicz et al. (1997) found 52% of object omissions in the production of 7 monolingual German children with an MLU below 3.

<sup>15</sup> In the same study Jakubowicz et al. (1997) found that German children with an MLU below 3 didn't make use of subordinate clauses.

Note that 3) would be ruled out if a CP were present, since CP would create a governing position for the operator, as in 4):

4. \*[CP ... [IP PRO<sub>i</sub> [IP Ivar répare ti ]]

Therefore, according to Müller et al. (1996), the development of the C-system makes null object disappear and triggers the emergence of clitic pronouns. This account, thus predicts that clitics emerge after the development of the C-system. Such a prediction, however, is probably considered too strong with the evidence of further data<sup>16</sup>.

As opposed to data on early Dutch and German, researchers on the acquisition of French and Italian have made the observation that monolingual French and Italian children omit objects infrequently. This has been shown by Guasti (1993/94) for Italian<sup>17</sup>: in her data object omission results in sentences where the object (NP or clitic) is not realized (5a), and clauses where subject omission also occurs (5b):

5.

- |                    |                |
|--------------------|----------------|
| a. Anche lui ha    | (Marco, 2:4.2) |
| ‘He also has’      |                |
| b. Dopo fa         | (Mattia 3:0.6) |
| ‘Afterwards makes’ |                |

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<sup>16</sup> Fujino and Sano (2000) found evidence of the null object phenomenon in child Spanish. They analyzed the spontaneous production data of three Spanish speaking children (aged 1;7-2;5 / 1;7-2;7 / 1;7-2;10 and 3;5-3;9) and found that children systematically produced null objects for a certain period of time, although they are ungrammatical in the adult language. It was observed, moreover, that null object gradually decreased with age and that clitics were initially absent or few and that the dramatic increase in the use of clitics coincided with the dramatic decrease of null objects –a result which has been documented in studies on early acquisition of object clitics in different languages (see Marinis, 1999 for Greek, Bottari et al., 1997 for Italian). Furthermore, in order to test the prediction that clitics emerge after the development of the C-system, the authors investigated on the first appearance of wh-movement and object clitics. The prediction was validated for two of the three children. Data from one of the four children ‘Koki’ and the fact that they found null objects in imperatives in the Spanish-speaking children’s speech led the authors to the conclusion that although the development of the C-system and of object clitics may coincide, the former does not need to be considered as the absolute trigger for the latter.

<sup>17</sup> See Jakubowicz et al. (1997) for similar data for French.

It has been observed, moreover, that null objects gradually decrease with age in early French and Italian and that this decrease of null objects coincides with the increase in the use of clitics (see also Fujino and Sano, 2000 for Spanish).

Differentially from monolinguals, German/French and Dutch/Italian bilingual children use object drop in the Romance language to a much higher degree than monolinguals. At an early stage they use object omission very frequently and object clitics are not attested or are very infrequent in their productions. As for monolingual children, this absence corresponds to the absence of constructions related to the C-system. Moreover, target deviant object omissions decrease once the C-system is integrated in their grammar, even if they continue to be attested for a long period. At this stage the use of object clitics increases<sup>18</sup>.

Hence, with respect to object omissions, the bilingual children differ significantly from monolingual children and seem to resemble monolingual German and Dutch children.

To account for this difference in the behaviour of bilinguals and monolinguals Müller and Hulk (2001) assume that the Italian and French of bilinguals are indirectly influenced by the respective Germanic languages. The authors assume that during early stages of acquisition children use a discourse licensing strategy to license empty objects. This seems to be a universal strategy, since it has been attested for other languages at early stages of acquisition<sup>19</sup>. From the Dutch/German input, children receive ample evidence of this strategy, namely through topic drop. French/Italian children, as well, receive input which contains constructions where the object position is empty, either because the object is

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<sup>18</sup> See Müller et al. (1999) for a more detailed and complete analysis of the data. See also Müller & Hulk (2001) for details on the data.

<sup>19</sup> See for example Fujino and Sano (2000), who report on the null object phenomenon in child Spanish, as discussed in footnote 17. Null objects have also been attested in child English grammar, even if the phenomenon seems to be very reduced in this language. See, on this proposal, Hyams and Wexler (1991) who found a rate of around 10% of null objects in child English, as opposed to null subjects, which were found at a rate of around 40-60% in the same children at the same stages of development:

- ❖ Subject-object agreement regarding null arguments in child English:  
Adam (2;5-2;8): null subject (55%) vs. null object (7%);  
Eve (1;6-1;9): null subject (39%) vs. null object (13%)

preverbal or remains implicit<sup>20</sup>. Therefore French/German children at the early stages can have the incorrect idea that the object position may be optionally empty and that a discourse licensing strategy can work also in the adult language. At the next stage of development, Italian/French children discover the language-specific morpho-syntactic mechanism licensing null objects, which will replace the early discourse mechanism. Due to the influence of the Germanic languages, the bilingual child uses this strategy to a much higher degree. The German/Dutch input, indeed, reinforces the early (discourse-oriented) child grammar, thus giving an explanation of why monolingual Dutch/German children drop more objects than French/Italian children at early stages and why bilingual Germanic/Romance children use more object omission and remain in the object omission phase longer than monolinguals.

Another phenomenon has been documented in recent years in the earliest productions of children speaking a wide variety of languages, which is related to the object omission: the so called “delay of object clitics”. This phenomenon has been observed for unimpaired children (Hamann et al. 1996, Hamann 2003 among others)<sup>21</sup> as well as for SLI children (Hamann et al. 2001, Hamann 2003,

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<sup>20</sup> Here are some examples from Italian and French:

- a. Francesco ho incontrato \_ (topicalized object)  
 Francesco (I) have met  
 ‘I met Francesco’
- b. Ça j’ai vu \_  
 that I have seen  
 ‘I saw that’
- c. Francesco la conosce \_ (the empty object is licensed by a preverbal object clitic)  
 ‘Francesco knows her’
- d. Je sais \_ (implicit object)  
 ‘I know’

<sup>21</sup> Results from research on L1 acquisition of French found that there is an important delay in the acquisition of object clitics when compared to other clitic elements, such as subject clitics and reflexives (see Hamann and Belletti 2005, Hamann et al., 1996 Jakubowicz et al., 1996; Müller et al 1996). For example, in the analysis of the development of the pronominal system in one unimpaired child Augustin (2;0.2-2;9.30), Hamann (2002, 2003) observed that subject clitics appeared earlier than complement clitics. (Note that a similar delay was attested for French children by Jakubowicz et al., 1997). Moreover complement omission was frequent during the third year of life, and the rate of omission of lexical objects gradually decreased in favour of the use of object clitics. As pointed out above, early object drop has been attested also in monolingual German and Dutch children (Müller and Hulk, 2000), bilingual German-Italian and Dutch-French children (Hulk and Müller, 2000) and in Italian children. Monolingual Italian children,

Jakubowicz et al., 1998), for bilinguals (Hulk 1997, Hulk and Müller (2000) and early L2 acquisition (White 1996, Belletti and Hamann 2004, Hamann and Belletti 2005). In regard to this last population, Belletti and Hamann (2004) found however a difference with respect to the behaviour of L1-learners. In the speech of two young children (L1 = Italian and German; L2 = French) it was found from the beginning a percentage of object clitics higher than that found for monolinguals French speakers, where the acquisition of object clitics seems to be more gradual. Moreover, when present, there seems to be a difference in the distribution of object clitics among the two populations. In monolinguals, object clitics are always correctly located and appropriately used in an adult fashion: on this, Guasti (1993/1994) found neither problems of clitic location, nor problems in the domain of enclisis and proclisis in monolingual Italian children, thus showing that children speaking Italian can distinguish correctly between finite and non finite contexts. These results are consistent with those found for French by Pierce (1992). On the other hand, in early L2 acquisition clitics can occur in non-clitic position, as shown by Belletti and Hamann (2004) who found occurrences of object clitics in isolation, after prepositions and in canonical object positions<sup>22</sup>. In this respect early L2 learners seem to have a pattern similar to adult L2 learners, who also show a similar behaviour as far as the use of clitic pronouns is concerned (Prévost and White 2000, Prévost and Paradis 2004).

The term delay of object clitics involves two issues; on the one hand the fact that the acquisition of object clitics seems to be very gradual, as demonstrated by the extremely low use of clitics at the age of 2-3 in some languages (Italian/French), (see Schaeffer, 2000 for Italian)-but frequently used in others (e.g. Greek)- (see Tsakali and Wexler, 2004); on the other hand the

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however omit objects less frequently (Guasti 1993/94) showing a behaviour similar to that of French children (Jakubowicz et al., 1997).

<sup>22</sup> As for object clitics in early production of Italian, see also Ferrari (2006), who analyzed the spontaneous productions of one German/Italian bilingual child and one early German L2 learner of Italian. She found that clitics were correctly placed in proclisis with finite verbs, and in enclisis with non finite verbs and imperatives. The two children, instead, didn't place the clitic in the correct position with some of the Modal + Infinitive constructions, where no-target intermediate clitic placements have been attested.

attested omission of object clitics after they appear in children's speech. However this last property seems to be parameterized, as shown by the fact that clitic omission holds more consistently in some languages than in others. Crucially, Wexler, Gavarrò and Torrens (2003) have shown that children omit object clitics in Spanish much less often than in French and Italian, a result which is corroborated by Tsakali and Wexler (2004), who have shown that children also omit object clitics in Greek much less frequently than in French or Italian.

This phenomenon has been associated to the so-called Optional Infinitive phase, during which children make use of non finite forms also in contexts where a finite form would be expected. Crucially, studies on the acquisition of clitics in Romance and Germanic languages have provided evidence for the generalization that the omission of clitics and the use of optional infinitives occur at the same age (Wexler 1998, 2000). For examples, Hamann (2002) found a concomitant use of infinitives and omission of object clitics in an unimpaired French child<sup>23</sup>, Haegeman (1996) and Guasti (1993/1994) reported the same evidence for Dutch and Italian children.

In literature several hypotheses have been proposed which have tried to identify which aspects of child grammar cause the omission of object clitics, i.e. the children's difficulty in forming A-chain (Guasti 1993/1994), or their inability to forming a full-fledged clausal structure, thus resulting in a truncated clause structure (Hamann et al. 1996, Haegeman 1996).

The above mentioned phenomena and the fact that clitic omission is subject to crosslinguistic variation, can be accounted for on the grounds of the Unique Checking Constraint, according to Wexler (2000) and Wexler et al. (2003). The UCC is conceived as a universal principle -operating in child grammars- which prevents children from carrying out some computational process of syntax<sup>24</sup>.

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<sup>23</sup> Note however that this phenomenon has been claimed to occur less frequently in French as compared with other languages. On this proposal, it has been noted that the phase of development during which French children use infinitives is shorter than the one described for Germanic languages, see, a.o. Clahsen (1991); Radford (1990), Weisseborn (1990).

<sup>24</sup> According to such account, the optionality of object clitics in child Italian and Catalan vs. the very low object clitic omission rate found in child Spanish and Greek can be accounted for on the grounds of the UCC together with the properties of the language the child is exposed to. Catalan

Another phenomenon has been reported as a feature of early grammar: the omission of determiners. This phenomenon, which has been documented in the earliest productions of children speaking a variety of languages (see Guasti (2006) and references cited there) has also been associated to the Optional infinitive phase.

The parallelism is strengthened by some theoretical approaches recently introduced by Hyams (1994) and developed by Hoekstra & Hyams (1996), Schaeffer (1997) and Avrutin (1999), where the attempt to link this phenomenon to a failure of discourse anchorage in the temporal and nominal domain was proposed. In order to explain Root Infinitives in child languages, Hyams claimed that finiteness, which is temporal specificity, is optionally marked at the early stages of development. The consequence of a not-marked finiteness is that V doesn't move to I to check its Agreement and Tense features, resulting in an infinitive. If we extend this proposal to the nominal system we can make the hypothesis that not only temporal specificity but also nominal specificity is optionally marked in early grammars.

These approaches, therefore, predict a parallel in the acquisition of determiners and the acquisition of pronouns. Definite DPs and pronouns should follow the same pattern as both are anchored to a salient element in the previous discourse. This is what has been shown by Schaeffer (1997) in her study of the acquisition object clitics and determiners in Dutch.

Note, however, that data from Augustin reported by Hamann (2003) doesn't allow a direct comparison between the two developmental paths, as determiners appeared much earlier than object clitics in his production. At the age of 2;6 he only used 3.9% of complement clitics, but he already had 90% of

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and Italian are participle agreement languages; in languages displaying participle agreement the object DP has two uninterpretable D-features (a feature of definiteness and a case feature) which need to be double checked with two functional projections (CIP and AgrOP). The UCC principle according to which "the D-feature of DP can only check against one functional feature (adapted from Wexler et al. 2003)" is operative in children in the optional infinitive stage; such double checking would violate the UCC. On the other hand, the very low clitic omission rate found in Spanish is predicted by the UCC if we assume that Spanish objects check against only one uninterpretable feature (see Wexler et al. 2003 for a more detailed analysis on this).

determiners. Furthermore the use of determiners dramatically accelerated at the age of 2;4.22, whereas his use of object clitics increased only at the age of 2;6.16.

A similar dissociation has been reported also by Marinis (1999) in a study based on two longitudinal corpus, consisting of the recordings of five monolingual Greek children. Object clitics emerged later than definite articles, which were however fully acquired later than clitics.

As for the comparison between the non-finite utterances and determiners omission, the data from unimpaired children described in Hamann (2003) does not provide evidence for a close parallel between the two phenomena, even if from the age of 2.2 they seem to have the same developmental pattern.

It has to be noted, moreover, that although article omission is known to be a feature of early grammar, it does not however affect all child languages to the same extent. Children's omission of articles in fact varies among languages. On this proposal, Lleò and Demuth (1999) observed that there is a temporal displacement in the development of articles as children speaking Spanish produced protoarticles at an earlier stage than German speaking children. Chierchia, Guasti and Gualmini (1999), moreover, observed that Italian and French children cease to omit articles at an earlier point of linguistic development than English and Swedish children; such results are then confirmed by Guasti (2006) who looked at two new languages, Catalan and Dutch, thus showing a relative delay of Dutch children in attaining the target grammar when compared to Catalan and Italian children.

It is also important to remember that some researchers found that children omission of articles is not a haphazard phenomenon. In fact Gerken (1996) showed that children acquiring English tend to omit articles when they are in subject position, or in nominal expressions uttered in isolation, while they do not

do it with nominal expression in object position<sup>25</sup>; Caprin et al. (2003 and 2006) found the same tendency in the spontaneous productions of Italian children<sup>26</sup>.

Results from the above mentioned studies will be highly relevant for the present thesis especially in the final chapter, where new data on the acquisition on object clitics and definite articles in Italian as L1 and L2 will be presented.

To conclude this section, one last issue is worth considering. In recent research on language acquisition, data from unimpaired children has been compared with those of SLI children: Hamann (2003), for example, analyzed the production of 11 French impaired children and found a high rate of complement clitics omission in the data, as all the 11 children examined showed a strong reluctance to use complement clitics. A high rate of omission of object clitics then persisted beyond the root infinitive phase. On the contrary, determiners omission was rare. This data has been supported by Jakubowicz et al. (1998) who didn't find any omission of determiners in their French children with SLI (aged between 5;7 and 13;1), tested with an experiment eliciting isolated DPs.

It thus seems that the SLI children's development resembles the data presented for the normal children: SLI children show a parallel but delayed development with respect to unimpaired children<sup>27</sup>. This view has been discussed by Rice and Wexler (1995)<sup>28</sup>, Wexler (1998) and has been confirmed for French by the study of Hamman et al. (1996), Hamann and Belletti (2005).

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<sup>25</sup> This subject/object asymmetry was explained in terms of prosodic constraints on the output of the speech production system.

<sup>26</sup> Note that a subject/object asymmetry is found in adult speech in special registers of Italian, as shown by Guasti et al. (2004).

<sup>27</sup> Under the assumption of these studies it is expected that phenomena which are developmentally related will be impaired to the same degree, as the result of the fact that properties of early syntax or early interface are shared. On the contrary, phenomena that are not related by an underlying common principle are expected to show selective impairment.

<sup>28</sup> They suggested that SLI children show an extended optional infinitive phase that is explained by the Unique Checking Constraint Hypothesis. (See also Wexler 2000).

## 2. The pronominal system in Italian and German

The study of the pronominal system in different languages has been one of the main areas of investigation of linguistic theory over the last two decades. The present chapter is designed to review some representative analyses proposed in the literature on pronouns in Romance and Germanic languages.

We will be mainly concerned with Italian and German, as they are the two languages involved in the experiment that is reported in the next chapter 3 and which has been used to investigate the L2 acquisition of object clitics and determiners by a group of adult L2 learners of Italian with German as L1.

Thus, the present chapter constitutes the background for the next chapter 3, which is the core of this thesis.

The starting point for the present section will be the Cardinaletti and Starke (1999) proposal of the existence of three classes of pronouns: strong; weak and clitic; we will show that the three classes are attested in Italian, while German has only weak and strong pronouns. We will then provide an analysis of cliticization in the two languages specifically, taking into account recent proposals which have been presented in literature, i.e. Belletti (1999) for Italian; Haverkort (1994); Haverkort and Weissenborn (2000) for German.

### 2.1. Some issues on cliticization

On the basis of surface distributional differences, Cardinaletti & Starke (1999) identify three classes of pronouns among languages:

- ☞ strong pronouns,
- ☞ weak pronouns,
- ☞ clitics.

They have different degrees of semantic, syntactic and morpho-phonological differences.

From a syntactic point of view clitics are heads, whereas strong and weak pronouns are maximal projections XPs (see also Rizzi (1986) a.o.). Cardinaletti and Starke, moreover, suggest a hierarchy of morphological deficiency for the pronominal system, according to which strong pronouns are assumed to be the least deficient forms, behaving like NPs, i.e. having some distributional liberty: they can surface in argument positions, they can be used in isolation, they can be coordinated and modified.

Clitics, on the other hand, are the most deficient forms and are impoverished elements: they cannot be modified, coordinated and used in isolation. Moreover, clitics must occur in some specially designated positions and must remain in a very local relationship with the verb they refer to. Weak pronouns have, instead, an intermediate status between the two classes, sharing the properties characterizing deficiency with clitics (for example coordination), but sharing also some distributional property with strong pronouns (for example they can appear in the V2-initial position in V2 languages)<sup>29</sup>.

From a semantic point of view, differently from strong pronouns which can only refer to [+human] entities, weak and clitic pronouns can have both [+human] and [-human] references.

The differences mentioned above are illustrated in the examples below from Italian<sup>30</sup>:

- 1 As opposed to strong pronouns deficient (weak and clitic) pronouns cannot occur in (base) theta positions:
  - a. [Ess<sub>AD</sub>; Leis; Maria] forse l'ha fatto [\*ess<sub>AD</sub>; leis; Maria] da sola  
     [it<sub>D</sub>; shes; Maria] maybe it has done [it<sub>D</sub>; shes; Maria] alone

<sup>29</sup> See, on this proposal, the examples taken from Cardinaletti (1999, pag. 57):

- i. **Es** is teuer (Es = weak pronoun).  
     it is expensive
- ii. \***Es** und die anderen sind teuer.  
     it and the other ones are expensive

<sup>30</sup> Some examples are adapted from Cardinaletti and Starke (1999), part of them are mine.

- b. Non dirò mai [loro<sub>D</sub>; \*a loro<sub>S</sub>; \*a Gianni<sub>NP</sub>] tutto [\*loro<sub>D</sub>; a loro<sub>S</sub>; a Gianni<sub>NP</sub>]  
 Not I will never said [to them<sub>D</sub>; to them<sub>S</sub>; to Gianni<sub>NP</sub>] everything
- c. Gianni [li<sub>D</sub>; \*loro<sub>S</sub>; \*questi studenti] stima [li<sub>D</sub>; \*loro<sub>S</sub>; \*questi studenti]  
 John [them<sub>D</sub>; them<sub>S</sub>; these students] estimates [them<sub>D</sub>; them<sub>S</sub>; these students]
2. As opposed to strong pronouns deficient pronouns cannot occur in peripheral positions:
- a. E' [\*essad; lei<sub>S</sub>; Anna] che è intelligente  
 It is [3sing.fem; 3sing.fem; Anna] that is intelligent cleft
- b. [\*Essad; Lei<sub>S</sub>; Maria], lei è bella  
 [3sing.fem; 3sing.fem; Anna], she,it is intelligent left dislocation
- c. pro arriverà presto [\*essad; lei<sub>S</sub>; Anna]  
 she/it will arrive soon [3sing.fem; 3sing.fem; Anna] right dislocation
- d. Chi è intelligente? [\*Essad; Lei<sub>S</sub>; Anna]  
 Who is intelligent? [3sing.fem; 3sing.fem; Anna] isolation
3. Deficient pronouns cannot be modified and coordinated:
- a. Anche/solo [\*essad; lei<sub>S</sub>; Anna] è intelligente  
 Also/only [3sing.fem; 3sing.fem; Anna] is intelligent modification
- b. Lei e [\*essad; lei<sub>S</sub>; Anna] sono intelligenti  
 She and [3sing.fem; 3sing.fem; Anna] are intelligent coordination
4. Strong forms, contrary to deficient forms cannot refer to non-human entities:
- a. Esse (\*e quelle accanto) sono troppo alte [+human] [-human]
- b. Loro (e quelle accanto) sono troppo alte [+human]  
 3plur.fem.nom (and those beside) are too tall/high

What is obtained is thus a ranking of deficiency as described in 5, with the pronoun  $x_D$  more “deficient” than the pronoun in  $y_D$ :

5.  $x_D < y_D < z_S$  (Cardinaletti & Starke (1999:167))  
 clitic < weak < strong

In X bar terms this morphological deficiency can be represented by the fact that a more deficient element realizes less syntactic heads, since its syntactic representation contains fewer elements to be realized. Deficient elements are indeed systematically morphologically reduced with respect to strong elements (see for example the Italian dative *loro/a loro*). This yields that the more a pronoun is deficient, the fewer projections it contains. Thus, weak pronouns correspond to less syntactic structure than strong pronouns and the syntactic representation of clitics is impoverished with respect to weak pronouns:

6. clitic = weak –  $y'$  = strong –  $y'$  –  $y''$   
 where  $y'$  = a set of functional projections which belongs to strong pronouns  
 but is lacking in weak and clitics pronouns

This structural reduction is expressly visible in forms where a “dummy marker” like *a* is used. This is shown for examples in the dative constructions in Italian (compare the examples in 7) 8) and 9)), where the presence/absence of *a* correlates with coordination, c-modification and focalization and the complement of *a* behaves as a weak element. The dummy marker *a* seems thus to realize the piece of missing structure in weak and clitic pronouns, with respect to strong pronouns:

7.  
 a. \*Ho parlato [loro e loro]  
 b. \*Ho parlato solo [loro]  
 c. \*Ho parlato [LORO], non [loro]

8.

- a. \*Ho parlato a [loro e loro]
- b. \*Ho parlato a solo [loro]
- c. \*Ho parlato a [LORO], non [loro]

9.

- a. Ho parlato [a loro] e [a loro]
- b. Ho parlato solo [a loro]
- c. Ho parlato [a LORO], non [a loro]

I have spoken to them and them/only to them/to them, not to them

Moreover, dummy markers have only the [+human] interpretation. This is corroborated by the Central Italian dialect examples in 10:

10.

- a. Ho parlato a loro  
I have spoken to them
- b. \*Ho aggiunto i pezzi di ricambio a loro  
I have added the parts of change (spare parts) to them

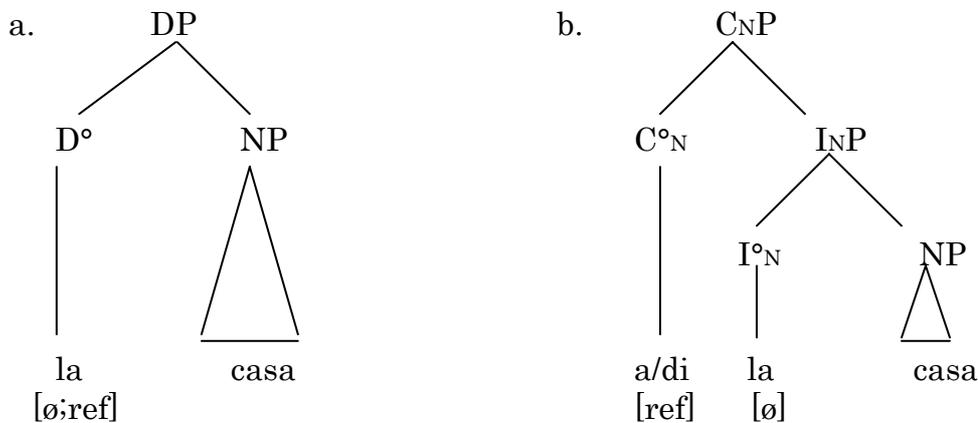
As pointed out by Cardinaletti & Starke (1999) these structures can be described adopting recent analysis on DP, according to which the D-node is constituted by distinct functional heads (Cinque 1994 a.o.) and contain different sets of features attributed to D<sup>o</sup> - theta features and referential features – (Abney 1987; Giusti 1993; Longobardi 1991, a.o.), which are realised into two distinct functional projections, one containing  $\emptyset$ -features - spelled out as such - and the other containing referential features - spelled out as a dummy preposition. Dummy markers are thus functional projections of the noun, thus containing features of N<sup>31</sup>. Considering then the fact that the highest functional projection of

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<sup>31</sup> This is also supported by data from other languages, where the presence of dummy prepositions is also attested. This is the case, for example, of Spanish or Rumanian: the dummy markers *a* and *pe* are possible in contexts where the head noun has a [+human] interpretation. They are thus functional projections of the nouns, specified for [+human] features and are only compatible with

the noun so clearly parallels the one of the verbal domain - both contain a dummy morpheme (e.g. *that of/a di*) and in each case the next morpheme down contains agreement information – the authors propose for them to be two instances of the same abstract category C. The traditional DP structure in 11a) is therefore split into CP and IP, as in 11b):

11.



In 11b) the topmost functional category is taken to contain referential features, and the dummy element C° is commonly designated as a mere case marker. The functional preposition (such as *a*) is thus interpreted as a nominal complementizer, and determines the highest boundary of the extended projection of the Noun<sup>32</sup>.

The application of the above analysis to strong, weak and clitic elements lead to the structural representations in 12 a) for strong pronouns, 12b) for weak pronouns and 12c) for clitics:

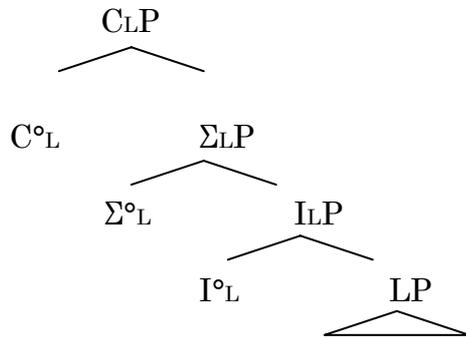
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nouns with human referents. See the example below for Rumanian and Spanish, from Dobrovie-Sorin (1990) and Jaeggli (1982) respectively:

- i. L'am văzut pe Jon.  
(I) him have seen ACC jon
- ii. Lo vimos a Juan  
(we) him saw Juan.

<sup>32</sup> In the same way, C° closes off the extended projection of the verb.

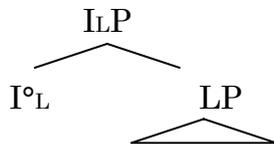
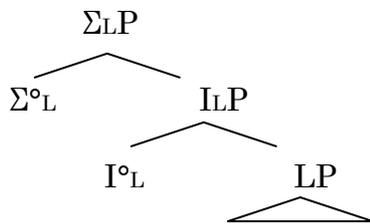
12.



where:

 $L^\circ$  = any lexical category $\Sigma^{\circ 33}$  = the locus of prosody-related features of  $L^\circ$ 

IP = a set of functional projections



The missing structure is thus identified as a high functional morpheme: while strong pronouns are full nominal projections, weak pronouns lack the highest functional layer and clitics lack both of the two functional layers.

From the absence of structure and of the features contained in the lacking structure the distributional and semantic asymmetry between strong vs. weak and clitic pronouns can be made follow: since the structure of weak elements lacks of  $C^\circ$  - which, according to Cardinaletti & Starke (1999) is the host of the copy of case features associated with the lexical head<sup>34</sup> - they do not have

<sup>33</sup> This label has been first adopted by Laka (1990) for her analysis of Basque, to identify a functional category between  $C^\circ$  and  $I^\circ$  which contains polarity and focus features.

<sup>34</sup> Grimshaw (1991) proposes indeed a principled conception of functional projections, as the "Extended Projection" of the lexical category they embed. According to the author, functional



strong case feature, which has to be checked before Spell-Out. Therefore movement is obligatory before Spell-Out.

As shown above, the fact that weak and clitic differ from strong pronouns syntactically, morphologically, semantically and phonologically, has been accounted for by an unique underlying syntactic difference. The distributional and interpretative properties of clitics, weak and strong pronouns depend on the amount of functional internal structure they project. Cliticization can therefore be seen as a change in structural representation during the derivation, from more to less (i.e. from XP to X°).

This also has important consequences on acquisition: knowledge of pronouns presuppose a knowledge of the different syntactic structures underlying the classes of pronouns, and it can be a diagnostic of the existence of some functional categories in the grammar of a particular learner.

Cardinaletti and Starke, assume moreover that children choose the least deficient possible pronominal first. Unless the pronoun of the target language is unambiguously deficient, children use it as a strong form. This assumption has been confirmed by recent studies on L1 acquisition which have shown that the acquisition of object clitics is significantly delayed with respect to the acquisition of subject clitics in French, which in fact are weak pronouns (Hamman, Rizzi & Frauenfelder (1996), a.o.)<sup>35</sup>.

From the description above it emerges therefore that structural deficiency is a universal of the languages. At an underlying level the pronominal system is identical among languages, but it can be realized differently. This is well supported if we analyse pronouns in Romance and Germanic languages.

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<sup>35</sup> But see also Jakubowicz et. al. (1996), who found data which seem not to be consistent with the theory of markedness as suggested by Cardinaletti & Starke's hierarchy of morphological deficiency.

## 2.2 The pronominal system in Italian

Italian has a full pronominal system. The three classes (clitic – weak – strong pronouns) are attested with morphologically distinct forms and have a different distribution:

14.

Il vigile gli farà la multa

Il vigile farà loro la multa (formal register)

Il vigile farà la multa a loro

‘The policeman will give them a ticket’

Taking into consideration the property of clitics described in the influential work of Kayne (1975), which has inspired the elaboration of a number of tests of cliticness, we can see, in particular, that clitic pronouns cannot be modified (15), conjoined (16), contrastively stressed (17) or used in isolation (18), as shown by the following examples:

15.

Francesco conosce solo lei

Francesco knows only her

\*Francesco la conosce solo

16.

Francesco conosce [lei e sua sorella]

Francesco knows her and her daughter

\*Francesco [la e sua sorella] conosce

17.

a. Francesco conosce LEI non sua sorella

Francesco knows her not her daughter

b. \*Francesco LA conosce, non sua sorella

18.

Chi conosce Francesco? Lei.

\*Chi conosce Francesco? La.

'Who does Maria knows? Her.'

Contrary to clitics and weak pronouns, strong pronouns can introduce a new referent in the clause and can appear in all syntactic positions available to full noun phrases. Clitics, instead, cannot remain in the postverbal object positions, but have to move to a position to the left of the finite verb in declarative clauses. This position is not possible for strong pronouns and full NPs:

19.

a. Francesco                      conosce \*la/lei/Maria

b. Francesco la /\*lei/\*Maria      conosce

Francesco her/her/Maria knows her/her/Maria

Furthermore, clitic pronouns can have [+human] and [-human] referents, whereas strong pronouns can refer exclusively to [+human] entities:

20.

a. Francesco non conosce che lei  
Francesco not knows (other) than herb. \*Francesco non mangia che lei  
Francesco not eat (other) than herc. Francesco la conosce  
'Francesco knows her'd. Francesco la mangia  
'Francesco eats her'

As far as pronominal subjects are concerned Italian does not have subject clitics, as opposed to dialects spoken in Northern Italy, such as Florentine and

Paduan<sup>36</sup>. Two forms of weak pronouns are thus attested: the null subject (21a) and the *egli/esso* forms:

21.

- a. Ø verrà domani
  - b. Egli verrà domani
  - c. Lui verrà domani
- ‘He will come tomorrow’

*Gli/loro* are used in the same pragmatic contexts. There is only a syntactic difference between the two forms: they have different syntactic features (singular vs. plural) and they also have a different distribution (attached to the verb, vs. in a position to the left of the direct object).

Italian has not only accusative and dative clitic pronouns but also pronominal forms which correspond to prepositional phrases. This is the case of the locative *ci* and *vi* and of the genitive and partitive *ne* forms. On the basis of a number of syntactic properties characterising these forms, which have been pointed out in a series of studies on the clitic *ne* (Belletti & Rizzi 1981; Cardinaletti & Giusti 1992), these forms have been claimed to have a different categorial status from dative and accusative clitics. Belletti (1993), indeed, suggests that the latter are of category D (the same as determiners), while *ci* and *ne* are Ps (the same as prepositions)<sup>37</sup>.

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<sup>36</sup> Subject clitics in Northern Italian dialects have been identified as heads (for a more detailed analysis see a.o. Brandi & Cordin 1989; Poletto 1993). With respect to a number of properties, indeed, subject clitics in these dialects have the same syntactic status of French and Italian object clitic pronouns. As opposed to them, French subject clitics have been identified as maximal projections (Kayne 1983, Rizzi 1986). In his analysis on French cliticization, Kayne (1983) makes the distinction between syntactic and phonological clitics: whereas object clitic pronouns are cliticized in syntax, subject pronouns attach to the verbal host in the phonological component (PF). This approach thus implies that subject pronouns are maximal projections and not heads.

<sup>37</sup> The clitic *ne* has been extensively studied also because its distribution is one of the arguments to make the distinction between intransitive and ergative verbs explicit (Burzio 1986). The description of this form however goes beyond the main focus of this work, which is the acquisition of object clitics in different populations. Therefore, we do not provide a more detailed analysis on this matter here, and we refer the reader to the above mentioned works.

### 2.2.1 Object clitics

One of the main theoretical problems raised by Italian and Romance clitics in general is the fact that object clitics function as arguments of predicates from an interpretative point of view, but formally they cannot surface in argument positions in the pronounced representation (Kayne 1975), and they seem to be attached to the string of the inflectional heads which define the configurational structure of the sentence. As shown in the examples below object clitics cannot indeed occupy the object position or be the complement of a preposition, but they have to be in the position to the left of the highest verb of the clause:

22.

- a. Francesco ha letto il libro  
'Francesco has read the book'
- b. Francesco lo ha letto
- c. \*Francesco ha letto lo
- d. \*Francesco ha lo letto  
Francesco it has \*it read \*it
- e. Francesco parla con lei
- f. \*Francesco parla con la  
Francesco speaks with her

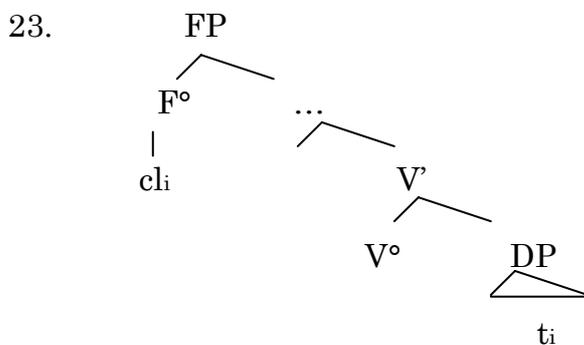
It is standardly assumed that an element must receive a thematic role in order to be interpreted as an argument and that thematic roles are only assigned in argument positions (Chomsky 1981). Giving this assumption, then, the problem of how clitics come to be interpreted as arguments is raised. Two main accounts have been proposed in literature in order to find an answer to this question:

- ☞ the direct approach first proposed by Kayne (1975) and involving movement;

☞ the indirect approach involving base generation.

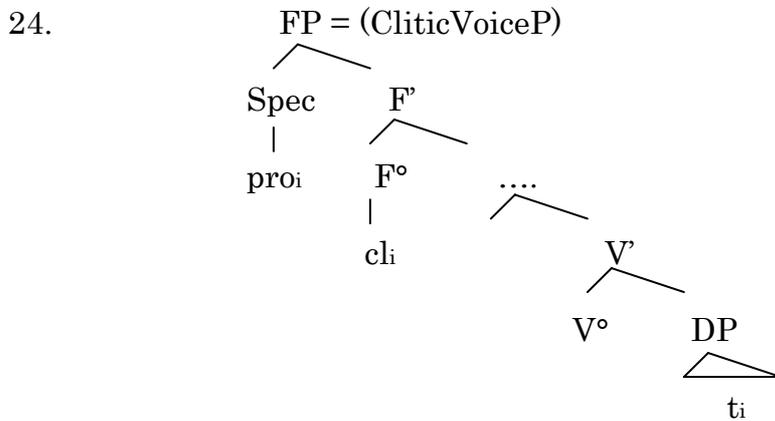
The two approaches basically differ in the fact that whereas under a movement account there is a level of representation – or point in the derivation – at which clitics are directly associated with VP-internal argument positions, under a base generation account this is not the case.

According to the first approach the clitic occupies an argument position at an underlying level of representation, where it receives its theta-role; subsequently it raises to a higher functional projection of the clause to satisfy a different surface-level constraint. This additional constraint has been taken to be phonological or morpho-syntactic in nature by some theorists (see, for example Kayne 1975; Belletti 1999), for others, instead it is a purely interpretative constraint, as pointed out by Uriagareka (1995) who draws the attention to the obligatorily referential/specific nature of clitics. The derivational approach is schematized in 23) below:



Under the alternative account, instead, clitics are base-generated in a dedicated position attached to their host outside the VP and are construed as arguments indirectly through a relation with a null pronominal element *pro* which shares the same corresponding phi-features with the clitic. Following this line, Sportiche (1992) proposes that clitic pronouns are base-generated as heads of functional projections, called Clitic Voices, which are associated with the verb, as they belong to the extended projection of V (Grimshaw 1991). A null category *pro*, generated in the object position, moves to the Specifier of Clitic-Voice Phrase,

in order to satisfy a requirement of Spec-head agreement with the clitic (Clitic Criterion). This approach is schematized in 24):



Another approach is however present in the generative literature, which following Sportiche (1992, 1996) holds that clitics are inserted directly under specialized functional categories, thus rejecting the traditional proposal which assumes that clitics are generated in argument positions and then adjoined to verbal positions. Such approach has been proposed by Manzini and Savoia (1998; 2002; 2004): contrary to Sportiche's assumption, nevertheless, it is claimed there that clitics are generated directly in the positions where they surface, between I and C. On the basis of evidence drawn from standard Italian and Italian dialects and adopting a universal hierarchy of functional category of the type proposed in Cinque (1999), the authors claim furthermore that such categories are ordered in a universal hierarchy, i.e. a clitic string. Clitic categories, moreover correspond to denotational/interpretative properties intrinsic to the lexical item involved. Hence, they propose the category P(erson) which lexicalize 1<sup>st</sup> and 2<sup>nd</sup> person clitics; the category N(oun) for 3<sup>rd</sup> person clitics, Q(uantifier) for plural clitics and D(efiniteness) for uninflected clitics. Finally they add further categories, such as the Loc(ative) one, lexicalizing reference to the spatial coordinates of discourse and the R(eferential) category which corresponds to specificity properties. At the same time, considering empirical evidence revealing the doubling of clitics on both sides of V they argue that the clitic string repeats itself in the three verbal domains, i.e. in the temporal domain above I; in the predicative domain above V

and in the modal domain immediately above C (Manzini and Savoia 1999). For a more detailed analysis of the internal structure of the clitic we refer the reader to Manzini and Savoia (2004).

Some observations have been done to support the derivational approach: as shown in Italian and in Romance languages in general, clitic placement is subject to locality effects that are typical of movement operations: as shown in the examples below, clitics cannot be extracted out of an adverbial prepositional phrase (25a), nor out of a phrase whose highest specifier is filled with a demonstrative (25b). But contrary to a Wh-phrase, a clitic pronoun cannot leave the finite clause to which it belongs, (26) thus clitic placement must be an instance of A-movement (the examples are taken from Cardinaletti 1999):

25.

- a. \*L'ho parlato dopo\_\_  
 (I) him have spoken after  
 (cf. \*Chi hai parlato dopo \_\_?)  
 whom have (you) spoken after?
- b. \*Ne ho visto questa foto  
 (I) of-him have seen this picture  
 (cf. \*Di chi hai visto questa foto \_\_?)  
 of whom have (you) seen this pictures?

26.

- a. \*Lo penso [che vedrò \_\_ ]  
 (I) him think that (I)-will see  
 (cf. Chi pensi [che vedrai \_\_ ]?)  
 whom (you) think that (you) will-see?
- b. Penso [che lo vedrò \_\_ ]  
 (I) think that (I) him will-see

Moreover Romance clitic systems are formally close to determiner systems as clitic pronouns have the same morphological form as the material generated DP-

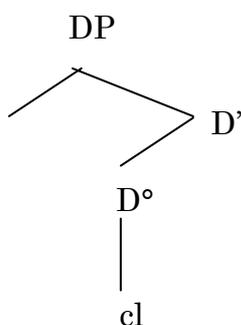
internally. In Italian, for instance, the feminine forms of 3<sup>rd</sup> person object clitics are identical and the masculine forms close or identical to determiner systems: as shown in 27)<sup>38</sup>:

27.

	Italian	
	Det	Cl
Masc Sing	Il/lo	Lo
Fem Sing	La	La
Masc Plur	i/gli	Li
Fem Plur	le	Le

This resemblance makes it plausible to identify clitic pronouns as D°s of impoverished DPs containing nothing else but the clitic, in accordance with recent trends in research (Rizzi 1993, Belletti 1999, Cardinaletti & Starke 1999, Hamann 2002). This is illustrated in 28) below<sup>39</sup>. At a certain point of the derivation, then, the clitic moves from this position, either as a head or as a DP (or both, as it will be discussed below).

28.



Note, however, that clitics morphologically encode more information than determiners: contrary to determiners clitics manifest case distinctions - see the

<sup>38</sup> This is also true for French, where all the forms of accusative pronominal clitics are identical to definite articles. Moreover, in German, pronouns sometimes formally resemble case morphemes (ich hab's gelesen; das Buch).

<sup>39</sup> Note that what is represented in 7) is the structure of third person clitics. First and second person clitics are presumably provided with a richer structure, containing at least a personal head. See also Kayne (2000) for a proposal of a syntactic characterization of the internal structure of clitics which distinguishes between 1<sup>st</sup> and 2<sup>nd</sup> person clitics from 3<sup>rd</sup> person clitic. According to such analysis the formers lack full DP structure, which instead characterizes 3<sup>rd</sup> person clitics, as revealed by the presence of full agreement features. See also Manzini e Savoia (2002; 2003).

four-way distinctions in Italian Accusative, Dative, Genitive, Locative *lo/la/li/le, gli/le, ne,ci-* and person features – Italian: *mi, ti, lo*.

Adopting thus the movement analysis and excluding the base-generation approach on cliticization, some other important topics related to clitic movement have to be examined. Recent studies on cliticization have indeed dealt with the following questions:

- ⇒ what is the trigger of the movement;
- ⇒ what is the nature of the movement;
- ⇒ what is the host of the movement.

These topics will be treated in the next sections.

## 2.2.2 On clitic movement

- ⇒ Why?

As illustrated in the representation in 28) Romance clitics are in a sense special determiners. What makes them move to a verbal landing side can be exhaustively expressed adopting the feature-checking system of the Minimalist Program (Chomsky 1993; 1995).

In the minimalist framework, there are three main modules in the grammar: phonological form (PF), the computation, and logical form (LF). The module where derivations are constructed is the computation. In contrast to earlier generative models, in minimalist syntax lexical items enter the computation fully inflected and movements take place to satisfy certain requirements, the crucial one being feature checking (Chomsky 1995).

In this system, inflectional heads such as Agr and T have a dual function: they check morphological features of Agreement and Tense on the verb moving to them as a head, and Phi features and Case features of DPs moving to their specifiers. Case is indeed one of the theta-features with which DPs are inserted in the clause structure and which have to be checked (Chomsky 1993). DPs check their case features by filling the Spec-position of the Agr head which carries the appropriate Case features. Nominative is thus checked in Spec/AgrS, while accusative is checked in a lower position labelled Spec/AgrO<sup>40</sup>. Feature strength characterizes the nature of the checking/movement: a strong Case feature in the relevant Agr heads determines a syntactic checking, thus movement takes place in the computation, whereas checking is delayed at LF if the relevant Agr head contains a weak Case feature, thus implying covert movement. Feature strength varies cross linguistically, resulting in surface word order differences between languages. This point will be developed in the next chapter.

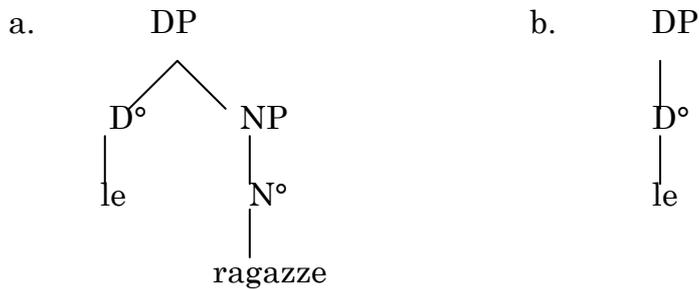
This features checking system can be extended to the internal structure of the nominal system, where the features morphologically expressed on N have to be checked, hence the movement of N to D, throughout a richer functional structure on the DP (Cinque 1995, Longobardi 1994).

Considering the structure in 28), which resembles that of clitics, in which the determiner does not take any lexical NP complement, it is visible that here D cannot check its features DP internally, but has to move to find a different checker in the structure. This is what happens with clitics (Rizzi 1993). A clitic is therefore a V-related determiner (29b), which has its features checked by a verbal head, as opposed to N-related determiners (29a) – that have their Phi features checked by a nominal head.

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<sup>40</sup> See Belletti 1999 for a more detailed analysis on this topic.

29.



The fact that in Italian, as in other Romance languages (see for examples French), object clitics manifest case distinctions has been taken as a proof for assuming that clitics bear a strong Case feature. This would explain the syntactic movement of clitic. On this purpose, Belletti (1999) exploits the richness of the clitic in morpho syntactic features with respect to other nominal expressions and draws the conclusion that clitics are endowed with strong, overtly realized grammatical and Case features. Such Case features, then, require a syntactic checking, hence the clitic undergoes an overt movement.

In her analysis of cliticization, Belletti proposes a structure with two distinct positions for AgrO and its projection - where accusative case is checked - and Agr and its projection, containing number and gender phi-features of past participle (following Friedemann and Siloni (1993)). This is given in 31) below and will be adopted in the present analysis of Italian cliticization. Note that Agr is labelled AgrPstPart here; moreover in a clause not containing any auxiliary AuxP and PstPrtP will not be present, but some functional projections would however appear between AgrO and VP)<sup>41</sup>.

Keeping in mind the structure in 31), the generalization claimed for Italian (but valid also for French and Romance languages), i.e. that nominative is checked in syntax, and accusative is checked at LF, finds evidence in the fact that in Italian

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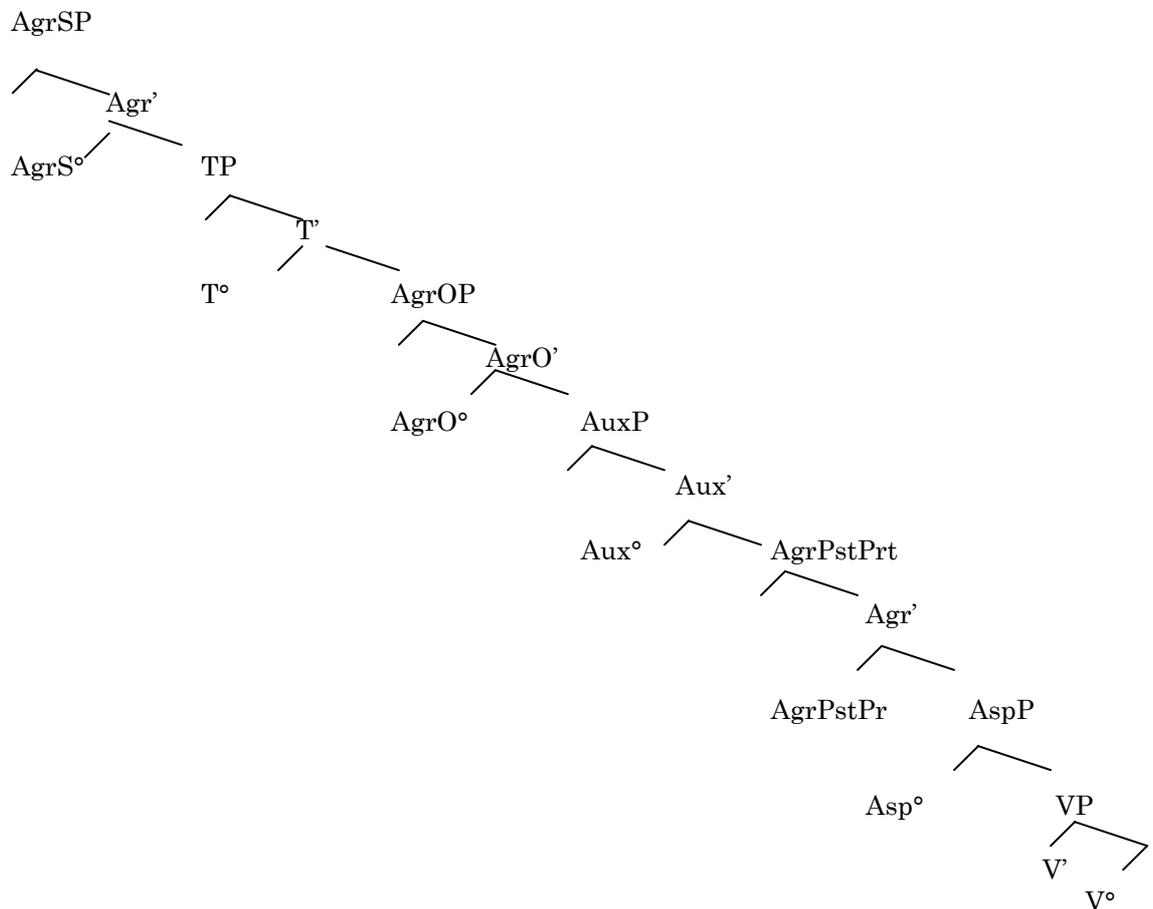
<sup>41</sup> See Friedemann and Siloni for a more detailed analysis on the dissociation of the two projections in Romance languages and for evidence for the fact that AgrPstPrt is located below AgrO.

the order in 30), with the direct object filling a position following the auxiliary and preceding the Past Participle, is ruled out:

30.

- a. \*Ho Francesco incontrato  
 (I) have Francesco met  
 'I have met Francesco'

31.



⇒ Where?

According to Belletti's analysis, clitic movement is due to the syntactic nature of the clitic itself, which bears a strong Case feature that must be checked. Under the assumption of the Minimalist Program (Chomsky 1993)

reported above, then, a strong unchecked feature cannot be interpreted at PF and has to be checked against a head bearing the corresponding features, under a SpecHead agreement relation<sup>42</sup>. But assuming the defective structure for clitics sketched in 7b), nothing could move from inside the DP to check case feature internally, hence clitic movement.

Giving thus the assumption that clitics move for Case reason, the next natural step will be to determine what the clitic moves to, i.e. to determine the landing site of cliticization.

The traditional assumption about the landing site of clitics, first proposed by Kayne (1975), is that Romance clitics adjoin to the Verb. Romance clitics, indeed, surface on V and never adjoin to Noun, Adverb or prepositions. But from a deeper investigation of Romance languages one can notice that some verbal structures don't seem to be suitable landing sites for clitics. This is visible, for example, in compound verbs in Italian (see 32.a. vs. 32.b.), where the clitic attaches to the aspectual auxiliary and not on the lexical verb<sup>43</sup>; or in infinitives embedded under a causative verb, (cf. Guasti 1993) where the infinitival verb seems to resist cliticization (33.a. vs.33.b.):

32.

- a. La mamma le ha messe in borsa  
Mother them has put in the bag
- b. \*La mamma ha messele in borsa  
Mother has put-them in the bag

33.

- a. Gianni lo farà scrivere a Piero  
Gianni it will make write to Piero

---

<sup>42</sup> See what happens for example in the case of subject movement to SpecAgrS in finite clause. Here the Case of DP is checked against the strong AgrS head.

<sup>43</sup> This cannot be due to the fact that the past participial form in Italian is not a possible landing site for the clitic, as shown by participial clauses (see Belletti 1990 for a more detailed analysis), where the clitic attaches to the participle:

- i. Messele in borsa, la mamma è uscita  
(Having) put (past participle)-them in the bag, the mother left

- b. ?\*Gianni farà scriverlo a Piero  
 Gianni will make write-it to Piero

In some Romance languages, moreover, clitics are not attached to the verb, as some material can intervene between the clitic and the verb. It is the case of Romanian as shown in 34) (from Rizzi 1993):

34.  
 a. Nu'l mai văd.  
 I not him anymore see

The traditional approach assuming that clitics in Romance languages attach to the verbs must be thus revisited as the following:

- ☞ the landing site of the clitic is a V-related functional head, thus, a functional head possessing features to be checked by V (Chomsky 1993), i.e. belonging to the extended projection of V (Grimshaw 1991).

Belletti (1999) identifies the V-related functional head the clitic moves to with AgrO. This conclusion is natural from the theoretical perspective described above: if clitic movement is triggered by the requirement of features checking in the overt syntax and accusative case is checked in AgrOP, then the landing site for clitics (at least accusative clitics) should be AgrO<sup>44</sup>.

Note that clitic placement is subject to cross-linguistic variation. In (most) Slavic languages, for instance, the clitic pronoun always appears in second position of the clause, independently of the position of the verb (Cardinaletti 1999):

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<sup>44</sup> As shown in the previous section, Cardinaletti & Starke (1999) propose a different account, where the clitic lacks a case feature and must undergo a movement process to be associated with a functional case feature. It must be in a local relationship to some Agr in order to constitute functional case through incorporation. In both accounts movement must take place in order to check certain features – ultimately Case features in both cases.



⇒ How?

At this point of the analysis the following question naturally arises: what is the nature of clitic movement? Or: does the clitic move as a head or as a maximal projection?

Assuming (as in Friedemann and Siloni 1993) that accusative Case can only be checked under a Spec-head configuration it follows that the clitic and the DP which it heads, must move to the specifier of AgrO; from there the clitic can cliticize via head movement to the next higher head. At least in the first part of its movement, the clitic moves as a XP. Belletti (1999) provides evidence for this by using examples from Italian sentences with a complex verb form containing an auxiliary and a past participle and involving cliticization. As shown in (36), indeed, the number and gender of the clitic agrees with the participle:

36.

a. Le ha dipinte ieri

Them(CL, FEM, PL) (he) has painted(FEM, PL) yesterday

b. \*Le ha dipinto ieri

Them(CL, FEM, PL) (he) has painted(MASC, SG, unmarked ending) yesterday

Under the assumption that feature agreement is a manifestation of the Spec-head relation with an agreement head as proposed by Kayne (1989), the clitic in (36) must have moved as a DP through SpecAgrPstPrt<sup>46</sup>.

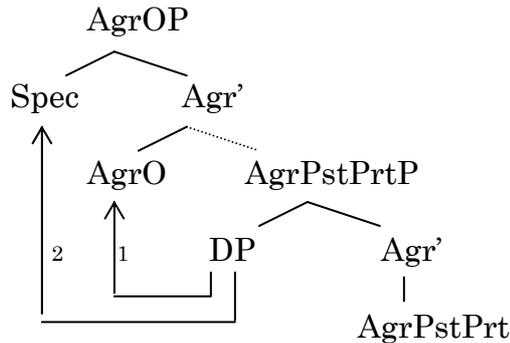
From the examples in (36), however, we can see that the clitic moves higher. Indeed, the clitic has incorporated to the verbal head in I°, thus it clearly is a head at its final landing-site.

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<sup>46</sup> See Belletti (1999) for a more detailed analysis of this movement and for an explanation of why the clitic cannot move to AgrO as a head from the very beginning of the derivation.

The clitic then continues its movement from SpecAgrPstPrt onwards either as a head to AgrO° or as a DP to the specifier of AgrOP, the two options being schematized in 37):

37.

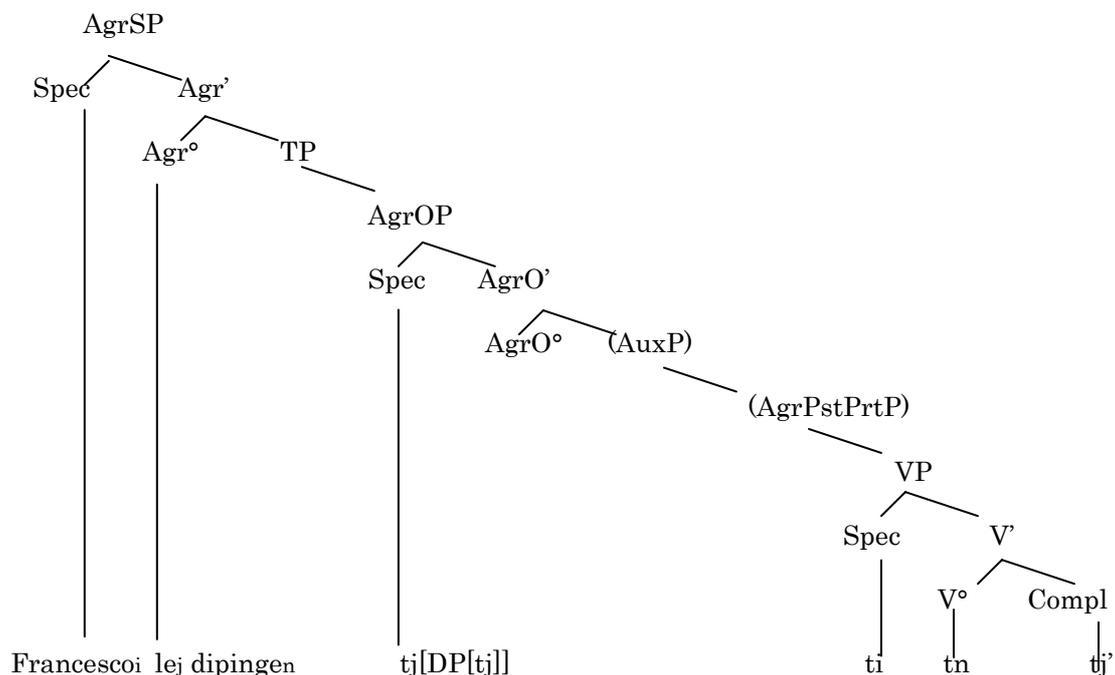


Belletti (1999) argues that in Italian the clitic moves as a head at this point, and it is also assumed for French by Haegemann (2002)<sup>47</sup>. Therefore both clitics in French and in Italian would pass through AgrO° which becomes the cliticization site. Furthermore, the verb raises to AgrSP in order to check its phi-features. The clitic also has phi-features which must be checked, but as shown above, it has an impoverished structure which does not allow checking within an N, hence the clitic D° follows the verb to a higher functional projection (AgrS), leaving an empty DP-shell in AgrOP<sup>48</sup>. The derivation which results is sketched in 38):

<sup>47</sup> But see Belletti (1999) for a different proposal based on French object clitics. Under Belletti's assumption, French differs from Italian for the fact that in the former object clitics move to SpecAgrS as a maximal projection. At this point of the derivation, therefore, cross linguistic variation is expected. This would explain why French infinitives display proclisis, whereas Italian infinitives show enclisis.

<sup>48</sup> Note, furthermore, that clitic movement cannot end up in AgrO, which is not a (Case) strong head projection and therefore cannot contain material which needs PF interpretation. Hence it must be empty by PF.

38.



At the end of the derivation the clitic ends up (left) adjoined to the verb which fills the functional head where its morphological checking is completed – AgrS in Italian.

⇒ Enclisis vs. proclisis

What is obtained from the derivation is a left adjunction of the clitic to the verb, giving the order cl-V, thus proclisis. Note that proclitization is produced by (left) adjunction of the clitic to the verb in a functional projection. As a matter of fact, due to the presence of the clitic within AgrO – which blocks the appropriate checking of the verbal morphology – the verb could not pass through the AgrO head, taking the clitic with it in its further movement to T and AgrS, but has to skip it. This is what happens in Italian with finite verb forms, which display proclisis, as shown in 39) below:

39.

- |                     |                       |                  |
|---------------------|-----------------------|------------------|
| a. Le chiamo        | (I) them call         | indicative form  |
| b. ...che le chiami | ...that (I) them call | subjunctive form |
| c. Le chiamerei     | (I) them would call   | conditional form |

As opposed to finite verb forms, non-finite verbs take encliticization in Italian, as shown in 40):

40.

- |                  |                  |                 |
|------------------|------------------|-----------------|
| a. Incontrarla   | to meet her      | infinitive      |
| b. Incontrandola | meeting her      | gerund          |
| c. Incontratala  | (having) met her | past participle |

Given the assumption that clitic pronouns always left adjoin to functional heads, - excluding in principle thus the possibility of right-adjunction, Kayne (1991) proposes that in infinitival clauses the verb-clitic order is obtained by movement of the verb across the clitic, to a further position adjoined to the inflectional head (T or Agr) dominating the clitic (t is the trace left by the verb in 41):

41. ... V ... cl+I ... [t] ...

In this analysis the verb and the clitic do not form a constituent, but Benincà and Cinque (1993) give evidence of the fact that as opposed to proclisis, enclisis seems to display a tighter rather than looser relation between the clitic pronoun and the

verb. As shown in 42) and 43), coordination and disjunction of clitics can sometimes occur with proclisis but not with enclisis:

42.

- a. Gianni lo [legge e rilegge] infinite volte  
Gianni it reads and rereads infinite times
- b. \*Per [leggerlo e rileggere] infinite volte  
To read it and reread infinite times
- c. \*Per [leggere e rilegger]lo infinite volte  
To read and reread infinite times

43.

- a. ?Chiunque abbia lanciato questo appello, lo o la dobbiamo aiutare  
whoever had sent this appeal we him or her must help  
\* Chiunque abbia lanciato questo appello, dobbiamo aiutarlo o la

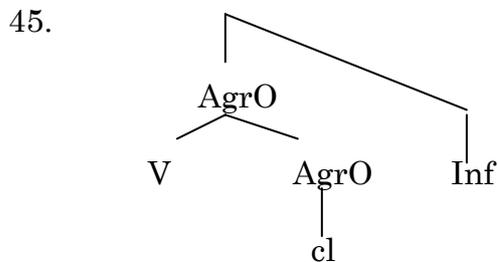
On the basis of this evidence the authors conclude that in enclisis the clitic and the functional head it is left adjoined to, combine only in the phonology. At the morphological level they do not form a single word. In the case of enclisis, instead, the verb and the clitic are syntactically fused and form a single unit. This is also confirmed by Italian Aux-to-Comp constructions, where the clitic is carried along by the auxiliary, as shown in the example 44) taken from Rizzi (1993), thus providing further evidence for the fact that the verb and the enclitic are a unit:

44.

- a. Avendola Gianni restituita al direttore.....  
Having it Gianni given back to the director.....

In light of these considerations, Belletti adopts an analysis of encliticization maintaining the spirit of Kayne's approach, i.e. encliticization arises when the verb is moved past the cliticization site, and is in line with her analysis of procliticization summarized above.

She proposes that in non finite contexts illustrated in (19a-c) the verb is allowed to pass through the AgrO head containing the clitic. This is possible because the passing doesn't interfere with the checking of verbal morphology, since it has been already performed below AgrO, namely in Inf<sup>49</sup>. Considering the fact that V must continue its movement higher than AgrO - i.e infinitives in Italian raise as high as AgrS, following Belletti (1990) - and that it can pass through AgrO taking the clitic with it in its further movement, this then gives a situation where V is adjoined to the functional head containing the clitic, thus resulting in enclisis (since adjunction is left adjunction). The process is shown in (45):



The account proposed here provides a uniform analysis of the properties of the syntax of Romance clitic system, which, as has been exhaustively shown above, is based on an implementation of the theory of morphological checking presented in the Minimalist Program. The theoretical basis of this assumption is constituted by the interaction of the procedures of Case checking, which is considered the trigger for movement, with checking of verbal inflectional morphology, which determines the movement in various ways; i.e procliticization vs encliticization.

From this account it is derived that clitics in Italian can be analyzed as morpho-syntactic feature matrices occupying head positions which the V is expected to pass through on its way to the top of its extended projection.

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<sup>49</sup> Following Rizzi (1993) the verb is morphologically completed below the cliticization site, i.e. it has already performed its morphological checking.

⇒ To sum up:

Verbs are canonical hosts for Romance clitics.

The verb moves up through its extended projection in order for the formal features of V to be checked off against those associated functional heads.

V thus moves to the top of the projection in order to license its formal features.

Moreover, it is the features of V rather than V itself which need to move.

Clitics are morpho-syntactic feature matrices which can be situated in functional heads associated with the verb, and on which the verb must therefore pass through on its way up to the tree. Pronominal clitics are most naturally analysed as introduced in the same VP-internal positions as their phrasal counterpart. However they display the morpho-syntactic properties of functional heads. In Romance languages clitics head defective DPs, - as opposed to German weak pronouns which are maximal projections XP, as shown in the next section.

As arguments they have to move to a case-checking position above VP, just as full DPs do. Depending on the details of one's theory of phrase structure, this could be any one of various functional heads against which case-checking occurs, which crucially are all positions through which V must pass. In the analysis adopted here, proposed by Belletti (1999), the clitic moves within AgrO.

## 2.3 The pronominal system in German

Recent findings on Romance cliticization have been applied to the study of cliticization in German, mainly through the comparative approach which has characterised recent work in Generative Grammar over the last 20 years.

From a morphological point of view the pronominal system in Germanic languages is more opaque than that of Romance languages: all Romance languages have morphologically distinct series of pronouns, whereas German

languages do not. Moreover, from a first sight, personal pronouns in Germanic Languages seem to behave like NP. As a matter of fact, pronouns can occupy the initial position of V2 main clauses, or can be in the Mittelfield, with subjects or objects, as shown in the German examples in 46):

46.

- a. [Klaus ; Er] ist sehr elegant  
[Klaus; he] is very elegant
- b. [Klaus ; Ihn] haben sie eingeladen  
[Klaus; him] have they invited
- c. Heute ist [Klaus ; er] ist sehr elegant  
Today is [Klaus; he] very elegant
- d. Sie haben [Klaus ; ihn] eingeladen  
They have [Klaus him] invited

Moreover, movement of pronominal elements is in a sense hidden by a general operation of movement -scrambling- which moves NPs to the left of sentential adverbs. This is shown in 47):

47.

- a. Ich glaube, daß Maria den Klaus gestern \_\_ getroffen hat
- b. Ich glaube, daß Maria           ihn           gestern \_\_ getroffen hat

The parallels between NPs and personal pronouns in German has been seen by many researchers as evidence of the existence of only one class of pronouns, namely strong pronouns. As a matter of fact German pronouns display all hallmarks for strength: they can be modified, coordinated, stressed, and used in isolation. As shown by Cardialetti & Starke (1996), this proposal seems, however, too extreme and makes no allowance to account for the form *es*, which displays a clitic-like behaviour, thus it cannot be coordinated, modified and topicalized to a V2-initial position,.

The exceptional status of *es* can therefore be explained if two classes of pronouns are hypothesized in German.

On the basis of the evidence provided by the German form *es* and by examples in other Germanic languages (see, a.o. Haegemann (1992) for West Flemish; Berendsen (1986) for Dutch; Holmberg (1986) for Swedish) recent studies on pronominal system in Germanic languages have proposed that contrary to Italian, German has strong and weak pronouns, but lacks genuine clitics. There is moreover a lack of isomorphic relations between form and function: for example personal pronouns can be used as weak and strong pronouns, as shown in 48)<sup>50</sup>. However if it is used as a strong pronoun the personal pronoun can obligatorily have only a [+human] referent<sup>51</sup>:

48.

- a. Ich hab ihn/den/'n gesehen  
 I have him seen  
 'I have seen him'
- b. Ich hab ihn/den und den anderen gesehen (strong pronouns)
- b'. \*Ich hab ihn/den/'n und den anderen gesehen (weak pronouns)  
 I have him and the other(one) seen  
 'I have seen him and the other one

The examples in 48) show that contrary to strong forms, weak pronouns cannot be coordinated nor can they be used in isolation or modified. Moreover they cannot be separated from the verb by any other constituent.

Weak pronouns display a special distribution, as they can occur only to the left of sentential adverbs, as opposed to strong ones which instead can occur in any syntactic position: to the right of sentential adverbs, in clause-initial position

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<sup>50</sup> With the exception of the pronominal form *es*, which is an unambiguously weak pronoun in German, as shown by Cardinaletti & Starke (1996).

<sup>51</sup> In this respect, German personal pronouns differ from demonstrative pronouns, which can refer both to [+human] and [-human] entities.

(SpecCP), in coordination, in isolation etc, i.e. in all the positions which don't allow weak pronouns. This is shown by the contrast between 49) and 50), adapted from Cardinaletti (1999, pp:54-55):

49. Strong pronouns [+human reference]
- a. Er hat **sie** gestern wohl eingeladen  
He has them yesterday probably invited
  - b. Er hat wohl **SIE** eingeladen
  - c. **Sie** hat er gestern eingeladen
  - d. Er hat **sie** und ihre Freunde eingeladen  
He has them and their friends invited
  - e. **Wer** hat er eingeladen? **Sie**  
Who has he invited? Them
50. Weak pronouns [-human reference]
- a. Er hat **sie** gestern wohl gegessen  
He has them yesterday probably eaten
  - b. \*Er hat wohl **sie** gegessen
  - c. \* **Sie** hat er gestern gegessen
  - d. \*Er hat **sie** und die Suppe gegessen  
he has them and the soup eaten
  - e. \***Was** hat er gegessen? **Sie**  
what has he eaten? Them

As shown in 51.a), the initial position of V2 clauses is a possible position for weak pronouns. Considering the fact that V2 initial positions are dedicated to maximal projections, we can thus conclude that weak pronouns, contrary to Romance clitics are XPs. Further evidence is given by the fact that weak pronouns can occur after prepositions, which is, again, an XP position (see 51b.) from Cardinaletti (1999)):

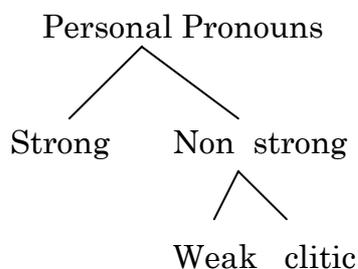
51.

- a. Sie/Es sind/ist teuer<sup>52</sup>  
 they/it are/is expensive
- b. Dieser Zug/er ist sehr schnell. Ich kann ohne **ihn** nicht pünktlich kommen.  
 This train/it is very fast. I can without it not in time arrive.

The different distribution of pronouns in the examples above can be motivated only if we postulate also for German, the existence of a particular class of pronominal forms displaying a “special” syntax, different from strong pronouns and full noun phrases.

Following Cardinaletti (1999) and Cardinaletti and Starke (2000), we have thus provided evidence for the fact that the German system of personal pronouns is underlyingly identical to that of Romance. The nature of the underlying system, described in the first section of this chapter can be schematized in 52):

52.



Where:  
 Clitic elements = deficient X°  
 weak elements = deficient XPs  
 Strong elements = non-deficient XPs

While in Romance languages the existence of the three forms is attested, German seems to have two classes of pronouns, i.e weak pronouns and strong pronouns<sup>53</sup>.

<sup>52</sup> Note that these pronouns in first position of the clause are weak pronouns: they may have a [-human] reference and cannot be coordinated, as shown by the impossibility of the examples below:

- i. \*Sie und die andaren sind teuer.
- ii. \*Es und die anderen ist teuer.

<sup>53</sup> In some recent works on Standard German, however, it has been referred to clitics to indicate a subset of personal pronouns which are allomorph, rather than the result of any phonological process of reduction or deletion. These forms have been taken as an instance of Romance clitics in German. Young-Scholten (2000), for example, proposes that these forms display a different syntactic status with respect to the other pronominal forms since they are head X°, as opposed to

The existence of the three classes is however reproduced German-internally in some German dialects, such as in Olang Tirolese described by Cardinaletti & Starke (1996); West Flemish (Haegeman, 1992) or Zurich German (Cooper 1999)<sup>54</sup>.

### 3.3.1 Germanic weak pronouns

In the literature, however there are several other proposals to the analysis assumed here. As a matter of fact, many of the most promising studies of Germanic personal pronouns have tried to assimilate the deficient Germanic personal pronouns to Romance clitics (see for example Haverkort 1994, Young-Scholten 2000).

In what follows we will present one of these proposals, and we will provide evidence which argues against it.

As will be pointed out, there are indeed a number of distinctions between the behaviour of Germanic pronouns and Romance clitics which are best

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the latter, which are XP. Young-Scholten provides evidence for the fact that clitics differ from their full counterparts not only in their reduced phonological form, but also in some positional requirements, since they cannot appear in positions typically occupied by XPs, see Young-Scholten (2000), for examples from standard German.

<sup>54</sup> Haegeman proposes for West Flemish the structure reported below, where AGR projection is recursive. She makes the assumption that all arguments move out of the VP into functional projections. Nominal arguments then occupy the specifier positions of AGRP projections, while clitics move to the heads of those projections. The position closest to COMP is the host of the subject clitic:

i. C CL<sub>SU</sub> NP<sub>SU</sub> CL<sub>IO</sub> NP<sub>IO</sub> CL<sub>DO</sub> NP<sub>DO</sub> (from: Haegemann, 1992)

Note that if subject clitics are taken to be heads it is surprising that they should occur in SpecCP (a position which is reserved for maximal projects) and satisfy the V2 constraint. For this reason Haegemann interprets subject proclisis as phonological.

Zwart (1992) makes a similar proposal for West Flemish, even if he advocates head initial projections only and argues that there is a structural difference between subject initial clauses (which are IPs) and non subject initial ones (which he proposes to be CPs).

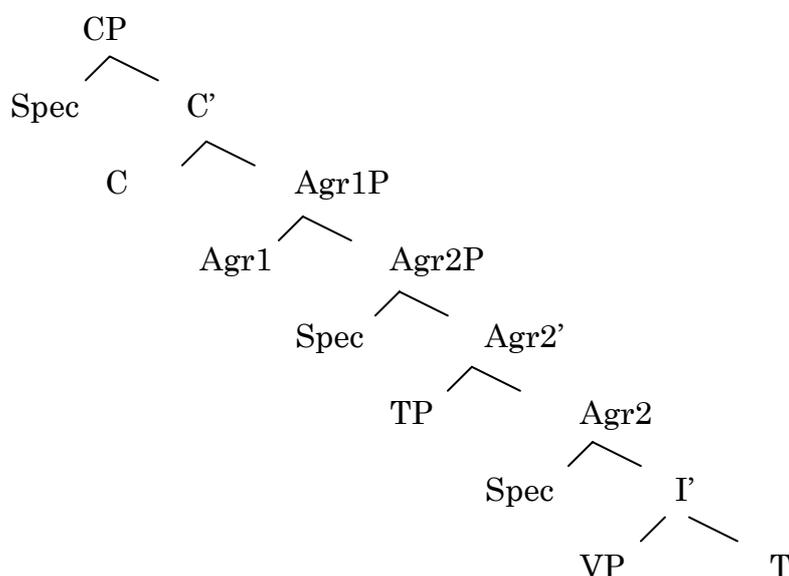
In her analysis of Zurich German, Cooper (1999) identifies the three forms of pronouns. She assumes that weak and strong pronouns are a different instantiation of one lexical item, with the strong form derived from the weak one by a process of lengthening and or/emphasise. The difference between the two forms of pronoun consists of vowel length (as shown in some cases, e.g. *eer* vs *er*, *miir* vs *mir*); furthermore the strong pronoun receives stress.

The difference between weak pronouns and clitics consists in shortening (as in *es* vs *s* or *er* vs *r*), thus object clitics are derived from weak pronouns. The two elements however have the same behaviour, since both cannot be modified, conjoined, or used in isolation.

explained if the pronominal forms in the two language families are assigned a different status in terms of X-bar Theory.

Following the analysis made in the recent literature for clitics in Romance language, Penner (1991) analyses Swiss German pronominal forms in terms of head movement; in his discussion on the acquisition of clitics in Bernese Swiss German he proposes the structure in 53):

53.



Adopting the idea suggested by Cardinaletti and Roberts (1991) he assumes an AGRP-projection, whose head hosts the clitic.

Note, however, that there is a problem that arises adopting Penner's clause structure as in 53), i.e. there is only one possible landing site for the clitics available under the head movement analysis, namely Agr1. Under the assumption that the subject occurs in the Specifier of Agr2, as in embedded clauses, the occurrence of object clitics in post-subject position remains unaccounted for<sup>55</sup>. As will be shown below, this is the order which is most attested in early child German. Note, moreover, that under Cardinaletti & Roberts's assumption Agr1P is allowed to have a Specifier: in a language like

<sup>55</sup> Object clitics in German and in Bernese Swiss German can occur in the position preceding and following the subject NP. See Haverkort and Weissenborn (2000) for examples of the data.

German and Swiss German the subject can occupy either the Specifier of Agr1P or AGR2P, getting Case under a Spec-head Agreement Configuration. This can thus account for the post- and pre-subject occurrence of the clitic. However, as pointed out by Haverkort and Weissenborn (2000), this left-headed functional projection is not very strongly supported, since, unlike other functional heads, it is not the site of the representation of morphological features; its sole purpose, instead, seems to serve as host for the clitic. Furthermore the existence of Agr1P is not motivated in other Germanic languages, such as Dutch, where embedded V-2 cannot occur.

These facts support the idea that German clitics must be treated differently from their Romance counterparts. Moreover some distributional differences existing between Romance clitics and German pronouns can be explained only if the pronominal forms in the two language families are assigned a different status in terms of x-bar Theory, i.e.:

- ☞ Romance clitics are heads, which adjoin to heads, having thus the structure shown in 54.a);
- ☞ Germanic pronouns behave like maximal projections XPs (and therefore can only adjoin to XPs), giving the structure in 54.b).

54.

- a. [IP NP [r [I clitic I] [VP [V ... ]]]]
- b. [IP clitic<sub>1</sub> [IP NP [r [VP clitic<sub>2</sub>] [VP V ... ] I ]]]

In what follows we will discuss a number of characteristics of Germanic personal pronouns which warrants treating them differently from Romance clitics; furthermore we will report data from L1 acquisition which will provide further evidence for the idea that German pronouns are XPs and that cliticization in German is a peculiar sort of A'movement.

⇒ Independence of Head Movement (V to C):

As shown in the previous section of this study, within Romance languages the clitic always appears on V. This is clear if we consider V to C movement, where the clitic is, in fact taken along, as shown in the French examples in 55) (cf. also the Aux-to-Comp examples in 44). This confirms the assumption that the clitic and the verb end up in the same head position, specifically in some functional heads in the extended projection of the verb.

55.

- a. Pourquoi m'avez-vous choisi?  
     why me have you chosen  
     'Why have you chosen me?'
- b. \* Pourquoi avez-vous me choisi?  
     why have you me chosen  
     'Why have you chosen me?'

As opposed to French, in German the object pronoun can be left-stranded while the verb moves to C (see 56), showing a pattern superficially similar to Romance cliticization. Moreover, in embedded clauses where the verb remains in situ, the pronominal form moves up, and appears either in pre- or in post-subject positions, i.e not on verbs but as a clitic on other different words. (the examples are taken from Haverkort and Weissenborn (2000):

56.

- a. Was hat'm die Mutter gegeben?  
     what has him the mother given  
     'What has mother given him?'
- b. Was hat die Mutter'm gegeben?  
     what has the mother him given  
     'What has mother given him?'

- c. Die Mutter hat'm was gegeben  
 the mother has him something given  
 'Mother has given him something'
- d. Weil'm die Mutter was gegeben hat  
 because him the mother something given has  
 'because mother has given him something'
- e. Weil die Mutter'm was gegeben hat  
 because the mother him something given has  
 'because mother has given him something'

⇒ Parasitic gaps:

Parasitic gaps are empty positions in islands, which require a gap in order to be licensed, which is the result of A'-movement at S-structure. L-F movement cannot license parasitic gaps.

In Romance, clitics never license parasitic gaps. This can be explained by the fact that in Romance languages cliticization is an instance of head-movement. As shown in the examples 57) from Italian, in fact, the licensing gap left by cliticization cannot form an extended chain with the gap of the empty operator in the adjunct-PP:

57.

\**Glielei* dobbiamo far mettere *t* nello scaffale invece di lasciare *e* sul tavolo  
 'We must make him put them on the shelf, instead of leaving (them) on the table'

In Germanic languages, on the other hand, cliticization can license parasitic gaps, as indicated by the German and Bernese Swiss German examples from Penner (1991:259), reported in 58):

58.

- a. Der Peter had'*n* [ohne *e* anzusehen] *t* zusammengeschlagen  
 the Peter has him without to look at beaten up  
 'Peter has beaten him up without looking at him'
- b. Dr Hans het'*ne* [ooni *e* aaz'luege] *t* zämegschlage  
 the Hans has him without to look at beaten up  
 'Hans has beaten him up without looking at him'

This property is accounted for by considering German cliticization as an instance of adjunction to a maximal projection in an  $\bar{A}$  position. Note, moreover, that this analysis also gives an explanation of the independence of clitic movement and verb movement in the examples in 57<sup>56</sup>.

⇒ Scrambling:

In German, maximal projections which are base generated in VP can be moved out of VP, giving different surface word orders in the sentence, which have the same underlying structure, as shown in the examples 59), taken from Uszkoreit (1987:18). This phenomenon has been known in the literature as scrambling.

59.

- a. Dann wird der Doktor dem Patienten die Pille geben (unmarked order)  
 then will the doctor the patient the pill give  
 'Then the doctor will give the patient the pill'
- b. Dann wird der Doktor die Pille dem Patienten geben (alternative ord.)  
 then will the doctor the pill the patient give  
 'Then the doctor will give the patient the pill'

---

<sup>56</sup> Note, moreover, that A'-movements of maximal projections are by definition freer than head movement and thus do not require verb movement in order to be licensed.

- c. Dann wird die Pille der Doktor dem Patienten geben (alternative ord.)  
 then will the pill the doctor the patient give  
 ‘Then the doctor will give the patient the pill’

As the examples in 60) for German (Thiersch, 1978:109) and in 61) for Bernese Swiss German demonstrate (Penner, 1991), cliticization seems to have a parallel behaviour with scrambling. In sentences a) and b), object pronouns occur in the same position occupied by scrambled elements, and in sentences where long-distance movement of scrambled elements is impossible, cliticization to the same position is also impossible, (c) and d)):

60.

- a. Weil ich das Lied [eine alte Dame singen] hörte  
 because I the song a old lady to sing heard  
 ‘because I heard an old lady sing the song’
- b. Weil ich’s [eine alte Dame singen] hörte  
 because I it a old lady to sing heard  
 ‘because I heard an old lady sing it’
- c. \*Weil ich das Lied [dass eine alte Dame sang] hörte  
 because I the song that a old lady sang heard  
 ‘because I heard that an old lady sang the song’
- d. \*Weil ich’s [dass eine alte Dame sang] hörte  
 because I it that a old lady to sang heard  
 ‘because I heard that an old lady sang the it’

61.

- a. I weiss dass’ne dr Dani laat la schlaafe  
 I know that him the Dani lets let sleep  
 ‘I know that Dani lets him sleep’
- b. I weiss dass mis Buech nid auui Chind hei probiert z’läse  
 I know that my book not all children have tried to read  
 ‘I know that not all children have tried to read my book’

- c. \*I weiss'er dass choo isch  
 I know he that come is  
 'I know that he has come'
- d. \*I weiss ds Buech dass'er mibracht het  
 I know the book that he brought has  
 'I know that he has brought the book along'.

Note however that the examples above are not sufficient to state that cliticization is a sort of scrambling. Examples from other Germanic Languages lead, in fact, to a different conclusion. As described in Haegeman (1992) for example, in West Flemish clitics can occur in a number of positions where scrambled maximal projections are not allowed<sup>57</sup>

Moreover, taking into account data from adult German, it turns out that pronominal forms cannot occur to the right of sentential Adverbs (62.d), but they can be separated from the subject by scrambled object (62.b-c):

62.

- a. Der Vater hat's gestern seinem Sohn gegeben  
 the father has it yesterday his son given  
 'father has given it to his son yesterday'
- b. ?Gestern hat der Vater seinem Sohn's gegeben  
 yesterday has the father his son it given  
 'yesterday has the father his son it given'
- c. ?Der Vater hat seinem Sohn's gestern gegeben  
 the father has his son it yesterday given  
 'father has given it to his son yesterday'
- d. \*Der Vater hat gestern's seinem Sohn gegeben  
 the father has yesterday it his son given  
 'father has given it to his son yesterday'.

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<sup>57</sup> See also Zwart (1993) for Dutch, where the long distance-scrambling is not allowed, though Dutch has long-distance clitic climbing.

If we make the assumption that scrambled maximal projections are moved into the Specifier of some functional head in the extended projection of VP, pronominal forms must thus be able to adjoin to such a maximal projection or to the highest projection of V. This would prevent them to follow adverbials, which are also adjoined to V. Both pronouns and scrambled elements would move past the position occupied by the adverbial: the surface order of pronominal forms, thus depends on their adjunction site with respect to the scrambled element which is either higher, giving the pronoun-NP order, or lower, thus resulting the NP-pronoun order.

Further evidence supporting the idea that Germanic cliticization cannot be reduced to a sort of scrambling comes from data from acquisition of German and Swiss German. Penner, Tracy & Weissenborn (2000), observe that till the age of 2;5 scrambling is blocked by VP-external subject, which however, doesn't constrain cliticization. At the same stages of acquisition clitics are thus attested, as shown in 63):

63.

- |    |                     |         |
|----|---------------------|---------|
| a. | Ich puste's auf     | 2;04.17 |
|    | I blow it up        |         |
|    | 'I blow it up'      |         |
| b. | Ich krieg's alleine | 2;04.21 |
|    | I get it alone      |         |
|    | 'I get it alone'    |         |

⇒ Surface order:

As shown in the examples below (64) for German, 65) for Swiss German- subject pronouns appear to the left of object pronouns and to the right of Compl:

64.

- a. Hat'r's dem Kind gegeben?  
has he is the child given?  
'Has he given it to the child?'
- b. Dem Kind hat'r's gegeben  
the child has he it given  
'He has given it to the child'
- c. \*hat's'r dem Kind gegeben?  
has it he the child given  
'Has he given it to the child?'
- d. \*Dem Kind hat's'r gegeben  
the child has it he given  
'He has given it to the child'

65.

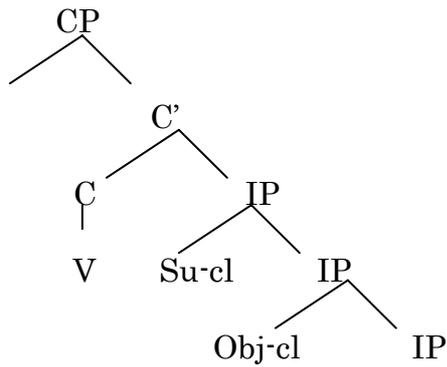
- a. I weiss dass'r'm's zeigt het  
I know that he him it shown has  
'I know that he has shown it to him'
- b. I weiss dass'r's'm zeigt het  
I know that he it him shown has  
'I know that he has shown it to him'
- c. \*I weiss dass'ne'si gseh hei  
I know that him they seen have  
'I know that they have seen him'

The surface position of the pronominal form is the result of the bottom up application of Move: cliticization is thus a movement of a maximal projection, adjoining the pronoun phrase to another maximal projection. At PF, as a result, both these elements cliticize phonologically to Comp.

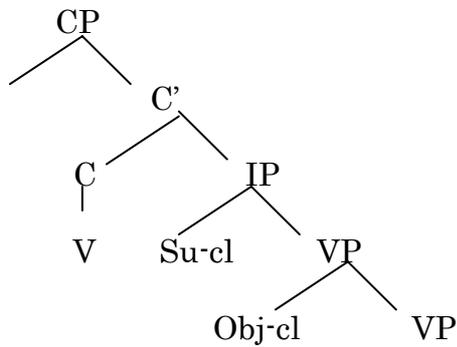
Two alternative analyses are then possible: first the object pronoun left adjoins to IP and then the subject pronoun left moves to some Spec position in a Split IP clause structure, as the derivation shown in 66.a); or the object pronoun adjoins to VP and the subject pronoun to IP, as in 66.b):

66.

a.



b.



## The study

### 3.1 Introduction

In this chapter we present one study where we investigate the nature of interlanguage grammars developed by learners of Italian as L2 and L1, with respect to their mastering of functional categories (FCs). We will first investigate the use/mastering of 3rd person accusative clitics vs. determiners by 3 groups of L2 German adult learners of Italian with different level of L2 proficiency: 6 near natives (average age 25), 7 at advanced level (average age 35) and 8 at intermediate level (average age 26).

Results will then be compared with original data from a monolingual Italian child (1,5; 3,0).

Two different investigation methods will be used:

- ☞ an elicitation task procedure
- ☞ spontaneous production data

The purpose of this study is to find out:

- what different acquisition contexts and learner populations can tell us about the acquisition of determiners and cliticization and their related syntactic structures;
- how different investigation methods can be used to compare the results - within the spirit of current work on acquisition of functional categories, (see for example Prévost/Paradis (2004).

The main aim of the study is to demonstrate that L2 learners show a differential pattern of acquisition with regard to elements which share the same categorial status – 3<sup>rd</sup> person Romance clitics and determiners are D<sup>o</sup> - since the

learners under investigation display an incorrect use of cliticization, whereas articles do not to present a major difficulty for them.

The results will offer evidence against those hypotheses, according to which interlanguages grammars suffer from some kind of permanent grammatical deficit (Beck 1998). The developmental pattern resulting from the data indicates that adult L2 learners are able to restructure their grammars, approaching that of native speakers.

Moreover the results will help to shed light on the question of ultimate attainment, as the L2rs at near native level of proficiency who participated in the experiment exhibit errors in the use of object clitics and determiners. It will be argued that such error stem from difficulties in supplying the exact morphology (Prévost & White 2000).

Finally, a tentative comparison with data from L1 acquisition will be proposed. This comparison will confirm previous comparative work on functional categories in L1 and L2 acquisition suggesting that there may be differences in the way these are acquired (Prévost & White 2000, Grandfeldt 2003, Belletti and Hamman 2000, Bernardini 2003).

The chapter is organized as follows:

- ⇒ After providing an overview of the theoretical background/general framework adopted here, we will describe the experimental methods used for collecting the data and we will provide some information about the participants.
- ⇒ We will then analyze the interlanguage grammars of the three L2 groups with respect to their ability in producing object clitics and determiners. Data will be collected through an elicitation task procedure.
- ⇒ We will then look at spontaneous production data from one of the learners at the intermediate level who took part at the experiment.

⇒ L2 data will be compared finally with original data from a monolingual Italian child (1,5; 3,0), coming from spontaneous speech.

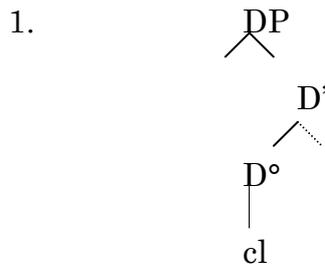
## 3.2 General theoretical framework adopted

### 3.2.1 On cliticization

In this research we have adopted some of the main assumptions of the Principle and Parameters Theory and its recent offspring, the Minimalist Program (Chomsky 1995). We built on the view that Formal Features are responsible for morpho-syntactic variation among languages and that the morphological features of functional category are the motivating force of the syntax. We also adopt the notion strong/weak and we assume that parametric differences among languages can be characterized as differences in the value of uninterpretable features in functional categories: strong uninterpretable features in a functional  $X^{\circ}$  attract another  $X^{\circ}$  to check off this feature before Spell-out, causing overt movement - which results in a different surface word order; weak features do not require overt movement – which means that word order is invariant.

As a theoretical framework for the study of the development of object clitics we adopt the idea proposed by Cardinaletti and Starke (1999) and reported in detail in the previous chapter 2, of the existence of three classes of pronouns with different degrees of semantic, syntactic and morpho-phonological differences: strong pronouns, weak pronouns and clitics. From a syntactic point of view clitics are heads, whereas strong and weak pronouns are maximal projection XPs. While in Italian the three forms are attested, German has only strong and weak pronouns. In our study we will thus investigate in an area where the two involved languages differ.

Following much recent research on Romance cliticization (Belletti 1999, Cardinaletti & Starke 2000) we assume that third person accusative Romance clitic belongs to the category  $D^\circ$ , and it is a head of an impoverished DP structure containing nothing but the clitic:



We adopt Belletti's idea –fully illustrated in chapter 2–according to which Italian object clitics undergo syntactic movement in order to check their strong feature before Spell-out; and that this movement is in two steps: as an XP first (as the agreement between object clitic and past-participle in complex verb form demonstrates) and then as a head to a higher functional projection belonging to the Extended projection of V (in the sense of Grimshaw 1991).

In this sense knowledge of cliticization presupposes knowledge of general constraints on movement, as well as the knowledge of the functional structure and the interaction between grammatical modules.

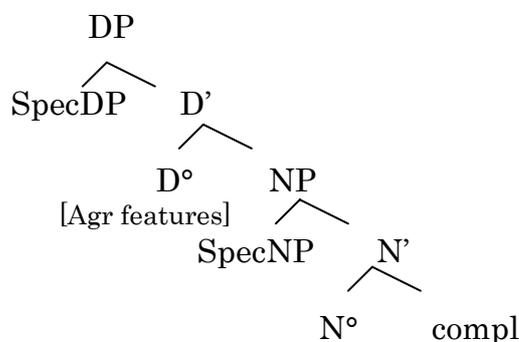
Assuming that Italian 3<sup>rd</sup> person object clitics are  $D^\circ$  heads, the relation between the acquisition of Italian object clitics and determiners is made possible. Moreover in Romance system, clitics are often formally close to determiner systems as clitic pronouns have the same morphological form as D. In Italian, specifically, the feminine forms of object clitics are identical and the masculine forms close or identical to determiner systems, as illustrated below:

- ☞ la[clFEMSING]/la[detFEM/SING];
- le[clFEM/PLUR]/le[detFEM/PLUR];
- lo[clMASC/SING]/il; lo[detMASC/SING];
- li[clMASC/PLUR]/i; gli[detMASC/PLUR].

### 3.2.2 On Det System

As a theoretical framework for the study of the development of the DP, we adopt the DP Hypothesis dated back to Abney (1987), which states that Noun Phrases are projections of the functional category D which contains the nominal agreement features. NPs are therefore dominated by Functional Projections in the nominal domain, with the Determiner occupying the head position and the NP being in complement position<sup>58</sup>:

2.



Moreover, following Longobardi (2000), Bernstein (1993) a.o, we assume that there are further projections, such as Num(ber)P or Q(uantifier)P, in between DP and NP and that adjectives are located in the Spec of functional projections between DP and NP (Cinque 1999). The N-Head moves to a higher functional head to check its Num or Q-features, Head movement being motivated by feature strength.

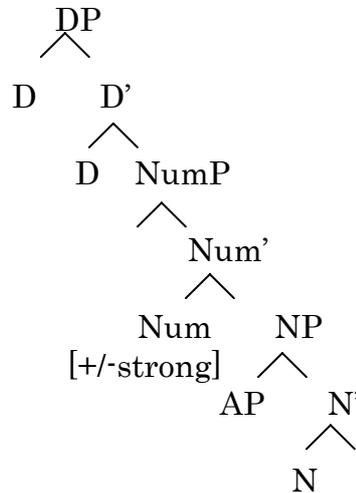
In this perspective word order of Noun and Adjective attested among languages is due to the different strength of Num: specifically, Italian has strong Num(ber) features and nouns must raise overtly from N to Num in order to check its features, thus resulting in the N Adj surface order as in 3b). German, on the

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<sup>58</sup> We will follow Tsimpli and Stavrakaki (1999) in claiming that in a language that has both strong and clitic pronouns and also has determiners (as in this case, i.e. Italian) the categorial similarity will be between determiners and clitics and not between determiners and strong pronouns. Clitics, which are deficient form in the sense of Cardinaletti & Starke (1999), are in fact represented as [D] elements, whereas strong pronouns have the richest possible structure that is assigned to NPs.

contrary, has weak Num features and the movement is covert, thus resulting in Adj N order of 3c<sup>59</sup>:

3. a.



b. La casa rossa  
the house red

Italian

c. Das rote Hause  
the red house

German

Finally we adopt the universal determiner parameter according to which a determiner must be present in argument position:

☞ Determiner Requirement (from Bottari et al. 1998; pp: 289):

Nominals in Arg positions must involve a Det position

Following Longobardi (1994), Bottari et al. (1998), among others, we assume that the Det requirement is universal and parameterized in different languages, as it is differently met in the individual languages possessing Det systems. As for Italian, the Det requirement is satisfied at PF through either insertion of overt

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<sup>59</sup> The internal structure of DPs, thus, is parallel to that found in clauses CPs: just as Verb Phrases are dominated by Functional Projections in the clausal domain, Noun Phrases are dominated by Functional Projections in the nominal domain. See also Cinque (2003) (ed.) for a detailed analysis of the functional structure in DP and IP.

Det<sup>60</sup> – the most widespread strategy - or insertion of other lexical material, specifically, following Longobardi's (1994/1996) hypothesis, by N-to-D movement. This latter possibility is restricted to some common N, like “*casa*”, to some kinship terms (in some dialects) and to proper names.

☞ Italian Parameter for DP (from Bottari et al. 1998; pp: 289):

Arguments are DPs and D° must be phonetically filled either by inserting a [+/-referential] Det or by N-movement to D°, unless an empty D° is properly licensed.

It is worth noticing, then, that the possibility of an empty D° is restricted to certain contexts and that the distribution of bare arguments varies between languages. Specifically, in Italian bare arguments have a much narrower distribution than in German. In German bare plurals and bare mass nouns are grammatical in all argument positions, while in Italian bare plural and mass nouns are accepted only as a sister to a lexical head, i.e. the direct object of transitive verbs or prepositions and the subject of unaccusative verbs (see Longobardi 1998 for a detailed analysis on this point).

This cross-linguistic variation has been explained by assuming the “Nominal Mapping Parameter” (Chierchia 1998), regulating the syntax of nouns and specifically the way in which syntactic categories -Nouns are mapped into their semantic types -meanings.

Chierchia assumes the existence of three types of languages: in the first type, Nouns are mapped into Pred, in the second Nouns are mapped into Arg, whereas in the third type Nouns are mapped into Pred or into Arg and the choice is lexically determined. Instantiations of the three settings can be found respectively in the Romance Languages (for example Italian), Chinese and the Germanic Languages (for example German). In Romance Languages Nouns are born as Pred and D must be projected and filled with an article in order to turn

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<sup>60</sup> Including the so called definite expletive articles, which are not associated with a semantic content, but rather have a pure syntactic function, i.e. are used as a strategy to satisfy the Det requirement at PF. It is the case, for examples of articles preceding proper names in some dialects, or kinship terms. (See Bottari et al. 1998).

them into arguments; therefore bare nominal arguments are generally not allowed in these languages. In Chinese, where Nouns are Arg, no articles are needed and bare nominals are allowed in all argument positions. Finally in Germanic languages Nouns are either Pred or Arg: in the first case they need to occur with an article (count nouns), whereas in the second case they behave like Chinese nouns and can occur as bare nominals (mass nouns).

Recent studies on L1 acquisition across different languages have shown that children omit articles in their earliest productions (see, a.o. Hoekstra, Hyams and Becker, 1996; Chierchia, Guasti, Gualmini, 1999; Marinis 1999; Crisma and Tomasutti, 2000) and that there is a difference across languages in the way in which such omission occurs. Chierchia, Guasti Gualmini (1999), in fact reported that French and Italian speaking children cease to omit articles at an earlier point of their linguistic development than English and Swedish speaking children; Guasti, de Lange, Gavarrò, Caprin (2004) observed that articles start to be used earlier in child Romance than in child Dutch and that Dutch children omit articles at a higher frequency than Italian children at the same stage of acquisition. The authors argue in favor of an account of the observed developmental pattern in terms of the Nominal Mapping Parameter of Chierchia (1998), discussed above: omission of articles is the result of incorrectly mapping a noun into the semantic type Arg.

### 3.3 Participants

20 adult German-speaking learners of Italian participated in the experiment with elicitation task procedure. Their age ranged between 19 and 42 years old.

15 of them were visiting students at the University of Siena. After their arrival in Italy, they had attended a language course of Italian for three weeks at the university. All subjects had been exposed to some Italian in their native countries, either starting in high school or at the university. These subjects have been identified as having intermediate or advanced levels of proficiency, as

determined by a standardized proficiency test, which was administered at the time of the experiment<sup>61</sup>.

The remaining 5 have been classified as near native speakers of Italian, on the basis of length of residence and the amount of their use of Italian.

They were first exposed to the L2 at different ages, ranging from age 10 to adulthood. However, their first extensive contact with the L2 was as adults. They had resided in Italy for at least 4 years, with day-to-day exposure to the L2.

The two whom had been first exposed to Italian at the age of 10 were native of Trentino Alto Adige, a bilingual region in Northern Italy. Nevertheless they grew up in a German context – attending German schools and speaking German at home; when they were 19 years old they moved to Siena to attend the University. Finally, the remaining 3 subjects, instead, have been living in Italy for more than 7 years.

10 adult native speakers of Italian served as a control group. They came from different regions in Italy but they all lived in Siena. Their age ranged between 22 and 34 y.o.

General information regarding the whole population taking part in the elicitation task experiment is provided in Table 1:

3.

**Table 1: Participants in the elicitation task experiment**

Subjects	Level of proficiency	Average Age	L1
7	Intermediate	30	German (6); Austrian (1)
8	Advanced	31	German (6); Austrian (2)
5	Near native	32	German (5)
10	-	28	Italian (Control group)

The corpus for the analysis of spontaneous production data comes from 1 year-long recordings of the speech of one German subject attending the University of

<sup>61</sup> The test that we utilized to determine the level of proficiency of the L2 learners is the same one used at the University for Foreigners of Siena to identify the level of knowledge of Italian of foreign learners who want to take part at the Italian language courses held at that University.

Siena. This subject had also participated in the elicitation task experiment at the time of the first recording and was classified in the Intermediate group.

Data for L1 investigation is based on the spontaneous speech of 1 Italian-speaking child, followed from 1;6 to 2;8, living in the area of Siena. More information is given in section 4.

### **3.4 On the elicitation task procedure:**

#### **3.4.1 The experimental design**

We used the experimental procedure already adopted in Leonini and Belletti (2004) for collecting the data based on the elicitation task experiment, where the learners had been set up in situations in which a clitic object should be expected.

The discourse situations worked very well in eliciting clitics: 19 videos describing different situations were shown to the subject. At the end of each video a question was asked concerning the scene; the subjects had been instructed to always answer with a full sentence containing the verb, in the way they felt most natural.

We faced the fact that in Italian there is a difference concerning the possible reference of object clitics and strong pronouns, as object clitics can refer both to [+/-animate] objects, while strong pronouns can only have [+human] referents, by using scenes which refer to both [+animate] and [-animate] objects. Furthermore, since in sentences with complex verb forms consisting of Aux + Past Part object clitics trigger Agreement with Past Participle in Italian, both sentence types were tested in the experiment: sentences in the present tense (12 items), and sentences in the present perfect (11 items). Verbs were transitive, and all the expected responses for the L2rs consisted in a clitic pronoun and a verb. Furthermore, the context given strongly favored a clitic object, rather than a full DP object: the object was known and had just been mentioned.

All subjects went through the same items and were tested individually. Some distractor scenes were also included.

To exemplify, object clitics have been elicited through questions related to the scenes of the type in (4) and (5):

#### 4. Object clitic elicitation task for present tense

Experimenter: - Il ragazzo che cosa fa con il foglio?  
 - the boy what does with the paper?  
 - “what has the boy done with the paper?”

Expected response: Lo strappa  
 - it(cl) tears up  
 - “he tears it up”

#### 5. Object clitic elicitation task for present perfect

Experimenter: - Che cosa ha fatto il ragazzo quando ha visto la ragazza?  
 - What has the boy done when he has seen the girl?

Expected response: - L’ha salutata  
 - He has greeted her

An object clitic was expected in 23 contexts out of 39.

The collected data was then used to investigate the L2 learners mastering of definite articles.

We discarded from the analysis unclear sentences, immediate repetitions of the same sentences, and routine sentences. Moreover, we limited the analysis to verbal utterances and we counted as omissions of articles all nouns that in the target language would have required an article. This means that plural and mass nouns without an article were considered ungrammatical unless they occurred as sisters of lexical heads (see the discussion above).

### 3.4.2 Results

#### A. Object clitics

##### ☞ Quantitative analysis

General results on cliticization are shown in (6) and (7):

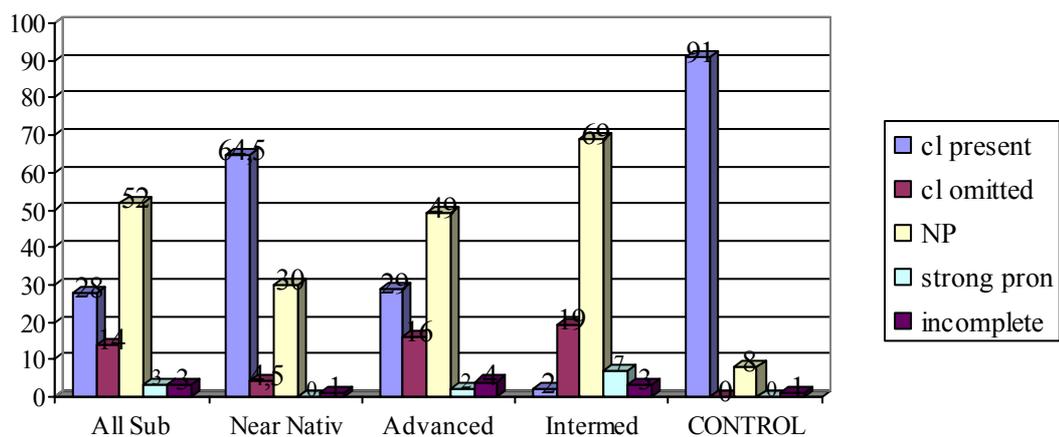
6.

**Table 2. Comparison of clitic use in L2 subject and control group**

Subjects	Clitic (+)	Clitic (-)	Lexical NP	Strong Pron.	Incompl.answ.
All (20)	127/460 <b>28%</b>	65/460 <b>14%</b>	239/460 <b>52%</b>	15/460 <b>3%</b>	14/460 <b>3%</b>
Near nat. (5)	70/115 <b>61%</b>	6/115 <b>5%</b>	37/115 <b>32%</b>	0 <b>0</b>	2/115 <b>2%</b>
Advanced (8)	53/184 <b>29%</b>	29/184 <b>16%</b>	91/184 <b>49%</b>	4/184 <b>2%</b>	7/184 <b>4%</b>
Intermed (7)	4/161 <b>2%</b>	30/161 <b>19%</b>	111/161 <b>69%</b>	11/161 <b>7%</b>	5/161 <b>3%</b>
ControlS.(10)	209/230 <b>91%</b>	0 <b>0</b>	18/230 <b>8%</b>	0 <b>0</b>	3/230 <b>1%</b>

7.

**Figure 1: % of clitic production vs. clitic omission**



6) and 7) show that the use of clitics is not acquired properly in the L2 group: clitics are often omitted and even more often the complement is realized as a full lexical noun phrase. We interpret the use of a full lexical noun phrase as a complement in place of the clitic as a strategy to avoid use of a clitic. Similar

results have been found by Leonini and Belletti (2004) [in the study of the acquisition of object clitics from L2rs with different L1s]. In their analysis the learners also adopted a generalized strategy implying the use of full NPs instead of the clitic, and it was pointed out there that the elicitation procedure makes the above mentioned strategy emerge in a clearer way than simple natural production data<sup>62</sup>.

Within the spirits of the current work, it is also interesting to compare L2 data from our research and from previous studies with data from L1 acquisition, collected by means of the same experimental method. In L1 acquisition data coming from elicited production, a high rate of omission has been attested: Perez-Leroux et al. (2005) found that French children at early stages of acquisition favor null object instead of clitics (60% of omissions); a high rate of omission in L1 French was also documented by Jakubowicz et al. (1996). Turning to Italian, Schaeffer (1997) found that Italian children (mean age 2;5) produced 14% direct object and only 22% of clitics, the rest being raw omission.

Adult L2rs and children learning a first language thus seem to show a different strategy to avoid clitics while object clitics are not yet fully acquired: L2rs prefer DPs; children prefer omissions<sup>63</sup>. A similar behaviour to the one found here for adult L2ers – the preference to fill the argument slots of predicates with full NPs – has been reported by Bottari, Cipriani and Chilosi (2000) in the production of

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<sup>62</sup> See also Duffield et al. (2002) and the reference cited there for a related discussion on this point.

<sup>63</sup> Note however that in L1 data coming from spontaneous production, a preference for use of DPs -vs. omissions- has been attested during the period when clitics are scarce. Van der Velde et al. (2002) found 70% of DPs and between 10-15% of omissions in spontaneous production data coming from the interaction of three French children recorded from age 1;11 to age 2;5; similar results were also reported by Jackubowicz et al. (1996). The authors gave the following analysis: clitics appear later because of their structural deficiency. Instead of clitics children prefer DPs because they prefer less complex computations to more complex computations

Now, how can such a difference between children's behavior in spontaneous (low percentage of omissions) vs. elicited production (high rate of omissions) be accounted for? Jackubowicz et al. (1996) mentioned that "the high percentage of object omissions (in L1 data from elicited productions) [...] is a by product of the task itself" (pp.384). Although, as pointed out by Pirvulescu (2005) "low rate of omissions in spontaneous discourse might be a consequence of the methodology used to count these omissions". Pirvulescu proposes an analysis of spontaneous production using the notion of "clitic context", which confirms what was found in elicited production, i.e. while object clitics are not yet fully acquired there is an important rate of omissions. See Pirvulescu (2006) for a detailed discussion of the notion of "clitic-context". See also section 4 of the present study.

dysphasic children. In their study they showed that children's productions differ from normal children, who tend to fill the argument slots with clitic pronouns as soon as they acquire mastery of the functor. Such behaviour for normal children will be also confirmed from our L1 data reported below.

Coming back to our data (see 6 and 7), it should be noted moreover that use of strong pronouns in place of object clitics is extremely limited; this is again in line with Leonini & Belletti's findings, which we report in (8) below, for a comparative purpose:

8.

**Table 2: Percentages of clitic use in subjects with L1 German  
(Adapted from Leonini & Belletti 2004)**

Subjects	Clitic (+) <sup>64</sup>	Clitic (-)	Lexical NP	Strong Pron	Incompl
German(16)	73/368 <b>22%</b>	81/368 <b>20%</b>	189/368 <b>51%</b>	8/368 <b>2%</b>	21/368 <b>5%</b>

A sharp contrast between the behavior of the Control group and the Intermediate and Advanced groups must be then noted.

In the control group a total lack of clitic omission is attested and the use of full lexical NPs is very limited: this indicates that use of a full lexical noun phrase as a complement can be interpreted as an effect of the experimental design only to a very marginal extent and supports our interpretation above for the "overuse" of lexical NPs by the L2rs investigated here as an avoidance strategy.

Advanced and Intermediate learners of Italian, on the contrary, show a low use of object clitics and display clitic omission to an extent which is similar.

As far as the use of clitics by Intermediate learners is concerned (4 clitic occurrences found in the corpus, 2%), it must be pointed out, moreover, that they have been produced exclusively by two learners and appear in answers to questions which contain a clitic (see example (9.a) below).

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<sup>64</sup> Leonini & Belletti found a higher use of object clitics than here, but it should be noted, however that 54 out of the 81 (67%) clitics attested in their experiment were produced by 3 subjects, who were, by far, the most fluent ones in Italian.

Some examples of clitic productions, omissions and use of NPs are reported in (9), (10) and (11) below:

9. Clitic present

- a. Quante volte l'ha chiamata?  
 how many times she-(cl) has called?  
 'How many times he called her?'
- a'. La chiama due volte Subject 8 (Intermediate)  
 her-(cl) calls twice  
 'He calls her twice'
- a". L'ha chiamata due volte Control Subject  
 her-(cl) has called-(PstPrtAgr) twice  
 'He called her twice'
- b. La ragazza della scena che cosa ha fatto con il libro?  
 the girl of the scene what has done with the book?  
 'What what has the girl done with the book?'
- b'. Lo sta leggendo Subject 1 (Advanced)  
 it-(cl) is reading  
 'She is reading it'
- b". Lo ha letto Control Subject  
 it-(cl) has read  
 'He has read it'
- c. Che cosa ha fatto il ragazzo con la carta?  
 what has done the boy with the paper  
 'What has the boy done with the paper?'
- c'. La butta nel cestino Subject 2 (Near native)  
 it-(cl) throws away in the basket  
 'He has thrown it away in the basket'
- c". L'ha buttata nel cestino Control Subject  
 it-(cl) has thrown away in the basket  
 'He has thrown it away in the basket'

10. Clitic omitted
- a. Che cosa ha fatto la ragazza al ragazzo  
 what has done the girl to the boy  
 ‘What has the girl done to the boy?’
- a’ \_Ha baciato Subject 16 (Intermediate)  
 Øhas kissed  
 ‘She kissed (him)’
- a” L’ha abbracciato e l’ha baciato Control Subject  
 he-(cl) has kissed  
 ‘She kissed him’
- b. Che cosa ha fatto il ragazzo alla ragazza?  
 what has done the boy to the girl  
 ‘What has the boy done to the girl?’
- b’ \_Ha invitata al cinema Subject 14 (Advanced)  
 Øhas invited-(PstPrtAgr) to the cinema  
 ‘He invited her to the cinema’
- b” L’ha invitata al cinema Control Subject  
 her-(cl) has invited-(PstPrtAgr) to the cinema  
 ‘He invited her to the cinema’
- c. Che cosa fa la ragazza al ragazzo  
 what does the girl to the boy  
 ‘What has the girl done to the boy?’
- c’ \_Aiuta a mettersi il cappotto Subject 21 (Near Native)  
 Øhelp to put on-(refl.cl) the coat  
 ‘She helps him to put on his coat’
- c” Lo aiuta a mettersi il cappotto Control Subject  
 him-(cl) help sto wear-(refl.cl) the coat  
 ‘She helps him to wear his coat’

11. Full lexical NP
- a. Che cosa fa la ragazza con la mela?  
 what does the girl with the apple  
 ‘What is the girl doing with the apple?’
- b. Lei lava la mela Subject 7 (Intermediate)  
 she washes the apple  
 ‘she is washing the apple’
- c. La ragazza lava la mela Subject 2 (Advanced)  
 the girl washes the apple  
 ‘The girl is washing the apple’
- d. Lava la mela Subject 19 (Near native)  
 washes the apple  
 ‘(She) is washing the apple’
- e. La lava Control Subject  
 her-(cl) washes  
 ‘(She) is washing it’

It should be pointed out, however, that a developmental effect can be observed across the groups: the results reveal that the upper groups pattern together with the native speakers, even though in some cases they seem to have other conditions than the natives: they show a lower use of clitics and the use of lexical NPs is still consistent. Rather, there is a clear difference between the native speakers and the lower group; the upper group, moreover, seems to resemble the native speakers and differ from the lower group.

The developmental pattern indicates that the adult L2 learners investigated here are able to restructure their grammars, approaching that of native speakers, thus offering evidence against those hypotheses, according to which interlanguage grammars suffer from some kind of permanent grammatical deficit (Beck 1998).

Note however that the use of a full lexical NP in contexts where native speakers would have used a clitic is a strategy also adopted by near native speakers, who do not show a completely target-like use of cliticization. The presence of clitics

omission among this group also demonstrates this. Variability in the use of cliticization is thus attested here, confirming that this is also a characteristic of grammars of near native learners (Lardiere 2000, Sorace 2000)<sup>65</sup>.

### ☞ Qualitative analysis

Focusing on clitic productions, the four instances of clitics produced by the intermediate learners are in clauses in the present tense, while clitics are attested both in sentences in the present tense and in the present perfect within the advanced learners and near natives. As illustrated in Table 3 in (12) below, all learners show variability in the use of agreement between the clitic and the Past Participle, as this is sometimes present, sometimes absent and sometimes incorrectly produced. Once again, a developmental pattern can be found within the two groups: Agreement between object clitics and Past Participle is correctly provided 88% of the times by near natives and only 39% of the times by advanced learners<sup>66</sup>.

12.

**Table 3: Clitic and Past Participle Agreement in L2<sup>67</sup>**

Subjects	Contexts	Past Part Agr	Lack of Pst Prt Agr	Different Agr <sup>68</sup>
Advanced	23	9 <b>39%</b>	10 <b>43%</b>	4 <b>11%</b>
Near native	34	30 <b>88%</b>	3 <b>9%</b>	1 <b>3%</b>
TOT	57	39 <b>68%</b>	13 <b>23%</b>	5 <b>9%</b>

Some examples of the attested forms are reported in (13) and (14) below:

<sup>65</sup> For a detailed analysis on variability and optionality at different stages of L2 competence – including end states and near native, see the discussion reported in section 1. See also White (2004) and references cited there.

<sup>66</sup> Again, variability/optionality is attested also at higher levels of performance in L2. See previous note.

<sup>67</sup> We took into account for the analysis of Past Participle Agreement only the relevant contexts, i.e. sentences where the feminine or the plural forms of the clitic are present. In Italian, indeed, the unmarked ending of the past participle is the same one as the masculine singular ending (-o).

<sup>68</sup> We included here some errors detected in the data, where the masculine plural form has been used in place of the feminine one. (see example 13b<sup>70</sup>).

13.

a. Che cosa ha fatto con le chiavi?

what has done with the key?

‘What has (she) done with the key?’

b. Past Participle Agreement

Le ha mess-e sulla tavola

Subject 21 Near Native

they-(cl-FEM.PLUR) have put-(FEM.PLUR) on the table

‘(She) has put it on the table’

b’. Lack of Agreement

Le ha mess-o sulla tavola

Subject 1 Near Native

they-(cl-FEM.PLUR) have put-(MASC.SING) on the table

‘(She) has put it on the table’

b”. Different Agreement

Le ha mess-i sulla tavola

Subject 5 Near Native

they-(cl-FEM.PLUR) have put-(MASC.PLUR) on the table

‘(She) has put it on the table’

14.

a. Il ragazzo che cosa ha fatto con la ragazza?

the boy what has done with the girl?

‘What has the boy done to the girl?’

b. Past Participle Agreement

L’ha invitat-a al cinema

Subject 10 Advanced

her-(cl-FEM.SING) has invited-(FEM.SING) at the cinema

‘(He) has invited her to the cinema’

b’. Lack of Agreement

L’ha invitat-o al cinema

Subject 15 Advanced

her-(cl-FEM.SING) has invited-(MASC.SING) at the cinema

‘(He) has invited her to the cinema’

Furthermore, a total lack of misplacement errors of clitics in the provided answers should be pointed out; it contrasts with previous studies on L2 (child and adult) acquisition of object clitic pronouns in French.

As for child L2 acquisition of French, see Hamann & Belletti (2004), where cases of object clitic in isolation, after preposition and in argument position have been found. Similar observations have been reported by Hulk (1997) and Hulk & Müller (1999), who found occurrences of the target-deviant intermediate position between the auxiliary and the participle, in the bilingual Dutch-French child they studied<sup>69</sup>.

As for adult L2 acquisition of French it has been observed that English adult learners pass through four stages, as reported by Hawkins (2001) and Herschensohn (2004):

- ☞ Stage 1: Post verbal position (strong form)
- ☞ Stage 2: Object omission
- ☞ Stage 3: Intermediate position
- ☞ Stage 4: Target-like position (pre-finite verb position)

The same progression has been then observed in adult learners of French with Swedish as L1 studied by Schlyter (1997) and Granfeldt & Schlyter (2004).

On the contrary, within the L2 subjects investigated here, when produced, clitics are always located in the appropriate pro-clitic position (with tensed verb

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<sup>69</sup> Hulk's findings contrast with previous studies on object pronouns in the L1 acquisition of French, whether monolingual or bilingual, which have shown practically error-free acquisition, as the clitic pronoun is placed correctly in preverbal position from the first time it appears in the child's production. See, on this, Hamann et al. 1996; Müller et al. 1994; Jakubowicz et al. 1996. Moreover, White (1996), in her study of child L2 acquisition of French, argues for a development which is very similar to that of L1 acquisition: object clitics are correct in form and position, from the time the children start using them, as there are only a few cases of incorrect position.

As for Italian, see Ferrari (2006) who reports on the acquisition of object clitics by two Italian/German bilingual children. In her data she found no target-deviant clitic placement with finite and no-finite verb forms, except for in some of the Modal+Infinitive constructions, where clitics were often located between the Modal and the Infinitive. Ferrari interpreted these errors as stemming from Verb syntax rather than from a misanalysis of the Italian clitic pronouns by the children

forms)<sup>70</sup>. Again, similar findings have been reported by Leonini & Belletti (2004) in their analysis of interlanguage grammars of adult L2 learners of Italian with different L1s. More data on adult L2 acquisition of clitics in Italian is necessary though, to determine the general character of this result.

Thus, when present, clitics are essentially correct in position and in form, as also demonstrated by the fact that only two morphological errors were found in the data. Two forms of the masculine plural object clitic, indeed, were replaced by the feminine plural one, as illustrated in (15) below:

15.

- a. Dove ha messo gli occhiali?  
 where has put the spectacles(MASC.PLUR)  
 ‘Where has she put her spectacles?’
- b. Le ha mess-i nella borsa → Li(MASC.PLUR) substituted by Le(FEM:PLUR)  
 them-(cl-FEM.PLUR) has put-(MASC.PLUR) in the bag  
 ‘(She) has put them in her bag’

As for clitic omissions, they always occur in sentences in the present perfect (Aux+PstPrt)<sup>71</sup> in the productions of advanced and near native learners (see (16) below): no omission of clitic pronouns in sentences in the present tense were observed within the groups. On the contrary, all clitic omissions produced by the intermediate learners occur in contexts with simple verb forms, as shown in (17):

16.

- a. Che cosa ha fatto il ragazzo con una delle lampade?  
 ‘What has the boy done with one of the lamps?’

---

<sup>70</sup> Only two enclitic forms are attested in the corpus. Also here clitics appear in the correct position, following the no-finite verb form.

<sup>71</sup> Advanced and near native learners make use of both sentences in the present tense and sentences in the present perfect. Therefore complex verb forms consisting of Aux+PstPrt are attested in their productions. On the contrary, intermediate learners use also sentences in the present tense.



## B. Determiners

The same data was then analyzed to investigate L2rs mastering of determiners. It is clear that the experiment was designed to elicit object clitics, but the answers to the tasks given by the L2rs can however be examined in order to analyse the use of articles.

We will focus on definite articles, as their categorial status makes the parallelism with third person accusative clitics explicit.<sup>73</sup> As shown in section 2, definite articles and object clitics belong to the same category as determiners, and hence occupy the same position [D]; in Italian they also share the same morpho-phonological properties.

Nevertheless, despite their categorial identity the two elements differ for some properties.

First of all, they have a different distribution: definite articles precede the noun, whereas accusative clitics either precede or follow the verb, and their distribution is determined by the form of the verb.

A further difference between third person accusative clitic pronouns and definite articles is that definite articles have the property to individualize an entity denoted by the noun, whereas clitics do not restrict or individualize, but only refer to a nominal discourse antecedent (cf. Jakubowicz et al., 1998).

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<sup>73</sup> First and second person clitics are presumably provided with a richer structure, containing at least a personal head. As a matter of fact a number of typological approaches have been proposed in recent literature, which sharply differentiate the status of 1<sup>st</sup> and 2<sup>nd</sup> person clitics from that of the 3<sup>rd</sup> person. Among these, see for example Tsimpli (2003) and Tsimpli & Stavrakaki (1999), according to which such distinction is based on the person feature. More specifically, in Greek, uninterpretability of case and *phi*-features is associated with 3<sup>rd</sup> person accusative clitics whereas the person feature is interpretable in the case of 1<sup>st</sup> and 2<sup>nd</sup> person clitics. (See also Manzini & Savoia (1998) and Torrego (1998) for similar account). The same distinction is held for definite vs. indefinite articles.

Note that in recent proposals on language development (both L1 and L2), impairment and attrition (see a.o. Tsimpli (2001), Bruhn de Garavito & White (2000), Bouba et al. (2002) and Sorace (2000)) it has been argued that difference in interpretability plays a crucial role. As for L2 acquisition, it has been proposed that for a set of parameters whose values differ between L1 and L2, uninterpretable features resist parameter-resetting and give rise to persistent problems also in advanced stages of L2 acquisition. Tsimpli (2003) provided evidence for this proposal investigating L2 acquisition of object clitics in Greek by Turkish and Russian learners. In her analysis she found different L2 performance in the use of 1<sup>st</sup>/2<sup>nd</sup> as compared to 3<sup>rd</sup> person clitics, the former showing lower omission rates than the latter. For the same reason also definite determiners were omitted more frequent than the indefinites by the same learners.

Determiners other than definite articles, such as quantifiers, demonstratives, numerals and possessives have been ignored from the count. Following recent works on the categorial status of determiners (see Giusti 2003, Bernstein 2000 and Longobardi 2000, a.o.) we adopt the idea that among determiners, only articles are functional heads, the rest being maximal projections assigned to the specifier position of a D-projection<sup>74</sup>.

Moreover, we took into consideration for the analysis only argument nominals and we did not include bare grammatical nouns, because their status is ambiguous between being the expression of the target like system or of a system that optionally omits articles with any kind of nouns.

To elicit definite articles, we identified three different types of contexts using similar criteria adopted by Bernardini (2003), on the basis of the presence of V and the position of the DP with respect to V:

- ☞ PRE-V: here we included nominal expressions in preverbal position (here lexical subjects);
- ☞ POST-V: we included all post verbal nominal expressions (here lexical objects);
- ☞ NO-V: we included here:

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<sup>74</sup> Giusti re-examines the status of the various pronominal elements which are standardly referred to as determiners (Abney 1987) proposing that they do not constitute a homogeneous category. In particular Giusti (2003) shows that only articles are extended heads of the noun and appear in  $F_{max}$ . Demonstratives are XP across languages and occupy specifier positions, even if they are not directly merged in  $FP_{max}$ . They are merged lower in the structure and then moved to  $SpecFP_{max}$  to check their referential features. As a matter of fact they provide semantic referential features to the NP, differently from articles that are the realization of syntactic features. (this assumption is confirmed by German, where definite articles may appear for what seems to be reason of Case realization: a) Ich trinke gerne Kafee; b) Ich ziehe \*(dem) Kafee (den) Tee vor).

Cross-linguistic variation is found in the stage of the derivation in which they move to  $SpecFP_{max}$ . This property is shared by other modifiers of the noun, such as possessives and personal pronouns. But see Bernstein (2000) for a different proposal, according to which the demonstrative doesn't raise to  $SpecDP$  universally. Bernstein assumes that the demonstrative head in German and Romance languages raises and substitutes to D, this being consistent with the fact that the demonstrative may not co-occur with the definite article in these languages.

- argument nominals which do not occur as complements of V (contextually governed arguments): es: Che cosa ha preso il ragazzo? \_libro giallo – What has the boy lost? \_yellow book<sup>75</sup>;
- nominal expressions occurring within prepositional phrases: es: Ha buttato la carta in\_ cestino; (He) has trown the paper away in \_ basket.

Following the generalization of Longobardi (1994), determinerless nominals are acceptable in Italian when they occur as sister of a lexical head (e.g. a verb or a preposition). The possibility of omitting determiners in subject position is then excluded in Italian. Contrary to Italian, German allows bare plurals in this position<sup>76</sup>.

General results are shown in 19), below:

19. **Table 3: Definite articles in L2 groups: production vs. omission**

L2rs	Def articles (+)		Def articles (-)	
NEAR NATIVES	191/194	<b>(98%)</b>	3/194	<b>(2%)</b>
ADVANCED	253/262	<b>(97%)</b>	9/262	<b>(3%)</b>
INTERMEDIATE	183/187	<b>(98%)</b>	4/187	<b>(2%)</b>
TOT	627/643	<b>(98%)</b>	16/643	<b>(2%)</b>

As shown in Table (3) L2 learners of all groups do not seem to have problems with articles as they only omit them in 2% of the cases. Our results thus confirm previous research on L2 showing that supplying articles is not a major difficulty for L2rs of an L2 where the L1 has overt determiners (Parodi and ali. 1997, Granfeldt 2000, 2004).

Most of the omissions were attested in nominal expressions occurring within prepositional phrases; a very low rate of determiners omission with nominal in subject positions was found, as shown in Table 4:

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<sup>75</sup> We found only one occurrence of this type. The remaining are all cases of determiner omissions after prepositions.

<sup>76</sup> See the discussion in section 3.2.2.

20. **Table 4: Omission of Definite articles per contexts in L2 groups:**

L2rs	PRE-V	POST-V	NO-V
NEAR NATIVES	0	1	2
ADVANCED	1	2	6
INTERMEDIATE	1	1	2
TOT	2/16 (13%)	4 (25%)	10 (63%)

Some examples are given in 21) below:

## 21. Pre-V

- a. \_Ragazza spinge il ragazzo

Advanced

\_girl pushes the boy

'the girl pushes the boy'

- b. \_Ragazza ha un libro in mano

Intermediate

\_girl has a book in her hands

'The girl holds a book'

## 22. Post-V

- a. Ha spostato \_lavagna vicino alla porta

Near Native

has moved \_blackboard next to the door

'he has moved the blackboard next to the door'

- b. Lui ha acceso \_lampada

Intermediate

he has switched on \_lamp

'he switched the lamp on'

## 23. No-V

- a. L'ha invitata a \_cinema

Near native

her-cl has invited to \_cinema

'he has invited her to the cinema'

- |    |                                                                                                        |              |
|----|--------------------------------------------------------------------------------------------------------|--------------|
| b. | L'ha buttato in _cestino<br>it-cl has thrown in the basket<br>'he threw it away into the basket'       | Advanced     |
| c. | Butta la carta in _cestino<br>throws the paper in _basket<br>'he throws the paper away into the basket | Intermediate |
| d. | Ha messo in muro<br>_has put in_ wall<br>'he has hung it on the wall'                                  | Intermediate |
| e. | Ha messo le chiavi su _tavola<br>has put the key on _table<br>'she put the key on the table'           | Advanced     |

We can thus conclude that the L2 acquisition of definite determiners seems sensitive to the syntactic environment in which the DPs appear.

Similar results have been reported by Sánchez and Giménez (1998) in a study on L2 acquisition of definite determiners in Spanish by L1 Quechua speakers. They found that the percentage of errors per possible occurrence of a definite determiner in the L2rs Spanish was higher for DPs complements of prepositional phrases than for DPs in subject position. They hypothesized that this could be due to the availability of licensing of the null determiner by incorporation to the prepositional head.

This sensitivity to the syntactic environment in which the DP appears is a characteristic of the L1 acquisition of definite determiners as well; although a different acquisitional pattern characterizes the acquisition of definite articles in L1. As reported in section 1, children tend to omit determiners when they are in subject position, or in nominal expressions uttered in isolation, and not to do it when they are in object position. This has been documented for several languages (see Caprin et al. 2003; 2006 for Italian; Gerken 1996 for English)<sup>77</sup>. We will go

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<sup>77</sup> Note that a subject/object asymmetry is found in adult speech in special registers of Italian as well, as reported by Guasti et al. (2004).

back to this topic at the end of this study when new evidence from L1 Italian will be provided.

A further fact worth considering is that we found some errors concerning gender of articles, but that no errors involving number were attested (at least in data from elicitation task, we will then see if this is confirmed by the data from spontaneous speech)<sup>78</sup>. Earlier appearances of number as compared with gender has also been reported by Bernardini (2003) in the L2 Italian of Swedish speakers (see also Granfeldt 2003, a.o.) where the early presence of plural nouns and general correctness of number concord was found<sup>79</sup>.

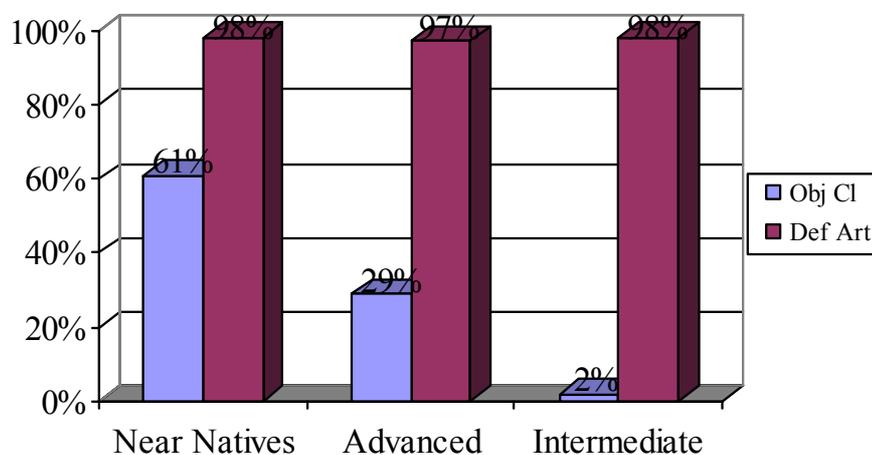
### C. A first comparison of the data

Our data from the elicitation task procedure shows that there is a discrepancy in L2rs use of cliticization and their use of articles. This emerges clearly from Figure 2 in (24) below, where the comparison between the use of object clitics vs. definite articles per group is given:

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<sup>78</sup> The aim of this section is to examine the presence of determiners versus their absence and not to distinguish between correct or incorrect forms or choice of determiners. Therefore we leave these data for further research.

<sup>79</sup> Note that a different pattern of acquisition of Gender and Number in bilingual and L2 acquisition was reported by Bernardini (2003): in her study, in the bilingual children, gender seems to be acquired earlier while in L2 acquisition number is earlier and gender is problematic.

24. **Figure 2: Object clitics vs. determiners use in L2 per group**

It is clear from the figure that the L2rs groups are at considerably lower levels of accuracy for clitic pronouns than for determiners<sup>80</sup>.

### 3.5 Spontaneous production data

#### 3.5.1 Method

Let's now turn to the investigation of spontaneous production data, in order to see if data collected by means of a different procedure can confirm the results found in the elicitation task experiment.

The corpus comes from spontaneous production speech of a 22 year old female German subject attending the University of Siena drawn from recordings of free interactions between the learner and the investigator. She was recorded two times in one month intervals for a period of 1 year. The first recording was conducted after six months' residence in Italy. At that time the learner also took

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<sup>80</sup> But recall that the elicitation task procedure used here was not designed to elicit determiners but object clitics. As far as determiners are concerned, it is rather a kind of "controlled" spontaneous production. It is important to note, therefore, that we are not comparing data drawn from the same situations. Nevertheless, the fact that the L2ers investigated here display a different mastery of definite articles vs. 3<sup>rd</sup> person object clitics is indisputable.

part at the elicitation task experiment, and was classified as belonging to the Intermediate group. From the study of the corpus, we identified 4 stages, on the basis of verbal morphology accuracy:

- ☞ Stage 1: 6 months after her arrival in Italy / at the beginning of a 3 month-long Italian language course (verb morphology not productive);
- ☞ Stage 2: At the end of the language course; beginning of second term at University;
- ☞ Stage 3: End of second term at University; (verb morphology getting productive);
- ☞ Stage 4: After 1 year at University (verb morphology almost target-like).

As we did for the analysis conducted previously, we took into consideration for the study only relevant utterances: we eliminated unclear sentences, sentences interrupted by hesitations and long pauses, repetitions, idiomatic expressions and uncompleted sentences.

In the count of accusative clitics, proper contexts for clitic insertion were considered to be only the contexts containing a word to which the clitic could attach. Thus, all cases in which an auxiliary or a modal verb was missing have been left out of the analysis. Furthermore, in order not to overestimate the omission rate (since in the cases where one obligatory argument of a predicate is not phonetically realized omissions may involve either a clitic or a full NP) we calculated the rate of omissions by looking only at contexts where a clitic is necessary. These are in fact the contexts where we can talk about object clitic deletion and which were used in elicited production as well. We thus adopted the notion of “clitic-context” following what has been proposed by Pirvulescu (2005), for the analysis of children spontaneous production<sup>81</sup>:

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<sup>81</sup> Pirvulescu (2006) proposes an analysis of spontaneous production using the notion of clitic-context. In her study of spontaneous speech of French children, the clitic-context was the denominator for calculating % of omissions vs. clitics. Her study confirms previous results from elicited production in L1 French (Perez-Leroux et al. 2005), i.e there is an important rate of omissions in a context that requires the use of a clitic. Her findings are not in line with previous

- ☞ The clitic context in children spontaneous production, by Pirvulescu and Roberge, to appear, pp. 10:

<<the referent is the topic of the discussion; it is contained in the question/assertion in the immediately preceding discourse>>

### 3.5.2 Results

#### A. Object clitics

- ☞ **Quantitative analysis**

We did not find a high use of object clitics in the data, similarly to previous studies investigating interlanguage knowledge of accusative clitics in spontaneous production data. White (1996) and Liceras et al. (1997), among others, found that spontaneous production of object clitics was relatively infrequent even in simple sentences. It is worth noticing, however, that this absence does not necessarily imply a lack of accusative clitics in the interlanguage grammar but might be due, instead, to the avoidance of using clitics that are nevertheless present.

Results are schematized in 25) below:

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researches on spontaneous speech in L1 French (Jakubowicz et. al 2006; Van der Velde et al. 2002), which have shown that children prefer DPs while object clitics are not yet fully acquired. Cfr. also footnote 62.

25. Table 5: Use of object clitics in Heike

Stage	Cl +	Cl -	NP	Strong Pron	Questo	TOT Contexts
1	1 (4%)	10 (43%)	7 (30%)	1 (4%)	4 (17%)	23
2	3 (30%)	4 (40%)	2 (20%)	1 (10%)	0 (0)	10
3	8 (35%)	9 (39%)	4 (17%)	1 (4%)	1 (4%)	23
4	8 (42%)	4 (10%)	2 (5%)	3 (7%)	2 (5%)	19
<b>TOT</b>	20 (27%)	27 (36%)	15 (20%)	6 (8%)	7 (9%)	75

Object clitic omission occurs in 36% of the cases while clitics are used 27% of the time. It should be pointed out, then, that full lexical NP complements are used in place of clitics quite consistently (20% of the time); however their use is lower than clitic omissions, which occur 36% of the time. A low degree of correctness in the use of cliticization is thus achieved.

As in the previous experiment, a low use of strong pronouns in place of object clitics is attested (8% of the time) – even though strong pronouns are used at a higher extent here than in the data from the elicitation task test. In fact, while in the elicited production data the use of full NP seems to be the only option to avoid the clitic, here the avoidance-strategy seems to allow for different solutions<sup>82</sup>.

Once again, however, strong pronouns are not used randomly: as a matter of fact they never occur with [-human] referents. In this case the learner uses the pronominal form *questo*.

If we look at the data across the different stages, a developmental effect can be observed there, as for the use of cliticization: the results reveal that object clitics are acquired gradually by Heike, as she starts with 4% of clitic production at Stage 1 and ends up with 42% of clitic use at Stage 4. Such development in the number of clitics used is then accompanied by a gradual decrease of use of the lexical NPs.

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<sup>82</sup> In the data from the elicitation task test the use of full lexical NPs was extremely limited in the control group. This can be taken as an evidence for the fact that the use of a full lexical NP as a complement can be interpreted as an effect of the experimental design only to a very marginal extent. However, in the elicitation test the NP is given in the immediate context (the question) and this can indirectly influence the learner's choice. See also the discussion in the next section.

A less gradual effect seems to affect Heike's behaviour across the stages, as far as clitic omission is concerned: clitic omission drops consistently only at Stage 4, where 10% of omissions are attested.

### ☞ Qualitative analysis

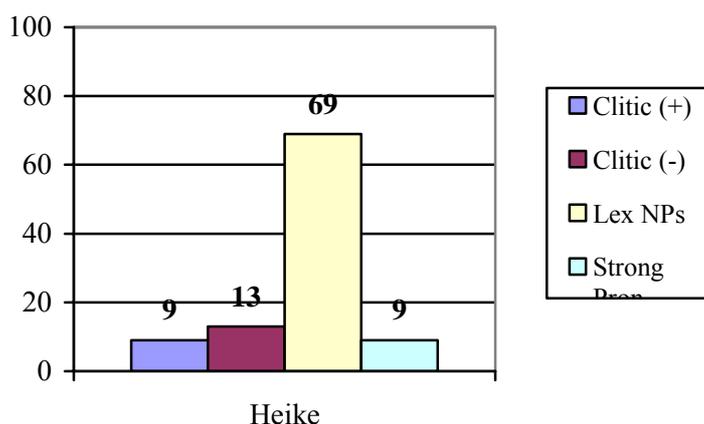
Since Heike also took part in the experiment with the elicitation task procedure, it is worth comparing the data drawn from the two methods, in order to see whether the experimental procedure can somehow affect the learner's performance.

Data from elicitation task procedure is reported in 26 and 27 below:

#### 26. Table 6: Use of object clitics in Heike from elicitation task

Cl +	Cl -	NP	Strong Pron	TOT
2 (9%)	3 (13%)	16 (69%)	2 (9%)	23

#### 27. Figure 3: % Clitic production in Heike from elicitation task



Recall that Heike participated in the elicitation task experiment at the time of the first recording of her spontaneous speech – 6 months after her arrival in Italy – therefore the comparison between the data reported in 26 and those of

Stage 1 reported in 25) is particularly relevant for our analysis. The comparison is illustrated in 28) below:

28. **Table 7: Comparison between data from spontaneous speech and elicitation task in Heike**

Method	Cl +	Cl -	NPs	Strong Pron	Questo	TOT Contexts
Spont. Produc. (Stage 1)	1 (4%)	10 (43%)	7 (30%)	1 (4%)	4 (17%)	23
Elicited produc.	2 (9%)	3 (13%)	16 (69%)	2 (9%)	0	23

The comparison reported in Table 7 shows that the mastery of cliticization is quite limited in both data from spontaneous and elicited production, but that the learner seems to resort to different generalized strategies to avoid the use of object clitics in the two experiments:

29.

- spontaneous production: Heike prefers omissions;
- elicited production: Heike prefers NPs<sup>83</sup>.

Recall, moreover, that as for elicited production, the strategy that requires the use of full NPs instead of the clitic was generally adopted by all the L2rs who took part in the experiment. Thus, it does not seem to be merely a peculiarity of Heike's L2 grammar, but rather a more generalized feature which characterizes the elicited production of (at least) adult second language learners of Italian. Further confirmation of this, is given by Leonini and Belletti (2004), where the use of a full lexical NPs as a prominent strategy to realize the complement of the

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<sup>83</sup> A difference between the rate of omissions in spontaneous vs. elicited production had also been reported in the acquisition of object clitic in French L1 (see the debate reported by Pirvulescu 2006).

verb in the interlanguage grammars of adult learners of Italian with different L1s has been reported.<sup>84</sup>

However, in the elicitation task the NP is given by the immediate context, i.e. in the question asked to the L2rs (see 4 and 5 above). This can provide a reason why it is the preferred selection for those speakers who have problems with clitics (which is not the case for controls). Here we may have a combined effect: on the one hand an effect caused by the experiment, on the other an effect derived by the problem with clitics. Differently, in spontaneous production, the speaker resorts to possible strategies to avoid the clitic.

As far as spontaneous production data is concerned, further data on Italian is necessary to better understand if the assumption reported in 29 has to be held good only for Heike or can be considered a more generalized strategy adopted by L2rs of Italian.

Going back to the analysis of Heike's spontaneous production data, it must be pointed out, then, that most of the clitic contexts attested there are cases of sentences in the present tense. Thus, we do not provide here a table showing the occurrence of clitics in different contexts i.e. with simple/complex verb forms, since Heike produced only few sentences in the present perfect with cliticization. Two occurrences of object clitics in clauses with Aux+PstPrt verb forms are attested only at Stages 3 and 4, where also two omissions occur<sup>85</sup>.

When used clitics are correctly positioned – i.e. cl+V<sub>fin</sub>; V<sub>inf</sub>+cl – similarly to the previous experiment, no target deviant intermediate positions have been found. Again, our data on L2 acquisition of Italian differ from previous results on L2 acquisition of French and English, where intermediate positions have been occasionally found (see a.o. Hersheyson (2004); Schlyter (1997); Granfeldt & Schlyter (2004); Towell and Hawkins (1994).

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<sup>84</sup> As pointed out in Leonini and Belletti (2004), moreover, use of a full lexical NP as a complement can be interpreted as an effect of the experimental design only to a very marginal extent. This is suggested by the extremely limited use of full lexical NPs throughout the control group.

<sup>85</sup> Omission with complex verb form : Anche la Costa Amalfitana è molto bella! \_Ho vista. Ci sono stata! Andrea ha avuto due multe. Lei non \_ha pagate (le multe)

Some examples of clitic productions/omissions, NPs and strong pronouns found in the data are given in 30) below:

30. Clitic Produced

a. Interviewer: Tu bevi birra? Stage 1

Do you drink beer?

Heike: Io non la preferisco  
I do not it-cl. Prefer

b. Interviewer: Hai trovato per lo stage? Stage 2

Have you found a place for your stage?

Heike: Non lo trovo  
I do not it-cl. Find  
Non so trovarlo  
I am not able to find it-cl.

c. Interviewer: Hai più visto Cristiane?  
Have you ever seen Cristiane?

Heike: L'hanno mandata via  
They have her-cl. sent away

31. Clitic omitted

a. Interviewer: Quando hai l'esame? Stage 1

When do you have your exam?

Heike: Venerdì. Quello di domani non \_faccio  
Friday. That I have tomorrow I do not do

b. Heike: Oggi tu puoi dirmi come funziona il passivo.  
Perché non \_ho mai imparato. Stage 2  
Today you can explain me the passive form, because I  
have never learnt.

c. Interviewer: Conosci la Costa Amalfitana? Stage 3

Do you know the Amalfi coast?

Heike: \_Ho vista. Ci sono andata!  
I have visited. I was there!

## 32. Lexical NPs

- a. Heike: Io non vado mai con i libri, solo con gli appunti.  
 In Germania quasi sempre con appunti. Io posso seguire bene, fare appunti no, perché va troppo veloce, prima ascolto, poi faccio gli appunti. A casa poi rileggo gli appunti. Stage 1  
 I never go with books, but only with notes.  
 In Germany (I use) almost always my notes. I can follow well, but not to make notes, because (the professor) is too fast, I first listen to him, then take notes. Then, at home, I go through my notes.
- b. Heike: Non mi piacciono questi zaini che hanno tutti.  
 Tutte le ragazze hanno questi zaini. Stage 4  
 I do not like these rucksacks, everybody here has them. All the girls have these rucksacks.

## 33. Strong pronouns

- a. Interviewer: Flavia dove l'hai conosciuta? Stage 5  
 When did you meet Flavia?  
 Heike: Ho incontrato lei una volta nell'ufficio.  
 I met her once in the office
- b. Heike: Posso incontrare lei lunedì. Stage 3  
 I can meet her next Monday.

Finally one more thing must be noticed: from the first recording, Heike produced 1<sup>st</sup> and 2<sup>nd</sup> person object clitics, specifically the first and second person singular dative form *mi* and *ti*. This is reported in 30) below:

30. Table 8: Use of 1<sup>st</sup> and 2<sup>nd</sup> person object clitic in Heike

Stage	Cl +	Cl -	NP	Strong Pron	TOT Contexts
1	4 (57%)	2 (29%)	0 (0)	1 (14%)	7
2	3 (60%)	0 (0)	1 (20%)	1 (20%)	5
3	6 (75%)	1 (12,5%)	0 (0)	1 (12,5%)	8
4	8 (89%)	0 (0)	1 (11%)	0 (0)	9
<b>TOT</b>	<b>21 (72%)</b>	<b>3 (10%)</b>	<b>2 (7%)</b>	<b>3 (10%)</b>	<b>29</b>

Moreover, when produced, 1<sup>st</sup> and 2<sup>nd</sup> person object clitics always appear in target like positions, both as enclitic and proclitic:

31.

- a. Mi facevano tutti entrare Stage 1  
They all let me enter
- b. Vai in palestra e ti fanno un programma Stage 1  
You go to the gym and they give you a program
- c. Mi hanno chiesto se voglio partecipare Stage 2  
They have asked me if I want to take part....
- d. Forse tu puoi dirmi Stage 3  
Maybe you can tell me
- e. Quando ti posso telefonare? Stage 3  
When can I call you?
- f. Lui sempre viene a chiedermi<sup>86</sup>.... Stage 4  
He always comes to ask me
- g. Telefono a Miki e gli chiedo di venire Stage 3  
I call Miki and ask him to come
- h. Io gli dico che no Stage 3  
To him I say no

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<sup>86</sup> It is also interesting the fact that we found examples of clitic climbing (as in e. f) with 1<sup>st</sup> and 2<sup>nd</sup> person object clitics. We did not find instead cases of OCC with 3<sup>rd</sup> person object clitics. For examples we found cases like *Credo che posso farlo* (I think I can do it); or *vo a prenderlo domani* (I go to take it tomorrow), but cases like *lo posso fare* or *lo vo a prendere domani* are not attested in the data. Moreover we found sentences like *mi puoi telefonare* (you can call me) or *mi viene a trovare in prossimi giorni* (me come to visit in the next few days). We do not go further in these data, as Heike only produced 7 sentences in the entire corpus which allow OCC (all these sentences are with modal verbs or motion verbs, such as *potere/dovere; andare/venire*). See Bennati and Matteini (2006) for a detailed analysis on clitic climbing in adult L2 Italian.

This possibly suggests that L2 learners of Italian would need different time in order to acquire certain morphological forms related to clitics. From a first observation of the data from Heike, a different pattern of development seems in fact to be found in the comparison between 1<sup>st</sup> / 2<sup>nd</sup> and 3<sup>rd</sup> person clitics<sup>87</sup>. The higher production of 1<sup>st</sup> and 2<sup>nd</sup> person clitics can be determined by the fact that Heike is speaking with the investigator, telling her about different topics. Further analysis is necessary on this point<sup>88</sup>.

## B. Determiners

We first analyzed the data in order to isolate the relevant utterances for this study. As for the previous study we took into consideration for the analysis only argument nominals and we did not include bare grammatical nouns, repetitions, interruptions, idiomatic expressions. Moreover, we ignored nouns in isolation, and certain copular sentences which in Italian do not allow an unambiguous classification of the subject and the predicate (see Moro, 1997 for a detailed analysis of copular constructions in Italian)<sup>89</sup>. Finally, we counted as omissions of articles all nouns that in the target language would have required

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<sup>87</sup> But see Tedeschi (2006) for different results. In her study she analyzed the spontaneous speeches of 1 Romanian, 2 Albanian and 1 Polish adult learners of Italian and she found that 3<sup>rd</sup> person accusative clitic were used more than 1<sup>st</sup> and 2<sup>nd</sup> person accusative clitics. In one of the learners –the Romanian– she found however a high use of the form *mi*: this form was attested many times in the expression “mi sembra” (it seems to me), which, as noted by the author, is typical of the narration in 1<sup>o</sup> person, in Italian.

<sup>88</sup> See also Tsimpli (2003) who found similar results in the acquisition of clitics in L2 Greek. In her data produced by Turkish and Russian learners use of 3<sup>rd</sup> person clitics in obligatory contexts lags behind use of 1<sup>st</sup> and 2<sup>nd</sup> person clitics. Cfr also footnote 74.

A different pattern in the acquisition of 3<sup>rd</sup> vs. 1<sup>st</sup> and 2<sup>nd</sup> person object clitics has also been reported by Bottari and al. (1998) in a group of Italian children with SLI.

<sup>89</sup> In Italian it is often impossible on the basis of syntactic criteria to carry out the distinction between the subject and the predicate in copular sentences. See the examples below, where the agreement is not sufficient to determine which is the subject:

- i. La causa è il dottore  
The cause is the doctor
- ii. Il dottore è la causa  
The doctor is the cause.

Moreover, in copular sentences the nominal predicate can be bare, as shown in the example below: (see also Chierchia et al. (1999) for a discussion on this point):

- iii. Io sono medico e voi siete linguisti  
I am doctor and you are linguists

an article. This means that plural and mass nouns without an article were considered ungrammatical unless they occurred as sisters of lexical heads

### ☞ Quantitative analysis

A first quantitative analysis of the data shows a higher use of definite articles with respect to indefinite articles from the first stage, as illustrated in (32).

32. **Table 9: Articles production per type in Heike**

Stage	Definite articles	Indefinite articles
1	82%	18%
2	66%	34%
3	64%	36%
4	65%	35%
TOT	69%	31%

As in the previous study we take into analysis here the use of definite articles<sup>90</sup>. Table 10 reported in (33) below shows a low rate of omission of these elements from the first stage. However, we found a higher number of omissions than in the previous findings, as definite articles were omitted here in 21% of the cases, in contrast with the previous experiment, where omissions were attested only in 2% of the cases – cfr. data reported in (19) at pag. 94, which show the production vs. omission of definite articles in elicited productions at different levels of accuracy.

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<sup>90</sup> As we did in the previous experiment, we examine here the presence of determiners versus their absence and do not distinguish between choice of determiners. In the studies involving the methodology of spontaneous production it is in fact impossible to easily distinguish between the contexts requiring a definite article vs. those which require an indefinite one.

There have been a number of studies on L1 and L2 acquisition of articles use, mostly for English, which have involved different methodologies, i.e. elicited production, comprehension tasks, and truth-value judgments. See Ionin (2003) for a review of these studies and for a proposal on the acquisition of the choice of articles in L2 English, based on the Fluctuation Hypothesis (see also chapter 1 section 3).

33. **Table 10: Definite articles production vs. omission in Heike**

Stage	Def Articles +		Def Articles -	
1	74/100	74%	26/100	26%
2	70/95	74%	25/95	26%
3	83/111	75%	27/111	25%
4	129/146	88%	17/146	12%
TOT	356/452	79%	95/452	21%

From Table 10 it is visible that definite articles are used quite consistently from the first stage by Heike<sup>91</sup>. She seems however not to be subject to a gradual development in the use of these elements, as demonstrated by the fact that the percentage of production and omission of definite articles remains the same throughout the first three stages; only at stage 4, instead, Heike shows a slight improvement in the mastering of these elements. We will be back to this topic in the last section of the present work, where Heike's data will be compared with Italian child language: it will be shown that a developmental effect can be clearly observed in data from L1 acquisition of Italian.

☞ **Qualitative analysis**

We want now to look at omissions of definite articles in some more details, adopting the contexts distinction already used for the analysis of the data in the previous experiment. Table 11 provides the results:

34. **Table 11: Def Articles omission in different contexts (Heike)**

	PRE-V	POST-V	NO-V
STAGE 1	10/74 <b>(14%)</b>	18/74 <b>(24%)</b>	46/74 <b>(62%)</b>
STAGE 2	16/70 <b>(23%)</b>	11/70 <b>(16%)</b>	43/70 <b>(61%)</b>
STAGE 3	14/83 <b>(17%)</b>	19/83 <b>(23%)</b>	50/83 <b>(60%)</b>
STAGE 4	28/129 <b>(22%)</b>	34/129 <b>(26%)</b>	67/129 <b>(52%)</b>
TOT	68/356 <b>(19%)</b>	82/356 <b>(23%)</b>	206/356 <b>(58%)</b>

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<sup>91</sup> As opposed to object clitics, as demonstrated by 43% of omission of these elements attested at Stage 1 (see Table 5 in 25 above). A comparative analysis of Heike's use of object clitics vs. definite articles will be given in the next section.

Nominal expressions in pre-verbal position are here lexical subjects. As for nominal expressions in post-verbal contexts, most of them are lexical objects (77 out of 82); 3 are lexical subjects occurring after intransitive and inaccusative verbs –which have been found at Stages 4<sup>92</sup>–; the remaining 2 are nominal expressions occurring in sentences introduced by *ci* existential.

Table 11 shows that omission of definite articles occurs in all contexts: as in the previous experiment, however, the highest rate of omission is attested in No-V contexts and specifically with nominal expressions after prepositions.

Some examples of omissions attested in the data are reported in (35) below:

35.

- |    |                                                        |         |
|----|--------------------------------------------------------|---------|
| 1. | Sono stata a Bologna, domenica. _ tempo era buonissimo | Stage 2 |
|    | i was in Bologna last Sunday. _weather was fine        |         |
| 2. | Devo andare a comprare _biglietto per _autobus         | Stage 1 |
|    | i must buy _ticket for _bus                            |         |
| 3. | Sono sempre con _valigia in spalla                     | Stage 3 |
|    | i am always with _bag                                  |         |
| 4. | Oggi c'è _luna in cielo                                | Stage 2 |
|    | today there is _moon in sky                            |         |
| 5. | Ha telefonato _ragazzo di mia coinquilina              | Stage 4 |
|    | has called _boyfriend of my roommate                   |         |

At the same time production of definite articles is also attested in the data, as shown in (36):

36.

- |    |                                                    |         |
|----|----------------------------------------------------|---------|
| 1. | Dopo tre minuti il letto è saltato nella stanza    | Stage 1 |
| 2. | Il 3 di Dicembre comincia un altro corso di storia | Stage 2 |
| 3. | La mia amica è tipica italiana                     | Stage 3 |

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<sup>92</sup> See Belletti & Leonini (2004) for a study on “subject-inversion” structures in L2 Italian.

- |    |                                                    |         |
|----|----------------------------------------------------|---------|
| 4. | I dipinti del duecento e trecento sono molto belli | Stage 4 |
| 5. | Le signore italiane amano la bella gente           | Stage 3 |
| 6. | Loro hanno preso la macchina per venire            | Stage 1 |

In 19% of the cases, however, definite articles have been omitted with nominals in subject position, which is a possibility that is excluded in Italian. Nevertheless, if you look at the data from a qualitative point of view, it can be noticed that most of the contexts where determiners omission occurs are possible contexts in German. Of particular relevance is indeed the fact that the majority of the attested determinerless subjects are either bare plurals –which are grammatical in German– or occur with possessives (37 out of 68-57%); moreover, 41 out of 77 attested determinerless objects (53%) also occur with a possessive.

Some examples are illustrated in (37) below:

37.

1.    \_Mia coinquilina dice che è pericoloso  
      my roommate says that is dangerous
2.    \_Amiche di tuo fratello sono tutte belle  
      girlfriends of your brother are all beautiful
3.    Ho visto \_tua collega di Università ieri  
      I saw a\_your colleague from the University yesterday
4.    Mi ha detto che \_suo professore parla spesso di queste cose  
      He told me that \_his professor speaks often of these things
5.    \_Sue scarpe sono un po' rovinate  
      \_her shoes are a bit ruined
6.    \_Lenti a contatto di Andrea sono viola  
      \_contact lenses of Andrea are violet  
      Andreas contact lenses are violet

Certainly, L1 influence is thus attested here<sup>93</sup>. Similar findings have been reported in previous studies on the development of the DP in adult second language acquisition of Italian by speakers of Germanic languages (see, a.o. Bernardini, 2003). The fact that there is L1 influence in the rate of omission of determiners element in obligatory contexts has been also pointed out by Parodi et al. (1997) in a study of the acquisition of German DPs by speakers of Romance languages and speakers of Korean. In the Romance languages articles are typically obligatory, but not in Korean, so the faster establishment of D in German by Romance speakers is consistent with L1 influence. These cases are counter examples to the “minimal trees” theory, which claims that there is no L1 influence on the representation of functional categories in L2 learners’ mental grammars.

So, the results from the spontaneous speech of Heike suggest that the subject investigated here does not show a problematic performance in the use of definite determiners. Rather, Heike seems to have acquired the property of the determiner system in Italian. This is also confirmed by the fact that we found no errors in the distribution of adjectives and nouns, thus showing that the learner has already established the Italian Noun-Adj order. Of particular relevance on this point is the short dialogue between Heike and her American friend Ron, which we report in (38) below:

38.

1. R: Ho incontrato la bionda ragazza (12 months of stay in Italy)  
I met the blond girl
2. H: No, si dice ho incontrato la ragazza bionda!  
No, you have to say the girl blond! (13 months of stay in Italy)

Finally, notice that this appears to be a counter-example to the claim by Tsimpli and Roussou (1991) that adult L2 learners cannot reset L1 values of parameters

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<sup>93</sup> Also 81 out of 206 (39%) of determinerless nominals which are attested with nominal expressions after PPs occur with possessives, being thus probably determined by L1 influence. Cfr. also the discussion reported in section 3.7.

associated with functional categories: evidence from the German learner of Italian reported here suggests that she can successfully acquire N movement to Num in Italian<sup>94</sup>. This shows that the claim that L2 learners cannot acquire the parameter values associated with functional categories which are not realized in their L1s, is probably too strong<sup>95</sup>.

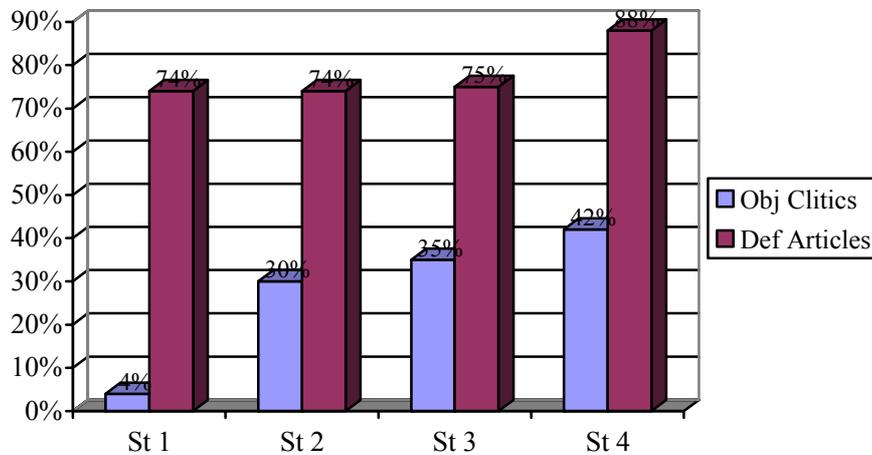
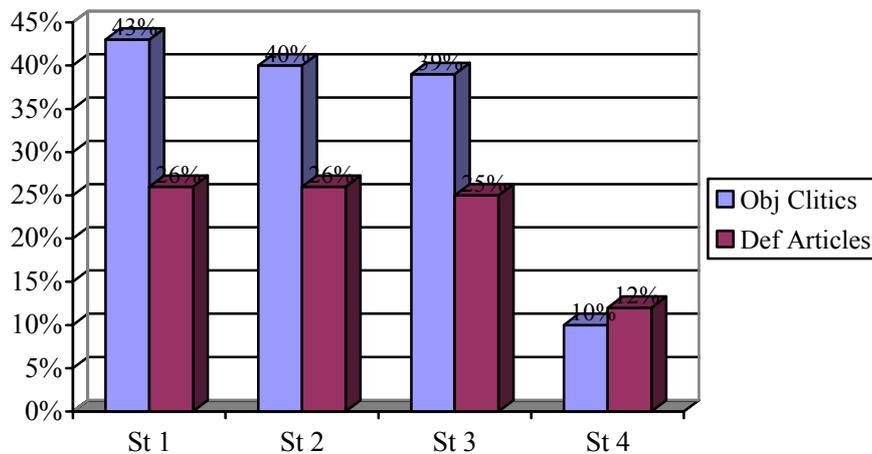
### C. A second comparison of the data

From the data above we can conclude that Heike shows a different pattern of acquisition with regard to object clitics and definite determiners. This is clearly visible in the Figures 4 and 5 below, where the comparison between the use vs. omission of object clitics and definite determiners in Heike's spontaneous speech is provided:

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<sup>94</sup> Note however that there is another parameter associated with Num, which seems to cause L2 learners persistent difficulty: the gender marking parameter. See Ritter (1993) for a detailed analysis, according to which the presence or absence of a gender feature in nominal phrases appears to be a parameter of variation allowed by UG (for example it is present in the Romance languages but not in English); moreover its location is also parametrized (i.e. in Italian it belongs to the category Num but in Hebrew it is associated with the category N). See, a.o. Hawkins (1998), Granfeldt (2000), Bernardini (2003), Tedeschi (2004) for evidence of L2 learners persistent difficulty in providing the correct gender of DPs.

<sup>95</sup> See Hawkins (1998) for similar findings for adult speakers of English learning French. Previous studies on L2 acquisition of French Granfeldt (2003) and German Clahsen et al. (1996) by adult learners with different L1s, however, have shown evidence of L1 influence as far as the position of N and Adj is concerned, at least in early stages of acquisition.

39. **Figure 4: % Use of definite articles vs. object clitics in Heike**40. **Figure 5: % omission of definite articles vs. object clitics in Heike**

Data in (39) reveal that Heike shows a higher use of definite articles than of object clitics from the first stage. At Stage 4, then, her mastering of definite articles is almost target consistent, whereas she still has a high use of object clitics.

In addition to this, Heike omits object clitics at a higher extent than definite articles. As shown in (40), clitic omission drops consistently only at stage 4, where also the omission of definite articles decreases.

Finally, it is worth considering once again Table 5 given in 25), which we report below:

25. **Table 5: Use of object clitics in Heike (spontaneous production data)**

Stage	Cl +	Cl -	NP	Strong Pron	Questo	TOT Contexts
1	1 (4%)	10 (43%)	7 (30%)	1 (4%)	4 (17%)	23
2	3 (30%)	4 (40%)	2 (20%)	1 (10%)	0 (0)	10
3	8 (35%)	9 (39%)	4 (17%)	1 (4%)	1 (4%)	23
4	8 (42%)	4 (10%)	2 (5%)	3 (7%)	2 (5%)	19
<b>TOT</b>	20 (27%)	27 (36%)	15 (20%)	6 (8%)	7 (9%)	75

When clitic omission occurs Heike generally produces NPs and the demonstrative *questo*, which are used a strategy to avoid the clitic. She uses strong pronouns at a lower extent (mostly attested at stage 2).

### 3.6 Object clitics and determiners in L1 Italian

#### 3.6.1 Introduction

The next step of the present study is the attempt to compare our data of L2 acquisition with the data from L1 acquisition of Italian.

Previous comparative works on the acquisition of functional categories in general in L1 and L2 have suggested that there may be differences in the way in which these are acquired. This has been shown to hold for different acquisition domains, including bilingual acquisition, early second language acquisition and specific language impairment. (see, a.o. Paradis & Prévost 2003, Prévost & White 2000, Grandfeldt 2003, Hamman and Belletti 2005).

As for the acquisition of DP morphemes specifically, previous investigation on French learner grammars have shown that older children with SLI and child and adult L2 learners do not omit determiners very often. In contrast, monolinguals, younger children with SLI and bilinguals go through a stage of determiner omission. Moreover, object clitic omissions and distribution errors

with object clitics appear to be a universal characteristic of French SLI and adult L2 French. Instead, bilingual L1 and early child L2 learners have few distribution errors with clitics (see Paradis and Prévost 2003 and references cited there for a detailed list of studies on these issues).

The idea behind conducting cross-learners comparisons on the acquisition of certain aspects of the grammar is to better determine what is universal in the acquisition process of a language and then, instead, what pertains to a specific population, hence contributing to a precise characterization of the linguistic systems that learners develop. Therefore, it sheds light for a better understanding in the nature of linguistic competence and how it is acquired<sup>96</sup>.

Following the spirit of previous research, we will present and analyze new data on the acquisition of object clitics and determiners in L1 Italian. The L1 patterns investigated here will then be compared with the L2 patterns analyzed in the previous sections. This will provide further evidence for the fact that there may be differences in the way in which functional categories are acquired in the two acquisition domains.

As a starting point for our investigation we take into consideration what has been evidenced by previous research on the acquisition of object clitics and determiners in L1, thus reviewing here the features of early grammars related to these elements. Our analysis will primarily focus on Italian, but evidence from other languages will also be taken into account. (For a more detailed description on the phenomena of early grammars which have been documented in literature over recent years, we refer the reader to chapter 1 of the present work).

The aim of the present section is two-fold: on the one hand we want to establish whether our findings are in line with those drawn from previous studies on L1; on the other we want to compare the L1 data presented below with the data on L2 acquisition of Italian previously reported.

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<sup>96</sup> Along the line of Belletti (2005) we claim that general linguistic theory help to shed light on developmental patterns in acquisition.

For this purpose we investigate here the spontaneous production data of one Italian child, Denis. The data covers the age period between 1;6 and 2;8 and MLU (Mean Length of Utterances) values range from 1.2 to 3.8.

### 3.6.2. Previous L1 studies

As already pointed out in chapter 1, section 1.4., previous studies on L1 acquisition have demonstrated that the use of the article seems to start with a short phase of complete omission, followed by a phase in which determiners are used optionally. There is then a convergence phase, which varies depending on the target language (see a.o. Chierchia et al. 1999; Lleò and Demuth 1999; de Lange et. al 2006).

As for Italian specifically, it has been documented over recent years that there is a stronger tendency to omit articles before nouns in sentence initial position than before nouns in sentence internal position. This phenomenon also seems to characterize the earliest stages of acquisition of other languages (see, a.o. Baauw & de Lange 2005 for Dutch; Gerken 1996, Lleò and Demuth 1999 for English; Shoenenberger et. al. 1997 for German). Furthermore, such tendency is found in some special registers of Italian and Dutch, for example in headlines, as discussed by Guasti et. al. (2004a) and de Lange et. al. (2006), and has been detected also in agrammatic speech (Guasti et al. (2004b).

To account for this asymmetry Crisma and Tomasutti (2000) claimed that the article omission may depend on phonological constraints in the output of the speech production system. They investigated the omission of the article *la* from nouns uttered in isolation and from object position of verbal utterances. They found that in the latter, omission was higher when the verb was disyllabic than when it was monosyllabic. They hence made the proposal that an article in object

position is enclitic to the preceding verb when it is monosyllabic<sup>97</sup>. Such results have not been confirmed by further studies on this topic (see, for example, Caprin and Ioghà 2006), thus suggesting that a mere phonological constraint alone is not sufficient to account for article omission in child languages.

At the same time, the generalization that article omission occurs more frequently in the first position of the clause than inside the clause has been fully documented by recent studies investigating children's earliest productions (see Guasti 2006 and references cited there). This fact is coherent with the proposal which recognizes the special status to the first syntactic position of the clause, similarly to what was proposed by Rizzi (2000; 2004) for the Root Null Subject Phenomenon, which has been observed for early subject omission in languages requiring overt subjects (Rizzi 1993/1994; Haegeman 2000)<sup>98</sup>.

With respect to cliticization, as we have already mentioned in chapter 1, it has been attested that there is an important delay in the acquisition of object clitics when compared to other clitic elements such as pronominal subject clitics, reflexives and determiners in children acquiring different L1 languages, (see a.o. Friedemann 1992, Hamann 2003, for French; Müller and Hulk, 1999 for German and Dutch, Guasti 1993/94 for Italian)<sup>99</sup>.

Object clitics have been shown to start appearing as soon as the children use determiners consistently (see Hamann 2003, for French and Bottari and al. 1998, for Italian). Once object clitics appear, they are always correctly located and appropriately used in an adult fashion: in this respect, Guasti (1993/1994)

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<sup>97</sup> Therefore they claimed for a double prosodic nature of the article, which would depend on the nature of the verb. In case of monosyllabic verbs the article is resyllabified as a syllable attached to the preceding foot forming a trochee.

<sup>98</sup> The fact that article omission is attested also in sentences internally, although at a lower extent, suggests that such difference may be attributed to the immature production system which characterizes the system of linguistic knowledge possessed by the child. As discussed in Rizzi 2004, the dropping of some material would facilitate the task of children production system, by reducing the computational load. Interestingly, the dropping options are possible options dictated by UG. Similarly, de Lange et. al. (2006), account for this facts in terms of processing: the first position of the clause is the canonical topic position of discourse identification,

<sup>99</sup> This phenomenon has been associated to the so called infinitive phase, during which children make use of non-finite forms even in contexts where a finite form would be expected.

found neither problems of clitic location, nor problems in the domain of enclisis and proclisis in monolingual Italian children.

Hence, the emergence and the development of acquisition of definite articles seems to differ from the one of clitics, although both 3<sup>rd</sup> person object clitics and definite articles share the same morpho-phonological properties<sup>100</sup>. The emergence of clitics after the emergence of definite articles has been related to the acquisition of the verbal inflection/system, since the positioning of clitics depends on the morphology of the verbal inflection.

### 3.6.3 Current study

#### 3.6.3.1 Method

The data comes from the spontaneous speech of Denis, an Italian child (male) who lives in the area of Siena and comes from a middle-class family. The data covers the age period between 1;6 and 2;8 and MLU (Mean Length of Utterances) values range from 1.2 to 3.8.

Our analysis is based only on relevant utterances and that the same criteria for selecting the relevant contexts in the investigation of the spontaneous production speech of the L2 learners have been used here: we eliminated unclear sentences, sentences interrupted by hesitations and long pauses, repetitions, idiomatic expressions and uncompleted sentences.

As for the investigation on the mastering of object clitics, we used the notion of “clitic-context” (Cummins and Roberge 2005; Pirvulescu and Roberge 2005), adopting the same methodology of the previous experiment on L2. Hence, we counted the omissions vs. productions of object clitics in well identified contexts, thus eliminating omissions that are presumably of a different type (Pirvulescu 2006), as in the case of deictic contexts where <<the null object refers

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<sup>100</sup> This has been attested also for Greek (Marinis 2000).

to an entity that is salient in the extralinguistic context but not necessarily present in the discourse (Cummins and Roberge 2005:22)>> or in the case of generic null objects<sup>101</sup>.

In order to identify the relevant contexts for the investigation of omission/use of determiners, we adopted Guasti (2006) in distinguishing utterances including a verb, and utterances without a verb, the latter including nouns in isolation –e.g. answers to this type of questions: *Che cosa vuoi? Succo!* “*What do you want? Juice!*” – and a noun occurring with a preposition or with adjectives –even if the last case is not attested in our data, which as compared with the one reported by Guasti (2006), covers a shorter age period<sup>102</sup>. We counted as omissions all cases where an article would be necessary in the target language.

Moreover, in line with previous studies on the acquisition of articles in Italian children (Crisma & Tomasutti 2000; Caprin et al. 2003; Guasti et al. 2004; Caprin & Ioghà 2006) we investigated whether omission rate varies in relation to syntactic positions. Specifically we looked at omissions in the sentences internal position ‘object position’ vs. omission in the sentences initial position ‘subject position’ and in nominal expressions uttered in isolation, thus we are also following previous researches on acquisition of determiners in L1 among different languages (see, for example Guasti et al. 2004, Caprin and Ioghà 2006).

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<sup>101</sup> Pirvulescu (2006) gives two examples of two types of omissions in L1 French-reported in i) and ii) respectively- taken from Lambrecht and Lemoine (2004):

- i. Upon hearing the doorbell: *Va ouvrir!* “Go open up”.
- ii. *Maman est occupée; elle coud.* “Mom is busy; she is sewing”.

It is also pointed out there that the clitic context is the one where the clitic is necessary, and which is normally used in the investigation on omissions in elicited production.

<sup>102</sup> Note that, as pointed out by Guasti, it is sometimes difficult to decide whether in utterances without verbs, the name requires an article. This is the case for example of names in lists and in answers to some questions. In order to avoid overestimations of omissions it is very important, therefore, to individuate all obligatory contexts, i.e. those contexts that would have required an article in the target grammar.

In our analysis of the data we counted as determiners only articles, and we excluded possessives, numerals, quantifiers and demonstratives<sup>103</sup>.

Our investigation is based on the free interaction between Denis and the investigator. Most of the experimental sections have been conducted at the child's home, and only two of the recordings have been made outside. During some of the recordings the child's mother was present as well.

The recordings cover a period of 14 months –Denis' age range 1;6; 2;8; MLU 1.2 - 3.8.– and were conducted at one month intervals with the exception of 3 recordings (between 2;1 and 2;5) which occurred at 2 month intervals.

Hence, the corpus consists of 12 files, resulting from 12 recordings of 45 minutes each.

Table 11 in 41) is a summary of the data used for the analysis.

41. **Table 11: Files used in the investigation**

Files	Age	N. of utterances	N. of verbal utter.
1	1;6	79	3
2	1;7	71	5
3	1,8	84	9
4	1,9	76	11
5	1,10	95	26
6	1,11	112	32
7	1,12	134	48
8	2,1	141	42
9	2,3	212	73
10	2,5	181	54
11	2,7	231	59
12	2,8	269	67

<sup>103</sup> Unfortunately, the transcription of Denis' data did not let us take into consideration the production of so called proto-articles (Bottari et. al. 1993/1994), as the audio material was not clear enough to allow an easy identification of such elements.

### 3.6.3.2. Results

#### A. Object clitics

Table 12 below shows the percentages of omissions, the use of 3<sup>rd</sup> person object clitics and the use of NPs in clitic contexts for Denis :

42. Table 12: Clitic production vs omission and NPs in Denis

File	Age	Clitic (+)	%	Clitic (-)	%	NPs	%
1	1;6	0	0	0	0	0	0
2	1;7	0	0	0	0	1	100%
3	1,8	0	0	0	0	0	0
4	1,9	0	0	0	0	3	100%
5	1,10	0	0	2	50%	2	50%
6	1,11	0	0	3	75%	1	25%
7	1,12	2	29%	4	57%	1	14%
8	2,1	6	55%	3	27%	2	18%
9	2,3	3	37,5%	4	50%	1	12,5%
10	2,5	17	65%	6	23%	3	12%
11	2,7	9	89%	1	11%	0	0
12	2,8	24	86%	3	11%	1	3%
TOT	-	61	60%	26	25%	15 <sup>104</sup>	15%

As shown in the table clitics appear quite early, however there is a high rate of omission at the same stages. NPs complements in place of the clitics are also used, although at a lower extent than omissions.

Furthermore, the drop in the rate of omission seems to coincide with the increased frequency of accusative clitics.

Similar results have been reported in previous studies on the acquisition of object clitics in different languages (see, ao. Marinis 2000 for Greek; Pirvulescu 2006 for French, Schaeffer 2000 for Italian). In addition to that, our data confirms that clitic omission is an important phenomenon in child grammar, since it is the option used by children when object clitics are not yet fully acquired. For this

<sup>104</sup> 5 of the 15 NPs are cases of the demonstrative form *questo*.

reason, our finding partially contrasts with previous investigations of spontaneous production data of L1 French, where a preference in the use of NPs has been attested (see a.o. Jackubowicz et al. 1996; van der Velde et al. 2002)<sup>105</sup>.

A qualitative analysis of the data provides evidence for practically error free acquisition and for the fact that the child seems to have already acquired the properties of clitics when he begins to use them: he uses proclitics and enclitics in the same files and there are no instances of misplacement errors attested in his production, thus confirming what has been found by Guasti (1993/1994) for Italian.

A relatively early access to the process of cliticization seems thus to characterize the child grammar. This is in contrast to what emerged from the data on L2 acquisition analyzed in previous sections, where evidence for the fact that in the L2rs' grammars the process of cliticization is subject to a very gradual and somewhere delayed development was reported.

The first accusative clitic which emerges in Denis speech (at age 1;12) is the enclitic form *ecco-lo*. However, in the same file, also a proclitic form is attested. This is reported in 43) below:

43. **File 7 Denis (1;12)**

a. %sit: in macchina vicino al posteggio.

%act: vede il posteggiatore.

\*CHI: Eccolo omino!

b. %sit: la mamma da a D. un pezzo di pane

\*CHI: Chiaa teni

\*INV: Grazie, lo mangio io? Tu non lo vuoi? Ma è buono!

\*CHI: sì, buono pappo, lo mangio io!

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<sup>105</sup> But see Pirvulescu (2006) for a re-analysis of these findings on the basis of the notion of clitic context. See also footnote 56 for a detailed analysis of what was reported by Pirvulescu.

The masculine form *lo* is initially probably used as default form, substituting the feminine form *la*, as illustrated in 44):

44. **File 8**            **Denis (2;1)**  
 a.    %sit: ai giardini, sta giocando  
       \*INV: Fammi vedere che cosa hai trovato.  
       %act: da a Chiara una castagna  
       \*CHI: to, teni Chiala cattagna! Pendilo cattagna!

In file 9 (age 2;3), however, the form *la* emerges and no other instances of incorrect agreement are further found in the corpus<sup>106</sup>:

45. **File 9**            **Denis (2;3)**  
 a.    \*CHI: **La** plendo io. Accendela!            [la candela]

Enclitic and proclitic forms (mostly attested with imperatives<sup>107</sup>) are simultaneously present in all files. Some examples are reported below from 46) through 48):

46. **File 8**            **Denis (2;1)**  
 a.    %act: indica il cigno  
       \*CHI: mi, mi eccolo! Mamma guadda in doè! guaddalo  
       \*CHI: Eccolo Chiala!Chamalo!  
 b.    \*CHI: mamma guadda buco!  
       \*CHI: Qui c'è buco  
       \*CHI: Eccolo, lo vedo

---

<sup>106</sup> But consider the fact that in the data we find the first distinction of gender at age 2;3. No feminine nouns have been used in the files preceding File 9, where only masculine nouns are attested. The first number distinction is instead attested at age 2;5.

<sup>107</sup> See Salustri (2003) on the systematic use of imperative forms in the early productions of L1 and bilinguals learners of Italian.

47. **File 9 Denis (2;3)**

- a. %sit: Va via la luce; la nonna prende una candela  
 \*CHI: Lì c'è le candela! **La** plendo io. Accendela!

48. **File 12 Denis (2;8)**

- a. %sit: parla dei pesci  
 \*CHI: No, pecchè poi dopo mi metto le cappe e poi vo nel male e poi **li** pecco e poi **li** butto giù! Ecco, complo quetta canna, pe piglialli.

Finally, as far as 1<sup>st</sup> and 2<sup>nd</sup> person object clitics are concerned, two occurrences of this type are first found in file 9, at age (2;3) and again with the verb in the imperative form, as illustrated in 49):

49. **File 9 Denis (2,3)**

- %sit: a tavola  
 \*CHI: Mamma damme la forchetta!  
 \*CHI: Chiaa metteti qui!

Before concluding this section, we also want to give some examples of clitic omission found in the data. These are reported in 50):

## 50.

- a. %sit: a casa. A tavola  
 \*CHI: Neni Chiala qui! Sedi, sedi! Mmm bona pappa, \_mangio io!  
 \*MOT: Lo vuoi il formaggio! \*MOT: Lo vuoi grattare da solo!  
 \*CHI: Sì, io\_glatto! Mangio io fommaggio **File 6: Denis (1;11)**
- b. %sit: tornano verso la macchina  
 \*INV: siamo venuti in macchina. Ti ricordi dove è la macchina? Dove abbiamo parcheggiato!  
 \*CHI: \_Cecco io! Eccolo là, eccolo là! **File 8 : Denis (2;1)**
- c. \*INV: cerchiamo lo scoiattolo.  
 \*CHI: eccolo! Chiala mettilo!...No! \_Metto io! **File 10: Denis (2;5)**

d. %sit: in macchina

\*CHI: mamma sicura ho chiuso. Te hai chiusa? **File 12: Denis (2;8)**

## B. Determiners

Table 13 shows the mastering of articles in Denis:

### 51. Table 13: Article production vs. omission in Denis

File	Age	Article (+)	%	Article (-)	%
1	1;6	0	0	2	100%
2	1;7	0	0	2	100%
3	1,8	0	0	5	100%
4	1,9	0	0	8	100%
5	1,10	0	0	3	100%
6	1,11	2	23%	7	77%
7	1,12	4	40%	6	60%
8	2,1	4	24%	13	76%
9	2,3	13	68%	6	32%
10	2,5	6	60%	4	40%
11	2,7	8	80%	2	20%
12	2,8	31	86%	5	14%
TOT	-	68	52%	63	48%

Since it was not always possible from the data to clearly distinguish between those contexts which require a definite article from those which require an indefinite one, we did not count definite and indefinite articles separately, but we put them together<sup>108</sup>. Thus, Table 13 illustrates Denis' use of both definite and indefinite articles.

<sup>108</sup> Such difficulty holds in particular for the investigation of spontaneous production data. Actually, early studies on acquisition of articles, both in L1 and in L2, have mostly involved different methodologies, including elicited production, comprehension tasks, and truth-value judgments. These studies, most of which are based on English, provide evidence for the fact that young children and adult learners tend to overuse the definite article *the* in indefinite contexts. See Ionin (2003) for an investigation of the acquisition of articles in L2 English and for a review of previous studies on L1.

As far as we can see, however, the child does not seem to show differences between the use of definite vs. indefinite articles.

As shown in Table 13, Denis does not produce any article in the first files, thus confirming that an initial phase of complete omission of these elements is attested in his early grammar. This has also been observed in literature for a wide variety of languages, as shown, for example, by Penner & Weissenborn (1996) for a Bernese-speaking child, Bohnacker (1997) for Swedish children, Marinis (1999) for Greek, Guasti (2006) for Italian and Dutch<sup>109</sup>.

Denis starts using articles around age 2 and the emergence of determiners takes place gradually. As show in Table 13, he starts by omitting article very frequently, then omission decreases: in file 6, when he is 1;11, 78% of the nouns are bare; at age 2;8 Denis has reached the 86% level of suppliance. The development took about 8 months in all<sup>110</sup>.

### ⇒ **Article Production**

Taking a closer look at the production of determiners we can see that the article which first emerges is the masculine for of the indefinite article *un*, attested at age 1;11:

51. **File 6 Denis (1;11)**
- a. \*INV: Chi sei te?  
\*CHI: Un bimbo!
  - b. %exp: una macchina suona il clacson

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<sup>109</sup> Recall, however, that we did not consider here the production of so called proto-articles, which have been documented in the child productions also at an earlier stage. (See, on this purpose, Bottari et. al. 1993/1994).

<sup>110</sup> This is in line with previous study on the acquisition of Det system in Italian and French (see a.o. Guasti 2006 and Granfeldt 2003). Bilingual children, instead, seem to show a development which takes slightly longer, as demonstrated by Hulke (2003).

Data from Denis differ from what has been found for Italian children with SLI, where a total or almost absence of Det (paralleled by a higher productivity of other functional categories) was attested (see a.o. Bottari et al.1998).

\*CHI: Sonato!

%exp: ne passa un'altra. Suona il clacson

\*CHI: Un antra macchina

The definite article appears 1 month later, in File 7, at age 1;12<sup>111</sup>:

52. **File 7 Denis(1;12)**

a. %act: indica il cigno.

\*CHI: Guadda mamma quello! Mangia!

\*MOT: Sì, è un cigno! Si chiama Romeo. Ha mangiato, si è lavato e ora si asciuga le penne. Fa come fai te quando facciamo la doccia!

\*CHI: Asciuga **le** penne...**la** coda!

b. \*INV: Hai sete?

\*CHI: Sì, bebo io... **il** cucco flutta!

As far as incorrect forms are concerned, we only find 4 instances of incorrect agreement, 2 involving gender specification and 2 number specification. These errors are attested in file 8 and 9:

53. **File 8 Denis (2,1)**

a. \*INV: adesso andiamo a mangiare. Prendi le tue cose!

\*CHI: Ndoe è **il** forchetta?

b. %sit: la nonna prende una candela

\*CHI: Lì c'è **le** candela!

54. **File 9 Denis (2;3)**

a. %act: si alza per prendere la borsa di Chiara

\*CHI: io plendo **il** borsa

b. %sit: stanno giocando con un libro di figurine

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<sup>111</sup> Previous studies on L1 Italian have shown that the definite article appears earlier than the indefinite article and other determiners. Interestingly, in the adult learners of Italian the contrary may be observed, as discussed in Bernardini (2005).

\*INV: adesso cerchiamo la figurina con i fiori

\*CHI: Ecco **le** fioli!

In the same files, however, target like forms are also present (55). From file 10 (age 2;5), then, no more errors are found<sup>112</sup>:

55. a. \*CHI: Mamma damme **la** forchetta!  
 b. \*CHI: tata, ieli, tagliato **i** capelli! **File 8 Denis (2;1)**  
 c. \*CHI: Chiala tieni **il** liblo  
 \*CHI: Ti do **una** chitalla, Chiala, e te soni  
 d. \*CHI: mettilo qui **nei** labbli  
 e. \*CHI: pagliao, è vicino casa sua. Bimbo plende **la** scopa e pazza **il**  
 pagliao! **File 9 Denis (2;3)**

The examples given above provide evidence for the fact that, from the earliest stages on, whenever an article is produced it is used correctly, thus showing that Denis does possess the relevant knowledge of the article system. There is however some factors which prevent him from always realizing it and which seem to involve also the syntactic position of the DP where omissions occur.

### ⇒ Article Omission

Taking in mind this last observation, it is worth now looking at determiners omission in more detail, in order to investigate whether article omission adheres to a specific pattern. As shown above, previous studies on the acquisition of articles in L1 have pointed out that the omission rate varies in relation to syntactic positions, (see, for example, Caprin et. al. 2003; Caprin &

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<sup>112</sup> We give the data here from a mere descriptive point of view. For some reference on the development of Gender and Number in L1 Italian see Bernardini (2005), Chini (2005), Kupish et al.(2002), Serratrice (1999). It has been generally shown there that in the acquisition of Italian Gender seems to be marked earlier than Number.

Ioghà 2006 for Italian, Guasti et al. 2004, de Lange et al. 2006 for Dutch and Italian, Marinis 1999 for Greek, Gerken 1996 for English).

For this reason, we distinguished between omissions occurring in sentence initial position from those in sentence internal position.

Similarly to previous studies, a tendency to omit more articles from sentence initial position than from sentence internal position is found in Denis. This is what emerges if we look at the Table 14 below:

55. **Table 14: Percentage of article omission in obligatory contexts in sentence initial and in sentence internal position**

File	Age	Sentence Initial		Sentence Internal	
1	1;6	2	100%	0	0
2	1;7	2	100%	0	0
3	1,8	3	60%	2	40%
4	1,9	5	68,5%	3	21,5%
5	1,10	1	33%	2	67%
6	1,11	5	71%	2	29%
7	1,12	4	67%	2	33%
8	2,1	7	54%	6	46%
9	2,3	5	83%	1	17%
10	2,5	2	50%	2	50%
11	2,7	2	100%	0	0
12	2,8	4	89%	1	20%
TOT	-	42	67%	21	33%

More specifically, a higher rate of omission is found in subject position and in nouns uttered in isolation than in object position, this again confirming previous studies on this topic. This is reported in Table 15.

56. **Table 15: Percentage of article omission in obligatory contexts in subject position, in noun uttered in isolation and in object position**

File	Age	Sentence initial				Sentence internal			
		Isolation		Subj position		Obj position		PP	
1	1;6	2	100%	0		0		0	
2	1;7	2	100%	0		0		0	
3	1,8	2	40%	1	20%	2	40%	0	
4	1,9	3	37,5%	2	25%	3	37,5%	0	
5	1,10	0	0	1	44%	2	66%	0	
6	1,11	2	29%	3	43%	1	14%	1	14%
7	1,12	0	0	4	67%	2	23%	0	
8	2,1	2	15%	5	38%	5	38%	1	8%
9	2,3	1	17%	4	67%	0		1	17%
10	2,5			2	50%	2	50%		
11	2,7	0	0	2	100%	0	0	0	0
12	2,8	0	0	4	80%	1	20%	0	0
TOT	-	14	22%	28	44%	18	29%	3	5%
TOT	-	42 67%				21 33%			

Some examples of this tendency are given in 57):

57.

- a. \*CHI: Mamma tieni i piatto. ...\_piatto è pieno, ola!  
 INV: Che mi dai ora?  
 \*CHI: \_Fittata.....\_Suppa, ecco! **File 8: Denis (2;1)**
- b. \*CHI: \_Bimbo plende la copa e pazza il paliamo! **File10:Denis (2;5)**
- c. \*CHI: \_Papellini mangiano la pastasciutta **File11:Denis (2;7)**
- d. \*CHI: \_Luce non c'è. Mamma, accende la luce **File 9: Denis (2;3)**
- e. \*CHI: \_tata ieli, tagliato i capelli a Pippo **File 9: Denis (2;3)**

It is also interesting to notice that these results are in sharp contrast to what has been found for adult L2 acquisition of Italian (Cfr. Table 4 and Table 11). As a matter of fact, although L2 acquisition of definite determiners seems also sensitive to the syntactic environment in which DPs appear, a different omission pattern of articles was found there.

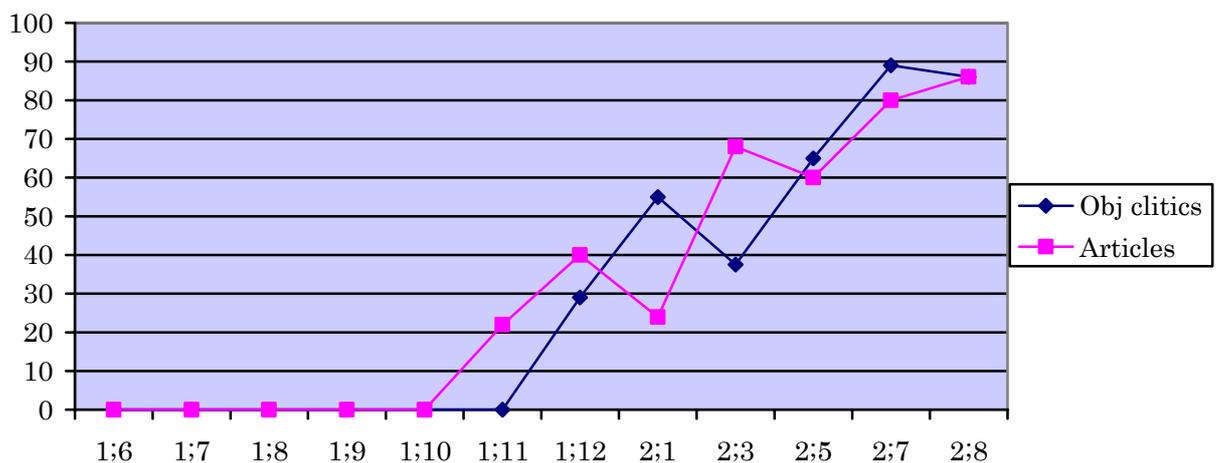
Interestingly, if we go back to the investigation of the data from Heike reported in previous sections, we can see that there most of the articles were omitted from DPs which occurred as a sister of a lexical head –within PP or in object position and only a few omissions from subject DPs were attested. On the contrary, the opposite tendency results from Denis' data, where article omission is higher from

the first position then from inside the clause. (See the discussion in the next section).

### C. Object clitics vs. Determiners

We want now to compare Denis' use of determiners and object clitics, in order to see if these elements display the same developmental pattern. The comparison is reported in 58) below:

58. **Figure 8: Age-production of object clitics and articles in Denis**



As illustrated in Figure 8, data from Denis allows a direct comparison between the two developmental paths. Although clitics appear for the first time one month later than articles, they tend to develop in a parallel factor.

Interestingly, our data are in partial contrast with previous studies on L1 acquisition of Italian and other languages, where an evidence of a close parallel in the development of object clitics and determiners is generally not found. As a matter of fact, the acquisitional pattern which emerges from Denis' productions does not confirm the tendency found by Bottari et al. (1993/94) of the

appearance of Italian object clitics as soon as the children use determiners consistently.

Our data partially differ from what has been reported by Hamann (2003) for L1 French. In the production of Augustin, the French child she examined, determiners appeared much earlier than object clitics: at the age of 2;6 he only used 3.9% of complement clitics, but he already had 90% of determiners. Furthermore the use of determiners dramatically accelerated at the age of 2;4.22, whereas his use of object clitics increased only at the age of 2;6.16<sup>113</sup>.

As shown in figure 8, we do not find this delay in the emergence of object clitics in Denis. In addition, the use of object clitics is comparable to that of articles at various intervals of Denis' age.

Our finding seems rather to be consistent with those approaches which predict that definite DPs and pronouns should follow the same pattern of acquisition. (see, for example, Schaeffer 1997)<sup>114</sup>. Further investigation on the data from Denis and a comparison with other data from L1 Italian are however necessary to determine if such assumption can be confirmed.

### 3.7. General discussion of the data and conclusion

We want to recapitulate here the main findings of our study, introducing where necessary, further elements of discussion.

We will first review the data on L2, comparing the findings drawn from the two methodologies of investigation. Results on L2 will be then analyzed in the light of the L1 result.

For the adult learners of Italian, we have observed a different pattern of acquisition with regard to object clitics and definite determiners, despite the

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<sup>113</sup> As already mentioned above, a similar dissociation has also been reported by Marinis (2000) in a study based on two longitudinal corpora, consisting of the recordings of five monolingual Greek children. Object clitics emerged later than definite articles, which were however fully acquired later than clitics.

<sup>114</sup> According to such accounts, definite DPs and pronouns should follow the same pattern as both are anchored to a salient element in the previous discourse.

categorial similarity between the two grammatical elements –which have been argued to be both D elements on the basis of their morphological, semantic and syntactic similarities (see the discussion reported in section 2.). The L2rs under analysis here show a delay in the acquisition of object clitics with respect to the acquisition of definite articles. This is what emerges from the figures 26 and 39 where a comparison between the use of object clitics vs. definite articles is provided.

This is even more visible from the analysis of Heike's spontaneous speech, where a side by side comparison between the mastering of the two elements through the 4 stages of acquisition can be conducted<sup>115</sup>.

From the first stage Heike shows a high use of definite articles (74% of the cases), at stage 4 she uses these elements 88% of the times. On the contrary, she has 4% of object clitics at stage 1 and 42% at stage 4<sup>116</sup>.

Nevertheless, our results indicate that in the L2rs' grammars the process of cliticization is subject to development. This strongly emerges if we quantitatively analyze the clitic production within the three groups of learners participating in the elicitation experiment and at Heike's different stages of acquisition, where a developmental effect can be observed. Further evidence is given by a qualitative analysis of the clitic productions/omissions. As clearly drawn from the investigation of the data collected by means of the elicitation task procedure, clitics are only attested in sentences in the present tense among learners at intermediate level, while they have also been produced in sentences in the present perfect -i.e. with Aux+Past Participle- by advanced and near native learners. Only in the latter group, the agreement between the clitic and the past participle is provided systematically.

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<sup>115</sup> Note, in fact, that the elicited production task was designed to elicit object clitics. Here we are not eliciting determiners, rather we are using a kind of "controlled" spontaneous production. Therefore, a direct comparison of the data is not possible there. However, the fact that the L2ers who took part at the task display a different mastery of definite articles vs. 3rd person object clitics is indisputable.

<sup>116</sup> Note that when clitic omission occurs, Heike generally produce NPs (30% of the times at stage 1 and 5% at stage 4) or the pronominal form *questo* (17% at stage 1 and 5% at stage 4). She uses personal strong pronouns at a lower extent.

The developmental pattern resulting from the data indicates that adult L2 learners are able to restructure their grammars, approaching that of native speakers. The results then offer evidence against those hypotheses, according to which interlanguage grammars suffer from some kind of permanent grammatical deficit (see, for example, Beck 1998). Moreover, they provide evidence against those Hypotheses which predict that adult L2 speakers could not reset L1 values of parameters associated with functional categories (see, a.o. Tsimpli and Roussou 1991 and also the discussion illustrated in section 1, i.e.1.1).

The fact that cliticization is gradual in adult L2 acquisition, has also been documented in previous research (see Granfeldt and Schlyter, 2004, a.o.), and has been addressed as one of the aspects in which adult L2 acquisition differ from child L1 acquisition<sup>117</sup>.

It is worth noticing, then, that despite the low use of object clitics, L2 learners seem to have acquired the conditions of the use of Italian cliticization to some extent. As a matter of fact, a complete lack of misplacement errors of clitics has been attested in the data drawn from both experimental methods –such results are in contrast to previous studies on object pronouns in bilingual and L2 acquisition of French, where some target-deviant structures have been reported (Granfeldt 2000, Herschensohn 2004, see also the review given in Hamann and Belletti 2005. Cfr. Leonini and Belletti 2003 for findings similar to ours). In those studies, placement errors of the clitic have been attributed to a misanalysis of the object clitic as a weak pronoun (XP) rather than as a real syntactic object clitic (X°)<sup>118</sup>.

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<sup>117</sup> Contrary to adults L2rs grammars, an early access to the process of cliticization seems to characterize a child early grammar. Crucially, several studies on early grammars of children in quite a number of languages have shown that when pronouns emerge, children know their syntax and distribution from their first occurrence. This is in sharp contrast to what has been found for adult L2 acquisition: several studies on L2 acquisition of object clitics in French have reported a number of clearly target-deviant structures, thus showing that adult L2rs do not interpret them as clitics, i.e. as heads (see a.o. Grandfeldt and Schlyter 2004; Herschensohn 2004), but as XPs. Differently from adult L2 acquisition, child L2 acquisition of French shows a development that is very similar to that of L1 acquisition: White (1996) found only a few cases of misinterpretation or incorrect position of the clitic in the production of children acquiring French as L2.

<sup>118</sup> See Hamann and Belletti (2005) where it is claimed that the absence of placement errors with clitics in data from L2 Italian can find an explanation with the fact that Italian lacks conspicuous

In addition to this, when strong pronouns are used in place of the clitics they never refer to [-human] referents. Rather, the demonstrative pronoun *questo* is used in such contexts, as documented by Heike's finding.

Considering the fact that strong pronouns refer to [+human] entities in both German and in Italian, it is reasonable to conclude that these learners receive a positive evidence from both their L1 and their L2, which makes their analysis of these elements easier.

From elicited production data it emerges furthermore that throughout the L2 group, clitic use is avoided by means of omissions but most of all through the use of a full lexical NP as a complement, similarly to what has been reported by Leonini and Belletti (2003). This appears to be a prominent strategy to realize the complement of the verb and thus to avoid the clitic, also among the near natives, where 30% of full lexical NPs in place of the clitics has been attested. Near natives, therefore, do not show a completely target-like use of cliticization, as the presence of clitics omission among this group also demonstrates. Variability in the use of cliticization is thus attested here, confirming that this is also a characteristic of grammars of near native learners (Lardiere 2000, Sorace 2000).

As for spontaneous productions specifically, high use of object clitics has not been found in the data, similarly to previous studies investigating interlanguage knowledge of accusative clitics in spontaneous production data (see a.o. White 1996; Liceras et al. 1997). Again, full lexical NP complements are used in place of clitics quite consistently (20% of the time); however their use is lower than clitic omissions, which occur 36% of the time.

Data from spontaneous and elicited production thus shows that the mastery of cliticization is quite limited among the L2rs investigated here and, a low degree of correctness in the use of cliticization has been achieved.

From a direct comparison of Heike's data drawn from the two experimental methods (recall that Heike took part in the two experiments) it emerges that the

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instances of "weak pronouns". According to such analysis, therefore, both the first and the other language will influence the analysis adopted by the learner.

learner seems to resort to different generalized strategies to avoid the use of object clitics in the two experiments:

- spontaneous production: Heike prefers omissions;
- elicited production: Heike prefers NPs.

It has to be kept in mind, however, that, in the elicitation task the NP is given by the immediate context, i.e. in the question asked to the L2rs (see 4 and 5 above). This can provide a reason why it is the preferred selection for Heike, who, as clearly evidenced by the low use of object clitics in both data from elicited and spontaneous production, has problems with clitics. Here we may have a combined effect: on the one hand an effect caused by the experiment, on the other an effect derived by the problem with clitics. Differently, in spontaneous production, the speaker resorts to alternative strategies – in this case principally NPs, then omission and only in some cases strong pronouns. Nevertheless, the fact that she shows a high rate of omission also in the spontaneous speech constitutes a point of interest; interesting it is also the fact that strong pronouns and *questo* are used in the appropriate contexts.

Differently from object clitics, definite articles seem not to constitute a major problem for the L2rs: as a matter of fact they are available to a higher extent in L2rs interlanguage grammars from the earliest stages: they are used 98% of the times by the learners at intermediate level, and 74% of the times by Heike at stage 1 (cfr. also Figure 2 and 3). Our results thus confirm previous research on L2 showing that supplying the article is not a major difficulty for L2rs of an L2 where the L1 has overt determiners (Parodi and ali. 1997, Granfeldt 2000, 2004).

A lower rate of omission is then attested in the data, although it is higher in Heike's spontaneous production (21% in total in the 4 stages) than in data from the L2 group participating in the elicitation task (2% within the 3 groups). Article omission seems to be partially determined by L1 influence, as shown by the fact that most of the contexts where determiners omission occurs are grammatical in

German. Data from Heike are of particular relevance: the majority of the attested determinerless subjects are either bare plurals -which are grammatical in German- or occur with possessives (37 out of 68-57%); moreover, 41 out of 77 attested determinerless objects (53%) also occur with a possessive.

As for the syntactic position where omission takes place, it is worth considering that articles are systematically omitted from DPs which occur as a sister of a lexical head, specifically within PP or in object position. This pattern seems to be proper of all the L2rs under analysis here. Within the subjects participating in the task to elicit object clitics 2/16 (13%) of the determinerless nominals are in subject position, 4 (25%) in object position and 10 (63%) occur within PPs.

Similarly, looking at the data from Heike in more details, we find that 68 out of 356 of determinerless nominals (19%) occur in subject position. 37 of them (57%) are grammatical in German and seem to be determined by L1 influence.

In 206 contexts out of 356 (58%) D omission occurs within PP; 39% of them (81 out of 206) occur with a possessive, hence L1 influence is attested. Moreover, 77/356 (22%) are cases of determinerless (direct) objects, in 53% of them (41 out of 77) a possessive is also present. In this sense, our findings confirm previous studies which have claimed that L2 acquisition of definite determiners seems sensitive to the syntactic environment in which the DPs appear (Sánchez and Giménez 1998). As it will be discussed later, the L2rs' omission pattern is different from the one we found for L1 Italian.

Finally, the L2rs investigated here, included those who at earlier stages of acquisition, had no problems in conveying features taken to be associated with the DP-layer, such as Definiteness and Number, or in producing the D-N-A Italian order (contrary to the D-A-N German order), thus showing that L2rs are able to acquire the parameter values associated with functional categories which are not realized in their L1 (contrary to Tsimpli and Roussou 1991).

Our results help also to shed light on the question of ultimate attainment, as the L2rs at near native level of proficiency who participate in the experiment

exhibit errors in the use of object clitics and determiners. Although to a low extent (5%), clitic omission is also attested throughout the near natives, who do not show a completely target-like use of cliticization. Their behaviour in fact is different from that of the control group, where no clitic omission is found.

Furthermore, when they produced clauses in the past perfect they do not always provided the correct form of Past Participle Agreement, as attested by 3% of the incorrect forms found in the data.

In addition to this, they also have 2% of omission of definite articles in obligatory contexts, which are not determined by L1 influence, since omission never occurs with possessives.

Keeping in mind the different analyses on optionality/variability given in section 2, we assume here that such errors stem from difficulties in supplying the exact morphological forms (Prévost & White 2000). In line with Lardiere (2000) we thus follow the assumption according to which L2 learners have unimpaired functional categories and features but have difficulty with morphological mapping from the underlying features to their surface representation.

The dissociation in the mastery of object clitics and definite articles which emerges from the productions of the L2 learners of Italian investigated above can be accounted for in terms of the computational load involved in cliticization, which is not involved in the realization of determiners<sup>119</sup>. According to the syntactic framework adopted here both object clitics and determiners are nominal in nature, but the former are also related to the verbal domain. Thus, a more complex computational process is involved in cliticization: as shown in section 2, object clitics are generated as XPs in argument positions and then undergo a syntactic movement into a higher functional projection belonging to the Extended projection of V. Moreover, knowledge of cliticization implies knowledge of related syntactic properties, such as -agreement between object clitic and past participle – thus increasing the number of different elements which the computation must deal with.

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<sup>119</sup> Note that a similar dissociation in the acquisition of object clitics and definite articles has been attested also in the production of Italian children with SLI, as documented by Pozzan (2004).

We will now focus on the L1 data, discussing the properties which make them similar or different to results on L2 discussed above.

Both for object clitics and determiners a clear developmental path comes out from Denis' data. In addition, a direct comparison between the two developmental patterns is allowed, although clitics appear for the first time one month later than articles (cfr Figure 8).

The first article in the data is the indefinite form *un*, produced by Denis at age 1;11. At age 1;12, then, the definite article appears (*il, la*). Interestingly, in the same recording the first form of object clitics is also attested: *lo*, both as enclitic and proclitic.

Both for articles and for clitics an initial stage of complete omission is detected, thus confirming previous studies on the acquisition of these elements in different languages (cfr. Guasti 2006 and references cited here for article omission; Hamann and Belletti 2005 for object clitics).

Clitics and articles appear quite early, however there is a high rate of omission at the same stages (see Table 12 and 13). - 29% of clitics and 57% of clitic omission at age 1;12; 23% of determiners and 77% of article omission at age 1;11.

In line with previous studies, the drop in the rate of omission seems to coincide with the increased frequency of accusative clitics (Hamann and Belletti 2005 for a review).

Our data also confirms that clitic omission in obligatory contexts (clitic contexts following Pirvulescu 2006) is an important phenomenon in child grammar, since it is the option used by children when object clitics are not yet fully acquired.

No misplacement errors of the clitics have been found, similarly to what already given for L2 Italian. In addition to this, Denis uses pre- and post verbal clitics simultaneously thus confirming previous research on L1 Italian (Guasti 1993/1994, a.o).

As a result, an relative early access to the process of cliticization seems to characterize the child early grammar. This is in contrast to what has been previously reported for L2, where the process of cliticization was subject to a very gradual and somewhere delayed development.

As for determiners, a high omission rate is attested at the earliest stages: at age 1;11 when Denis starts producing articles, 78% of the nouns are bare (cfr table 13). Then, omission gradually decreases: at age 2;8 Denis produce articles 86% of the times. In line with previous studies, moreover, when an article is produced it is used correctly, thus showing that Denis does possess the relevant knowledge of the article system.

As opposed to what has been reported for L2rs, where dissociation in the use of object clitics and articles was attested, a close parallel in the development of the two elements is found in Denis, as clearly shown in Figure 8. As visible there, in fact, although in Denis object clitics emerges 1 month later than articles, the acquisition of these elements seems to follow the same pattern. At this point, our results are partially different from previous finding on the acquisition of L1 Italian and French, where an evidence of a close parallel in the development of object clitics and determiners is not found. See, on this, Bottari et al. 1993/94 for Italian and Hamann 2003 for French where evidence for the fact that determiners appear much earlier than object clitics and that is given<sup>120</sup>.

In line with previous studies (cfr Guasti 2006 and references cited there), however, article omission is higher from the first position of the clause or with names uttered in isolation (67% of the times) then from inside the clause (23% of the times) (cfr. Table 15).

It is important to recognize that in this case there is a contrast between Denis' behavior and that of the L2rs, where, as pointed out above, the opposite pattern emerges. If we compare, in fact, the data from Heike described previously and these from Denis, both drawn from spontaneous production, we see that the two modes of acquisition show significant differences which involve the syntactic position of the DP. In the L2 Italian of the L1 German speaker the percentage of omission is higher for DPs which are in complement position – and in particular occurring within prepositional phrases – than in subject position. In fact, if we eliminate the cases in which omission would be clearly determined by L1

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<sup>120</sup> In the data presented in these studies, moreover, the use of object clitics is not directly comparable to that of articles. In Denis' data, instead, a direct comparison is possible, as object clitics and articles tend to develop in a parallel way.

influence, i.e. determinerless nominal occurring with possessives, the following rate of omission is obtained for Heike:

Subject position:	31/192 – 25%	⇒	first position	
Object position:	36/192 – 19%	⇒	complement position	Tot compl pos :
PPs:	125/192 – 65%	⇒	complement position	161/192 – 84%

On the contrary, data from Denis shows that articles are preferably omitted from the first position of the clause, although 29% of determinerless nominals occur in object position:

Subject position:	42/63 – 67%	⇒	first position	
Object position:	18/63 – 29%	⇒	complement position	Tot compl pos :
PPs:	3/63 – 5%	⇒	complement position	21/63 – 33%

In the case of L1, we claim that such preference in omitting articles from clause initial position can be explained by recognizing a special status to the first position of the clause, in the spirit of what has been proposed by Rizzi (2000; 2004) to account for early subject omission in languages that require overt subject (Root Subject Drop). It is plausible therefore that under a condition of limited processing resources (brain maturation) or of immaturity of the production system, the child resorts to dropping options which facilitate his task. Interestingly, such dropping options are not wild but are regulated by UG. This can account for the fact that child article omission mainly occurs from the highest clausal position, which does not have any clausal internal antecedent.<sup>121</sup>

Differently from what happens in L1, L2rs clearly tend not to omit articles from the first position but from complement positions. Interestingly, there are more instances of null  $D^{\circ}$  found in DPs that are complements of prepositions than from DPs in object position. This fact seems to indicate that for the L2rs of Italian the licensing of the null determiners is more readily available in the syntactic environment of a preposition.

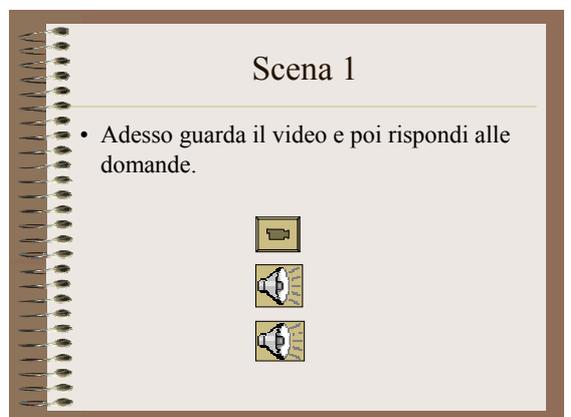
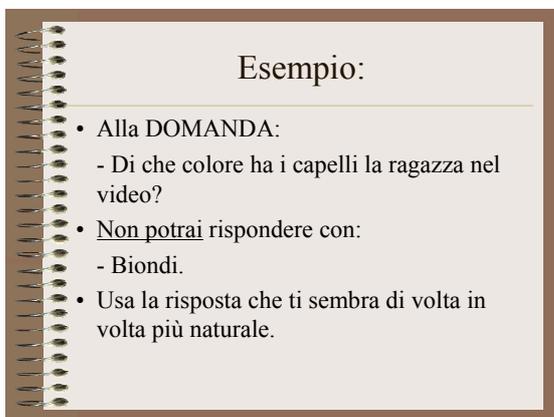
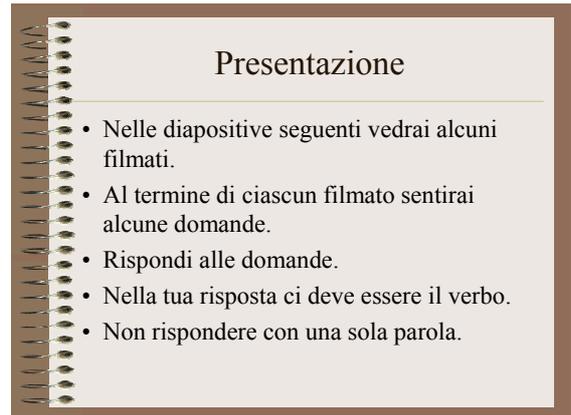
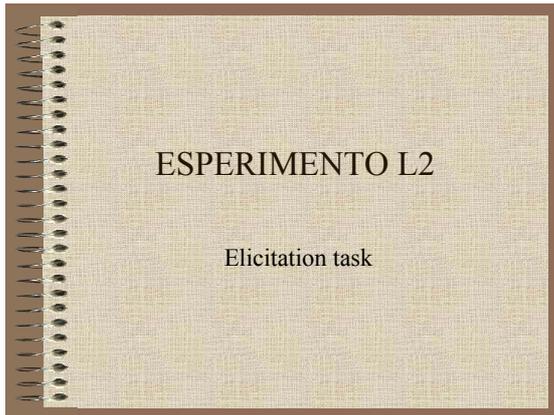
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<sup>121</sup> Along similar lines, de Lange et al. (2006) propose that child article omission can be accounted for in terms of processing reasons, being the sentential initial position the canonical topic position of 'given-expected information'

To conclude, the comparison between the original data from L1 and L2 Italian confirms that there are clear differences in the way object clitics and definite articles are acquired. Overall, this work has constituted an example of how empirical data from different acquisition modes can contribute to a better understanding of linguistic speculations and how different methodologies of analysis can be used for an accurate investigation of the data.

## APPENDIX

### The elicitation task experiment





**Che cosa ha fatto il ragazzo quando ha visto la ragazza?**



**Che cosa fa la ragazza al ragazzo?**



**Il ragazzo, che cosa fa con il foglio?**



**Che cosa ha fatto il ragazzo con la lampada?**

VIDEO 1

Quante persone vedi in questa scena?

Il ragazzo che cosa ha fatto con la carta?

VIDEO 2

Chi vedi in questa scena?

Che cosa ha fatto la ragazza al ragazzo?

VIDEO 3

Quante scrivanie ci sono in questa scena?

La ragazza della scena, che cosa ha fatto con il libro?

VIDEO 4

Che cosa ha fatto il ragazzo con la ragazza?

Quante volte l'ha chiamata?

VIDEO 5

Che cosa ha in mano il ragazzo?

Che cosa fa con il foglio

VIDEO 6

Che cosa ha in mano la ragazza?

Che cosa ha fatto con il libro?

VIDEO 7

Quante lampade ci sono nella scena?

Che cosa ha fatto il ragazzo con una delle lampade?

VIDEO 8

Che cosa ha in mano la ragazza

Dove ha messo gli occhiali?

VIDEO 9

Chi vedi nella scena?

Che cosa ha fatto la ragazza quando ha visto il ragazzo?

VIDEO 10

Dove si svolge la scena?

Cosa fa il ragazzo alla ragazza?

VIDEO 11

Dove si trova il ragazzo?

Dove ha spostato la lavagna?

VIDEO 12

Nella scena, la ragazza aiuta il ragazzo?

In particolare, che cosa ha fatto la ragazza al ragazzo?

VIDEO 13

Che cosa ha fatto il ragazzo quando ha visto la ragazza?

Dove l'ha invitata?

VIDEO 14

Che cosa c'era sopra il tavolo?

Dove ha messo le chiavi?

VIDEO 15

La ragazza nella scena, era in piedi?

Il ragazzo, che cosa ha fatto quando ha visto la ragazza?

VIDEO 16

Come è vestita la ragazza

Cosa sta facendo con la mela?

VIDEO 17

Che cosa è successo nella scena?

Dove ha messo il cappello la ragazza

VIDEO 18

Il ragazzo della scena ti è sembrato arrabbiato con la ragazza?

Che cosa ha fatto alla ragazza

Il ragazzo, come ha trattato la ragazza?

VIDEO 19

Il ragazzo ha fatto qualcosa di strano con l'orecchio

E che cosa ha fatto?

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