



2808988148

## REFERENCE ONLY

## UNIVERSITY OF LONDON THESIS

Degree *PhD* Year *2006* Name of Author *TSAKALI  
Paraskevi Vina*

## COPYRIGHT

This is a thesis accepted for a Higher Degree of the University of London. It is an unpublished typescript and the copyright is held by the author. All persons consulting the thesis must read and abide by the Copyright Declaration below.

## COPYRIGHT DECLARATION

I recognise that the copyright of the above-described thesis rests with the author and that no quotation from it or information derived from it may be published without the prior written consent of the author.

## LOAN

Theses may not be lent to individuals, but the University Library may lend a copy to approved libraries within the United Kingdom, for consultation solely on the premises of those libraries. Application should be made to: The Theses Section, University of London Library, Senate House, Malet Street, London WC1E 7HU.

## REPRODUCTION

University of London theses may not be reproduced without explicit written permission from the University of London Library. Enquiries should be addressed to the Theses Section of the Library. Regulations concerning reproduction vary according to the date of acceptance of the thesis and are listed below as guidelines.

- A. Before 1962. Permission granted only upon the prior written consent of the author. (The University Library will provide addresses where possible).
- B. 1962 - 1974. In many cases the author has agreed to permit copying upon completion of a Copyright Declaration.
- C. 1975 - 1988. Most theses may be copied upon completion of a Copyright Declaration.
- D. 1989 onwards. Most theses may be copied.

*This thesis comes within category D.*

This copy has been deposited in the Library of \_\_\_\_\_

This copy has been deposited in the University of London Library, Senate House, Malet Street, London WC1E 7HU.



**The Syntax and Acquisition of Pronominal Clitics:  
a Crosslinguistic Study with Special Reference to  
Modern Greek**

Thesis submitted to the University of London  
in partial fulfilment of the requirements  
for the degree of Doctor of Philosophy

**Paraskevi Tsakali**

Department of Phonetics and Linguistics

University College London

2006

UMI Number: U593212

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI U593212

Published by ProQuest LLC 2013. Copyright in the Dissertation held by the Author.  
Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against  
unauthorized copying under Title 17, United States Code.



ProQuest LLC  
789 East Eisenhower Parkway  
P.O. Box 1346  
Ann Arbor, MI 48106-1346

I, Paraskevi Tsakali, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

**To my family**

## **ABSTRACT**

This thesis is concerned with the syntax and acquisition of clitic constructions. The empirical focus is on Clitic Doubling constructions and on the emergence of clitics in the child grammar. The aim in this thesis is therefore twofold: first, to explain why certain languages allow Clitic Doubling and others do not, and second, to explain why the L1 acquisition of certain clitic-languages, but not others, is characterised by a so-called clitic omission stage.

The claim to be defended is that the presence of participial agreement in a language determines the availability of Clitic Doubling: Participle Agreement excludes Clitic Doubling. Moreover the presence of participial agreement results in omission of the clitics in L1 grammars.

The analysis relies crucially on the checking relations of phi-features that hold in clitic-languages. I argue that the presence of participle agreement in clitic-languages induces split-checking, which forces associates of the clitic to be null (*pro*). When no split-checking is required, a language may optionally be a clitic-doubling language. The theory that emerges allows us to account for the clitic omission stage: L1 learners undergo a stage (up to the age of 3) in which they are unable to establish split-checking relations between an XP and the functional heads involved. As a result, in languages in which such operations are required, clitic omission will arise.

# CONTENTS

	Page
<b>ABSTRACT</b>	5
<b>LIST OF TABLES</b>	10
<b>ACKNOWLEDGEMENTS</b>	12
<b>CHAPTER 1: INTRODUCTION</b>	
1.1 Clitics and Cliticization in general	16
1.2 The status and position of clitics	20
1.3 Clitic Doubling	23
1.4 Clitic Doubling and Checking Theory- the Hypothesis	26
1.5 Organization of the thesis	29
<b>CHAPTER 2: CLITIC DOUBLING RELATED TO CASE AND THETA THEORY</b>	
2.0 Introduction	31
2.1 The phenomenon of Clitic Doubling	32
2.2 Theoretical Considerations	34
2.2.1 Movement Analyses	34
2.2.2 Base Generation Analyses	39
2.2.3 Sportiche's Analysis	44
2.3 Summary of the properties of Clitic Doubling in Modern Greek	47
2.4 Towards the new Proposal: The unification of Clitic Doubling and Expletive Chains	50
2.5 Case Mismatch with full pronouns	55
2.6 Case problems in Passives/Unaccusatives and Raising constructions	60
2.7 Doubled CPs	61
2.8 The Status of doubled CPs: Against Right Dislocation	62
2.9 The role of the clitic in Clitic Doubling constructions	67
2.10 Clitic Doubling Theorem and impossibility of doubled PPs in Greek	68



2.11 Conclusions	70
------------------	----

### **CHAPTER 3: CLITIC DOUBLING INTERACTS WITH PARTICIPLE AGREEMENT**

3.0 Introduction	71
3.1 Clitic Doubling and related constructions	73
3.1.1 Clitic Doubling versus Clitic Left Dislocation	74
3.1.2 Clitic Doubling versus Clitic Right Dislocation	79
3.2 Previous attempts to derive the Clitic Doubling parameter	83
3.2.1 Kayne's Generalization and the Clitic Doubling parameter	83
3.2.1.1 Shortcomings of and empirical counterexamples to Kayne's generalization	84
3.2.2 Further developments and Sportiche's theory of Doubling	92
3.3 Clitic Doubling interacting with participle agreement	98
3.3.1 What looks like Participle Agreement in Modern Greek	98
3.3.2 The Proposal: Split Checking prevents Clitic Doubling	101
3.3.2.1 Crosslinguistic evidence: Clitic Doubling and Participle Agreement in complementary distribution	107
3.3.2.2 Language specific evidence	109
3.4 Interpretational effects of Doubling constructions	110
3.5 Predictions for developmental studies	114
3.6 Conclusions	116

### **CHAPTER 4: WHAT DO WE KNOW ABOUT THE ACQUISITION OF CLITICS?**

4.0 Introduction	117
4.1 Plato's problem and possible answers	118
4.2 Language Acquisition within the framework of Generative Grammar	122
4.2.1 Basic notions and concepts in the study of language acquisition	122
4.2.2 Reflections of child grammar on syntactic theories	126
4.3 General morphosyntactic properties of pronominal clitics	128
4.4 Evaluating the predictions of syntactic theories on clitics	129

4.4.1 The placement and the emergence of clitics	129
4.4.2 Differences in the acquisition of Indirect and Direct Object Clitics	131
4.4.3 The emergence of Clitic Doubling	133
4.5 Conclusions	135

## **CHAPTER 5: CLITIC OMISSION ACROSS LANGUAGES**

5.0 Introduction	136
5.1 Developmental properties of object clitics	137
5.2 Crosslinguistic variation with respect to clitic omission	139
5.2.1 Object clitics in early French	140
5.2.2 Object clitics in early Italian	143
5.2.3 Object clitics in early Spanish and Catalan	145
5.2.4 Object clitics in early Romanian	147
5.3 The Greek data	150
5.3.1 Previous studies	150
5.3.2 Naturalistic data	151
5.3.3 Experimental results	154
5.4 Comparative conclusions from the acquisition studies on clitics	157
5.5 Crosslinguistic differences in clitic languages:	
The correlation of Clitic Doubling and Participle Agreement	158
5.6 The Optional Infinitive Stage and the Unique Checking Constraint	160
5.6.1 Theoretical background	160
5.6.2 Implications of the UCC for object omission – Deriving the Clitic Omission Stage – The modification of UCC	164
5.6.3 Interaction of clitics with Participle Agreement	167
5.7 Conclusions	171

## **CHAPTER 6: CONCLUSIONS AND FUTURE RESEARCH**

## **APPENDIX: NOMINALIZATION AND CLITIC DOUBLING**

174

1. Nominalization and its relation to Clitic Doubling	174
2. When is the Determiner obligatory?	176
3. What type of clauses can be nominalized?	179
4. The verb <i>distazo</i>	181
5. The structure of the D-CP	183
6. Why Nominalisation at all?	184
<b>REFERENCES</b>	<b>188</b>

## LIST OF TABLES

	Page
<b>Table 2.1:</b> <i>The pronominal system of 1<sup>st</sup> and 2<sup>nd</sup> person in Modern Greek</i>	48
<b>Table 2.2:</b> <i>The pronominal system of 3<sup>rd</sup> person in Modern Greek</i>	48
<b>Table 3.1:</b> <i>The distribution of Clitic Doubling and Participle Agreement</i>	109
<b>Table 5.1:</b> <i>Percentages of clitic use in Philippe's and Grégoire's speech</i>	140
<b>Table 5.2:</b> <i>Use of clitic versus full DPs and clitic omission in Augustine's speech</i>	141
<b>Table 5.3:</b> <i>Correlation of MLU with clitic use and clitic omission</i>	142
<b>Table 5.4:</b> <i>Elicited clitic omission in Italian</i>	144
<b>Table 5.5:</b> <i>Clitic omission in Catalan in present tense contexts</i>	146
<b>Table 5.6:</b> <i>Clitic omission in Spanish in present tense contexts</i>	146
<b>Table 5.7:</b> <i>Clitic omission in Catalan in present perfect tense contexts</i>	146
<b>Table 5.8:</b> <i>Clitic omission in Spanish in present perfect tense contexts</i>	146
<b>Table 5.9:</b> <i>Spanish, direct clitic objects in spontaneous speech</i>	147
<b>Table 5.10:</b> <i>Clitic omissions in early Romanian (Avram study)</i>	148
<b>Table 5.11:</b> <i>Clitic omissions in early Romanian (Babyonyshev and Marin study)</i>	149

<b>Table 5.12:</b> <i>Alexia's use of object clitics and clitic omission</i>	151
<b>Table 5.13:</b> <i>Elli's use of object clitics and clitic omission</i>	151
<b>Table 5.14:</b> <i>Clitic omission in Greek (CHILDES)</i>	152
<b>Table 5.15:</b> <i>Full-object omission in Greek (CHILDES)</i>	153
<b>Table 5.16:</b> <i>Clitic omission in the DOUKAS corpus</i>	153
<b>Table 5.17:</b> <i>Full-object omission in the DOUKAS corpus</i>	154
<b>Table 5.18:</b> <i>Elicited clitic omission in Greek</i>	156
<b>Table 5.19:</b> <i>Proportion of omitted clitics with and without agreement in passato prossimo</i>	168
<b>Table 5.20:</b> <i>Proportion of overt clitic and agreement errors</i>	169
 <b>APPENDIX</b>	
<b>Table 1:</b> <i>The distribution of the definite article with CPs</i>	178
<b>Table 2:</b> <i>The categorization of complement clauses</i>	182

## ACKNOWLEDGEMENTS

The years of conducting this thesis have been so rich in experiences that I have constantly had the feeling that I'm not doing enough or that I am failing to learn everything that needed to be learnt. Well, the feeling developed into knowledge: my personal achievement by the completion of this thesis is that I have finally internalized that as long as the need for learning is alive, what is learnt will not be enough. I will always remember the thesis's years as a particularly exciting period in my life. And finally, I can seize the opportunity to thank everybody who has had a major or a less major influence over my intellectual maturation.

I'm indebted to my first supervisor Neil Smith. Neil was the first to introduce me to the beauty of child language. However this is by far his smallest influence over me. Neil showed me how linguistics is about life and how life is channelled into linguistics. Without putting any (unwanted) pressure, his open-mindedness let me develop independently by showing me that one always needs to "wander" with a vision. His wisdom combined with his sense of humour, even at the most difficult moments has been invaluable.

I thank Misi Brody for always demanding more than I thought I could deliver. Misi was a strong challenge in my linguistic life and his sharp and insightful criticism was particularly helpful, especially during my first steps in doing research.

I'm deeply grateful to Ken Wexler. During my on-and-off-almost-four-year-stay at MIT, he acted as a supervisor, always willing to discuss every little aspect of my work, to transfer his knowledge, to consider my view. Ken not only taught me how to approach language acquisition problems but also how to

evaluate the importance of what might look like superficial detail. I was pleased to discover that he is also a fun person to be with; Ken, especially when with Sherry, can make you laugh until your stomach hurts!

I spent the years of my graduate studies in two academic places: UCL and MIT. I enjoyed every moment in both places. UCL became my “home” immediately after I moved there from Athens. It wasn’t just the stimulating classes (I thank Deirdre Wilson for her outstanding course on Relevance Theory), but also the friendly and pleasant atmosphere that everybody in UCL creates. I thank Dirk Bury, Amela Camdzic, Dina Haidou, Vikki Janke, Hans van de Koot, Marika Lekakou, Ad Neeleman, Jamal Ouhalla, Dimitra Papangeli, Alex Perovic, Kriszta Szendroi, Reiko Vermeulen, and the Imperial-group for creating the conditions to enjoy life.

I owe much to the whole MIT community: their open-mindedness, their endless enthusiasm combined with their hard working attitude creates the perfect environment for any scholar. I have benefited enormously from the classes I attended at MIT, as well as all the discussions I had with teachers and peers. My warmest thanks to Norvin Richards (he can make any difficulty look trivial), Alec Marantz, Danny Fox (not just for linguistics but also for the best thanksgiving gatherings), David Pesetsky, Donca Steriade.

Discussions with Sabine Iatridou made me question what I want to say, why I want to say what I want to say and how I want to say it. Sabine influenced my perspective in linguistics immensely. I thank her for that, but mostly for her friendship and her inviting family (Orestes and Olivia, I thank you for the laughter you brought into my life at a very difficult period).

I was attracted to linguistics when I attended my first syntax classes at the University of Athens with Dimitra Theophanopoulou-Kontou. I especially thank her for teaching me that very complicated issues and notions can be approached with clarity in a scientific way. Throughout these years I have benefited from discussions on and about linguistics with Marta Abrusan, David Adger, Artemis Alexiadou, Masha Babyonyshev, Adriana Belletti, Hagit Borer, Joseph Brian, Amela Camdzic, Cleo Condoravdi, Annabel Cormack, Cristina Cuervo, Lee Davies, Thomas Doukas, Karen Froud, Anna Gavarro, Anastasia Giannakidou,

Stella Grillia, Andrea Gualmini, Valentine Hacquard, Dina Haidou, Geoffrey Horrocks, Tania Ionin, Richard Kayne, Nina Kazanina, Giorgos Kontzoglou, Rita Manzini, Theodore Marinis, Eric Mathieu, Andrew Nevins, Oystein Nielsen, Jamal Ouhalla, Roumy Pancheva, Anna Roussou, Andres Salanova, Irini Sanoudaki, Ioanna Sitaridou, Vassilis Spiropoulos, Michal Starke, Melita Stavrou, Marco Tamburelli, Arhonto Terzi, Nina Topinzi, Ianthi Tsimpli, Spiridoula Varlokosta, Michael Wagner. I especially thank Michal Starke for all the relaxing and insightful discussions about life, in New York and in Thessaloniki.

I am grateful to Elena Anagnostopoulou for so many things. Elena has been a constant source of inspiration for me. Always willing to talk linguistics, always with some idea to offer, always interested in whatever I had to say, always prompt to explain things to me and provide me with a list of references, which, I have to admit, made me sometimes think it would be better if she knew less about clitics!

I undoubtedly owe the development of many ideas of this thesis to Winnie Lechner; his insight helped me pursue my own ideas to the next level. Winnie would always listen to me carefully, crediting me for good ideas that were driven by his penetrating understanding. Winnie and Elena thank you for all the excellent moments we have had in Boston, Athens, and in Cyprus, and for your friendship.

I never expected that in my “working” environment I’d meet so many people who would become close friends and we will survive over thousands of miles of geographical distance. I’m grateful to life that I have met Kriszta (and Balazs), Alex (and Steve), Karen (and John and Sam), Vikki (and Lavinia), Marika, Michael, Dina and Thomas. Your love and friendship is invaluable, guys. A special thanks to Alex and Michael for putting up with me when I was really difficult to talk to. I owe a huge thanks to Kriszta for going through the tough finishing period of this thesis with me, reading drafts, taking care of bureaucratic issues and being constantly close to me despite the intervening pond.

There are plenty of people from outside linguistics that I wish to thank for offering me the luxury of having happy times. Vassilis thank you for sharing everything with me for ten years, including your family, who I love deeply. Pinelo-pitsa your value in my life is deep and constant! Klaus and Wasseem I



have had great time with you every single time and thank you for never forgetting me. My “little” cousin Mary, thank you for helping me realise that panic attacks can actually be accompanied by epiphanies. Dimitris thank you for being an excellent roommate and for making my first period in Boston relaxing.

This thesis was made possible by the financial support of the Greek State Foundation, which is hereby gratefully acknowledged.

I also wish to thank the children that participated in my experiments (the ones included and others, not included in this thesis) and the Principals of Ellinogermaniki School, Moraitis School and Paleros nursery school that made my experimental work possible.

Last and most of all I wish to thank my female-dominated family for everything: my mother Aggeliki, my sisters Jiouli, Tulina, Vassiliki, my nieces Katia and Danai, and my brother in law, Assimakis. Thank you for your support, emotional and practical, and most importantly thank you for empowering me with strength, courage and optimism in life. This thesis is dedicated to you all and to the memory of my father, Dimitris!

# INTRODUCTION

## A GRAMMAR OF CLITICS AND CLITIC DOUBLING

This thesis is a study of pronominal clitics from a syntactic and developmental perspective within the Minimalist approach (Chomsky 1995 and thereafter).<sup>1</sup> First, it explores the formal syntactic mechanisms which regulate the appearance of Clitic Doubling in some clitic-languages but not in others. Secondly, the validity of the syntactic analysis developed in this thesis is tested and further supported by data from developmental studies on pronominal clitics.

The Introduction gives a limited overview of general properties of clitics and the grammar of cliticization. Its purpose is to present issues central to any study of cliticization and give a rough chronological account of the questions that have led to specific approaches. The second half of the Introduction gives an overview of my own proposal.

### 1.1 Clitics and Cliticization in general

Despite the extensive literature on clitics, there is still some opacity concerning their nature; and even their definition is still a topic of debate.

According to a standard view of clitics presented in an introductory book, *“clitics are elements which share certain properties of fully fledged words, but which lack the independence usually associated with words. In particular, they can't stand alone, but have to be attached phonologically to a host. This makes them look a little like affixes, in particular, inflectional affixes. Typically, clitics are function words, such as modal participles (e.g. interrogative participles), conjunctions, pronominals or auxiliary verbs. Historically, they generally develop from fully fledged words and frequently develop into inflectional affixes. [...] In general, cliticization is freer or less restricted lexically than affixation, in the sense that clitics will typically attach themselves to any old word provided that it*

---

<sup>1</sup> Reference to Chomsky 1995 and thereafter is an abbreviation for Chomsky 1998, 1999, 2001, and 2005.

*is in the right position in the sentence, while affixes usually attach only to specific classes of words or stems. However, there are plenty of exceptions to this rule of thumb too. These difficulties of characterization have led some linguists to abandon the notion altogether as a theoretical primitive and regard the notion of clitic as simply a descriptive cover term. Other linguists, however, regard clitics as a separate identifiable morphosyntactic category”* (Spencer 1991:350)

Thus the term clitic has been used to denote many different elements and it is not necessarily endowed with any specific theoretical status. We could say that the only certain property that the term clitic denotes is that it is phonologically attached to some other word. It says nothing about the nature of the word, the category it belongs to, or its distribution. Halpern (1995:1) notes that: *“Clitic” [...] refers to any morpheme which shares some of the following properties: lack of inherent accent, membership in a closed class category (pronominal, auxiliary, discourse particle, etc), distribution different from that of other words of similar fashion. Ultimately, the term is used here as a rough-and-ready label for an item which is problematic for canonical approaches to defining a word or affix’.*

There are two topics within the study of clitics that have received a lot of attention over the years. The first one is the so-called “Second position clitics” (Wackernagel effects) as illustrated in (1). This is a phenomenon where the clitic is placed after the first prosodic word of a syntactic constituent.<sup>2</sup> Importantly the issue here is not about the nature of the element that undergoes cliticization; the cliticizing word may vary (e.g. auxiliary, negation, pronominal element, etc.) and in many cases there may be more than one cliticizing element, which forms a clitic cluster, but which nevertheless has to appear in the second position.<sup>3</sup>

(1) a. Taj=**je** covek svirao klavir (Serbo-Croatian) (from Halpern 1995)

---

<sup>2</sup> A detailed study with extensive bibliography on Second Position Clitics can be found in Halpern (1995).

<sup>3</sup> This phenomenon is crucially different from the phenomena of “Verb-Second” that is found in Germanic languages and where the finite verb is placed after the first syntactic constituent. Second position clitics is not a root phenomenon, that is, it is not confined to main clauses only as (i) shows.

(i) Petar misli da=ga Jovan vidja svaki dan  
 Peter think-3<sup>rd</sup> gs that him-cl-acc John see-3<sup>rd</sup> sg every day  
 “Peter thinks that John sees him every day”.

- that AUX man play-3<sup>rd</sup> sg-past piano  
 “That man played the piano”
- b. \*Taj covek=**je** svirao klavir
- c. Marko=**ga** vidjia svaki dan  
 marko-nom him-cl-acc see-3<sup>rd</sup> sg every day  
 “Marko sees him every day”
- d. \*Marko vidja=**ga** svaki dan

In (1a) *je* is the form of the auxiliary that cliticizes to the demonstrative, while (1c) illustrates the second-position occupied by a pronominal clitic. Comparison between (1a)/(1c) to (1b)/(1d), shows that clitics in Serbo-Croatian have to appear after the first word.

The second major issue of cliticization relates to the status of pronominal object clitics across languages (where the focus of study has been mostly Romance and Balkan languages). The main difference<sup>4</sup> of the pronominal cliticization in these languages from the second-position clitic-languages is that clitics in the former group but not in the latter occur as proclitics to the inflected verb and in general there is no restriction on their appearing sentence initially as in (2b).<sup>5</sup>

- (2) a. **agorasa to vivlio**  
 buy-1<sup>st</sup> sg-past the book-acc  
 “I bought the book”
- b. **to agorasa**  
 it-cl-acc-neuter buy-1<sup>st</sup> sg-past  
 “I bought it”

---

<sup>4</sup> There is also another difference, namely that in second position clitic languages pronominal clitics form clitic-clusters with auxiliaries, a phenomenon which does not occur in Romance and Greek.

<sup>5</sup> Exceptions to this restriction are Berber clitics (Ouhalla 2001), as well as Portuguese and Cypriot Greek.

In view of the diversity of clitic phenomena across languages, a crucial question that arises is whether it is possible to reach a coherent and unified concept of clitics, or if this is not feasible at all due to the possibility that clitics simply do not constitute a unified category, i.e. they are not a ‘natural class’.<sup>6</sup>

Here and throughout this thesis I discuss properties of pronominal clitics of the type exemplified in (2b), which I take to form a uniform category. The properties that these clitics<sup>7</sup> seem to share are generally the following:<sup>8</sup>

**i.** They cannot occur alone; they are attached to the verb (or to some projection of the verbal domain) and this is why they are often called verbal clitics.

**ii.** They occur in a different position from that of the canonical position of the full DP-object, as the contrast between (2a) and (2b) shows.

**iii.** They tend to occur in a fixed order with respect to other functional categories associated with the verb, e.g. negation or particles.<sup>9</sup>

- (3) a. **ton** idha  
 him-cl-acc see-1<sup>st</sup> sg –past  
 “I saw him”
- b. dhen **ton** idha/ \***ton** dhen idha  
 NEG him-cl-acc see-1<sup>st</sup> sg –past  
 “I didn’t see him”
- c. (dhen) tha **ton** dho/ \***ton** (dhen) tha dho  
 NEG FUT him-cl-acc see-1<sup>st</sup> sg  
 “I will not see him”

<sup>6</sup> See Van Riemsdijk (1999) for a discussion of the state of the art in the research on clitics. See also Cardinaletti and Starke (1994/99) for an affirmative answer to this question which builds on “the typology of structural deficiency”.

<sup>7</sup> For a thorough discussion of the properties of pronominal clitics and their implications see Mavrogiorgos (2005).

<sup>8</sup> These are mainly the properties that Kayne (1975) attributes to clitics. His discussion includes more properties which apply also to weak pronouns in Germanic languages. However, Cardinaletti and Starke (1994/99) have shown that there are syntactic, semantic and phonological differences between weak pronouns and clitics.

<sup>9</sup> To the best of my knowledge this property seems to hold for all Romance and Balkan clitics; however Ouhalla (2001) shows that clitics in Berber obey PF restrictions as well in the sense that they cannot appear sentence initially and attach to the first functional category of the sentence (clitics in Cypriot Greek and Portuguese obey similar restrictions).

iv. They also appear in a fixed order in relation to each other (indirect-direct clitics).

- (4) a. **tu to** edosa  
him-cl-dat it-cl-acc give-1<sup>st</sup> sg-past  
“I gave it to him”  
b. **\*to tu** edosa

v. They cannot be stressed.<sup>10</sup>

- (5) **\*TO** diavasa  
it-cl-acc read-1<sup>st</sup> sg-past  
“I read IT”

In what follows I will present some of the issues that have been central to the investigation of cliticization and have led to theoretical debates. These are mainly questions regarding the status and the position of the clitics.

## 1.2 The status and the position of clitics

The placement of the clitic has attracted a lot of attention, as it systematically appears in a different position than full NPs. Where is the clitic exactly and why? Is it base-generated in its surface position or has it moved there? If it moves, what type of movement does the clitic undergo? Head-movement, XP-movement or both? Do the answers to the questions above depend on the assumptions regarding the nature of the clitic, that is, are clitics referential arguments or agreement markers?

---

<sup>10</sup> Although these are considered to be basic properties of pronominal clitics that distinguish them from full pronouns for example, their validity is not an absolute. Cardinaletti and Starke (1999) and Monachesi (1995) discuss the properties of the Italian clitic *loro*, arguing that in Italian the third person plural dative clitic *loro* (to them) can occur separated from its host by an adverb and it can receive stress. Moreover, Monachesi (1995) points out that in Neapolitan (a southern Italian dialect) a clitic cluster can receive stress.

It is still an open question whether clitics should be treated as affixes or as independent syntactic forms. The treatment of clitics as either affixes or arguments divides previous analyses into two broad groups: *strict lexical analyses* and *syntactic analyses*.<sup>11</sup>

Kayne (1975) assumed that clitics are referential arguments. Kayne's objective was to explain the presumed complementary distribution of clitics and DPs. Consequently, he proposed that the clitic is able to satisfy the subcategorization requirements of the verb, as it starts out in the object position and later adjoins to the verb. That was not questioned until Zwicky (1977) who highlighted their syntactic interaction with morphology and phonology. The diverse behaviour of different types of clitics led him to distinguish between two types of clitics, namely *simple clitics* and *special clitics*. Simple clitics are syntactically normal elements that are phonologically dependent on an adjacent word, while special clitics are elements whose placement cannot be accounted for by the normal processes of syntax and for which specific rules must be stipulated. Klavans (1985) developing this view further, proposed that there are three operations that interact with cliticization, namely *dominance*, *precedence* and *phonological liaison*. The typology produced by her proposal is determined by values like *[initial]* or *[final]* for dominance, determining whether the clitic adjoins to the initial or final constituent of the domain of cliticization, *[before]* or *[after]* for precedence, specifying whether the clitic will precede or follow its host, while phonological liaison determines the direction of phonological attachment of the clitic. According to her view, cliticization is actually phrasal affixation, and Romance verbal clitics represent verbal features that appear as verbal affixes.<sup>12</sup>

---

<sup>11</sup> A terminological clarification: Van Riemsdijk (1999) and Anagnostopoulou (2002) classify base-generation analyses within lexical approaches, based on the fact that base generation assumes that there is definitely a lexical component to the distribution of clitics (i.e. the modification of Case properties of the affected predicate). On the other hand, Sportiche's (1998) classification treats movement analyses and base-generation approaches as syntactic analyses (based on the fact that base generation does not lead to the conclusion that the cl+V sequence is not an intransitive verb), and distinguishes them from other lexical approaches. Here I follow Sportiche's classification and for terminological clarity I will refer to the lexical analyses which treat cl+V as an intransitive verb as strict lexical approaches.

<sup>12</sup> This idea was further pursued by Miller (1992) who, using criteria that Zwicky and Pullum (1983) developed for distinguishing between clitics and affixes, claims that French clitics are lexically attached inflectional affixes. The Lexicalist approach is also followed by Monachesi (1995) for Italian clitics.

The general idea of strict lexical analyses is that clitics are derivational affixes modifying the lexical entry of a predicate. So the alternation between *mangia spaghetti* (eats spaghetti) and *li mangia* (cl. eats) is that between a transitive verb *mangia* and an intransitive one *li mangia*. Thus clitics exist only in phonology, as the spell out of certain features. The main argument for dismissing such approaches is that they seem incompatible with clitic climbing constructions, mainly for the reason that the clitic in these constructions bears no argument relation to the verb it is attached to, but instead is thematically related to the embedded verb as illustrated in (6a/b) (example from Sportiche, 1998).<sup>13</sup>

- (6) a. Jean veut manger la pomme  
 John want-3<sup>rd</sup> sg to-eat the apple-acc  
 “John wants to eat the apple”
- b. Jean la veut manger  
 John it-cl-acc want-rd sg to-eat  
 “John wants to eat it”

On the other hand syntactic analyses assume that the presence of a pronominal clitic stands for some argument and it does not affect the thematic properties of the predicate which requires the clitic as its argument. (Note that strictly speaking this is incorrect: base generation analyses, which are here classified as syntactic, do not treat clitics as arguments but rather as affixes; thus they are lexicalist approaches (see van Riemsdijk 1999, Anagnostopoulou 2002). However for simplicity I follow Sportiche’s (1998) rough classification driven by the differences that exist between strict lexical approaches and base-generation - see footnote 10). Thus, syntactic analyses assume that the status of the verb remains transitive; the focus of the investigation then turns to the nature of the XP associated with the clitic and the properties of the relation between the clitic and the XP.

---

<sup>13</sup> See Sportiche (1996) for discussion of the empirical problems that strict lexical approaches face. An alternative is suggested by Monachesi (1995) and, according to her references by Miller and Sag (1995) (which I have not seen).



This shift of focus resulted in two different types of syntactic analysis: *base-generation* approaches and *movement* analyses. The debate between the two types is essentially motivated by the existence of *Clitic Doubling*, a construction that is the topic under investigation in this thesis. In the next Section I will briefly survey the two proposals and indicate which of the questions that *Clitic Doubling* gives rise to are addressed in the following Chapters.

### 1.3 Clitic Doubling

In some languages a clitic can co-occur with a co-referent DP as in (7). When the DP appears in postverbal position the construction is typically called *Clitic Doubling*.<sup>14</sup> Note though that not all constructions with a clitic and a postverbal DP are instantiations of *Clitic Doubling*; such strings could instead be instances of *Clitic Right Dislocation* (for discussion and references see Sections 2.5.3 and 3.1.2 of this thesis).

- (7) To agorase to vivlio o Kostas  
it-cl-acc buy-3<sup>rd</sup> sg-past the book-acc the Kostas-nom  
“Kostas bought the book”

The availability of *Clitic Doubling* is parameterised across languages: for example *Clitic Doubling* is not attested in some languages (e.g. French and Italian)<sup>15</sup>, while being very productive in others (e.g. Argentinean Spanish, Modern Greek); moreover in some languages (e.g. Standard Spanish) only doubling of indirect object is allowed, while in others (e.g. Argentinean Spanish and Modern Greek) both direct and indirect objects can be doubled. The nature of the *Clitic Doubling* parameter has given rise to many theoretical discussions over the years. Some questions that arise from *Clitic Doubling* constructions are: What is the nature of the construction? What is the exact relationship between the clitic

---

<sup>14</sup> When the DP precedes the clitic the construction is called *Clitic Left Dislocation* (see, among others, Cinque (1990) and the various contributions to Anagnostopoulou et al. 1997 for discussion).

<sup>15</sup> Doubling of 1<sup>st</sup> and 2<sup>nd</sup> person pronouns is also attested in varieties of French (Kayne 2000).

and the doubled element? Is the doubled element in an argument position or is it in an adjunct position? Why is Clitic Doubling not attested in all clitic-languages? What is the semantic/pragmatic effect of Clitic Doubling?

For Kayne (1975) the goal was to explain the presumed complementary distribution of clitics and DPs. Consequently, his proposal treated clitics as arguments which are able to satisfy the subcategorization requirements of the verb, originally starting out in the object position and later adjoining to the verb. However, very soon it was pointed out (Strozer 1976, Rivas 1977) that the complementarity between the clitic and the DP is not empirically founded, as in clitic-doubling-languages the two elements can co-occur. The new evidence led to a new theoretical approach, namely the *base-generation* approach (Borer 1984, Jaeggli 1982, 1986, Bouchard 1982, Burzio 1986 among many others), which assumed that the clitic is base generated in a distinct position from the object-associate.

Therefore, the base-generation approach could account for the phenomenon of clitic doubling but faced different problems. Some of the problems concerned the co-referentiality of the clitic and the DP and the locality of the placement of the clitic.<sup>16</sup> This means that since clitic doubling was not attested in all clitic-languages (and a uniform analysis was desired) base-generation had to define the nature of the empty category. For movement approaches it was a trace, while base-generation considered it to be a *pro*.<sup>17</sup>

The question finally that both approaches need to account for is why Clitic Doubling is not an option in all clitic-languages.

Irrespective of the approach that researchers took, it was a common assumption that clitics absorb certain properties or features that the verb assigns to its argument; the property that was mainly assumed to be absorbed was Case. Therefore it needed to be assumed that Clitic Doubling will be possible if there are independent mechanisms in a language that can (re-)assign these properties to

---

<sup>16</sup> Under the movement approach the co-indexation between the clitic and the associate was elegantly captured. Base-generation approaches on the other hand had to introduce some sort of copying mechanism for the semantic link between the clitic and the doubled element.

<sup>17</sup> *Pro* seems to create difficulties; in particular the existence of *pro* with reflexive clitics runs into problems for Binding theory (Sportiche 1992, as discussed in Iatridou 1999).

the DP. This is essentially the insight behind *Kayne's Generalization*: doubling is possible only in languages that allow the doubled DPs to be preceded by a preposition.<sup>18</sup>

Given that the main property of clitics was assumed to be Case-absorption, Kayne's Generalization was developed by Borer (1981) and Jaeggli (1981) into a theory accounting for the parameterization of Clitic Doubling.<sup>19</sup> Their proposal suggested that Clitic Doubling constructions will (only) be available in languages that can employ an independent mechanism that can assign Case to the DP. Such an independent mechanism was found in Rioplatense Spanish: the preposition *a*, which is an animacy marker that appears when the object is animate (even in the absence of Clitic Doubling), as shown in (8).<sup>20</sup>

- (8) a. vimos \*(a) Juan  
b. vimos (\*a) el libro  
c. lo vimos a Juan  
d. lo vimos al libro

The problems and the empirical counterexamples with this account are discussed in detail in Chapter 3 (Section 3.2 and 3.3). Here I will just point out that languages like Modern Greek and Albanian do not obey Kayne's Generalisation as they permit Clitic Doubling without the presence of any preposition. Actually the presence of a preposition in Clitic Doubling in these languages turns the sentence into an ungrammatical one (see discussion in 2.7.1).

---

<sup>18</sup> This is an observation attributed to Kayne by Jaeggli (1981).

<sup>19</sup> Case was only one of the crucial properties (see also Borer 1984). However, Jaeggli (1982) considers Case-absorption to be a side effect and Government to be the crucial one. Zubizarreta (1982) proposes the relevance of the Theta-role, while Aoun (1981, 1999) considers both the Theta-role and Case to be absorbed by the clitic.

<sup>20</sup> Torrego (1998) provides a detailed discussion of the distribution of the preposition *a*, and she shows that its presence does not depend simply on animacy. Nevertheless, in Spanish the possibility of Clitic Doubling remains dependent on the presence of *a*. For further discussion of this issue see Cuervo (2003).

In conclusion, the main factor determining the distribution of Clitic Doubling across languages is still widely accepted to be Kayne's proposal.<sup>21</sup> In the next Section I will introduce a different hypothesis that will be defended in this thesis, namely that the availability of clitic doubling is linked to the availability of participle agreement within a language.

#### 1.4 Clitic Doubling and Checking Theory- the Hypothesis

This thesis is divided into two parts: the first part looks into Clitic Doubling constructions from a syntactic perspective, while the second part explores and accounts for the issues that Clitic Doubling gives rise to in language acquisition, in particular the absence of clitic omission in clitic-doubling languages.

I first focus on the empirical and theoretical puzzles that Clitic Doubling poses for Case and Theta-theory. I discuss new data with Clitic Doubling of complement clauses as in (9) and Clitic Doubling of first and second person pronouns as in (10).

- (9) (To) ksero [CP (to) oti efige o Jiorgos]  
 it-cl-acc know-1<sup>st</sup> sg the that leave-3<sup>rd</sup> sg-past the George-nom  
 "I know it, that George left"
- (10) \*(Mu) telephonise **emena**  
 me-cl-gen phone-3<sup>rd</sup> sg-past me-full pronoun-acc  
 "He/She phoned me"

The discussion of the new data leads me to conclude that Clitic Doubling is still Case-related to a certain extent. Based on data like (9), I argue that Clitic Doubling is only possible as long as it is viable to construct a well-formed chain between the two elements; otherwise Clitic Doubling will be illicit. The conditions on the well-formedness of Clitic Doubling constructions are similar to

---

<sup>21</sup> Suñer (1988) and Anagnostopoulou (1994) have argued against the validity of Kayne's Generalization. Similarly, Sportiche (1996) suggests that the relevant factor for the crosslinguistic variation of Clitic Doubling is Specificity.

those holding for expletive associate chains, namely that the head of the chain will be assigned the Case, while the tail of the chain will receive the Theta-role. The ungrammaticality of (10) in the absence of a clitic brings out the similarities with the obligatoriness of Clitic Doubling in Spanish. However, I show that constructions like (10) do not obey the restrictions that hold for Clitic Doubling in Standard Spanish, and therefore I consider it evidence for the claim that Clitic Doubling will occur as long as the clitic is assigned the Case and the doubled element remains caseless. The preposition then employed in Spanish for Clitic Doubling licensing is not for Case reasons but rather it is a morphological condition that needs to be satisfied by PF requirements of the Case Filter. In this respect my analysis is similar to previous theoretical proposals (e.g. Kayne 1975, Borer 1984) which suggest that the clitic absorbs case; the main difference from those proposals is that I do not consider that the doubled element needs to be Case-licensed by any independent mechanism, as the clitic itself can license caseless DPs. Although the sets of data in (9) and (10) along with the impossibility of doubling prepositional phrases in Greek suggest that Clitic Doubling is subject to Case restrictions, I argue that case constraints cannot explain the availability of Clitic Doubling crosslinguistically, that is, Clitic Doubling cannot be accounted for in terms of Kayne's Generalisation. Instead the parameterization of Clitic Doubling leads me to the conclusion that the Clitic Doubling parameter is related to other parameters within a language, namely the parameter of participle agreement across languages.

My specific proposal departs from previous studies on Clitic Doubling in taking a different approach towards the Clitic Doubling Parameter. Instead of assuming that Case or Specificity is the crucial factor determining the (un-)availability of Clitic Doubling across languages, I propose that the relevant property that regulates the distribution of Clitic Doubling crosslinguistically is to be found in the *checking* properties that hold in a language. More specifically, the hypothesis is based on the generalization in (11), which states that Clitic Doubling is blocked by the presence of Participle Agreement.

(11) THE DOUBLING/AGREEMENT CORRELATION

*If a language has clitic doubling it lacks participle agreement.*

*If a language has participle agreement it lacks clitic doubling*

First I substantiate the correlation in (11) providing extensive crosslinguistic evidence, exemplified in (12a) and (12b) from Spanish and Italian respectively, Clitic Doubling is licit in Spanish which lacks participle agreement and illicit in Italian which has participle agreement:

- (12) a. La he vist-o/\*a (a ella/a Maria) (Spanish)  
her-cl-fem-acc have-1<sup>st</sup> sg seen her-full pronoun/Maria  
“I have seen her/Maria)
- b. l’ha vist-a (\*la ragazza) (Italian)  
her-cl-acc have-1<sup>st</sup> sg seen-part agr the girl-acc  
“I have seen her – the girl”

I argue on the basis of evidence from Romance, Arabic and the Balkan languages that the complementarity between Clitic Doubling and participle agreement shown in (12) systematically characterizes all clitic-languages.

I furthermore argue that the correlation in (11) provides the key to an understanding of the Clitic Doubling parameter. The exploration of the complementarity between participle agreement and Clitic Doubling as expressed in (11) leads me to propose that checking mechanisms are not uniform across languages; rather they follow different patterns. In particular, I argue that clitic-languages are divided into two groups: in the first group, instantiated by non-doubling-languages, such as French and Italian, *phi*-features are split, located in two distinct functional categories, i.e. Clitic Phrase (where the clitic occurs) and AgrO (where participle agreement surfaces). I will call these languages *split-checking* languages. In the second group, the *phi*-features which need to be checked are located in one position, namely the Clitic Phrase. I will refer to this group of languages as *bundling* languages, which contains clitic-doubling-languages, such as Greek, Spanish and Romanian. In ‘bundling’ languages, AgrO does not host *phi*-features, explaining why participle agreement is impossible.

Phi-features related to objects are located in a single position, namely the Clitic Phrase. Thus in clitic-doubling-languages, checking of phi-features takes place simultaneously, while in non-clitic-doubling-languages checking operations separate phi-features. I propose that split-phi languages do not permit Clitic Doubling because the split checking of phi-features violates the Principle of Unambiguous Pronunciation (Richards 2001), which states that PF must not receive contradictory information as to where an XP will be pronounced.

In the second part of the thesis I investigate the acquisition properties of clitic and how the emergence of clitics in a language is related to Clitic Doubling. One of the major advantages of this proposal is that it brings together the cross-linguistic differences regarding clitics in child grammar and the cross-linguistic distribution of Clitic Doubling in natural language. Thus, the typology resulting from my split-checking syntactic account matches the typology resulting from the properties of clitic omission in clitic-languages. Within the framework of the Unique Checking Constraint (Wexler 1998), which prevents double checking in child language, I develop a hypothesis for developmental properties of the clitics according to which children avoid split-checking. It is therefore predicted that children will omit clitics in split-checking languages but not in ‘bundling’-languages. This prediction is borne out as children omit clitics in French, Italian and Catalan but not in Greek, Spanish and Romanian.

### **1.5 Organization of the thesis**

In Chapter II, I discuss various aspects of Clitic Doubling as they have been implemented within the generative tradition. The key idea to be defended in this chapter is that Clitic Doubling is no more of a violation of the Theta Criterion and Case Theory than any instance of an expletive chain. Drawing an analogy between the two, I set out the theoretical ground on which Doubling in general is licit and discuss the implications which new data of Clitic Doubling of complement clauses and full pronouns from Modern Greek have for Case and Theta Theory.

In Chapter III, I propose a syntactic analysis of Clitic Doubling that establishes the correlation between Clitic Doubling and Participle Agreement. The notion of *split-checking* is introduced and developed to account for the generalization. In the first part of the Chapter, I compare and contrast Clitic Doubling with two related constructions, namely Clitic Right Dislocation and Clitic Left Dislocation. After discussing the problems for Kayne's Generalization I propose that the correlation between Clitic Doubling and Participle Agreement underlies the crosslinguistic distribution of direct object doubling.

In Chapter IV, the developmental properties of clitics are presented as discussed in the literature. The purpose of this chapter is to discuss general issues regarding language acquisition studies and more specifically issues which concern the growth of pronominal clitics in child grammar.

In Chapter V, I account for the crosslinguistic variation regarding clitic omission. Data from child language show that crosslinguistically, children do not acquire all properties of pronominal clitics simultaneously: studies of French, Italian and Catalan speaking children have shown high rates of clitic omission at the age of about 2;0 to 3;6, while Spanish and Greek children do not show comparable omission rates at the same stage of language acquisition. Focusing on the experimental results from Greek, I defend the hypothesis that crosslinguistic variation stems from a universal principle that prevents children from carrying out certain computational processes of syntax, and which applies to the Grammar as a whole, allowing children to accept and produce ungrammatical constructions.

Finally, Chapter VI contains some concluding remarks and discusses the issues that remain open for investigation, in addition to the questions that this thesis has generated.



## **CHAPTER 2**

### **CLITIC DOUBLING RELATED TO CASE AND THETA THEORY**

#### **2.0 Introduction**

Within the generative literature on pronominal clitics, the parameter of Clitic Doubling (CID) has been discussed from various perspectives. However there seems to be no account that could empirically capture all the differences and the variation that characterize the phenomenon crosslinguistically. Nevertheless, the existing literature on CID has shown that clitic doubling constructions are subject to both morpho-syntactic and semantic/pragmatic constraints.

The objective of this Chapter is to present and introduce new empirical puzzles that Clitic Doubling constructions pose for the syntactic components of the grammar, namely for Case and Theta Theory. One major theoretical consideration related to CID concerns the nature of the doubled element. In the early eighties, the question concerning clitic constructions mainly revolved around the complementarity versus lack of complementarity between clitics and argument XPs. The observation was that in some languages CID was very productive while in others it was less productive or completely unattested. Therefore, the theoretical accounts developed did not construe Clitic Doubling phenomena uniformly: while for one group of analyses the doubled element was in the canonical object position, for a second group the doubled element was an instance of right dislocation.

These issues will be addressed as part of the historical overview I present in this Chapter and then again when relevant to my standpoint regarding the facts under discussion. The challenging data for Case and Theta-theory I discuss involve constructions with Clitic Doubling of complement clauses and obligatory Clitic Doubling of first and second person full pronouns. The key idea is that CID is no more of a violation of the Theta Criterion and Case Theory than any instance of an expletive chain. Drawing an analogy between the two, I set out the theoretical ground on which Doubling in general is licit.

The structure of this Chapter is as follows: In Section 2.1, the phenomenon and the definition of CID is introduced. In Section 2.2, I present the theoretical analyses associated with CID that have been proposed within the framework of generative grammar and comment on their strengths and weaknesses. The properties of CID in Modern Greek that are relevant for the subsequent discussion are summarized in Section 2.3. In Section 2.4, I introduce my theoretical view on CID of direct objects and its correlation with expletive chains. The theoretical arguments along with the empirical evidence that support my view are presented in Section 2.5. In Section 2.6, I argue against the right dislocation of the doubled CP, while in Section 2.7, I discuss the empirical predictions that my proposal makes for the availability of CID. Finally, in Section 2.8 the chapter is concluded.

## 2.1 The Definition of the Phenomenon of Clitic Doubling

The term Clitic Doubling has been confusingly used to refer to distinct clitic constructions such as Clitic Left Dislocation (CLLD), Clitic Right Dislocation (CLRD) and proper Clitic Doubling (CID).<sup>1</sup> In the more recent literature the ambiguity regarding Clitic Doubling has slowly evaporated although there are serious uncertainties with respect to certain constructions that do not seem to differ from one another in a clitic doubling and a non-clitic doubling language.<sup>2</sup> Thus the definition of Clitic Doubling I adopt describes constructions where *a clitic and a full NP/DP refer to the same entity, belong to the same syntactic domain*<sup>3</sup> and hence “compete” for the same Case and Theta-role as shown in the examples (1)-(2) from Greek and Argentinean Spanish respectively.

The phenomenon of CID as defined above, is distinct from the phenomenon of Clitic Right Dislocation (example (3) in French), where the clitic and the DP do not belong to the same syntactic domain (for a detailed discussion

---

<sup>1</sup> For consistency, I follow Anagnostopoulou (1994 and thereafter) regarding the terminology/abbreviations and the definitions relating to clitic constructions.

<sup>2</sup> More on this issue in Section 2.5.3, where I discuss some differences between languages with CLLD (e.g. Catalan) and Greek, and in Chapter 3 (Section 3.1.2).

<sup>3</sup> The term *syntactic domain* is defined in terms of c-command properties. See discussion in Section 2.4.

on the differences between the two constructions see Anagnostopoulou (2002); a summary of her discussion is presented in the next Chapter (Section 3.1.2).<sup>4</sup>

- (1) Tin apofevgi ti Maria o Jianis (Modern Greek)  
her-cl-acc avoid-1<sup>st</sup> sg the Maria-acc the John-nom  
“John avoids Maria”
- (2) Lo vimos a Juan. (Argentinean Spanish)  
him-cl-acc see-1<sup>st</sup> pl-past John-acc  
“We saw John”
- (3) Je l’ ai vu, l’assassin (French, from Jaeggli 1986)  
I-nom him-cl-acc have-1<sup>st</sup> sg seen, the murderer  
“I saw him, the murderer”

In the majority of the analyses of Clitic Doubling, it is assumed that the associate of the clitic receives Case, while the clitic itself is either treated as an exponent of agreement or as a specificity marker (see e.g. Kayne 2000, Sportiche 1996, Uriagereka 1995, and Anagnostopoulou 1994). These studies have exclusively focused on Clitic Doubling of DPs, but have neglected constructions in which the doubling clitic is associated with a CP. Based on new data of Clitic Doubling of complement-clauses, I will argue first that the position of the doubled element in Clitic Doubling is not dislocated (not an adjunct type). Second, I will suggest a novel hypothesis according to which in Clitic Doubling constructions the Case of the verb is assigned to the Clitic (cf. Borer 1984), and not to the associate, while the associate receives the theta-role. This standpoint challenges the traditional view and further elucidates the nature of the relationship between the clitic and the co-referent element.

Showing that doubled CPs and accusative doubled DPs behave on a par, thus being amenable to the same syntactic analysis, I will argue that CID is viable

---

<sup>4</sup> Anagnostopoulou (1994) provides extensive arguments as to how these two constructions are different and why Greek is a CID language. In summary, the main argument comes from word orders [cl V DP-object DP-subject] that are grammatical in CID languages but ungrammatical in CLLD languages like Catalan (see Vallduvi 1990, for discussion). Here and throughout the thesis I assume that the two constructions (CID and CLLD) should be analyzed differently (following Cinque 1990, Iatridou 1991, and Anagnostopoulou 1994).

whenever it is possible to establish a well-formed chain relation between the two elements. This insight is directly or indirectly shared by all researchers. I will show how this is theoretically possible and what type of empirical predictions it makes.

Before entering the discussion regarding the nature of the doubling, I will present the main theoretical proposals accounting for CID and point out the considerations they raise.

## **2.2 Theoretical considerations on the Movement vs. Base Generation of Clitics**

In a nutshell, we can say that the main syntactic approaches fall into two major groups, the movement approaches (Section 2.2.1) and the base generation approaches (Section 2.3.1). However, Sportiche's (1996) approach departs from both groups and for this reason is presented separately (in Section 2.2.3).

### **2.2.1. Movement analyses**

According to the movement approaches (Kayne 1975<sup>5</sup>, Aoun 1981, 1999, Sportiche 1988, 1990, Philippaki 1987, for Modern Greek, among others) pronominal clitics are originally base-generated in the object position and then move to their Surface-structure position, as they need to cliticise to a higher element for phonological support. This hypothesis accounts for the fact that either a clitic or a full NP may occur, but not both at the same time. The presumed complementarity between the clitic and the NP-object, together with the observation by Kayne that a doubled element can appear only in those languages that can employ an independent mechanism for re-assigning Case to the doubled element (i.e. a dummy preposition, like *a* in Spanish or *pe* in Romanian) led to the

---

<sup>5</sup> Kayne (2000, 2002) adopts an approach to CID of the sort found in Kayne (1972) and Uriagereka (1995), in which the clitic and the double are merged together and subsequently separated. This probably represents his current view on CID although he does not discuss the variation of CD crosslinguistically. However, reference to Kayne's proposal applies to his older approach, which has been very influential and it is therefore meant to be representative of a series of analyses among various languages.

view that what appears structurally as the associate of the clitic is licit under specific circumstances, namely if a prepositional element is available.<sup>6</sup> This approach became known as Kayne's Generalisation.

More specifically, movement approaches assume that clitics absorb the Case feature of the verb because, like other pronominal elements, they require Case in order to be licensed. Accordingly, doubling constructions are ruled out as Case Filter violations, unless the NPs in object position can be assigned Case by means of an independent device. This is a widely accepted view in the traditional literature, which finds empirical support in Romanian and Spanish data. However Suñer (1988) and Anagnostopoulou (1994 and thereafter) have argued extensively against the validity of Kayne's Generalisation based on languages where the doubled argument does not need a dummy case marker, e.g. Argentinean Spanish and Modern Greek, as illustrated in (4a) and (4b) respectively:

- (4) a. Yo la tenía prevista esta muerte (Argentinean Spanish)  
 I it-cl-acc have foreseen this death  
 "I had foreseen (it) this death"
- b. Ton idha to Jiani (Modern Greek)  
 Him-cl-acc saw-1<sup>st</sup>-sg the John-acc  
 "I saw him, John."

Therefore, Modern Greek poses a serious problem for the appealing proposal that Clitic Doubling can be parameterised with respect to the availability of dummy prepositional Case assigners, as an option in some languages but not in others.

Thus proposals assuming movement of the clitic<sup>7</sup> (Drachman 1983<sup>8</sup>, Philippaki-Warburton 1987, Tsimpli 1990, 1995, Fykias 1988 among others)

<sup>6</sup> This account was developed mainly by Borer (1984) and Jaeggli (1981).

<sup>7</sup> Note here that all theories of clitics involve a component of movement analysis of the clitic. The distinction between movement versus base-generation holds for the different treatment that these accounts pursue regarding the original position of the clitic.

<sup>8</sup> As Anagnostopoulou points out, Drachman (1983) attempts to account for the Modern Greek Doubling data assuming the general Case-absorption framework. He uses the hypothesis that in

account for CID in Greek by taking clitic-doubled elements to emerge in a right dislocated position, treating them like adjuncts.

According to Sportiche (1996), movement approaches face two types of problems: a) the lack-of-source arguments, that is, there is no possible source from which the clitic could have moved, and b) the impossibility-of-movement arguments, that is, the distance between the clitic and its source are not allowed to be covered by movement.

a) Lack-of-source arguments:<sup>9</sup> this argument involves constructions with ethical datives (5) and (6) (see also Dimitriadis 1999 for discussion of Greek).

- (5) a. Je t'acheterais un cadeau à Pierre (Sportiche 1996)  
 I-nom you-cl-dat buy-would a present-acc for Peter  
 "I would buy Peter a present for you"
- b. Mou ponai to kefali (Dimitriadis 1999)  
 me-cl-dat hurt-3<sup>rd</sup> sg the head-nom  
 "My head hurts me/ I have a headache."
- c. \*Ponai se mena to kefali.  
 Hurt-3<sup>rd</sup> sg to me the head-nom
- (6) Pierre en a bavé (Sportiche 1996)  
 Peter-nom of-it has-3<sup>rd</sup> sg drooled  
 "Peter suffered"

In example (5a) the clitic *te* cannot be replaced by any full XP. The same effect is shown in (5b) in Greek, while (5c) demonstrates the impossibility of replacement of the clitic by a PP, which in general is allowed in Greek as long as the dative-NP is an argument of the verb. In fact, both (5a) and (5b) show that the

---

Modern Greek a local Case Copying rule is available, which allows for CID to emerge, in apparent violation of Kayne's generalisation (see also Fykias 1988 for extensions on this core idea).

<sup>9</sup> This was an argument for movement analyses in general but mostly for the proponents of movement analyses who assumed that the clitic absorbs the subcategorization feature of the verb (e.g. Aoun 1981)

function of the clitic is not linked to any argument. Example (6) shows the same point: the clitic *en* does not correspond to any XP slot.<sup>10</sup>

b) Impossibility-of-movement argument: Sportiche (1996) also discusses cases with floating quantifiers. The distribution of floating quantifiers seems difficult to reconcile with the movement approaches. Consider the following example (from Sportiche 1996):

- (7) Il a tous fallu que Louis les lise  
it-cl-expl-has-3<sup>rd</sup> sg all necessitated that Louis-nom them-cl-acc read-3<sup>rd</sup> sg  
“It was necessary that Louis read them all”

Example (7), in an account in terms of movement theory, would mean that (a) the clitic is the head of the DP modified by or quantified over by *tous*, (b) the clitic itself has moved to its surface position, and (c) *tous* quantifying over this DP is licensed by this DP moving through the specifier position of Q. The representation of example (7) would read as in (8):

- (8) [QP [tous V...[CP...[D les<sub>i</sub>]...[DP t<sub>i</sub>]]]]

Another set of data that are problematic for movement analyses come from constructions in which an adjunct cannot be tolerated, in particular, subjects of small clauses and ECM constructions (Anagnostopoulou 1994).

c) Impossibility of Adjuncts in Argument positions: Example (9) is an ECM construction and (10) is an example containing a small clause. In both examples,

---

<sup>10</sup> Sportiche (1998) reports that Kayne points out the weakness of the lack-of-source argument by the existence of English examples like:

- (i) John perjured himself.  
(ii) John kicked the bucket.

In both (i) and (ii) the direct objects (parts of the idioms) must somehow be listed as part of a lexical entry including the verb and at the same time be realized as independent DP-objects, even though their link to any theta-role is not at all certain.

the DP *tin Maria* is doubled by the clitic *tin* (her). Both constructions would be impossible if the full DP was in an adjunct position.<sup>11</sup>

- (9) O Jianis tin perimeni tin Maria/afti na paraponethi.  
 the John her-cl-acc expect-3<sup>rd</sup> sg the Maria/her-acc to complain-3<sup>rd</sup>sg  
 “John expects Maria/her to complain”.
- (10) O Jianis den tin theori tin Maria/afti eksipni  
 the John NEG her-cl-acc consider-3<sup>rd</sup> sg the Maria/her-acc clever-acc  
 “John doesn’t consider Mary/her clever.”

Moreover, binding properties that are expected under the movement approach do not seem to validate the movement hypothesis.

d) Binding Restrictions: One of the main advantages of Kayne’s original proposal was that it can capture the strong dependency between the clitic and the DP. Thus, if we accept that the clitic has moved from the original object position, we would expect that the trace of the clitic would be able to bind a non-restrictive relative clause, in the same fashion that the trace of a moved DP-object is able to in (11b). Consider the following examples:

- (11) a. Tin idha tin Eleni, i opia evapse ta malia tis ksantha  
 her-cl-acc see-1<sup>st</sup> sg-past the Helen-acc, who dye-3<sup>rd</sup> sg-past her  
 hair-acc blonde  
 “I saw Helen, who dyed her hair blonde”
- b. Tin Eleni idha *t*, i opia evapse ta malia tis ksantha  
 the Helen-acc see-1<sup>st</sup> sg-past, who dye-3<sup>rd</sup> sg-past her hair-acc  
 blonde  
 “I saw Helen, who dyed her hair blonde”
- c. ??Aftin idha *t*, i opia evapse ta malia tis ksantha

---

<sup>11</sup> One could claim that the subject of a small clause is an adjunct and therefore in this spirit these particular examples would not undermine movement analyses (I thank Vassilis Spiropoulos for pointing this out to me). However even under this view one has to distinguish between adjunct-subjects and what are traditionally called adjuncts (e.g. adverbs).



her-acc see-1<sup>st</sup> sg-past, who dye-3<sup>rd</sup> sg-past her hair-acc blonde

“I saw her, who dyed her hair blonde”

- d. \*Tin idha *t*, i opia evapse ta malia tis ksantha

her-cl-acc see-1<sup>st</sup> sg-past, who die-3<sup>rd</sup> sg-past her hair-acc blonde

“I saw Helen, who dyed her hair blonde”

If the clitic in (11c) was in fact the original argument of the verb that has moved, the appositional relative clause *i opia evapse ta malia tis ksantha* (who dyed her hair blonde), that follows it, should be licit bound by the trace of the clitic, in the same fashion that the moved DP in example (11b) does. The contrast between (11b) and (11d) suggests that the clitic and the moved full DP-object do not originate from the same position. Moreover, the contrast between (11c) and (11d) shows that the ungrammaticality of (11d) cannot be due to other properties of the language that would disallow an appositional clause to be bound to a moved pronoun as *afti* (her) in (11c).

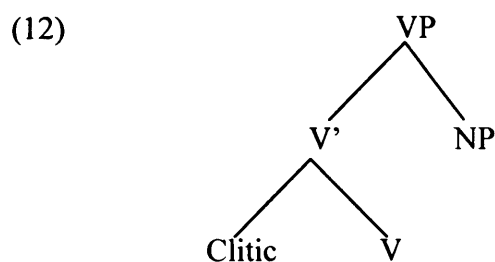
In summary, the challenge for movement approaches comes from constructions with ethical datives, floating quantifiers, binding relations, ECM constructions and subjects of small clauses.

In the following section, I will review some of the base generation proposals and I will explain the general theoretical assumptions that are essential for my own proposal.

### 2.2.2 Base Generation analyses

Base generation analyses (Jaeggli 1982, Borer 1984, Anagnostopoulou 1994) are motivated by Clitic Doubling constructions. Jaeggli (1981) in his original proposal assumes that clitics absorb Case and therefore Doubling constructions would be ruled out as Case Filter violations unless the full DP could be Case licensed. Thus, clitics are base-generated in their Surface-structure position attached to Infl. Hence clitics are not treated as lexical affixes, which cannot be base generated in any syntactic position, but as an internal part of a word/verb. Consequently, the object position of the verb is occupied by a null

pronominal *pro*, and that *pro* gets the theta-role of the verb. With this approach it is possible to have both a clitic and a full NP as the object of the verb. The tree in (12) (from Jaeggli, 1982) represents the structure with both elements being base generated: the pronominal clitic in the VP is generated to the left of the verb, while the coindexed DP is generated in the object position, as required by the selecting verb.



Base generation raises many questions: a crucial one being that in contrast to the movement analyses, it cannot adequately explain the co-indexation of the clitic and the full DP. This is something elegantly captured by movement analyses, achieved via trace theory. The obligatory movement rule that Kayne (1975) introduced, provides a logical explanation for the strong relation of the clitic and the DP, if one is willing to accept that CID would be a right dislocation construction. Thus base-generation theories are obliged to introduce some sort of “copying” mechanism in order to escape difficulties accounting for the co-indexation between the clitic and the doubled element.

Moreover in order to account for the parameterization of CID within clitic-languages, base-generation theories have to suggest that clitics are affixes in doubling-languages, a status which allows them to co-occur with argument DPs, while in non-clitic-doubling languages, clitics are arguments and therefore their co-existence with full-DPs is not an option. At a purely descriptive level, it seems natural to argue that the characterisation of clitics as affixes or argumental elements is language specific, depending on the availability of doubling. However, to my mind, in order to handle the status of clitics differently in different languages, we need to establish these differences on independent grounds as well,

other than the availability of CID. Thus, I consider it more desirable to obtain a uniform analysis for CID crosslinguistically.

Returning to the issues that old base-generation analyses cannot (easily) account for, we can say that these are properties that display a movement relationship of the clitic with the empty category associated with it (*pro*). Sportiche (1992/96) discusses constructions with Specified Subject Condition (SSC) effects, extractability of PPs and DP-complements, and clitic dependencies with participle agreement.<sup>12</sup>

a) Extractability from PPs: Preposition stranding under clear cases of movement is not allowed in French, as illustrated in (13b) (from Sportiche 1996). It is, however, possible to have P-stranding in French (14) when the missing object is interpreted as referring to some discourse-prominent entity in the same fashion as in (15a) (data from Zribi-Hertz 1984, as discussed in Sportiche 1996):

- (13) a. Jean a voté pour Maastricht  
John-nom has-3<sup>rd</sup> sg voted for Maastricht  
“John has voted for Maastricht”  
b. \*Quel traité Jean a-t-il voté pour *t* ?  
which treaty John-nom has he voted for  
“Which treaty did John voted for?”

- (14) Jean a voté pour  
Jean-nom has-3<sup>rd</sup> sg for  
“John voted in favour of it”

However, Sportiche (1996) showed that preposition stranding under cliticization is completely disallowed (15b) (examples from Sportiche, 1996):

- (15) a. Jean a voté pour lui  
John-nom has-3<sup>rd</sup> sg voted for him

---

<sup>12</sup> I will not discuss the SSC-effects as their movement properties are not so clear and depend on a particular construal of Binding theory. Thus they form an inconclusive argument against base-generation.

“John has voted for him”

- b. \*Jean lui a voté pour [*sc*]  
John-nom him has-3<sup>rd</sup> sg voted for

Thus comparison between (13b), (14) and (15b) shows that the [*sc*] (which stands for *silent category*) in (15b) is a trace. In other words, (15b) patterns with (13b), but not with (14), where the missing element is best analysed as *pro*.

b) Extractability from DP-complements: Extraction out of direct object DPs in French obeys the restriction that the extracted XP is licit only if the XP can appear as the possessor of the DP which the XP extracts from (see Giorgi and Longobardi 1991, Sportiche 1988, Valois 1991). The observation is exemplified in (16) (data from Sportiche 1996):

- (16) a. Jean a vu une/la photo de qui?  
John-nom has-3<sup>rd</sup> sg seen a/the picture-acc of whom  
“John saw a picture of whom?”
- b. Jean a lu une dépêche de Paris  
John-nom has-3<sup>rd</sup> sg read a dispatch from Paris  
“John read a dispatch from Paris”
- c. \*D’où<sub>j</sub> Jean a-t-il lu une dépêche *t<sub>j</sub>*?  
from where John-nom has-3<sup>rd</sup> sg he read a dispatch  
“From where did John read a dispatch?”

Sportiche (1990) and Valois (1991) argued that this pattern is explained by appealing to antecedent government, a property required of traces but not of silent categories. Thus in order to derive the observation, extraction out of postnominal XP must proceed through the Spec-DP, guaranteeing antecedent government.

Clitic extraction follows the same pattern as shown in (17) (from Sportiche 1996), suggesting that clitic placement behaves like a movement process.

- (17) a. Jean en<sub>j</sub> a vu [une/la/\*ma/\*cette photo *t<sub>j</sub>*]

John-nom of-him has-3<sup>rd</sup> sg seen a/the/\*my/\*this picture-acc

“John saw a/the/my/this picture of him”

b. \*Jean en<sub>j</sub> a lu [une dépêche t<sub>j</sub>]

John-nom there-from has-3<sup>rd</sup> sg read a dispatch

“John read a dispatch from there”

c) Clitic dependencies with participle agreement: The general observation is that a participle may or must (depending on the dialect) agree with the accusative direct object when the object precedes the participle. Agreement is excluded in French when the object follows the participle, while in Italian there are cases where the participle agrees with post-participle objects as well.<sup>13</sup> Moreover, in all known varieties with participial agreement, the participle shows agreement with the clitic, as in (18):

(18) Jean l’a peint(e)

John-nom her-cl-acc has-3<sup>rd</sup> sg painted-FEM

“John painted it”

Kayne (1989) suggests that the only way to get agreement is under the assumption that there is an intermediate specifier (of the participial morphology) through which the moved object may (or must) transit. Sportiche (1989) and (1990) provides substantial independent evidence for the existence of this intermediate position in French. Thus the representation of (18) is as in (19):

(19) le<sub>j</sub> a [ t<sub>j</sub> [peinte...t<sub>j</sub>]]

Assuming base-generation, the object in (19) would not be a trace but a *pro*, which essentially means that the object remains postparticipial. It would then be unclear how the realisation of participle agreement within the base-generation framework works. In the next Chapter I show that it is possible to derive the overt occurrence of the participle agreement within a base-generation framework;

---

<sup>13</sup> See discussion in Chapter 3.

moreover I show that the link between movement of the object and participle agreement is not accurate.

Summarizing the discussion in this Section, a) extraction of PPs and argument DPs, and b) the realisation of the participle agreement in clitic constructions, do not favour the base-generation approaches.

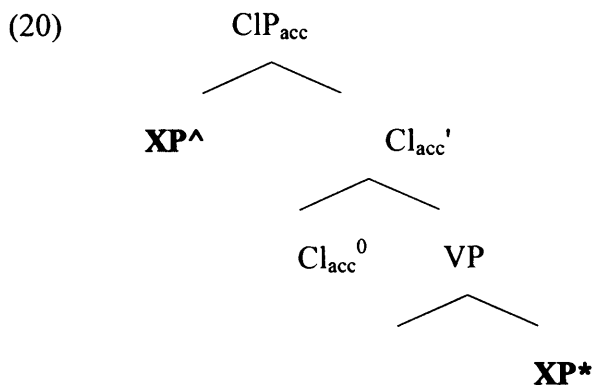
### **2.2.3 Sportiche's analysis**

The challenge described in the two previous subsections, that is, the need to maintain a uniform analysis of clitic constructions on the one hand, and the fact that different clitic constructions seem compatible with different analyses, on the other, has been tackled quite successfully by Sportiche's (1996) approach.

Sportiche exploits the idea that only movement can explain the condition of locality between the clitic and the associated DP, whereas, only base generation can explain the lack of complementarity between clitics and the associated DPs.

According to his analysis, clitics are inflectional heads whose close syntactic connection with a host can be analysed as a case of head-to-head movement incorporating the clitic head to the host head and/or vice versa. This entails that the agreement between a clitic and a corresponding DP could be viewed as an instance of agreement between a phrasal constituent and a head. From this perspective, it is not the clitic that moves but rather a lexical DP or a *pro* (in the cases where the DP is silent) that raises to the Spec of the clitic head to receive case.

Clitics, then, are base generated in pre-existing slots as functional heads, heading their own projection. Clitic constructions involve movement, though not movement of the clitic, but rather movement of the associated DP. He further argues that with each clitic slot of the clitic template, there is a corresponding projection available, under the label *Clitic Voice*. The representation of his structure is given in (20):



Sportiche's theory assumes that the agreement between the clitic and the corresponding XP\* is derived as a spec-head relation and the locality between the clitic and the XP\* follows from the movement relationship between the XP\* and XP^. In this way, Sportiche's theory can account for issues that pose a problem for either movement or base-generation analyses, namely the lack-of-source arguments, the impossibility-of-movement arguments for movement theories, and the locality relations that seem to hold between a clitic and its associate. In addition, Sportiche proposes that direct object clitics license specificity on their associates, unlike indirect object clitics which are pure agreement markers.

Clitic Doubling in Sportiche's system follows from the movement of the XP\* to the XP^ position at some point in the derivation. What accounts then for the parameterization of CID across languages relates to the kind of movement that XP\* undergoes, that is, whether the movement is overt or covert. Thus CID will appear in those languages in which the XP\* moves covertly, while it will be absent in those that involve overt XP\* movement.<sup>14</sup> The relevant principle is given in (21):<sup>15</sup>

<sup>14</sup> Sportiche does not give an independent reason of why XP\*-movement is overt or covert depending on the language and how we could predict which language will have overt or covert movement.

<sup>15</sup> Sportiche's account for crosslinguistic parameterization of Clitic Doubling is based on the Doubly Filled Voice Filter, a filter similar to the Doubly Filled COMP (Cheng 1991 for discussion). I return to Sportiche's proposal and its predictions for Clitic Doubling in Chapter 3 (Section 3.2.2) where I discuss the details of his analysis. In this Section I limit myself to presenting the core ideas of his proposal and discuss potential problems which are relevant to the rest of the discussion in this Chapter.

(21) CLITIC CONSTRUCTIONS PARAMETERS (Sportiche 1996)

*Movement of XP\* to XP^ occurs overtly or covertly*

*Head is overt or covert*

*XP\* is overt or covert*

One problem arising from Sportiche's proposal concerns Case theory. He suggests (personal communication) that "clitics, not being DPs but rather being heads of functional projections, do not need nor do they get Case. The associate DP does need Case and it gets its Case by moving to the spec-Agr before moving to the spec of Clitic Phrase. The clitic has to agree in Case with the associated DP. We could compare this Case transmission to a spec from its head as the subject verb/inflection agreement, which exists independently".

However clitics in Greek are morphologically marked for genitive/dative or accusative.<sup>16</sup> Although the morphological realisation of Case on the clitic could in principle be attributed to Case transmission or to some independent morphological condition, by assuming that clitics do not receive Case, example (22c) is unexpectedly ungrammatical under Sportiche's view.

- (22) a. Edosa sto Jiani/tu Jiani to vivlio  
Give-1<sup>st</sup>sg-past to the John the book-acc  
"I gave the book to John"
- b. Tou edosa tou Jiani to vivlio  
Him-cl-gen give-1<sup>st</sup>sg-past the John-gen the book-acc  
"I gave him the book, to John"
- c. \*Tou edosa sto Gianni to vivlio  
Him-cl-gen gave-1<sup>st</sup>-sg to the John the book-acc

The otherwise legitimate optionality of the verb for selecting for either a genitive or a PP-complement (22a), disappears in the presence of a genitive clitic as shown by the contrast of (22b) with (22c). Example (22c) suggests that the verb *edosa* (give) selects for a genitive/dative indirect object that in Greek can appear

---

<sup>16</sup> Modern Greek lacks the morphological distinction between genitive and dative. Moreover there are no nominative clitics in Greek, and therefore no subject clitics.



either in the form of genitive-DP (*tu Jiani*) or as a PP (*sto Jiani*). However in a Clitic Doubling construction (22b) the doubled element must appear as a genitive-DP. Under Sportiche's view, that is, if the Case on the clitics is a by-product of Case transmission at LF, by co-indexation with the DP, example (22c) raises questions.

Note though that this is not a problem for Sportiche's theory per se; it could be argued that since PPs in Greek cannot be doubled (see Dimitriadis 1999 and Anagnostopoulou 2003), the ungrammaticality of (22c) could be attributed to some other reason and not to Case. The consideration that these data raise is that ungrammaticalities of this type are not excluded in a principled way in Sportiche's system. I will return to the issue of PP-doubling in Section 2.10.

Another consideration concerning Sportiche's predictions is that although he captures the correlation between the clitic and the participle agreement, his system cannot account for participle agreement that appears when the object is postparticipial in Italian. This is actually a problem for all movement analyses, which derive participle agreement on the basis of an overt movement.

### **2.3 Summary of the properties of Clitic Doubling in Modern Greek**

Prior to any discussion regarding my proposal, it will be helpful to present and summarize the main properties of pronominal clitics in Modern Greek.

Object pronominal clitics in Greek bear distinct morphological inflection for accusative or genitive/dative Case. Third person clitics appear to be identical to the definite article; the only difference being that third person pronominal clitics have the same form for genitive and accusative due to syncretism. The complete paradigm of the pronominal system in Modern Greek is given in Tables (1) and (2), where the reader can easily observe the differences/similarities between the full form of the pronouns and the clitics.<sup>17</sup>

---

<sup>17</sup> Note one important difference from any other similar table in the literature: the genitive/dative form of the 1<sup>st</sup> and 2<sup>nd</sup> person pronoun is missing, as *emena* as genitive/dative and *esena* as genitive/dative never appear in any context that requires genitive/dative in Greek. The issue is discussed in detail in Section 2.5, where I dispute the claim that *emena* and *esena* can encode both accusative and genitive/dative due to syncretism.

Table (1):

		<i>1<sup>st</sup> Person</i>		<i>2<sup>nd</sup> Person</i>	
		<i>Full form</i>	<i>Clitic</i>	<i>Full form</i>	<i>Clitic</i>
<i>Singular</i>	<i>Nominative</i>	ego	∅	esi	∅
	<i>Genitive/Dative</i>	∅	mu	∅	su
	<i>Accusative</i>	emena	me	esena	se
<i>Plural</i>	<i>Nominative</i>	emis	∅	esis	∅
	<i>Genitive/Dative</i>	emas	mas	esas	sas
	<i>Accusative</i>	emas	mas	esas	sas

Table (2):

		<i>3<sup>rd</sup> Person</i>					
		<i>Masculine</i>		<i>Feminine</i>		<i>Neuter</i>	
		<i>full</i>	<i>clitic</i>	<i>Full</i>	<i>clitic</i>	<i>full</i>	<i>clitic</i>
<i>Sing</i>	<i>Nom</i>	aftos	∅	afti	∅	afto	∅
	<i>Gen/ Dat</i>	aftu	tu	aftis	tis	aftu	tu
	<i>Acc</i>	afton	ton	aftin	tin	afto	to
<i>Plural</i>	<i>Nom</i>	afti	∅	aftes	∅	afta	∅
	<i>Gen/ Dat</i>	afton	tus	afton	tus	afton	tus
	<i>Acc</i>	aftus	tus	aftes	tis/tes	afta	ta

Modern Greek lacks subject clitics as indicated by ∅ in the Tables above.<sup>18</sup> Clitic climbing does not arise in Modern Greek, presumably because of the lack of infinitives and the impossibility of gerunds occurring as complements of the verb. Rivero (1988) and Terzi (1992) convincingly show that Modern Greek behaves on a par with the other Balkan languages in this respect and they offer alternative analyses as to why clitic climbing is entirely absent across all Balkan languages.

<sup>18</sup> For discussion about subject-clitics in Modern Greek and the elaboration of the idea that pro-subject can be a clitic, see Spiropoulos and Philippaki (2002).

The position of the clitics with respect to the verb is proclitic with finite verbs (23) (like in Italian, French and Spanish in this respect), for both matrix (23) and embedded contexts (24). Enclisis is observed with non-finite verbal forms, i.e. Imperatives and what are called “gerunds” (25)-(26).

**i. Proclisis/ Matrix clause/ Fixed IO-DO clitic order/ Optional CID**

- (23) **Tis to** eho pi (to mistiko) (tis Marias)  
 her-cl-gen it-cl-acc have-I said the secret-acc the mary-gen  
 “I have told the secret to Mary”

**ii. Proclisis/ Embedded clause/ Fixed IO-DO clitic order/ Optional CID**

- (24) a. O Jianis nomizi oti tha **tis to** pis (tis Marias) (to mistiko)  
 John-nom thinks that FUT her-cl-gen it-cl-acc say-you the secret-acc the mary-gen  
 “John thinks that you will tell Mary the secret”  
 b. O Jianis iposhete na **tis to** pi (tis Marias) (to mistiko)  
 John-nom promises to-subjunctive her-cl-gen it-cl-acc say-he the secret-acc the mary-gen  
 “John promises to tell Mary the secret”

**iii. Enclisis/ IO-DO or DO-IO clitic order/ Optional CID**

- (25) a. Pes **tis to** (tis Marias) (to mistiko)  
 tell-Imperative her-cl-gen it-cl-acc the Mary-gen the secret-acc  
 b. Pes **to tis** (tis Marias) (to mistiko)  
 tell-Imperative it-cl-acc her-cl-gen the Mary-gen the secret-acc  
 “Tell the secret to Mary”  
 (26) a. Legontas **tis to** (tis Marias) (to mistiko)  
 tell-Gerund her-cl-gen it-cl-acc the Mary-gen the secret-acc  
 “Telling the secret to Mary”  
 b. Legontas **to tis** (tis Marias) (to mistiko)  
 tell-Gerund it-cl-acc her-cl-gen the Mary-gen the secret-acc  
 “Telling the secret to Mary”

Clitic clusters have the order of IO-DO (like Italian, and unlike French) with finite verbs (23)-(24), while the order of the clitics is free when they are enclitic (25)-(26).<sup>19</sup>

Finally, Modern Greek shows productive Clitic Doubling with direct and indirect objects with both finite and non-finite verbs (23)-(26). CID in Modern Greek does not seem to obey the obligatoriness observed in other clitic-doubling languages (e.g. Spanish and Romanian).<sup>20</sup>

#### **2.4 Towards the new Proposal: The unification of Clitic Doubling and Expletive Chains**

Summarizing the discussion in Section 2.2, the theoretical proposals regarding the nature of Clitic Doubling constructions and the positions of the clitic and the doubled element can be divided into two groups: the first group (Kayne 1975, 2000, Aoun 1981, Philippaki-Warburton 1987, Drachman 1983, Rivero 1986) assumes that the clitic starts from the original object position and then moves to its surface position, while the second group (Borer 1984, Jaeggli 1982, Sportiche 1996, Anagnostopoulou 1994) assumes that both the clitic and the DP are generated in their surface position. It is important to note that the common assumption shared by these two different types of approaches is that the clitic and the DP have to identify their semantic/pragmatic features somehow.

My proposal adopts Sportiche's (1996) configuration; both the clitic and the associate are base generated in distinct positions. The clitic and the associate are in a long distance Agree relation, which ensures the identification of features. However, I depart from Sportiche's claim that clitics do not bear Case and maintain the idea that Clitic Doubling is to a certain extent case-theoretic (Kayne 1975, Jaeggli 1982, 1986, Borer 1984), despite the fact that I do not consider Case to determine the distribution of the parameter of Clitic Doubling. I return to this

---

<sup>19</sup> For more details on the relative clitic order see Rivero (1988), Drachman (1991), Philippaki-Warburton (1992), Terzi (1992), Agouraki (1993), (1997), among many others, While for discussion on the restrictions of the person-case constraint in Greek see Anagnostopoulou (2003, 2004).

<sup>20</sup> Anagnostopoulou (1994) discusses cases of obligatoriness of Clitic Doubling with epithets.

issue in the next Chapter, developing an analysis based on the observation that CID is limited to languages that lack participle agreement (Tsakali and Anagnostopoulou, to appear).

In this Section, I discuss the general theoretical conditions which need to be satisfied in order for Clitic Doubling (and Doubling in general) to occur. The proposal is that the clitic and the doubled element form a *syntactic chain* (in the spirit of Borer 1984); from this perspective the syntactic conditions that characterize the viability of CID are the ones characteristic of expletive constructions (of the type *It seems that John is sick* in English).<sup>21</sup>

The satisfaction of the conditions which will guarantee the proper formation of Clitic Doubling is expressed in (27):

(27) (CLITIC) DOUBLING THEOREM (CDT):

*(Clitic) Doubling may occur if and only if a well-formed chain between the two associated elements is established.*

The CLITIC DOUBLING THEOREM is derived by the constraints which ensure the identifications of features at LF (assumption shared by Sportiche 1996). Feature sharing between the members of the chain takes place as long as the conditions in (28) can be met.

(28) LF-IDENTIFICATION CONSTRAINT (FOR CHAINS):

- i. *The head of a chain and the tail of the chain are base generated in distinct positions, that are legitimate for Case and Theta-role assignment respectively, and*
- ii. *The head of the chain properly c-commands the tail.*

(28) is based on the Main Thematic Condition (29) (Brody 1995).<sup>22</sup>

---

<sup>21</sup> My proposal, adopting the notion of syntactic chains, opens the question of whether we need to assume that there are chains in the syntax or whether chains are imposed by the interfaces. Although the question is too broad to be answered in short, I believe that Clitic Doubling-constructions, expletive chains (and probably all A-chains) are primarily syntactic chains.

<sup>22</sup> The origins of the Main Thematic Condition are found in Brody 1981, 1983.

- (29) MAIN THEMATIC CONDITION (MTC) (Brody 1995)  
*Only the root position of a chain can be theta-related (assigning or receiving a theta role), and*  
*Only the head of an A-chain can be in a Case position.*

On analogy to (28), which I take to hold for all different types of syntactic A-chains, I suggest the same restrictions hold also for Clitic Doubling. Thus, the head of the chain (that is, the clitic) will receive Case from the verb while the tail of the chain (that is, the DP/pro) will receive the theta-role. Thus the feature-sharing constraint for Clitic Doubling reads as in (30).

- (30) LF-IDENTIFICATION CONSTRAINT (FOR CLITIC DOUBLING):
- i. *The clitic and the doubled element are base generated in distinct positions that are legitimate for Case and Theta-role assignment respectively, and*
  - ii. *The clitic properly c-commands the doubled element.*

Note here that point (ii) is essential for deriving the syntactic domain in which CID is realised. The clitic needs to c-command the doubled element and not the trace of the doubled element; even in the constructions where the doubled element has moved to higher position, clitic doubling can occur as long as the clitic c-commands the associate as well as its trace. One of the advantages then of treating Clitic Doubling as a syntactic chain along these lines, is that the observed differences between CID and CLLD on the one hand and CID and CLRD on the other, are expected, as CLLD and CLRD do not form syntactic chains. (31) is an instance of CLLD and (32) is an example CLRD; in both examples the associate is dislocated and the chain relation that holds between the clitic and the DP is not syntactic, but rather semantic. In (33) the DP-associate has moved within the verbal domain, the clitic c-commands both the associate and the trace of it.

- (31) to Jiani<sub>i</sub>, ton<sub>i</sub> idha *pro*<sub>i</sub>

the John-acc him-cl-acc see-1<sup>st</sup> sg-past

“John, I saw him”

(32) Je l’<sub>i</sub> ai vu, l’assassin<sub>i</sub>

I-nom him-cl-acc have-1<sup>st</sup> sg seen, the murderer

“I saw him, the murderer”

(33) ton<sub>i</sub> idhe to Jiani<sub>i</sub> i Maria t<sub>i</sub>

him-cl-acc see-3<sup>rd</sup> sg-past the John-acc the Maria-nom

“Maria saw John”

Thus, only in CID constructions do the clitic and the doubled element belong to the same syntactic domain. In other words, condition (30ii) guarantees that CID will occur only when the doubled object has not moved from outside the vP-domain.

Returning now to condition (30i), it remains unaddressed how Case will be assigned to the head of the chain, i.e. the clitic. A crucial assumption for my proposal is that Case and phi-features are distinct and are not checked simultaneously (following Chomsky 1995 but not his subsequent work). The problem for assigning Case to the clitic in a configuration like Sportiche’s, where the clitic is high in the structure, above TP, can be solved in the following way: Assuming that clitic is a probe itself, it is in principle possible for v to assign Case to the clitic after it has moved to T and has formed a complex head with T. The Case assignment then is not in a spec-head configuration but head to head in a local relation. The locality is respected by the movement of the v to T.

One problem of this derivation is that it appears to be a violation of the SUBJECT IN SITU GENERALISATION (SSG), (Alexiadou and Anagnostopoulou, 2001), as stated in (34).

(34) SUBJECT IN SITU GENERALISATION (SSG)

*More than one argument with an unchecked Case feature cannot remain VP-internally by Spell-out.*

Alexiadou and Anagnostopoulou (2001), in their proposal, capitalised in (34), have convincingly argue that v-to T movement cannot occur if more than one element has not been assigned structural Case. Given that the subject in Greek has not been assigned Case until v moves to T, the object must have received Case prior to this movement; otherwise the derivation crashes. In other words, movement of v-to-T is prohibited before v assigns Case to the DP/pro, which resides in the original object position and is in a local relation to v.

However Alexiadou and Anagnostopoulou (2006) accounting for a number of exceptions to the SSG, propose that an object (or a subject) can remain vP-internal in apparent violation of SSG, in one of the two following cases: (i) if raising of v-to-T fails to take place, or (ii) if the object (or the subject) is Caseless.

Exception (ii) is particularly relevant here, as I argue that the doubled element in CID is case-less. This is supported by the data presented in Sections 2.5-2.7. If the DP in the object position is Caseless then the raising of v-to –T is not banned and the clitic can check Case with v in the minimal domain of T.

A crucial assumption for the derivation of the Case Theory I adopt is that I take [*Case*] feature to be an optional feature on a DP, which needs to be satisfied according to the Visibility condition. In this respect I consider the Case Filter to apply at PF and case requirements for PF reasons to be a morphological condition (Marantz 1996). However, I assume (unlike Marantz 1991) that there is a distinction between abstract and morphological case.

Thus, the feature [*case*] of a DP can optionally be checked as long as the Visibility condition is respected. This gives us enough freedom as to where and when the Case of the verb is valued. I assume that in the instances of well-formed chains the requirements imposed by Visibility need to be satisfied by the chain and not by a single DP. The version of Visibility I adopt applies to chains and it reads as in (35) (from Chomsky 1995).

(35) VISIBILITY CONDITION OF CHAINS (Chomsky 1995)

*A chain is visible for theta-marking if it contains a Case position (necessarily the head) or is headed by PRO.*



Thus the doubled DP enters into a checking relation with a [*case*] feature that needs to remain unvalued if there is a clitic in the derivation, otherwise the derivation crashes. The morphological Case-form we usually observe on the doubled DP comes from feature-sharing with the clitic. (Note that Sportiche treats case on the clitic as a by-product of the feature-sharing at LF).

Assuming that it is viable to suggest that (Clitic) Doubling may occur as long as the CLITIC DOUBLING THEOREM is respected, I attempt to reduce redundancy in the grammar by unifying the representational apparatus for Clitic Doubling chains and expletive associate chains. Consequently, although at first sight, Clitic Doubling might appear to be problematic for the theta-criterion, the findings to be presented below indicate that the conditions on the clitic have to be analysed in terms of Case theory and not in terms of Theta theory. It is part of my claim then that the clitic plays the role of an expletive, that is, it is not associated with any theta role. This will be shown in Section 2.9, which is where I discuss the role of the clitic in Clitic Doubling of CPs. It will also be shown that the features that the clitic and the associate share obligatorily are those of gender and person, and not those of number and case as has been suggested in the existent literature.

In the next three Sections I discuss empirical evidence from CID with full pronouns, CID in passives and CID of clauses, which suggest that the doubled element is case-less.

## **2.5 Case mismatch with full pronouns**

The data in this section introduce the following puzzling observation: *first and second singular full pronouns need to be doubled in context where genitive case is required*. This restriction holds for both direct and indirect first and second singular full pronoun objects when they need to express genitive/dative: *emena* (me-gen) and *esena* (you-gen) are licit only when doubled by a clitic.

The data in (36)-(37) illustrate Case-mismatch between the clitic and the associate full pronoun. The verb *telephonise* (phone) in (36) belong to the type of verbs that assign genitive Case to their direct object, while *chrostai* (owe) in (37)

is a verb that assigns genitive Case to its indirect object; alternatively these verbs select for PP-complements as shown in (36a) and (37a). However when the direct object is a full first or second person singular pronoun, the selectional properties of the verb are restricted to PP-complements (36-37b). The issue requires scrutiny as the ungrammaticality vanishes when *emena* and *esena* are doubled by a clitic, as in (36d) and (37d).

- (36) a. Tilephonise tu Jiorgu/ sto Jiorgo i Maria  
 Phone-3<sup>rd</sup> sg-past the George-gen/to the George the Mary-nom  
 “Mary called George”
- b. Tilephonise \*emena/s’emena/ \*esena/s’esena o Kostas  
 phone-3<sup>rd</sup> sg-past me-full pronoun-acc/to me/you-full pronoun-acc/to you the Kostas-nom  
 “Kostas called me/you”
- c. Mu tilephonise i Maria  
 Me-cl-gen phone-3<sup>rd</sup> sg-past the Mary  
 “Mary called me”
- d. \*(Mu)/\*(Su) tilephonise emena/esena i Maria  
 Me-cl-gen/you-cl-gen phone-3<sup>rd</sup> sg-past me-full pronoun-acc/you-full pronoun-acc the Mary-nom  
 “Mary called me/you”
- (37) a. Chrostai tu Jiorgu/sto Jiorgo i Maria  
 owe-3<sup>rd</sup> sg the George-gen/to the George the Mary-nom  
 “Maria owes George”
- b. Chrostai \*emena/s’emena/\*esena/s’esena o Kostas  
 owe-3<sup>rd</sup> sg me-full pronoun-acc/to me/you-full pronoun-acc/to you the Kostas-nom
- c. Mu chrostai i Maria  
 Me-cl-gen owe-3<sup>rd</sup> sg the Mary-nom  
 “Mary owes me”
- d. \*(Mu)/\*(Su) chrostai emena/esena i Maria

me-cl-gen/you-cl-gen owe-3<sup>rd</sup> sg me-full pronoun-acc/you-full  
 pronoun-acc the Mary-nom  
 “Mary owes me/you”

The same problem appears when *emena* and *esena* are indirect objects of ditransitive verbs as in (38).

(38) edose \*emena/\*esena/s'emena/s'esena/tu Jiani/sto Jiani ena vivlio  
 give-3<sup>rd</sup> sg-past me-full pronoun-acc/you-full pronoun-acc/to me/to  
 you/theJohn-gen/to the John a book-acc  
 “She gave a book to me/to you/to John”

The first question emerging from the description of the data so far is the following: do full pronouns in Greek obey a restriction which disallows them from occurring undoubled? If the restriction is more general, then the doubling phenomena described in (36)-(38) behave in a similar way to doubling of full pronouns in Spanish.

First the contrast between (39) and (40) show that the CID of full pronouns in Greek cannot be assimilated to equivalent structures in Spanish. In Greek full third person pronouns can freely occur in object positions undoubled.<sup>23</sup>

(39) \*Vimos à el  
 see-1<sup>st</sup> pl-past a him-full pronoun-acc  
 “We saw him”

(40) idame afton  
 see-1<sup>st</sup> pl-past him-full pronoun-acc  
 “We saw him”

---

<sup>23</sup> Note that Clitic Doubling in Greek does not obey restrictions like [+animacy] of the DP-object as in Spanish and in Romanian.

The question then is whether the restriction is limited to first and second person pronouns. Data like (41)-(42) show that CID of first and second plural full pronouns is not obligatory in similar contexts.

- (41) Tilefonise emas/esas o Kostas  
phone-3<sup>rd</sup> sg-past us-full pronoun-pl-gen/you-full pronoun-pl-gen the  
Kostas-nom  
“Kostas phoned us/you”
- (42) Edose emas/esas ena vivlio o Petros  
give-3<sup>rd</sup> sg-past us-full pronoun-pl-gen/you-full pronoun-pl-gen a book-  
acc the Peter-nom  
“Peter gave us/you a book”

Recall from Table (1) that the form of the full pronouns in the plural is the same for genitive and accusative. This is an instance of Case-syncretism as *emas* (us) and *esas* (you-pl) can occur in both genitive/dative (41-42) and in accusative contexts (43).

- (43) Htipise emena/esena/emas/esas (to aftokinito)  
hit-3<sup>rd</sup> sg me-full pron-acc/you-full pronoun-acc/us-full pronoun-acc/you-  
full pronoun-acc the car-acc  
“The car hit me/you/us/you”

Is then the restriction specific to *emena* and *esena*? The discussion of the data so far strongly indicates that the real problematic cases are these two forms. It could be possible to assume that *emena* and *esena* forms encode both accusative and genitive/dative case but for some independent reason they fail to show up undoubled in contexts where a clitic may co-occur.

This tentative approach fails for two reasons: a) *emena* and *esena* denoting accusative do not need to be doubled, as in (43) and b) *emena* and *esena* never appear in genitive contexts, independent of clitics.

Thus *emena* and *esena* as the complements of prepositions which assign genitive are ruled out in (44)-(45). The same observation holds for *emena* and *esena* as complements of NPs (46).

- (44) \*enadion emena/esena  
 against me-full pronoun-acc/you-full pronoun-acc  
 “Against me/you”
- (45) \*Eksetias emena/esena  
 because me-full pronoun-acc/you-full pronoun-acc  
 “Because of me/you”
- (46) \*Jia hari emena/esena  
 for favour me-full pronoun-acc/you-full pronoun-acc  
 “In my/your favour”

Summarizing the discussion we have seen that first and second person singular but not plural pronouns undergo obligatory CID in genitive contexts. I have also shown that the requirement for obligatory clitic doubling is specific to *emena* and *esena* when these two pronouns are called to express genitive but not accusative. Moreover *emena* and *esena* never appear in an environment that requires genitive. It is thus logical to conclude that *emena* and *esena* cannot express genitive form; in the environments that these two pronouns appear, they express accusative, unless doubled by a genitive clitic. In the latter instance though, it is not the full pronoun that bears the appropriate Case assigned by the verb but the clitic; *emena* and *esena* are in these contexts Case-less, and when doubled by a clitic do not need to check Case, as proposed in the previous Section.

(47) expresses the summary of the features of the full pronouns which are obligatorily doubled by a clitic.<sup>24</sup>

---

<sup>24</sup> Similar morphological conditions hold for Clitic Doubling in the nominal domain as the contrast between (i) and (ii) suggests (see Giusti and Stavrou 2006).

- (i) \*to vivlio emena  
 the book me-full pronoun
- (ii) to vivlio mu emena  
 the book me-cl-gen me-full pronoun  
 “My book”

(47) [+1<sup>st</sup>/ 2<sup>nd</sup> person]/[+singular]/[-case] → Obligatory Clitic Doubling

Thus the relevant feature that forces clitic doubling is the [-case] feature of the pronoun. The fact that *emena/esena* can co-occur with genitive clitics shows that in clitic doubling environments, the doubled element is licit as long as the clitic has been assigned Case.

Clitic Doubling remains Case-theoretic in the sense that the clitic needs to be Case-assigned. The clitic itself can license the doubled element, even in the cases where the associate is not licit for Case reasons. In this respect the morphological case shown in other instances of CID on the doubled NP is a by-product of the feature-sharing effects between clitic and its associate, which will be observed as long as the appropriate form is available.

In the next two Sections I explore further the idea that clitics in CID constructions are assigned Case while the doubled elements can be Case-less.

## 2.6 Case problems in Passives, Unaccusatives and Raising constructions

Evidence suggesting that doubled DPs are not assigned Case, comes from passives, unaccusatives, and raising constructions, where genitive/dative DPs cannot be tolerated if they are not doubled with a genitive clitic, as shown by the contrast of (48a) with (48b) (examples from Anagnostopoulou 2003).

- (48) a. To grama tu tachidromithike tu Petrou chthes  
The letter-nom him-cl-gen was mailed-3<sup>rd</sup>-sg the Peter-gen  
yesterday  
“The letter was mailed to Peter yesterday”
- b. ?\*To grama tachidromithike tu Petrou chthes  
The letter-nom was mailed-3<sup>rd</sup>-sg the Peter-gen yesterday  
“The letter was mailed to Peter yesterday”

Anagnostopoulou (2003) argues that when a Nominative-argument (subject) moves to spec-T in the presence of a dative-DP-argument, the dative-DP is not allowed unless it is a clitic or doubled by a clitic. According to her argumentation, the distribution of dative arguments in NP-movement constructions is determined by the principle of Attract Closest. In Passives and Unaccusatives, dative DPs are ruled out because they are introduced by a higher (light applicative) head, thus blocking NP-movement of the lower theme argument to T. Prepositional Phrases on the other hand (49) are licit because they are merged in the same minimal domain as themes.

- (49) To grama            tachidromithike            ston Petro            chthes.  
 The letter-nom    was mailed-3<sup>rd</sup> sing    to Peter            yesterday.  
 “The letter was mailed to Peter yesterday.”

Unlike Anagnostopoulou (2003) I take the ungrammaticality of (48b) to result from the lack of Case on the goal *tu Petru* (to Peter). The DP-dative *tu Petru* in (48a) does not function as a barrier for the movement of the theme to the subject position, for the reason that it has been Case-licensed by the clitic and it does not block the movement of the accusative-theme to the subject position.

## 2.7 Doubled CPs

In the last two Sections I discussed data which question the claim that the doubled element is assigned Case. In this Section I introduce Clitic Doubling of complement clauses. In Greek an argument CP may co-occur with an accusative clitic (as long as the Verb assigns Case, see Appendix for discussion of the verbs that do not assign Case to their complement).

In (50), the clausal arguments of *apofevgo* (avoid) and *ksero* (know) are doubled by a clitic.<sup>25</sup>

---

<sup>25</sup> As far as I know, Greek is the only clitic-doubling language that has Clitic Doubling of CPs. This is not surprising given that Greek does not have restrictions on animacy for doubling.

- (50) a. (To) apofevgo [<sub>CP</sub>(to) na sinantiso ta pedhia]  
 it-cl-acc avoid-1<sup>st</sup>-sg-present the-def to meet-1<sup>st</sup>-sg-present the  
 kids-acc.  
 “I avoid it, meeting the kids”.
- b. (To) ksero [<sub>CP</sub>(to) oti efige o Jiorgos]  
 it-cl-acc know-1<sup>st</sup>-sg the that leave-3<sup>rd</sup>-sg-past the George-nom  
 “I know it, that George left”

Construction like (50), with doubled CPs could be regarded as a compelling argument in favour of the hypothesis that Case is assigned to the clitic and not to the CP, as CPs could take Case but do not need to. Since Stowell’s (1981) CASE RESISTANCE PRINCIPLE (stated in (51)), complement clauses have been considered to be Case-less.

(51) CASE RESISTANCE PRINCIPLE

*Case may not be assigned to a category bearing a case assigning feature.*

Examples (50a-b) demonstrate constructions in which the verb takes a CP-complement. The CP-argument can also be nominalized, although nominalization is not obligatory. (However, there is a difference in the interpretation which I discuss in the Appendix). In addition, the CP can be optionally doubled with a clitic, which does not affect the optionality of the definite article in front of the CP.

The question that arises pertains to the nature of the CP and to the syntactic-thematic position of the CP, that is, whether it is a proper argument of the verb in an A-position or a right dislocated element, co-indexed with the clitic.

In the following section I will argue that the position of the doubled CP is the object position and that there is no reason to treat them differently from doubled DPs.

## **2.8 The Status of doubled CPs: Against Right Dislocation**



As stated in Section 2.2 of this chapter, the position of the doubled element has been the subject of substantial debate. It has been argued, that doubled DPs are adjuncts rather than complements of the verb (Rivero 1986 for Old Spanish, in the same spirit as Aoun 1981, 1996; Drachman 1983; Hurtado 1984; Philippaki-Warbuton 1987; Androulaki 2002). This group of analyses patterns Clitic Doubling and Clitic Right Dislocation together. Clitic Right Dislocation is the construction in which the clitic co-occurs with a phrase to the right of the sentence, as in example (3) repeated here as (52) for convenience.

- (52) Je l' ai vu, l'assassin (French, from Jaeggli 1986)  
 I-nom him-cl-acc have-1<sup>st</sup> sg seen, the murderer  
 "I saw him, the murderer"

On a different view (Strozer 1976; Rivas 1997; Jaeggli 1982, 1986; Borer 1984, 1984, Anagnostopoulou 1994, 2003; Agouraki 1993), Clitic Doubling and Clitic Right Dislocation differ in that in the latter but not the former construction, the doubled element is an adjunct (to VP or IP).<sup>26</sup>

Jaeggli (1986) argued against the Right Dislocation hypothesis for Spanish, pointing out that, while right dislocations are set off from the rest of the sentence with a sharp intonational break, sentences involving Clitic Doubling require no such pause. This is shown in the contrast between (53) and (54) (examples from Anagnostopoulou 2003):

- (53) Parece que tuvieron que llevarla de urgencia a los Estados Unidos la hija de Coronel Martinez (Rioplataense Spanish)  
 "It seems that they had to take her urgently to the United States, the daughter of Colonel Martinez"
- (54) Parece que tuvieron que llevarla a la hija de Coronel Martinez de urgencia a los Estados Unidos (Rioplataense Spanish)  
 "It seems that they had to take her, the daughter of Colonel Martinez, urgently to the United States"

---

<sup>26</sup> For detailed discussion on the differences between Clitic Doubling and Clitic Right Dislocation see Section 3.1.2. The focus of the current Section is to discuss the status of the doubled CP.

According to Jaeggli there is a strong difference in the intonation between (53) and (54), which is unexpected if the two sentences have the same structural analysis, while it is naturally expected under the assumption that in Clitic Doubling the chain consists of a clitic and an argument, and in clitic right dislocation the dislocated phrase occurs in a peripheral right-adjoined position.

The same observation holds for doubled CP. Argentinean Spanish, unlike Greek, does not allow doubling of clauses, although Argentinean Spanish has CID of direct objects. The intonational break seems to be a useful diagnostic test for these constructions as in (55) a pause is required (indicated by #), but not in (56).

(55) No lo puedo creer, # que se hayan ido# (Argentinean Spanish)  
 NEG it-cl-acc can believe-1<sup>st</sup> sg that SE have-subjunctive-pl gone  
 “I can’t believe it, that he left”

(56) To pistevo oti efige (Greek)  
 It-cl-acc believe-1<sup>st</sup> sg that leave-3<sup>rd</sup> sg  
 “I believe that he left”

The observation is that in the Greek example in (56) no pause is involved, while in (55), there is an intonational pause between the main clause and the embedded clause. If one intends the intonation of a clitic doubling construction for the example (55), the sentence sounds ill-formed.<sup>27</sup> This sheds more light on whether the intonational break is a reliable diagnostic for distinguishing between CID and CLRD.

The second diagnostic tests the occurrence of CPs in positions where an adjunct cannot be tolerated (Anagnostopoulou 1994). These are environments of ECM constructions (57) and small clauses (58).

(57) Den to perimena [to oti horise] na tin ponesi toso  
 NEG it-cl-acc expected-1<sup>st</sup>-sg the-def that divorce-3<sup>rd</sup> sg-past to-  
 subjunctive her-cl-acc hurt-3<sup>rd</sup>-sg so much

---

<sup>27</sup> Judgments given by Cristina Cuervo and Andres Salanova (p.c.)

“I didn’t expect the fact that you got a divorce to hurt you so”

(58) To theoro [to na petihis stis eksetasis] simantiko.

it-cl-acc consider-1<sup>st</sup>-sg the-def to-subjunctive pass-2<sup>nd</sup>-sg the exams-acc  
important.

“I consider passing the exams important”.

A third diagnostic for the position of the CP is related to word order. Anagnostopoulou (1994, 1999, 2003), expanding Vallduvi’s (1990) arguments for Clitic Right Dislocation in Catalan, shows that in Greek, unlike Catalan, the order [cl-V-Obj-Subj] is perfectly grammatical. The same holds for doubled CPs, as shown in (59) (the context is provided for checking the informational stress of the answer with CID):

(59) a. A: Pjios apo sas potimai na figume tora?

Who-nom of you prefer-3<sup>rd</sup>-sg subj leave-1<sup>st</sup> pl now

“Who of you prefers to leave now?”

B: To protimai na figume tora i Maria

It-cl-acc prefer-3<sup>rd</sup> sg subj leave-1<sup>st</sup> pl now the Mary-nom

“Maria prefers we leave now”

b. A: Pos kseris oti irthe o Jiorgos?

How know-2<sup>nd</sup> sg that come-3<sup>rd</sup> sg-past George-nom

“How do you know that George came?”

B: To ematha oti irthe o Jiorgos apo ti Maria

It-cl-acc learn-1<sup>st</sup> sg-past that come-3<sup>rd</sup> sg-past from the Mary

“I heard it, that George came, from Mary”

Further arguments come from the process of Nominalisation, that is, the insertion of the definite article in front of the CP. It has been argued that Nominalization in Greek (Roussou 1991) is associated with clauses in argument position but is not possible with adjunct clauses, as indicated by examples (60a) versus (60b).

- (60) a. Ksero (to) oti petihe stis eksetasis  
 Know-1<sup>st</sup> -sg the-def that pass-3<sup>rd</sup>-sg the exams-acc  
 “I know that he passed the exams.”
- b. Tha to dhiavaso, (\*to) an epimenis.  
 Fut-prt it-cl-acc read-1<sup>st</sup>-sg, the-def if insist-2<sup>nd</sup>-sg  
 “I will read it, if you insist”.

Extractability from doubled argument-CPs favors the position that the CP, when doubled, is not dislocated. It is generally argued that it is possible to extract from a complement but not from an adjunct or a complex NP. Example (61) shows that extraction from an argument-CP is possible. The *wh*-word *pjus* (who) has moved from the embedded CP *na hasis* (losing). On the other hand, example (62b) (derived from (62a)) is ruled out as it involves extraction from the appositional clause which is in an adjunct position.

- (61) Pjus<sub>i</sub> tha to apfevges na hasis t<sub>i</sub>?  
 Who-acc-pl fut it-cl-acc avoid-2<sup>nd</sup>-sg subjunctive lose-2<sup>nd</sup>-sg  
 “Who would you avoid losing?”
- (62) (a) Su eho zitisi ksana afti ti hari, (to) na grapsis to grama  
 you-cl-gen have-1<sup>st</sup>-sg asked again this the favour-acc, the-def  
 subjunctive write-2<sup>nd</sup>-sg the letter-acc  
 “I have asked you for this favour before, to write the letter”
- (b) \*ti mu ehis zitisi ksana afti ti hari, na grapso t<sub>i</sub>?  
 What me-cl-gen have-2<sup>nd</sup>-sg asked again this the favour,  
 subjunctive write-2<sup>nd</sup>-sg

The possibility of extraction from an embedded clause can be demonstrated with respect to indirect objects as well, as shown in example (63).<sup>28</sup>

---

<sup>28</sup> One could argue that the grammaticality of example (63) is due to the possibility of a verb like *apofevgo* (avoid) acting like an ECM verb. In such a case the *wh*-word (*pjus*) would not have moved out of the embedded clause but would originate outside the CP-domain. Example (63) illustrates that the *wh*-word (*pjanu*) has been extracted from the embedded clause.

- (63) Pjanu<sub>j</sub> dhen tha to itheles na tu<sub>j</sub> kanis ti hari *t<sub>j</sub>*?  
 Who-gen NEG would it-cl-acc want-2<sup>nd</sup>-sg to-subjunctive him-cl-gen do-  
 2<sup>nd</sup>-sg the favour-acc  
 “Who wouldn’t you like to do the favour?”

In (63) the *wh*-word *pjanu* (whose) has moved from the embedded CP and is co-referential with the indirect object of the embedded clause *tu* (him).

The discussion in this section aimed to show that doubled CP-arguments occupy the same position as doubled DPs. Thus, there is no good evidence to assume that the doubled CP is dislocated. The topic of Clitic Doubling of CPs touches upon the issue of nominalization. The view that nominalization takes place for Case assignment (Roussou 1991), is incompatible with my proposal that the doubled element does not bear case. For this reason, I return to the issue of nominalization in the Appendix arguing against the standard view that perceives nominalization as a mechanism for Case assigning.

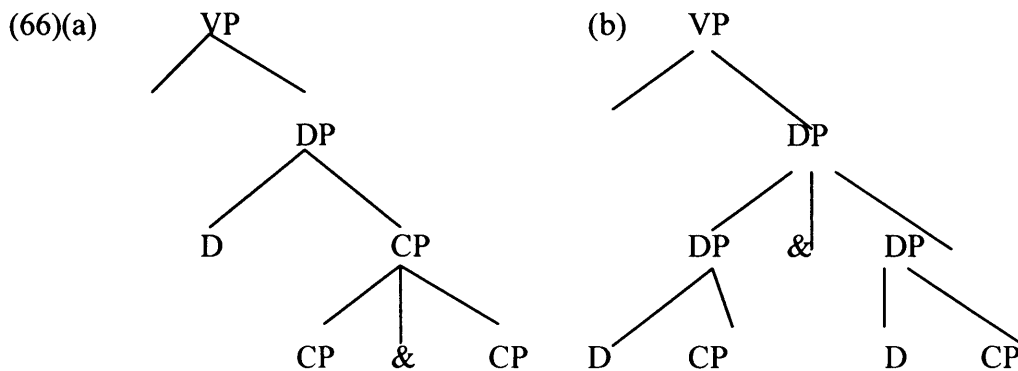
## 2.9 The role of the clitic in Clitic Doubling Constructions

The role of the clitic in these constructions remains to be explained. I shall argue that the clitic acts as an expletive in these constructions and probably in all cases of CID. Consider examples (64)-(65).

- (64) To apofevgo to na sinantiso ta pedhia kai na tous miliso.  
 It-cl-acc avoid-I the-def to meet-I the kids-acc and to them-cl-acc talk-I  
 “I avoid it, meeting the kids and talking to them”.
- (65) \*Ta apofevgo to na sinantiso ta pedhia kai na tous miliso.  
 Them-cl-acc-neut avoid-I the-def to meet-I the kids-acc and to them-cl-acc  
 talk-I  
 “I avoid it, meeting the kids and talking to them”.

Example (64) shows that the clitic associated with the nominalized clauses is tolerated only in the singular. However, if the clitic was strictly associated with

the thematic role of the arguments of the verbs it should be able to appear in the plural form. Thus the number feature on the clitic does not depend on the number of arguments of the verb. The structure induced given the contrast between (64) and (65) is the one depicted in (66a) and not in (66b).



## 2.10 Clitic Doubling Theorem and impossibility of doubled-PPs in Greek

The present account generates a number of predictions with respect to the doubled element, which do not follow from earlier theories, borne out by the set of data presented in examples (67)–(68) below.

Dimitriadis (1999) points out that PPs in Modern Greek cannot be clitic-doubled. According to my proposal, CID of PP-arguments is banned because PP-arguments are not in a possible case position assigned by the verb. Thus the clitic, which I claim to absorb the verbal Case, cannot be licit. The incompatibility of clitics and PPs, even when they are semantically co-referent, results from the impossibility of forming a syntactic chain between the two elements, that is, from violation of the DOUBLING THEOREM.

- (67) a. \*Tu edhosa sto Giorgio mia kukla.  
 Cl-gen gave-I to the George a doll-acc  
 \*‘‘I gave him, to George, a doll’’.
- b. Edhosa sto Giorgio mia kukla.  
 Gave-I to the George a doll-acc  
 ‘‘I gave a doll to George’’.

- c. Tu edhosa tu Giorgu mia kukla.  
 Cl-gen gave-I the George-gen a doll-acc  
 “I gave George a doll”
- (68) a. Sizitissime gia to provlima tis Mesis Anatolis.  
 Talked-we about the problem of the Middle East  
 “We talked about the problem in the Middle East”.
- b. \*To sizitissime gia to provlima tis Mesis Anatolis.  
 Cl-acc talked-we about the problem of the Middle East  
 “We talked about the problem in the Middle East”.
- c. To sizitissime to provlima tis Mesis Anatolis.  
 Cl-acc talked-we the problem-acc of the Middle East  
 “We talked about the problem in the Middle East”.

The prediction of the proposal put forward in 2.4 is that we should not be able to clitic-double an element that cannot enter into a Case-chain.

Under this view, the “dummy” preposition that is taken to serve as a case assigner in Spanish and Romanian, is not a real case assigner but rather it functions as case marker forced by the Case Filter Principle (see also Cuervo 2003 for a proposal along these lines). Consequently the difference between Greek on the one hand and Spanish and Romanian on the other is that in Greek the DP can show morphological realisation of Case while this is not an option in Spanish and Romanian.

## 2.11 Conclusions

My proposal rests on the assumption that Clitic Doubling is an instance of a syntactic chain. It is therefore assumed that the two elements of the chain are base-generated in distinct positions: the clitic, being the head of the chain, receives the Case assigned by the verb, while the doubled DP/CP, being the tail of the chain, receives the Theta-role. This proposal accounts for the problems that Clitic Doubling poses for Case and Theta theory. Although I assume the structure proposed by Sportiche (1996), I consider clitics to be cased marked and the associate to be in a possible Case position, which nevertheless need to be caseless in the presence of a clitic. This is the essential requirement to test the validity of the Doubling Theorem, that is, that Clitic Doubling is possible only when the formation of a syntactic chain between the two elements is possible.

Empirical evidence supporting my proposal come from doubling of full pronouns, where one can observe case-mismatch effects, and doubling of CPs, which in principle are caseless elements.

I thus set the theoretical ground under which Clitic Doubling may occur and is different from that of Clitic Left Dislocation and Clitic Right Dislocation in that only Clitic Doubling is a well-formed syntactic chain. Moreover the present proposal accounts for the fact that elements which receive case from some element other than the verb (i.e. prepositions) cannot enter into a chain relation with a clitic, and therefore Clitic Doubling in these cases leads to ungrammaticality.



## CHAPTER 3

### CLITIC DOUBLING INTERACTS WITH PARTICIPLE AGREEMENT<sup>1</sup>

#### 3.0 Introduction

The aim of this chapter is twofold: on the one hand, to present a critical review of the major developments in the theory of Clitic Doubling (CID), focusing on the issue of the Clitic Doubling parameter (discussion is based on Anagnostopoulou 2002). The discussion shows that the main answers to the question of the parameter regulating the crosslinguistic distribution of doubling that have been suggested in the literature so far are incomplete. On the other hand, to outline the beginnings of a new approach towards the Clitic Doubling parameter, exploring a correlation that has gone unnoticed in the literature so far, namely that there is a systematic link between the (un-)availability of object Clitic Doubling and the (un-)availability of participle agreement across languages. The cross-linguistic investigation of the two phenomena in Romance, Greek, Semitic and Slavic leads to the conclusion that they are in complementary distribution:

(1) THE DOUBLING/AGREEMENT CORRELATION

*If a language has clitic doubling it lacks participle agreement.*

*If a language has participle agreement it lacks clitic doubling*

It will be argued that the *doubling / agreement correlation* in (1) provides the key to an understanding of the clitic doubling parameter.<sup>2</sup> The general idea is that syntactic principles of economy allow bundles of phi-features in the functional domain to enter Agree with overt DPs in a chain of only two at a time, preventing “tripling” within a clause (or within the same syntactic domain). As a result, clitics, (participial) agreement and DPs are not allowed to form three-

---

<sup>1</sup> This Chapter is based on Tsakali and Anagnostopoulou (to appear).

<sup>2</sup> The correlation in (1) focuses on clitic doubling of object arguments and does not generalize over subjects. The impact of the correlation on subject arguments is subject to further research.

membered chains, which explains why doubling clitics and participle agreement never co-occur<sup>3</sup>.

I also discuss the predictions that my proposal makes for developmental studies, while supporting evidence from acquisition is provided in Chapter 5.

The chapter is organized as follows. In Section 3.1, I compare and contrast Clitic Doubling to two related constructions, namely Clitic Left Dislocation and Clitic Right Dislocation. In Section 3.2, I present the classic analysis according to which the Clitic Doubling parameter is regulated by the Case requirement of the doubled DP (Kayne's Generalization). Following the discussion in Anagnostopoulou (1994, 1999, 2002, 2003), I argue against this approach on the basis of two considerations. First, in order to account for the crosslinguistic distribution of doubling in terms of Kayne's Generalization a number of stipulations are necessary which lack independent justification. Second, this approach is strongly undermined by the existence of numerous counterexamples crosslinguistically. In the next subsection (3.2.2), I present a number of developments in the research on Clitic Doubling which have led to the highly influential theory of clitics advanced in Sportiche (1992/1996). In Section 3.3, I establish the correlation in (1) which, in my view, underlies the crosslinguistic distribution of direct object doubling, and I develop an account for this correlation. In the same Section I also dispute proposals suggesting that languages like Modern Greek exhibit properties of object agreement (following Iatridou 1995). The account in this Section is supported by theoretical and empirical evidence. In Section 3.4, I discuss common interpretational properties of Clitic Doubling and constructions with participle agreement; I argue that both phenomena are associated with the *perfectivity* of the action. In Section 3.5, I discuss the

---

<sup>3</sup> As will be discussed in Section 3.4.3.1, the correlation in (1) is bidirectional in the sense that when a language exhibits participle agreement it will not have Clitic Doubling and vice versa, that is, if a language has Clitic Doubling, it means that it lacks object agreement with the participle. However the correlation is not bi-conditional, that is, if a language does not have participle agreement it does not mean that Clitic Doubling will be present. Similarly, the absence of clitic doubling constructions in a language does not entail that participle agreement will be morphologically overt. Thus, participle agreement and Clitic Doubling are mutually excluded but the lack of one does not entail the presence of the other. Therefore the correlation is meant to describe the prerequisite for the presence of Clitic Doubling, namely the lack of participle agreement in a particular language; it is not meant to be understood as the sufficient condition for the presence of Clitic Doubling.

predictions that my account makes for developmental studies and finally in Section 3.6, I conclude and address some questions for further investigation.

### 3.1 Clitic Doubling and related constructions

Clitic Doubling as defined in Chapter 2, is the construction in which a clitic co-occurs with a full DP in argument position forming a discontinuous constituent with it, as is illustrated in the examples (2) and (3) from Greek and Spanish, respectively.

- (2) To agorase to forema o Petros (Greek)  
It-cl-acc buy-past-3<sup>rd</sup> the dress-acc the Peter-nom  
“Peter bought the dress”
- (3) Lo vimos a Juan (Rioplátense Spanish)  
Him-cl-acc saw-1<sup>st</sup> plural Juan  
“We saw Juan”

Clitic Doubling has been claimed to exist in Romance, Semitic, Slavic, Albanian and Greek.<sup>4</sup> However, the construction of Clitic Doubling displays intriguing cross-linguistic variation. In particular, some languages (e.g. Spanish, Romanian and Greek) have Clitic Doubling of objects, while others (e.g. French, Italian and Serbian) lack this type of construction. This difference is illustrated in (4a-b) with an indirect and direct object Clitic Doubling example from Spanish and (4c-d) with its ungrammatical counterpart from French (data from Jaeggli, 1982):

- (4) a. Miguelito (le) regaló un caramelo a Mafalda (Spanish-all dialects)  
Miguelito Cl-dat gave a candy to Mafalda  
“Miguelito gave Mafalda a candy”

---

<sup>4</sup> See many among others, Strozer 1976; Rivas 1997; Aoun 1981; 1999; Jaeggli 1982, 1986; Drachman 1983; Borer 1984; Suñer 1988; Philippaki-Warburton 1987; Fykias 1988; Dobrovie-Sorin 1990; Sportiche 1993; 1996; 1998; Massey 1992; Agouraki 1993, Anagnostopoulou 1994; 2003; Uriagereka 1988, 1995; Torrego 1998; Blears 1999; Petkova Schick 2000; Kalluli 1999.

- b. lo vimos a Juan  
Him-cl-acc saw-1<sup>st</sup> plural Juan  
“We saw Juan”
- c. Jean (\*lui) a donné des bonbons à Marie (French)  
Jean Cl-dat has given the candies to Mary  
“Jean gave Mary the candy”
- d. Je (\*l’) ai vu l’assassin (French)  
I-nom him-cl-acc have-1<sup>st</sup> sg seen, the murderer  
“I saw him, the murderer”

Further cross-linguistic differences in the availability of Clitic Doubling will be discussed throughout this Chapter. Before I enter into the discussion of the conditions that regulate the parameter of Clitic Doubling, it is necessary to clarify the differences that Clitic Doubling exhibits from related constructions such as Clitic Left Dislocation (CLLD) and Clitic Right Dislocation (CLRD), differences which have created confusion in the literature.

### 3.1.1 Clitic Doubling versus Clitic Left Dislocation

Clitic doubling should be distinguished from two constructions that look very similar to it, namely Clitic Left Dislocation (CLLD) and Clitic Right Dislocation.

CLLD is a construction in which a clitic co-occurs with an XP to its left. An example of CLLD is provided in (5) from Italian (Cinque 1990):

- (5) Gianni, lo vedrò domani  
John, Cl-acc will see-1<sup>st</sup> singular tomorrow  
“I will see John tomorrow”

CLLD is an unbounded dependency that is selectively sensitive to islands and shows connectedness effects (see Cinque 1990, Iatridou 1991,

Anagnostopoulou 1994; 1997 and the various contributions to Anagnostopoulou, van Riemsdijk and Zwarts 1997). Given the similarity between CLLD of objects in (5) and Clitic Doubling, a natural question that arises is whether CLLD results from fronting of a clitic doubled DP to a position in the left-periphery of the clause. Sportiche (1993/1996), Agouraki (1993), Kayne (1994) and Grohmann (2003), among others, argue in favor of an analysis along these lines, while Cinque (1990), Iatridou (1991) and Anagnostopoulou (1994, 1997) argue that the two constructions are transformationally unrelated. In this thesis, the latter approach is adopted.

The main argument that Cinque (1990) provides against the derived order of CLLD is that CLLD appears in many clitic-languages that do not have clitic doubling. This typological difference provides a puzzle as to why Clitic Doubling languages can also exhibit CLLD constructions, whereas the presence of CLLD in a language does not necessarily entail the existence of Clitic Doubling. This crosslinguistic variation suggests that the two constructions should be analysed separately. Moreover, as will be argued in Section 3.3 the presence of Clitic Doubling depends on the availability of participial agreement in a language. However CLLD is not restricted to languages that do not have participle agreement.<sup>5</sup>

Moreover, as Iatridou (1990) points out, there are semantic classes of NPs that can appear in CLLD structures but cannot be clitic doubled (examples from Iatridou 1990):

- (6) a. Tria provlimata mono o Kostas ta elise  
 three problems-acc only the Kostas them-cl-acc solve-past-3<sup>rd</sup> sg  
 “Only Kostas solved three problems”
- b. Mono o Kostas (\*ta) elise tria provlimata  
 only the Kostas them-cl-acc solve-past-3<sup>rd</sup> sg three problems-acc  
 “Only Kostas solved three problems”

---

<sup>5</sup> To the best of my knowledge there is actually no clitic-language that does not have Clitic Left Dislocation constructions.

In addition, there are languages that have an animateness requirement on Clitic Doubling but not on CLLD constructions:

- (7) a. (lo) vimos a Juan  
 him saw Juan  
 ‘We saw Juan’  
 b. \*lo vimos el/al libro  
 it saw the book
- (8) el libro lo compramos ayer  
 the book it bought yesterday  
 ‘the book, we bought it yesterday’

Finally, there are arguments in favour of the position that the order O S cl-V is base-generated if we compare this order to the O S V which is the result of movement (Iatridou 1990, Tsimpli 1995 among others). Contextualizing sentences (10a), (10b), and (10c), the observation is that only (10b) and (10c) can answer (9a) and (9b) respectively, while (10a) is an infelicitous reply to both (9a) and (9b). The reason being that in O S cl-V (CLLD), the object is old information and cannot be stressed. In O S V the object is new information and receives focal stress.

- (9) a. Pjios idhe ti Maria?  
 “Who saw Maria?”  
 b. Pjion idhe o Kostas?  
 “Who did Kostas see?”
- (10) a. o Kostas idhe tin Maria  
 Kostas-nom saw Maria-acc  
 “Kostas saw Maria”  
 b. tin Maria o Kostas \*(tin) idhe O S cl-V  
 Maria-acc Kostas-nom her-cl-acc see-past-3<sup>rd</sup> sg  
 c. tin Maria o Kostas (\*tin) idhe OSV  
 Maria-acc Kostas-nom her-cl-acc see-past 3<sup>rd</sup> sg

However it is still possible to argue that while (10c) is the result of movement, (10b) represents a base-generated construction. If this is the case, we would expect both OSV and O S cl-V to show weak cross-over effects. This is the opposite of what (12) versus (13) indicates, where the “variablehood” of the ECs after the verb is checked, is represented in the schema (11):

- (11) a. *O S cl-V EC<sub>[pro]</sub>=base generated order*  
 b. *O<sub>i</sub> S V EC<sub>i[variable]</sub>=movement*
- (12) a. *Op [...poss. Pronoun...] verb EC(variable)*  
 b. \*ton Kosta i mitera tou agapa  
 Kosta-acc the mother-nom his-poss love-3<sup>rd</sup> sg  
 “His mother loves Kostas”  
 c. \*kathe pedhi i mitera tu agapa  
 each child-acc the mother-nom its-poss love-3<sup>rd</sup> sg  
 “His mother loves each child”  
 d. ton Kosta i Maria agapa  
 Kosta-acc the Maria-nom love-3<sup>rd</sup> sg  
 “Maria loves Kostas”
- (13) a. *Op [...poss. pron...] [clitic pron.] verb EC(pro)*  
 b. ton Kosta i mitera tu ton agapa  
 Kosta-acc the mother-nom his-poss him-cl-acc love3rd sg  
 “His mother loves him, Kostas”  
 c. kathe pedhi i mitera tu to agapa  
 each child-acc the mother-nom its-poss it-cl-acc love-3<sup>rd</sup> sg  
 “His mother loves them, each child”

In example (12) we observe Weak Cross Over effects (order O S V) but not in (13) (order O S cl-V). WCO effects are found in a construction like the one in (12), where an operator binds both a pronoun and a variable, neither of which c-commands the other, as depicted in (14):

(14) \* Operator [...pron...] EC(variable)

In (12) pron is the possessive pronoun contained in NP *i mitera tu* (his mother), and the variable is the empty category following the verb. The ungrammaticality of (12b-c), which has the status of a WCO violation compared to the fully acceptable (12d), suggests the existence of a variable in the internal argument position of the verb. This is not the case with CLLD, where no WCO violation occurs as shown by the contrast between (12b-c) and (13b-c). Based on the fact that there are no WCO violations in (13b-c), Iatridou concludes that this indicates that the postverbal EC in these sentences is not a variable.

A final argument comes from parasitic gap constructions. The O S V order licenses parasitic gaps while O S cl-V does not. A parasitic gap is licensed by an A-bar trace that does not c-command it. The parallelism between (15) and (16) shows that there is an A-bar trace after the verb “arhiothetise” (filed) in (16) but not in (17), which is a case of CLLD.

- (15) a. Which article did you file EC(vbl) without reading EC(pg)  
b. This article Mary filed EC(vbl) without reading EC(pg)
- (16) a. Afto to arthro i Maria arxiothetise xoris na dhiavasi  
this the article the Mary filed without reading  
b. Op V EC(variable) [...parasitic gap...]
- (17) a. \*Afto to arthro i Maria to arxiothetise xoris na diavasei  
this the article Mary it filed without reading  
b. Op V EC(pro) \* [...parasitic gap...]

The unacceptability of (17a) shows that the postverbal empty category in CLLD is not a variable. So, from the absence of WCO violations and the unacceptability of parasitic gaps, we can conclude that there is no A-bar trace after the verb in a CLLD construction.

Summarizing this section so far, I have presented arguments which favour the claim that while O S V is the result of movement of the object to a sentence-initial A-bar position, O S cl-V (CLLD) is a base-generated order. The discussion



in this section is crucial for the tentative claim that CLLD is derived from a clitic doubling construction and therefore that all clitic languages appear to have Clitic Doubling at some level of the derivation.

### 3.1.2 Clitic Doubling versus Clitic Right Dislocation

Right Dislocation is a construction in which a clitic co-occurs with a phrase to its right as illustrated in (18) with an example from French:

- (18) Je l'ai vu, l'assassin (Jaeggli 1986)  
I him-cl-acc have-1<sup>st</sup> sing seen the murderer  
"I have seen the murderer"

Given the similarity between right dislocation of objects and Clitic Doubling, the question once again arises whether the two constructions have the same or a different structural analysis. In the literature, both positions have been entertained. According to one view (Hurtado 1984; Aoun 1981, 1999; Philippaki-Warbuton 1987, Kayne 1994 and much later literature), there is no formal difference between Clitic Doubling and Right Dislocation. In both constructions, the phrase associated with the clitic is an adjunct. According to another view (Strozer 1976; Rivas 1977; Jaeggli 1982, 1986; Borer 1984, Anagnostopoulou 1994), the object is generated as a complement of the verb in Clitic Doubling constructions, while it is an adjunct (to VP or IP) in Right Dislocations. In the present discussion, the latter approach will be adopted. Right dislocation is found in (probably) all clitic-languages and can be easily mistaken for Doubling. It is therefore necessary to present here a more complete picture of Right Dislocation, as opposed to Clitic Doubling. Below I summarize the main arguments (from Anagnostopoulou 2002) against collapsing Clitic Doubling and Right Dislocation, as they have been discussed in the literature.

Jaeggli (1986) argued against the adjunct analysis of Clitic Doubling on the basis of three systematic differences between CLRD and Clitic Doubling: a) the intonational break, b) the lack of requirement for a preposition in front of the

“doubled” element in CLRD, and c) the crosslinguistic variation observed only in CID but not in CLRD.

(a) In right dislocation, the dislocated phrase is set off from the rest of the sentence with a sharp intonational break, while no such break is required before the object in Clitic Doubling.

The argument becomes stronger if we look at the Clitic Doubling of CPs. In Chapter 2 (Section 2.8), I argued against the right dislocation of doubled CPs, providing evidence from Argentinean Spanish. Argentinean Spanish although it has Clitic Doubling of direct objects, it lacks Clitic Doubling of object-CPs: in the order cl-V-CP the intonational break is very sharp. Thus, in these constructions CLRD is employed as indicated by the pause.

(b) Right dislocation is not subject to Kayne’s Generalization while Clitic Doubling seems to be in certain languages. That is, right dislocated elements do not require the presence of the preposition *a* preceding the doubled phrase (illustrated in (18) for French), while Clitic Doubling is subject to this restriction (example (3) from Rioplatense Spanish).

(c) There are languages that have CLRD but disallow Clitic Doubling. French presents such a case. This language freely allows CLRD, as illustrated in (18), while lacking CID, as was shown in (4b).

As discussed in Anagnostopoulou (2002, 2003), Vallduví (1990, 1992) and Zubizarreta (1994, 1998) focusing on an intonational property of right dislocation not discussed in Jaeggli (1986), more recent explorations of Jaeggli’s original arguments have shown that intonational properties provide strong evidence against the assimilation of the two constructions. While for Jaeggli (1986) the salient property of right dislocation is a pause separating it from the rest of the clause, for Vallduví (1990, 1992) and Zubizarreta (1994, 1998) the crucial property is that the intonation peak of the sentence falls on some element preceding the right dislocated phrase.

According to Vallduví, the main informational task of right dislocation is to focus  $V^0$  or a projection of  $V^0$ . The intonation peak of the sentence falls on  $V^0$  to which the clitic (and the negation, if present) attaches. The example in (19) is an instance of this construction in Catalan (from Vallduví 1990):

- (19) La vaig VEURE la barilla  
 it-cl-acc see-past-1<sup>st</sup> sing the fight  
 “I SAW the fight/ I did see the fight”

Evidence from word order supports the view that in CLRD the DP "doubled" by the clitic is an adjunct. In Catalan locative constructions, the order of the verbal complements is fixed. The direct object must precede the locative phrase carrying the main stress of the sentence, as illustrated in (20a). A stressed object is not allowed to follow the locative phrase, as illustrated in (20b) (from Vallduví 1990):

- (20) a. Fiquem el ganivet AL CALAIX  
 Put-1<sup>st</sup>-pl the knife-acc in the drawer  
 “We put the knife in the drawer”  
 b. \*Fiquem al calaix EL GANIVET  
 Put-1<sup>st</sup> pl in the drawer the knife

When a clitic is present, signaling right dislocation, word order and intonation must be as in (21b), i.e. the direct object must follow the locative phrase, which carries the main sentence stress. As (21a) shows, the right dislocated object is not allowed to precede the locative phrase:

- (21) a. \*El fiquem el ganivet AL CALAIX (Catalan)  
 it-cl-acc put-1<sup>st</sup> pl the knife in the drawer  
 “We put the knife in the drawer”  
 b. El fiquem AL CALAIX el ganivet  
 it-cl-acc put-1<sup>st</sup>pl in the drawer the knife  
 “We put the knife in the drawer”

In her discussion of right dislocation of objects in Standard Spanish, Zubizarreta (1998) draws a further distinction between right dislocated objects

and de-accented *in situ* objects. While right dislocated objects can co-occur with a clitic and follow a subject bearing Nuclear Stress (22), de-accented *in situ* objects cannot co-occur with a clitic and follow a subject bearing Contrastive Stress, as illustrated in (23):

- (22) La lavó mamá, la mamadera (Standard Spanish)  
 Cl-acc wash-3<sup>rd</sup> sg-past mother-nom the milk bottle  
 “Mother washed the milk-bottle”
- (23) Lavó MAMÁ, la mamadera  
 wash-3<sup>rd</sup> sg-past mother-nom the milk bottle  
 “Mother washed the milk-bottle”

In conclusion, even though a clitic co-occurs with an object to its right in both CID and CLRD, the two constructions can be easily distinguished in languages like Spanish and Catalan. Clitic Doubling is subject to Kayne's Generalization (i.e. it takes place with pronouns or DPs preceded by the preposition *a* associated with animacy), while right dislocation takes place with DP objects of any kind, as illustrated in e.g. (19), (21b) and (22), where a clitic co-occurs with an inanimate object not preceded by *a*. This difference in form correlates with the intonational and positional differences discussed above. Objects undergoing Clitic Doubling can be accented and precede elements with nuclear stress, unlike right dislocated objects. Thus, in Standard Spanish, where indirect objects and direct object pronouns are allowed to (or must) undergo Clitic Doubling, a doubled indirect object may carry nuclear stress, as shown in (24a) (from Zubizarreta 1998), and a doubled direct object pronoun may precede a non-right dislocated focused subject receiving nuclear stress, as shown in (24b) (from Zubizarreta 1998):

- (24) a. Se lo envió a mamá\_\_#María#el regalo  
 her-cl-dat it-cl-acc send-3<sup>rd</sup> sg-past to mother #Mary #the book  
 “Mary sent the book to mother”
- b. Esta mañana lo castigó a él [F]la madre de Juan]

This morning him-cl-acc punished him the mother of Juan  
“This morning, Juan’s mother punished him”

In short, Anagnostopoulou’s (2002) discussion presented above concludes that doubled objects have the intonation and distribution of arguments, while right dislocated objects have the intonation and distribution of peripheral elements. These differences can be straightforwardly expressed in an analysis according to which, the former occupy argument slots and the latter are right-adjoined elements.

### **3.2 Previous attempts to derive the Clitic Doubling parameter**

#### **3.2.1 Kayne’s Generalization and the Clitic Doubling parameter**

Up to the late 80’s Clitic Doubling was seen as a marked phenomenon (see Jaeggli, 1982 for theoretical discussion): it is found in varieties of Spanish and Romanian, while it is totally absent in French and Italian.<sup>6</sup> Initially, it was believed that the property regulating the cross-linguistic distribution of doubling is linked to what Jaeggli (1982) called Kayne’s Generalization: an object NP may be doubled only if it is preceded by a special preposition. Thus any theory of cliticization should be flexible enough to allow for the Clitic Doubling option but restrictive enough to treat doubling as a specific choice limited to Kayne’s Generalization environments (Jaeggli 1982, 1986 and Borer 1984). As discussed in Chapter 2, the common assumption was that clitics absorb the Case feature of the verb (see Jaeggli 1982, Borer 1984, Jaeggli 1986 for alternative implementations), and Clitic Doubling is ruled out as a Case Filter violation (Chomsky 1981) unless a special preposition is present which assigns Case to the doubled NP. Kayne’s Generalization was thus linked to Case theory.<sup>7</sup>

---

<sup>6</sup> Later research has shown that Clitic Doubling is not completely absent from dialects of French and Italian (see Kayne, 2000 for Clitic Doubling in French, and Manzini and Savoia 2005, for Italian)

<sup>7</sup> For more detailed discussion of Clitic Doubling as it relates to Case Theory see Section 2.4 in Chapter 2.

This approach has been highly influential and is still widely believed to be correct (see e.g. Baker 1996 who basically adopts this approach for non-configurational polysynthetic languages), even though it has been criticized by a number of researchers (Suñer 1988; Sportiche 1993/1996; Anagnostopoulou 1994, among many others).

However it has inter- and intra-linguistic limitations. In the next two subsections I will review the variation in Clitic Doubling as it has been accounted for in the spirit of Kayne's Generalization. In Section 3.2.1.1 I will present some of the crosslinguistic problems for Kayne's proposal, while in Section 3.2.2 I will discuss the developments of Sportiche's (1992/96) reconciliation approach and the implications that his theory has for deriving Clitic Doubling.

### **3.2.1.1 Shortcomings of and empirical counter-examples to Kayne's Generalization**

Accounting for the crosslinguistic variation on CID in terms of Kayne's Generalization (that is, in terms of Case-theory), we are faced with two types of problems. The first one concerns stipulations that need to be made in accounting for data from languages of the same family (i.e. Standard Spanish, Argentinean Spanish and French), while the second one concerns clear counterexamples to the Generalization from unrelated languages (discussion from Anagnostopoulou 2002).

**A.** Explaining cross-linguistic variation in terms of the properties of prepositions has shortcomings.

#### a) Direct object doubling: The contrast between Rioplatense Spanish and Standard Spanish is problematic

Direct object doubling is allowed in Rioplatense Spanish with animate, specific objects, which are introduced by the special preposition *a* (25a). It is disallowed in Rioplatense Spanish when the object is inanimate and a preposition

in front of it is impossible (25b). Doubling is ruled out in French and Italian, where the option of inserting *a* is unavailable, as illustrated in (26) for French. Finally, in Standard Spanish direct object doubling is ruled out, even though animate, specific objects are introduced by *a* (27b) (examples from Anagnostopoulou 2002):

- (25) a. Lo vimos a Guille (Rioplátense Spanish)  
 him-cl-acc see-1<sup>st</sup> pl-past a Guille  
 “We saw Guille”  
 b. \*La vimos la casa de Mafalda  
 it-cl-acc see-1<sup>st</sup> pl-past the house of Mafalda  
 “We saw the house of Mafalda”
- (26) a. \*Je le vois Jean (French)  
 I him-cl-acc see-1<sup>st</sup> sg Jean  
 “I am seeing Jean”  
 b. Je vois Jean  
 I see-1st sg Jean  
 c. \*Je vois à Jean
- (27) a. \*Lo vimos a Guille (Standard Spanish)  
 him-cl-acc see-1<sup>st</sup> sg a Guille  
 “We saw Guille”  
 b. Vimos a Guille  
 See-1<sup>st</sup> pl-past a Guille

The contrasts between (25a) and (25b) in Rioplátense Spanish, on the one hand, and (25a) in Rioplátense Spanish vs. (26a) in French (and Italian), on the other, can be straightforwardly linked to the presence vs. absence of *a*. When *a* is present, Case can be assigned to the NP complement of V. In the absence of *a*, the NP cannot be assigned Case, violating the Case Filter. The contrast between Rioplátense Spanish (25a) and Standard Spanish (27a), however, does not

naturally follow from Kayne's Generalization. It has to be stipulated that *a* cannot assign Case to direct objects in Standard Spanish (Jaeggli 1982, 1986).<sup>8</sup>

b) Indirect object doubling: The contrast between Spanish versus French and Italian is problematic

Indirect object doubling is permitted in all dialects of Spanish and is disallowed in French and Italian. The relevant examples are repeated from above, for Spanish and French respectively:

- (4) a. Miguelito (le) regaló un caramelo a Mafalda (Spanish-all dialects)  
Miguelito Cl-dat gave a candy to Mafalda  
"Miguelito gave Mafalda a candy"
- b. Jean (\*lui) a donné des bonbons à Marie (French)  
Jean Cl-dat has given the candies to Mary  
"Jean gave Marie a candy"

The problem posed by this contrast is that in both Spanish and French/Italian, indirect objects must be preceded by *a*, and yet doubling is ruled out in the latter group of languages.<sup>9</sup>

**B.** The necessity of the prepositional case-assigner is not universal. In what follows I will discuss data from languages that do not need a preposition preceding the doubled element.

**i. Porteño Spanish:** Suñer (1988) argues against the view that *a* is a Case assigner licensing Clitic Doubling in Spanish, providing data from Porteño

---

<sup>8</sup> In a similar fashion Borer (1986) accounts for the differences that preposition *šel* (in nominal doubling in Hebrew) exhibit in comparison to *a* for Spanish and *pe* for Romanian. On the basis of this differences Borer concludes that if a preposition-like element rescues a CID construction without providing evidence that it is a preposition, then it is inserted at PF.

<sup>9</sup> To account for this difference, Jaeggli (1982, 1986) suggested that *à* is a case marker in French, i.e. the realization of dative Case and not a Case assigner. He provided two pieces of evidence based on co-ordination that distinguish French from Spanish *à* (Vergnaud 1974; see Jaeggli 1982 for details).



Spanish, where direct object clitic doubling is possible in the absence of *a* (Suñer 1988):

- (28) a. Yo la tenía prevista esta muerte  
“I had foreseen (it) this death”
- b. Lo último que escuché, claro que la encontré pesada la audición,  
fue el reportaje  
“The last thing I listened to, of course I found (it) boring the radio-  
program, was the interview (Barrenechea y Orecchia 1979)”
- c. Yo lo voy a comprar el diario justo antes de subir  
I it am going to buy the newspaper just before coming up

Suñer argues that these examples are not right-dislocations because they are uttered with the same unbroken intonation curve they would have without the clitic, they occur in embedded or parenthetical clauses as in (28b), as well as in non-peripheral positions as in (28c). She concludes that *a* is not a Case assigning preposition but rather a marker of animacy or "distinctiveness" (Ramsey 1956) and that the presence of *a* is not a necessary condition for clitic doubling in Argentinean Spanish, contrary to what is widely assumed in the literature. According to Suñer, the existence of examples like (28) show that although direct object clitic doubling of inanimates in Spanish is less general than doubling of animates, neither animacy nor the presence of *a* are required for Clitic Doubling (see also Cuervo 2003).

**ii. Balkan Languages/ Modern Greek:** All Balkan languages that have been claimed to have Clitic Doubling (e.g. Bulgarian, Albanian, and Modern Greek) as well as Berber, and Lebanese Arabic<sup>10</sup> fall in this group. I present here the discussion concerning Modern Greek (from Anagnostopoulou 1994, 2002, 2003).

In Greek, indirect objects bearing genitive case and direct objects bearing accusative can be doubled:

---

<sup>10</sup> For an analysis of Clitic Doubling in Lebanese Arabic in conformity with Sportiche's theory see Choueiri 2000, a different account from that of Aoun 1999.

- (29) (Tu) (to) edosa tu Jiani to vivlio  
 him-cl-gen it-cl-acc give-1st sg-past the Jianis-gen the book-acc  
 “I gave John the book”

Greek instantiates a third pattern distinct from Spanish/ Romanian, which possess Clitic Doubling without observing Kayne’s generalization. As shown in (29), Clitic Doubling in Greek does not take place in the presence of a preposition. To the contrary, Clitic Doubling in Greek is blocked when the indirect object is a PP (see Dimitriadis 1999 for discussion):<sup>11</sup>

- (30) a. \*Tu edosa to vivlio s-ton Jiani  
 him-cl-gen give-1<sup>st</sup> sg-past the book-acc to-the Janis  
 “I gave the book to John”  
 b. \*Tu pira to vivlio apo ton Jiani  
 him-cl-gen take-1<sup>st</sup> sg-past the book-acc from the Jianis  
 “I took the book from John”

The observation (Anagnostopoulou 1994) is that Greek looks like the reverse of Spanish and Romanian: *Doubling is actually not allowed in the presence of a preposition*. This cross-linguistic difference between Romance and Greek raises the question whether Greek indeed possesses genuine Clitic Doubling of DPs. Alternatively, one might argue that what superficially resembles Clitic Doubling in fact manifests a case of Right Dislocation which is found in (probably) all clitic languages, regardless of whether they have Doubling or not, and which is not subject to Kayne’s Generalization (see section 3.1.2 above). Greek definitely has right dislocation, i.e. a natural way of uttering (29) is with the intonation peak falling on the verb cluster, resulting in an emphatic interpretation of the verb, as illustrated in (31).

- (31) (Tu) (to) EDOSA #tu Jani #to vivlio

<sup>11</sup> In Chapter 2, I attributed the unavailability of Clitic Doubling of prepositional phrases to the impossibility of forming a case-chain.

him-cl-gen it-cl-acc give-1st sg-past the Janis-gen the book-acc  
“I gave John the book (I did give John the book)”

Comparing (31) to Catalan and Spanish examples of right dislocation discussed in section 3.1.2 above, it is natural to think that (31) has exactly the same intonation and interpretation as its Romance counterparts discussed above.

Nevertheless, Anagnostopoulou (1994, 1999, and 2003) argues extensively that Modern Greek employs Clitic Doubling productively. The arguments Anagnostopoulou provides were discussed in detail in Section 2.8 concerning the status of the doubled CPs. Here I will focus on one set of data in support of this claim, which relates to the evidence from intonation and word order presented in section 3.1.2 (see Anagnostopoulou, 2003). In Greek, objects can be doubled in environments in which the object precedes the subject, as in (32b) and (33b).

- (32) a. Pjos tin efage tin turta?  
Who-nom it-cl-acc eat-3<sup>rd</sup> sg the cake-acc?  
‘Who ate the cake?’
- b. Tin efaghe tin turta o Jianis  
it-cl-acc eat-3<sup>rd</sup> sg the cake-acc the Jianis-nom  
‘John ate the cake’
- (33) a. O Petros aghorase ena vivlio.  
The Petros-nom buy-3<sup>rd</sup> sg-past a book-acc.  
‘Peter bought a book’
- b. Ke tin ali mera, to katestrepse to vivlio enas mathitis tu  
And the next day, it-cl-acc destroy-3<sup>rd</sup> sg-past the book-acc a student-  
nom his  
‘And the next day, a student of his destroyed the book’

In both cases, the object is de-accented and the subject bears main sentence stress. The context provided by (32a) and (33a) furthermore ensures that the subjects in (32b) and (33b) are not presupposed. Moreover, it can be shown that subjects in strings like (32b)/(33b) with the order Cl-VOS reside *in-situ*. From this

it follows that the object associated with the clitic cannot be right-dislocated. Hence, it can be concluded that Greek possesses genuine clitic doubling.

Following Cinque (1993), Zubizarreta (1994) and Alexiadou (1999), Anagnostopoulou builds on the observation that in VOS strings the subject necessarily bears main sentence accent and take this to indicate that the subject is the most deeply embedded argument which remains in its VP-internal base-position. Furthermore, she points out that objects may bind subjects to their right, as schematized in (34a) and illustrated in (34c) (example (34b) provides the context for (34c)):

- (34) a.  $[OBJ_i \dots [[SUB \textit{pron}_i] [t_i \dots]]]$   
 b. Pjos sinodepse to kathe pedhi?  
 who-nom accompanied the every child?  
 “Who accompanied every child?”  
 c. Sinodepse to kathe pedhi<sub>i</sub> i mitera tu<sub>i</sub>  
 accompany-3<sup>rd</sup> sg-past the every child the mother his  
 “His mother accompanied every child”

Thus, the object in (34) must have reached its surface location by overt leftward A-movement to a position above the subject. Versions of this analysis for VOS orders are widely adopted in the literature (see Zubizarreta 1994, 1998 for Spanish; Ordoñez 1998, 1997 for Spanish and Catalan; Cardinaletti 1997 for Italian; Alexiadou 1999 for Greek). Crucially for present purposes, the subject also bears main stress when the object is doubled as in (32b), (33b). This entails that objects in CI-VOS configurations are not right-dislocated. But from this it also follows that Greek qualifies as a genuine Clitic Doubling language.

Crosslinguistic evidence that the facts in (32) and (33) indeed constitute an argument that Greek has Clitic Doubling comes from languages that have limited CID of direct objects such as Standard Spanish and Catalan. In Standard Spanish and Catalan, doubling of objects preceding post-verbal subjects carrying main sentence stress is permitted with indirect objects (Ordoñez 1997), and with pronominal direct objects (Zubizarreta 1998), as illustrated in (35):

- (35) a. Se lo dió a Juan Maria, el libro  
 him-cl-dat it-cl-acc give-3<sup>rd</sup> sg-past to Juan Maria-nom, the book  
 “Maria gave Juan the book”
- b. Lo castigó a el la madre de Juan  
 him-cl-acc punish-3<sup>rd</sup> sg-past a him the mother of Juan  
 “Juan’s mother punished him”

In these languages, Clitic Doubling of direct object DPs is ruled out. Accordingly, doubling of *a la profesora* in a position preceding the subject is ruled out in (36):

- (36) \*La saludó a la Profesora Juan  
 her-cl-acc greet-rd sg-past a the Professor Juan-nom  
 “Juan greeted the professor”

Note that in (35a) the direct object *el libro* is “doubled” by a clitic but, crucially, it occurs in a position after the subject, i.e. in a right dislocated position.

To sum up, VOS configurations in which the subject bears main stress provide diagnostic environments for Clitic Doubling as opposed to Right Dislocation.

Summarizing the discussion so far, we have seen how inter- and intra-linguistic variation is accounted for in approaches that capitalize on Kayne's Generalization: *a preposition-like element must be present for Case-interpretation, that is, to assign the Case absorbed by the Clitic*. This explains Spanish, Romanian direct object Clitic Doubling as opposed to French and Italian. (It also explains Hebrew doubling in nominals, see footnote 7). However the Generalization needs a number of auxiliary assumptions.

- a) Auxiliary assumption 1: *When a preposition-like element is a preposition, doubling is possible. Otherwise not*. This explains why indirect object doubling is well-formed in Spanish but not in French and Italian.

- b) *Auxiliary assumption 2: When a preposition-like element is a preposition that can assign Case, doubling is possible. Otherwise not.* This explains why direct object doubling is well-formed in Rioplatense Spanish but not in Standard Spanish.

In addition, Kayne's Generalization has a number of important counterexamples. On the basis of the data (29)-(36), it can be concluded that Greek has Clitic Doubling even though it is not subject to Kayne's Generalization.<sup>12</sup> Thus, it is evident that Kayne's Generalization cannot provide a complete and satisfactory answer to the understanding of the Clitic Doubling parameter.

### **3.2.2 Further developments and Sportiche's theory of Doubling**

As Anagnostopoulou (2002) points out, in the late 80's and early 90's, three significant developments in the research on Clitic Doubling took place:

- (i) The validity of Kayne's Generalization was questioned,
- (ii) the sensitivity of direct object doubling to the semantico-pragmatic properties of DPs (animacy, specificity, partitiveness, prominence) was emphasized, and
- (iii) a number of interpretational differences between direct object doubling and indirect object doubling were noted. Point (i) has already been discussed in the preceding section. Here I will focus on points (ii) and (iii).

Suñer (1988) pointed out that direct object Doubling has interpretational effects. More specifically, specific animate DPs can be doubled by accusative clitics in Porteño Spanish while non-specific animate DPs cannot undergo Clitic Doubling (Suñer 1988).

---

<sup>12</sup> The only way to make Greek fit under Kayne's Generalization is by proposing that an empty Case-assigning preposition is present in clitic doubling constructions like (21b) and (22b). The presence of overt case morphology in Greek nominals could be viewed as licensing this zero preposition, or even as being the overt realization of a preposition affixed on nouns. In fact, Dobrovie-Sorin (1990) adopts this proposal for dative arguments in Romanian, which undergo clitic doubling without being preceded by a special preposition. We do not adhere to this view, however, as there are numerous environments in which the presence of overt accusative or nominative case morphology on Greek nouns clearly does not signify obliqueness.

- (37) a. *[+anim, +spec, +def]*  
 La oían a Paca/a la niña/a la gata  
 Her listen-3<sup>rd</sup> pl-past to Paca/to the girl/to the cat  
 “They listened to Paca/the girl/the cat”
- b. *[+anim, +spec, -def]*  
 Diariamente, la escuchaba a una mujer que cantaba tangos  
 daily, her-cl-acc listen-3sg-past to a woman-acc who sang tangos  
 “He listened daily to a woman who sang tangos”
- c. *[+anim, -spec, +def]*  
 \*Lo alabarán al niño que termine primero  
 Him-cl-acc will praise-3<sup>rd</sup> pl the boy who finishes first  
 “They will praise the boy who finishes first”
- d. *[+anim, -spec, -def]*  
 \*No lo oyeron a ningún ladrón  
 Not him-cl-acc hear-3<sup>rd</sup> pl-past to any thief  
 ‘They didn’t hear any thieves’

Suñer observed that indirect object/dative Clitic Doubling differs from direct object/accusative Clitic Doubling in not being subject to specificity (see also Sportiche 1996). Any indirect object can undergo Doubling in Spanish, as shown below, unlike direct objects which must be specific:

- (38) a. *[+human, +spec., ±def]*  
 le ofrecí ayudaa la niña/ a una estudiante  
 her-cl-acc offer-1st pl-past help to the girl/ to a student  
 “I offered help to the girl/ to a student”
- b. *[+human, -spec., -def]*  
 les ofrecieron queso y leche a familias de pocos medios  
 them-cl-acc offer-3<sup>rd</sup> pl-past cheese and milk to families of little means

“They offered cheese and milk to low-income families”

c. [*+human, -spec, +def*]

les dejaró todo mi dinero a los pobres

them-cl-acc will leave-1st sg all my money to the poor

“I will leave all my money to the poor”

Dobrovie-Sorin (1990) reported similar findings for Romanian. She argued that there are many restrictions on direct object Clitic Doubling in Romanian which stem from the interpretation of NPs, and that indirect object Clitic Doubling differs from direct object Clitic Doubling in not being sensitive to the semantics of NPs. Anagnostopoulou (1994) noted that Greek direct object Clitic Doubling has interpretive effects, similar to Spanish and Romanian. Greek Doubling is more or less restricted to definites, which cannot be understood as accommodative/novel (Heim 1982) in the presence of Doubling. Moreover, Anagnostopoulou points out that Clitic Doubling is obligatory with so called “epithets” i.e. definite anaphoric DPs as in (39).

(39) idha to Jiorgo ke \*(ton) malos ton ilithio pu dhen me kalese sto parti  
see-1<sup>st</sup> sg-past the George-acc and him-cl-acc scold-1<sup>st</sup> sg-past the stupid-  
acc that NEG me-cl-acc invite-3<sup>rd</sup> sg-past in the party  
“I saw George and I scolded him for not inviting me to the party”

The above mentioned developments led to a significant shift in the treatment of Clitic Doubling in three major respects:

(a) The abandonment of Kayne's Generalization naturally led to a view of doubling clitics as agreement markers: agreement markers co-occur with argument DPs (as they do not absorb Case).

(b) After the discovery of the relevance of the interpretive effects of direct object clitics most accounts of direct object Clitic Doubling focused on them.

(c) The fact that the conditions under which indirect object Clitic Doubling takes place are different from the ones licensing direct object Doubling led some researchers to speculate that the two instances of Doubling do not fall under the

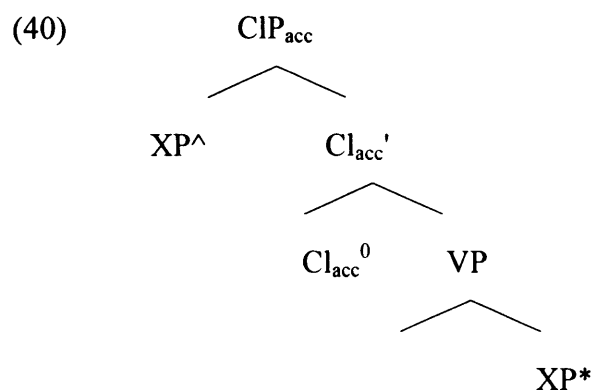


same parameter as they seem to be instantiating very different syntactic phenomena.

This shift in perspective is crystallized in Sportiche's Clitic Voice Theory which treats clitics as bundles of phi-features in the functional skeleton of the clause which enter an agreement relationship with their associate DPs. In addition, Sportiche proposes that direct object clitics license specificity on their associates, unlike indirect object clitics which are pure agreement markers.

According to Sportiche, clitics are functional heads heading their own projections in the domain of Infl. These are referred to by the term "*Clitic Voices*" and are suggested to license a particular property on an agreeing argument: the doubled DP in Clitic Doubling, an object pro in simple cliticization.

Sportiche argues that clitic constructions show properties of XP-movement and claims that it would be the null hypothesis to postulate that clitic constructions are identical to all other types of movement configurations, which, in Checking Theory (as proposed by Chomsky 1993, 1995), involve movement demanded by specifier-head licensing. The structure Sportiche proposes for accusative clitics is illustrated in (40):



In (40), the (overt or covert) XP\* related to the clitic moves to the XP^ position at some point in the derivation (overt syntax or LF).<sup>13</sup> In this way,

<sup>13</sup> In this account, the formal relation between clitics and argument DPs is comparable, to some extent, to the relation between expletives and associates in expletive-associate chains in the framework of Chomsky (1995). Similarly to associates that move to the expletive position at LF, doubled DPs move to the clitic position overtly (in CLLD and scrambling) or covertly (in clitic doubling; see Sportiche 1993). It is easy to see that in the framework of Chomsky (2000, 2001) movement of the associate to the clitic can be restated as an Agree relation between the clitic and

agreement between Cl and XP\* is sanctioned. The agreement relation between the clitic and the XP\* is derived as a spec/head relation, and the locality between the clitic and the corresponding XP\* follows from the movement relationship between the XP\* and the XP<sup>^</sup>. Clitic doubling minimally differs from non-doubling in that the XP\* is overt in the former and covert in the latter. This way, the syntax of clitics is fully assimilated to that of other functional heads.

The obvious question to ask is what is the trigger of movement of the double. Sportiche answers this question by pushing the parallelism between the syntax of clitics and that of other kinds of movement. Under the assumption that wh-movement is motivated by the Wh-criterion (Rizzi 1991), he attributes the XP\*-to-XP<sup>^</sup> movement to the CLITIC CRITERION in (41) which, in turn, is subsumed under the GENERALIZED LICENSING CRITERION in (42):

(41) CLITIC CRITERION (Sportiche 1996)

*At LF*

*a. A clitic must be in a spec/head relationship with a [+F] XP*

*b. A [+F] XP must be in a spec/head relationship with a clitic*

(42) GENERALIZED LICENSING CRITERION (Sportiche 1996)

*At LF*

*a. A [+F] head must be in a spec/head relationship with a [+F] XP*

*b. A [+F] XP must be in a spec/head relationship with a [+F] head*

In (42), [ $\pm$ F] stands for a set of properties such as Wh, Neg, Focus etc. which trigger movement. For direct object clitic constructions, it is proposed that the clitic licenses Specificity on its associate. Indirect object clitic heads are treated as indirect object agreement markers since they do not yield specificity effects (see above). The structure in (40) makes a number of further options available:

---

the doubled phrase (or T and the doubled phrase; in the latter case, the clitic can be viewed as an overt signal of *Agree* between T and the object). Such an analysis dispenses with actual movement but maintains the locality characteristic of movement (for discussion, see Anagnostopoulou, 2003).

(43) CLITIC CONSTRUCTIONS PARAMETERS (Sportiche 1993)

*Movement of XP\* to XP^ occurs overtly or covertly*

*Head is overt or covert*

*XP\* is overt or covert*

By (43) the following cases are predicted:

(i) Undoubled clitic constructions as in French and Italian arise when a covert XP\* moves overtly or covertly to XP^ with H overt.

(ii) Clitic Doubling constructions as in Spanish and Romanian arise when an overt XP\* moves covertly with H overt.

(iii) Scrambling constructions as in Dutch and German arise when an overt XP\* moves overtly with H covert.<sup>14</sup>

Finally, Sportiche proposes that the *Clitic Doubling Parameter* should be attributed to a filter similar to the Doubly Filled COMP Filter (see Cheng 1991 for crosslinguistic discussion), which he calls DOUBLY FILLED VOICE FILTER:

(44) DOUBLY FILLED VOICE FILTER (Sportiche 1993)

*\*[<sub>HP</sub> XP [H...]]*

*where H is a functional head licensing some property P,*

*and both XP and H overtly encode P*

Assuming (44) to hold universally, Sportiche speculates that Clitic Doubling arises in a language precisely when XP\* movement may be delayed until LF, since this is the only way of preventing a violation of (44) with an overt XP\* in the presence of an overt clitic.

However, there is no independent evidence that (DP and/or pro) associates move overtly in languages not licensing doubling, i.e. French and Italian, and covertly in languages licensing doubling, i.e. Spanish, Greek, Bulgarian, Albanian,

---

<sup>14</sup> Note that Sportiche unifies the syntax of cliticization/ Clitic Doubling with that of Scrambling, which has also been claimed to display interpretational effects (Diesing 1992; de Hoop 1992). This idea was further explored in Anagnostopoulou (1994) and Alexiadou & Anagnostopoulou (1997).

Romanian. Even more problematically, one is led to stipulate arbitrary variation within one and the same language. It would have to be claimed, for instance, that in e.g. Standard Spanish (i) indirect object DPs and direct object pronouns can delay their movement to the clitic position until LF, explaining why Clitic Doubling with these elements is allowed, while (ii) direct object DPs must move to the clitic position overtly, explaining why direct object DP doubling is disallowed.

### **3.3 Clitic Doubling interacting with Participle Agreement**

Having presented the main approaches towards the Clitic Doubling parameter that have been developed in the literature so far, I now proceed to the discussion of an intriguing correlation: the fact that the availability of Clitic Doubling correlates with the unavailability of Participle Agreement and vice versa.

It is an extensively discussed fact in the literature of cliticization that clitics trigger participial agreement in languages that show object agreement, e.g. French, Italian and Catalan. It has been argued that participle agreement is activated by the movement of the clitic in the preverbal position, an observation which nevertheless has not been explained by some independent mechanism that would explain why agreement on the verb is triggered by “movement” of the clitics but not object DPs which remain postverbal.

I will argue that the overtness of participle agreement depends on the checking properties of the language. Moreover I will show that when participle agreement is activated, DP-objects cannot be overt. This results in the absence of Clitic Doubling in languages which show participial agreement with clitics.

Before I present my proposal on how participle agreement and Clitic Doubling are in competition, I will discuss (following Iatridou 1995) the properties that determine whether a language has participle agreement or not and dispute the claim that languages like Modern Greek exhibit object agreement constructions.

#### **3.3.1 What looks like Participle agreement in Modern Greek**

The participle used in the Perfect in Romance languages (as well as in Germanic) is isomorphic to the one used in the Passive, as shown in (45a-d) (examples and discussion from Iatridou 1995).

- (45) a. j'ai écrit le menu (French)  
 I have written the menu
- b. le menu est écrit  
 the menu is written
- c. ik heb de brief geschreven (Dutch)  
 I have the letter written
- d. de brief is geschreven  
 the letter is written
- e. eho grapsi to grama  
 I have written the letter
- f. to grama graftike  
 the letter write-Pass-past-3<sup>rd</sup> sing-perf

In Modern Greek there is no similar pattern as shown by (45e-f). Greek has a periphrastic Perfect using HAVE and an uninflected participle e.g. *eho grapsi* ("I have written) but also a synthetic Passive which inflects like all Modern Greek verbs for Number and Person, Tense and Aspect:

However if one takes a closer look an isomorphism equivalent to that of Germanic and Romance appears to show up.

- (46) a. eho grameno to grama  
 have-1<sup>st</sup> sg written-neuter-sg-acc the letter-acc  
 "I have written the letter/I have the letter written"
- b. to grama ine grameno  
 the letter-nom is-3<sup>rd</sup> sg written-sg-neut  
 "The letter is written"

As Iatridou (1995) points out, data like (46) might make it look at first sight that Greek does have constructions with participle agreement. The form *grameno* (written) inflects for the nominal paradigm, that is, it inflects for Gender, Number and Case and can be preceded by either HAVE or BE. These constructions (that are also attested in other languages that are claimed not to have Participle Agreement, such as Spanish, Czech and Slovakian) would pose a potential counterexample to our correlation if (46) was a case of genuine object agreement (as claimed by Joseph and Philippaki-Warburton 1989).

Nevertheless, Iatridou (1995) argues that examples like (46) should not be analysed as Perfect constructions. Compare the two potential representations of (46a) in (47):

- (46) a.    *eho* [<sub>VP</sub> *grameno to grama*]=*eho* [<sub>VP</sub> *grapsi to grama*]  
           have-1<sup>st</sup> sg written-neuter-sg-acc the letter-acc  
           “I have written the letter”
- b.    *eho* [<sub>to</sub> *grama<sub>i</sub>* *grameno t<sub>i</sub>*]  
           have-1<sup>st</sup> sg the letter-acc written-neuter-sg-acc  
           “I have written the letter”

The main argument disqualifying structure (47a) has to do with Case. Crucially, the object in (47a) is not Case-dependent on the participle. Instead, the participle itself and the object can only appear in the Accusative, which, arguably, is assigned by *eho* (have). Evidence for this is provided by verbs like *milao* (talk) that assign Genitive or Oblique Case to the direct object, as shown in (48).

- (48) a.    *Milisa tu Kosta*  
           talked-I Kosta-gen  
           “I talked to Kostas”
- b.    *milisa ston Kosta*  
           talked-I PP-Kosta

The choices of Case remain the same in the Perfect, as shown in (49), but not in the construction under consideration, as shown in (50):

- (49) a. eho milisi tu Kosta  
       have-I talked Kosta-gen  
       b. eho milisi ston Kosta  
       have-I talked Kosta-PP
- (50) a. \* eho milimenu-gen tu Kosta-gen  
       b. \* eho milimeno-acc tu Kosta-gen  
       c. \* eho milimenu-gen ston Kosta-PP  
       d. \* eho milimeno-acc ston Kosta-PP  
       e. eho milimeno-acc ton Kosta-acc

In (50a-d) we see that no combination containing Genitive or Oblique (PP) is acceptable, which means that the Case-properties of the verb on which the participle is based are lost. Example (50e) is acceptable but it lacks the compositional meaning of “Kostas has been spoken to” and instead it means something roughly like “Kostas has been made part of the conspiracy” or “Kostas is part of the conspiracy”. Thus, Iatridou concludes that the object is not Case-dependent on the participle and that the participle itself and the object can only appear in the Accusative, independently of what the verb of the participle could have assigned. In turn, this means that the representation in (47a) is not the correct one.

In the small clause analysis in (47b), HAVE has a passive small clause complement. According to this analysis *to grama* (the letter) is not Case-dependent on *grameno* (written) but on HAVE. This makes the right prediction as HAVE always and only assigns Accusative.

In conclusion, structures like (46) in Greek do not show object agreement with the participle, despite appearances to the contrary.

### 3.3.2 The Proposal: Split Checking prevents Clitic Doubling

The data discussed in the preceding section provide empirical support for the Doubling/Agreement correlation in (1), repeated here, which calls for an explanation:<sup>15</sup>

(1) THE DOUBLING/AGREEMENT CORRELATION

*If a language has clitic doubling it lacks Participle Agreement.*

*If a language has participle agreement it lacks Clitic Doubling*

In this section, I develop an account for (1) based on a constraint on Agree. The general idea is that syntactic principles of economy allow pronominal/agreement elements to enter into an agree-relation with an overt DP-object in a chain of two at a time. So, while Doubling is permitted, “tripling” is excluded. This restriction entails that agreement markers and/or clitics, agreement suffixes on the verb and full DP-objects may appear in the following schemata:<sup>16</sup>

- (i) clitic V-agr (\*DP) (French/Italian)
- (ii) clitic V-(\*agr) DP (Spanish, Balkan languages)
- (iii) (\*clitic) V-agr DP (Bantu languages)

---

<sup>15</sup> The generalization in (1) holds for direct object Clitic Doubling. It remains unaddressed how the generalization affects Clitic Doubling of indirect objects, given that participles shows agreement only with direct objects in all known languages. The answer is not clear to me at this point; however it seems to be the case that there are no languages that have participle agreement, lack Clitic Doubling of direct objects but exhibit Clitic Doubling of indirect objects. Thus it seems that the correlation with participle agreement is relevant to indirect Clitic Doubling as well.

<sup>16</sup> The elaboration of the Doubling/Agreement correlation is meant to capture the absence of object clitic doubling in languages with participial agreement. Its validity to subject clitics is at this stage unclear, as there seem to be Italian dialects that allow “tripling” with subject clitics, overt DP-subjects and subject agreement on the verb. One possible way to account for this difference is that participial object-agreement is [-person], a property that is responsible for split-checking, while subject agreement on the verb is [+person]. However, the variation that language exhibit with respect to subject-clitic doubling and the similarities/differences with object-clitic doubling generates a number of questions for further research.



Here I concentrate on structures (i) and (ii)<sup>17</sup>, being particularly interested in the derivation of Clitic Doubling and its correlation with Participle Agreement.<sup>18</sup>

To begin with, I adopt Sportiche's theory of clitic constructions discussed in Section 3.2.2 according to which, clitics are heads of CIP. I furthermore assume that Participle Agreement is realised on Agr-O following Chomsky (1991, 1993) among others.

The main and crucial difference of my proposal is that I assume the checking relations to vary crosslinguistically. In particular, I propose that clitic-languages fall into two groups which differ with respect to whether *phi*-features related to objects form bundles located in a single position in the functional domain or whether they are split, located in more than one position in the tree.

Clitic languages without participle agreement are *bundling-languages*, i.e. all *phi*-features reside in one and the same position; on the other hand, clitic languages with participle agreement are *split-languages*<sup>19</sup>, i.e. they distribute *phi*-features in two different syntactic positions.<sup>20</sup>

---

<sup>17</sup> Norvin Richards (personal communication) informed me that cases like (iii) might actually exist in languages like Wampanoag. However in non-configurational languages, like Wampanoag, is particularly difficult to test what is dislocated. The issue generates many questions for further research.

<sup>18</sup> The correlation was first pointed out in Tsakali and Wexler (2003), where it was suggested that participle agreement does not show up in Clitic Doubling languages based on acquisition evidence. However Tsakali and Wexler didn't provide a syntactic account for the correlation.

<sup>19</sup> I'm grateful to Winfried Lechner (p.c.) for his ideas and suggestions on the topic upon which the idea of split-checking for non clitic-doubling languages was developed.

<sup>20</sup> In my system, *phi*-feature checking of objects in clitic languages is limited to clitic constructions. Case checking cannot be linked to *phi*-feature checking in clitic languages (contra Chomsky 2000; 2001). The two processes should be kept distinct (as in Chomsky 1995) for the following reason: if Case checking were linked to *phi*-feature checking, we would expect, incorrectly, doubling clitics to be obligatory with structural objects in non-split doubling languages, where, by hypothesis, person and gender are checked in CIP. This is possibly a parameter differentiating clitic doubling languages from object agreement languages. In the former, doubling - and hence *phi*-checking - of direct objects is optional, while in the latter object agreement - and hence *phi*-checking - of direct objects is obligatory. *Phi*-checking and Case checking are linked together only in agreement languages. Note, furthermore, that I do not assume that all objects check person features (contra Chomsky 2000; 2001). It seems that in all Romance languages (whether these are split like French and Italian or non-split like Spanish and Romanian) only pronominal objects (1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> person animates) or just 1<sup>st</sup> and 2<sup>nd</sup> person pronominal objects check person features, explaining why clitic doubling of strong pronouns or of 1<sup>st</sup> and 2<sup>nd</sup> person strong pronouns is obligatory across Romance.

More specifically, in languages not showing participle agreement, such as Greek, *[person]* and *[gender]* and *[number]* reside in a single site, which can be identified as the head of the Clitic Phrase CIP. On the other hand, languages like French and Italian, which show overt participle agreement, are *split*-languages, i.e. they distribute phi-features over two distinct positions. *[Gender]* and *[number]* are checked in AgrO – the same site where the participle surfaces - and *[person]* in the head of the (higher) clitic position (CIP). Crucially object participial agreement is considered to be *[-person]*, which gives rise to split-checking.<sup>21</sup>

Thus, overt Participle Agreement arises in *split*-languages, where the object checks *[gender]* and *[number]* features in AgrO, and then needs to move further up to check *[person]* feature with the CIP. In contrast, in languages lacking Participle Agreement, all object features are checked in CIP, AgrO being parametrically inactive. The inactivity of participle agreement and its derivation in a principled way is discussed at the end of this Section. Intuitively, the idea is that the clitic in Clitic Doubling languages subsumes the function of object agreement in non-doubling languages. I will return to this point in Section 3.5, discussing the interpretational effects of Doubling constructions. I furthermore assume that *split*-checking of phi-features in French and Italian clitic constructions takes place even in the absence of a participle, i.e. in non-participial clitic constructions *[gender]* and *[number]* are still checked in AgrO and *[person]* in the clitic position.

Turning to the correlation between participle agreement and clitic doubling in (1), it can now be restated as in (51):

(51) THE DOUBLING/AGREEMENT CORRELATION

*If a language has Clitic Doubling it lacks split phi-checking.*

*If a language has split phi-checking it lacks Clitic Doubling*

The correlation in (51) leads to a novel formulation of the Clitic Doubling parameter, which disassociates Clitic Doubling from Case Theory.

(52) CLITIC DOUBLING PARAMETER

---

<sup>21</sup> None of the languages under investigation exhibits morphological realization of person-feature on the participle agreement.

*Overt associates of clitics are limited to non-split (bundling) languages.*

*Pro-associates are licensed in non-split as well as split languages.*

According to (52), full DPs are not allowed to undergo *split*-checking while phonologically empty elements (*pro*) are not subject to this restriction. In turn, this asymmetry leads to the constraint in (53), which regulates the crosslinguistic distribution of Clitic Doubling:

(53) OVERT DP-ASSOCIATE CONSTRAINT

*Overt DPs must enter into an Agree relation all at once.*

The question that arises is what accounts for the *Overt Associate Constraint* in (53).<sup>22</sup> Richards (2001) shows that the well-formedness of Agree relations obeys PF-restrictions. The condition that ensures which part(s) of a chain is pronounced is THE PRINCIPLE OF UNAMBIGUOUS PRONUNCIATION stated in (54) (as proposed by Richards, 2001).<sup>23</sup>

(54) THE PRINCIPLE OF UNAMBIGUOUS PRONUNCIATION (Richards 2001)

*PF must receive unambiguous instructions about which part of a chain to pronounce.*

---

<sup>22</sup> Winfried Lechner suggested (p.c.) that (52) derives from locality. On this view, overt DP associates do not permit *split*-checking, because this would necessitate two independent operations on two distinct subgroups of features. Such ‘subextraction’ or ‘subagree’ of features out of a DP, however, would violate locality. As a result, DPs can only enter agree as a whole, as this does not involve ‘subextraction’ or ‘sub-agree’. Doubling, which by definition involves DP associates, can thus not be found in *split-agreement* languages. Crucially, if *pro* serves as the associate, as in simple (i.e. non-doubling) cliticization constructions, absence of a phonological matrix obviates the island effect if Merchant (2001) is correct that phonologically silent categories impose looser locality conditions than their overt counterparts. This would explain why *split-agreement* languages permit simple cliticization: *split*-Agree between the covert category *pro*, [*gender*] in AgrO and [*person*] in Cl would not violate locality. This idea makes certain predictions and implications for the checking properties of DPs as opposed to empty categories, which are subject to further investigation.

<sup>23</sup> Originally, principle (53) was proposed in conjunction with the principle in (i):

(i) A strong feature instructs PF to pronounce the copy in a chain with which it is in a feature-checking relation.

The two principles impose certain restrictions on the possible operations which can be performed in the overt syntax (see Richards 2001 for details).

Viewing Agree as an instruction for pronunciation at PF, (54) can derive the OVERT DP-ASSOCIATE CONSTRAINT in (53), if all-at-once Agree is viewed as an unambiguous instruction for pronunciation at PF. On the other hand, *split*-Agree between a DP and two distinct sets of phi-features is ambiguous, leading to a violation of (54). This means that in a split-checking derivation the associate receives contradictory information with respect to where it should be pronounced, by both the Clitic Phrase and the Agr-OP. No such problem arises when *split*-agree takes place with *pro* which is unpronounced. Having derived the OVERT DP-ASSOCIATE CONSTRAINT in (53) on the basis of (54), it is then predicted that the associate of the clitic in split-languages is forced to be a *pro*.<sup>24</sup>

I will now return to the question regarding the overtness of participle agreement. One of Sportiche's (1992/96) motivations for reviving the idea of movement of the clitic is that participle agreement happens when a DP-object moves to the left of the participle.<sup>25</sup> This is considered one of the strongest arguments favoring the movement approach. However the argument is based on a particular view of how agreement is realised. In Sportiche's system the agreement happens by movement of the *pro* to the spec-CIP at LF for identifications of features with the clitic. Under the assumption that *pro* will move through all the spec positions, its movement via spec of AgrO will trigger the agreement on the participle.

One problem that this approach has, common in all movement approaches, is that it predicts that agreement will be overt as long as there is movement of the object. However, Italian data from unaccusatives (55a) and from the so-called Absolute Small Clauses (55b) show that agreement can also be activated with objects which remain in situ.

---

<sup>24</sup> I'm grateful to Norvin Richards for his help in the developments of this idea.

<sup>25</sup> The other main reason for maintaining some version of a movement analysis comes from extraction properties of the clitics (see Sportiche 1996, for discussion). The observation involves structures with preposition stranding and extractability out of DP. Thus in French, there is no preposition stranding by movement; clitics do not allow preposition-stranding either. Secondly, extraction out of a DP is only permitted when the extracted phrase could otherwise be the possessor (cf. Giorgi and Longobardi 1991). Similarly cliticization out of a DP is only permitted if the DP is the possessor.

- (55) a. e partita Maria  
 have-3<sup>rd</sup> sg left-fem-sg maria-nom  
 “Maria has left”
- b. Conosciutala, ...  
 known-fem-sg her-cl-fem-sg  
 “Having known her,...”

In the split-checking system the problem imposed by data like (55) does not arise. According to my proposal overt agreement will result as long as the *[gender]* and the *[number]* features need to be checked. Thus participial agreement is feature licensed and its morphological realisation depends on whether the relevant features have been checked in the overt syntax or not; this is expressed in (56), following Guasti and Rizzi (1999).

- (56) *If a feature is checked in the overt syntax then it is expressed in the morphology* (Guasti and Rizzi, 1999)

Thus the agreement in the participle is realised when either *pro* or a full DP checks its *[number]* and *[gender]* features independently of whether it needs to check person with the clitic. Note that under this view, no additional assumption is employed, namely, there is no need to assume that overt movement of the object takes place.

### 3.3.2.1 Crosslinguistic evidence: Clitic doubling and Participle Agreement in complementary distribution

The data in (57)-(62) show that languages with productive clitic doubling of direct objects (i.e. Greek, Albanian, Bulgarian, Spanish, Romanian and Taqbaylit Berber<sup>26</sup>) lack participle agreement with direct objects.

- (57) Tin eho agorasi tin turta (Greek)

<sup>26</sup> I'm grateful to Jamal Ouhalla for pointing out these data to me.

her-cl-fem-acc have bought-3<sup>rd</sup> sing the cake-acc-fem

“I bought the cake”

- (58) John e ka lyer (ate/deren) (Albanian)

john her-cl-fem-acc has-3<sup>rd</sup> sing painted it/the door-acc

“John has painted it”

- (59) At sam ja procel (knigata) (Bulgarian)

I am it-cl-fem-acc read-sing-masc (subject agreement) the book-acc

“I have read the book”

- (60) La he visto/\*a (a ella/a Maria) (Spanish)

her-cl-fem-acc has-I seen her-full pronoun/Maria

“I have seen her/Maria”

- (61) L’ am văzut pe ministru (Romanian)

Him-cl-acc have-I seen the minister

“I have seen the minister”

- (62) zri-x=t umcic (Taqbaylit)

saw-I=it cat

‘I saw the cat.’

The above facts should be contrasted with the data in (63)-(66) below, where direct object Participle Agreement is present and Clitic Doubling is ruled out:

- (63) (\*=T) t-lsa (=t) tfruxt. (Tarifit) (from Ouhalla 2004)

(=*it*<sub>ACC</sub>) 3F-wear (=it<sub>ACC</sub>) girl

‘The girl wore it’

- (64) l’ he vista (\*la noia) (Catalan)

her-cl-acc have-I seen-part agr the girl

“I have seen her - the girl”

- (65) l’ha vista (\*la ragazza) (Italian)

her-cl-acc have-I seen the girl-acc

“I have seen her – the girl”

- (66) Paul les a repeintes (\*les tables) (French)

paul-nom them-cl-acc has-3<sup>rd</sup> sing repainted the tables-acc

“Paul has repainted them – the tables”

Thus, languages with grammatical direct object participial agreement have ungrammatical direct object Clitic Doubling and vice versa. The complementarity of clitic doubling and participle agreement in clitic languages is summarized in Table (1):<sup>27</sup>

Table (1): *The complementarity between Clitic Doubling and Participle Agreement*

Languages	Clitic Doubling	Participle Agreement
<b>Greek</b>	YES	NO
<b>Argentinean Spanish</b>	YES	NO
<b>Catalan</b>	NO	YES
<b>Romanian</b>	YES	NO
<b>Albanian</b>	YES	NO
<b>Bulgarian</b>	YES	NO
<b>French</b>	NO	YES
<b>Italian</b>	NO	YES
<b>Serbo-Croatian</b>	NO	NO
<b>Taqbaylit</b>	YES	NO
<b>Tarifit</b>	NO	YES

### 3.3.2.2 Language specific evidence: French Agreement

The Doubling/ Agreement correlation in (51) holds at two levels: at a language level and at a structure specific level. Thus, as already mentioned if a language has Participle Agreement it does not have Clitic Doubling though, it is known (Kayne 2000) that in some dialects of French, Clitic Doubling is

<sup>27</sup> Table (1) contains a language, i.e. Serbo-Croatian, which lacks both clitic doubling and participle agreement. As discussed in the Introduction of this Chapter, lack of participle agreement in a language does not entail that clitic doubling is an option in this language and vice versa; it's the presence of one that excludes the other.

obligatory with 1<sup>st</sup> and 2<sup>nd</sup> person pronouns.<sup>28</sup> The predictions of the proposal put forward above would be that even in these less productive cases of Clitic Doubling, Participle Agreement cannot co-occur with a doubled DP. The prediction is borne out, as shown by the following data:

- (67) a. \*Il m'a mis moi sur la liste  
 b. Il m'a mise moi sur la liste  
 he me-cl-acc has-3<sup>rd</sup> sg put me-full-pronoun on the list  
 "He has put me on the list"
- (68) a. \*Ils t'auraient repris toi (mais pas ton mari)  
 b. Ils t'auraient reprise toi (mais pas ton mari)  
 They-nom you-cl-acc-fem would have-3<sup>rd</sup> pl taken you-full  
 pronoun (but not your husband)  
 "They would have taken you but not your husband"

Both (67a) and (68a) become grammatical when Participial Agreement is not phonologically realised. This is in accordance with the proposal put forward.

### 3.4 Interpretational effects of Doubling constructions

As mentioned in Section 3.3.2, the intuition behind the proposed correlation is that the clitic in Clitic Doubling languages subsumes the function of object agreement in non-doubling languages. The interpretational function relevant to our discussion is that both Clitic Doubling and participial constructions are semantically associated with "completion of the action". When either Clitic Doubling or participle agreement takes place in a language, the meaning of the structures involves certain presuppositions similar to the presuppositions carried in structures that express *aspectual perfectivity*. We could say that in this respect, Clitic Doubling and Participle Agreement function like conventional implicatures which can, in appropriate circumstances, be subject to cancellation or coercion.

Consider the following data:

---

<sup>28</sup> Kayne (2000) suggests that Clitic Doubling is obligatory with 1<sup>st</sup> and 2<sup>nd</sup> person pronoun because the full pronoun has been assigned structural case.



- (69) a. tis pragmatopiise tis iposhesis tis i nea kivernisi  
 them-cl-acc-fem accomplish-3<sup>rd</sup> sg-past the promises-acc her-poss  
 the new government-nom  
 “The new government accomplished its promises”
- b. dhen tis pragmatopiise tis iposhesis tis i nea kivernisi  
 NEG them-cl-acc-fem accomplish-3<sup>rd</sup> sg-past the promises-acc her-  
 poss the new government-nom  
 “The new government did not accomplish its promises”

(69a) has the meaning that the new government accomplished all the promises they had given. The utterance would be false if the new government had managed to achieve their promises only in part.<sup>29</sup> This reading is better recognised, if we try to negate example (69a); the negation in (69b) is felicitous even if the new government has failed to realize one of its promises. Therefore in order for (69b) to be true the conditions are exactly the opposite of the ones in (69a).

Similar interpretational effect can be observed in constructions with overt participle agreement in French.

- (70) a. J’ai offert une bague à Marie  
 I-nom have-1<sup>st</sup> sg offered a ring-acc to Mary  
 “I offered Mary a ring”
- b. Je l’ai offert, à Marie
- c. Je l’ai offerte, à Marie  
 I-nom her-cl-acc have-1<sup>st</sup> sg offered a ring-acc to Mary  
 “I offered her a ring”
- (71) a. Elle les a pris(es)  
 she-nom them-l-acc has-3<sup>rd</sup> sg taken

<sup>29</sup> Naturally there is the issue of “majority” involved; like in every other case that involve the concept of completion of the action, if the biggest part of the action in question is completed the truth value of the sentence is not an absolute. This applies in our examples as well. That is, if the new government has managed to fulfill nine out of ten promises, sentence (68a) would hardly be characterized as false; though there is a personal judgmental value in these cases. However, I think that all native speakers would agree that if the new government has realized its plan to, let’s say, 60%, no native speaker would characterize (68a) as true.

“She has taken them”

b. ??Elle les a toutes pris

c. Elle les a toutes prises

she-nom them-cl-acc-fem has-3<sup>rd</sup> sg all taken

“She has taken them all”

Example (70b) could get the interpretation that “I offered the ring to Mary but she declined it”, while (71c) can only mean that “I offered her a ring and then she took it”. The contrast becomes clearer with the following minimal pair<sup>30</sup>.

(72) a. Je l’ai offert à Marie, mais elle l’a refusée

I-nom it-cl-acc-fem have-1<sup>st</sup> sg offered to Mary but she-nom it-cl-acc-fem has-3<sup>rd</sup> sg refused

b. ??Je l’ai offerte à Marie, mais elle l’a refusée

I-nom it-cl-acc-fem have-1<sup>st</sup> sg offered to Mary but she-nom it-cl-acc-fem has-3<sup>rd</sup> sg refused

“I gave it to Mary but she refused it”

The observation that Clitic Doubling constructions behave like conventional implicatures is indicated by data like (73) and (74):

(73) a. Tus gnorise tus sigenis tu Petru i Maria, # ala ohi olus

them-cl-acc meet-3<sup>rd</sup> sg-past the relatives-acc the Peter-gen the Maria-nom, but not all

“Maria met Peter’s relatives, but not all of them”

b. Gnorise tus sigenis tu Petru i Maria, ala ohi olus

meet-3<sup>rd</sup> sg-past the relatives-acc the Peter-gen the Maria-nom, but not all

“Maria met Peter’s relatives, but not all of them”

(74) a. To dhiavase to vivlio tu Chomsky o Kostas, # ala ohi olo vevea

---

<sup>30</sup> I am grateful to Michal Starke and Eric Mathieu for the data and judgments.

It-cl-acc read-3<sup>rd</sup> sg past the book-acc the Chomsky-gen the Kostas-nom, but not all of course

“Kostas read the book by Chomsky, but not all of it”

- b. Dhiavase to vivlio tu Chomsky o Kostas, ala ohi olo vevea  
read-3<sup>rd</sup> sg past the book-acc the Chomsky-gen the Kostas-nom,  
but not all of course

“Kostas read the book by Chomsky, but not all of it”

(73a) and (74a) are not subject to cancellation, while (73b) and (74b) can have the reading of partially fulfilling the action described by the verb. That is, in (73a) the set of “the relatives” is defined by Clitic Doubling in such a way that it must include all the relatives; in contrast, the undoubled DP *tus sigenis* (the relatives) in (74b) does not carry the same presuppositions, that is, its meaning is not necessarily exhaustive.

It was first observed by Obenaeur (1992, 1994) and discussed by Adger (1994) and further by Deprez (1998) that the optionality in the distribution of the participle agreement in French *wh*-structures involves differences in the interpretation. In the presence of the participle agreement with a *wh*-word like *combien* (how many) (75a), the *wh*-word is presupposed, that is, D-linked, while D-linking is not obligatory in the absence of the participle agreement (75b) (examples from Deprez, 1998).

- (75) a. Combien de fautes a-t-elle faites  
b. Combien de fautes a-t-elle fait  
“How many mistakes has she made?”

The difference in the interpretation between (75a) and (75b) along the present discussion can be attributed to the D-linking properties of *combien*, which in the presence of the agreement acquires an exhaustive reading. Similar D-linking effects we can observe in Clitic Doubling constructions, as the clitic denotes discourse old information.

### 3.5 Predictions for developmental studies

The proposal put forth above is supported by evidence from language acquisition. Comparative studies on the acquisition of clitics lead to the conclusion that children acquire some of the clitic properties (i.e. clitic placement, the relative order of clitics) simultaneously, while the acquisition of other properties, such as the emergence of clitics, varies crosslinguistically. Wexler, Gavarro and Torrens 2003, Tsakali and Wexler 2003<sup>31</sup> have demonstrated that clitic omission takes place in languages that have Participle Agreement, while in languages that lack Participle Agreement no significant clitic omission is attested.

There are several hypotheses in the literature concerning which aspects of grammar cause the omission of object clitics, including difficulties in forming A-chains (Guasti 1993/94, extending Borer and Wexler's 1987 work on maturation of A-chains), or children's inability to always form a full-fledged clausal structure, i.e. truncated clause structure (Hamann, Rizzi and Frauenfelder, 1996; Haegeman 1996), or problems in coping with Multiple Spell-Out operations (Avram 2000). Nevertheless, as discussed in Chapter 5 below none of these proposals can explain the crosslinguistic variation in clitic omission, in particular the correlation between clitic omission and participle agreement.

The suggestion made in Tsakali and Wexler (2003), following Wexler (to appear), suggest that clitic omission and its cross-linguistic variation stem from a universal principle that prevents children from carrying out certain computational processes of syntax, namely the Unique Checking Constraint (Wexler 1998), that applies to the Grammar as a whole and allows children to accept and produce ungrammatical constructions. Within the spirit of the Unique Checking Constraint, clitic omission will be expected to be attested in *split agreement* languages (Italian, French) but not in Clitic Doubling languages, i.e. Greek and Spanish. The idea is that in *split*-languages (Italian, French), *pro* needs to check features on two heads (AgrO and Cl) while Cl-dependencies in Greek are exhaustively licensed by a single checking relation (the object checks features against Cl). As a result, the

---

<sup>31</sup> In Chapter 5 I discuss the issue of Clitic Omission and how it correlates with my proposal in detail.

Unique Checking Constraint applies to *split*-languages, where it induces omission, but not to Clitic Doubling languages such as Greek and Spanish.

This prediction is borne out as clitic omission occurs in languages like French and Italian but not in Greek and Spanish.<sup>32</sup>

---

<sup>32</sup> As also discussed in Chapter 5, it remains an open question whether the generalisation I explore can also capture the facts of the Optional Infinite Stage for subject-clitics and subject Clitic Doubling.

### **3.6 Conclusions- Further Discussion**

All studies on Clitic Doubling so far (including the present proposal) deal with the conditions that determine the impossibility of Clitic Doubling. The generalisation in (1) accounts for the fact that Clitic Doubling does not appear in languages with Participle Agreement but does not make any predictions on whether Clitic Doubling will indeed exist in a language that lacks Participle Agreement.

Table (1) in Section 3.4.1 provides some examples of languages (e.g. Serbo-Croatian) that have clitics but lack both Clitic Doubling and Participle Agreement. That is to say, the generalisation explored here is not a bi-conditional. Thus, we should not expect a language that lacks Participle Agreement to have Clitic Doubling, although we should expect the opposite. The former would make the wrong predictions with respect to e.g. Spanish, as both Argentinean and Peninsular Spanish lack participle agreement but only Argentinean Spanish has clitic doubling of direct objects. Moreover the present analysis offers in particular no explanation why clitic doubling may affect pronouns and all (animate) specific objects in e.g. Rioplatense Spanish, while it is limited to pronouns and IO DPs in Peninsular Spanish and Catalan.

## **CHAPTER 4**

### **WHAT DO WE KNOW ABOUT THE ACQUISITION OF CLITICS?**

#### **4.0 Introduction**

In this chapter I outline some of the general questions that concern developmental studies and introduce some of the particular problems that pronominal clitics raise for such studies.

During the last decade many acquisitionists have studied the developmental properties of pronominal elements, namely their placement, their emergence and the differences they exhibit with respect to their different syntactic position (i.e. subject versus object clitics and indirect versus direct object clitics). Thus the aim of this chapter is to introduce the relevant issues and previous results and prepare the ground for the analysis elaborated in the next Chapter (Chapter 5) with respect to clitic omission in child grammar.

The chapter is organised as follows: In Section 4.1, the general problem of language acquisition is discussed and the main theoretical approaches are sketched. The discussion continues (Section 4.2.1) with the presentation of developmental processes as these are construed within the framework of generative grammar, while in Section 4.2.2 I turn to the relevance of the study of acquisition for theoretical linguistics. In Section 4.3 the focus shifts to the study of the acquisition of pronominal elements and its significance. After the presentation of the general morphosyntactic properties of pronominal clitics (Section 4.4), the discussion in Section 4.5 revolves around facts drawn from the literature on the acquisition of clitics, evaluating simultaneously the predictions that various syntactic theories are associated with. Finally in Section 4.6, I present the main conclusions that emerge from the literature review.

## 4.1 Plato's problem and possible answers

There is no doubt, irrespective of the theory that one adopts, that all speakers of a language have developed a certain system of knowledge. The question that follows from this is an ancient one, usually referred to as Plato's problem: Where does knowledge of language come from? In other words, how do human beings come to the point of being able to judge what is ill-formed or well-formed, what can or cannot have a specific meaning, or what is ambiguous in their native language?

There are several ways of answering this question. In general we can talk about two main frameworks that approach the topic from a completely different perspective: the behaviourist and the generative approaches. Following Guasti's (2002) classification,<sup>1</sup> we can talk about four hypotheses advanced on the question of learnability, each of them representing a different framework for investigation.

i. Language learning through imitation: according to this hypothesis children learn language by imitating adults, that is, by trying to repeat what they hear. In order for this hypothesis to be valid, we would expect children's production to be close to what they have been exposed to. However this is not the case.

Children constantly produce novel utterances in the sense that the form of their utterances is not identical to what they derive from the environment. Moreover children produce utterances that they cannot have heard since they are ungrammatical and adults don't use them. One such example is the over-regularization of the past tense of irregular verbs. Children say *goed* instead of *went* and *singed* instead of *sang*, although they have never heard these forms from adults. Another example is that children produce negative questions like (1) (see Guasti, Thornton and Wexler 1995, examples from Guasti 2002).

- (1) a. What does he doesn't eat?  
b. Why could he couldn't wash his hands?

---

<sup>1</sup> The discussion in this section is a summary of Guasti's (2002) discussion of the topic.



A third example comes from Thornton (1990) who showed that English children produce long-distance extraction questions in which an interrogative pronoun occurs twice, in both sentence initial and intermediate positions, like in (2).

(2) What do you think what the puppet has eaten?

All the examples above show that children's language production goes beyond the linguistic input and therefore imitation cannot play an exclusive role in language acquisition.

ii. Language learning through reinforcement: behaviourist psychologists drawing a parallel between general-purpose mechanisms that are suggested to take place in other learning processes in animals and humans (Skinner 1957) and language as a learning mechanism claimed that knowledge of language emerges through a mechanism of reinforcement, that is, through a conditioned association between stimulus and response. The idea is somewhat similar to the imitation hypothesis, in the sense that children produce what they hear from their environment. However, as already pointed out regarding the imitation hypothesis children do not only produce utterances they have heard. To the contrary, children come up with novel sentences all the time. Moreover parents generally do not pay attention to the ungrammaticality of the utterances that children produce. This is illustrated in the following example (taken from Guasti 2002), which shows that the adult responds to the child's utterances without commenting on their ill-formedness.

(3) Adam: Where penny go? (Adam, 2;5)

Mother: I don't know.

(4) Adam: Where penny go? (Adam, 2;5)

Mother: Didn't you drop your pennies on the floor?

The dialogue above shows that the adult responds to the child's questions without commenting on their ungrammaticality. This is an argument against the

behaviourists' approach in two senses: first it shows that adults do not provide enough reinforcement for the children and, secondly, by the same token, if this is an example of reinforcement we have no reason to believe that Adam will reach a point where he will produce the grammatical forms of the questions in (3) and (4).

However we do know that Adam will reach a stage where his questions will be grammatical and the "lack of reinforcement" will not affect his knowledge of language.

Thus, the behaviourists' model seems quite simple but as Chomsky (1959) points out in his original review of Skinner (1957), it cannot explain how language is acquired and neither can it characterize human linguistic competence.

**iii. Language learning through association:** according to this hypothesis, which is best known in its current guise of connectionism (Elman 1993, Elman et al 1996, Rohde and Plaut 1999 among others), the brain works as a neural network, consisting of several interconnected neuron-like processing units, modified by learning associations between input (stimulus) and output (response) patterns.

There are roughly two main phases; the primary learning phase and the post-primary learning phase. During the learning phase the network is presented with examples of both input and output. In the second phase, the network can generalise to new stimuli provided that they belong to the same class of stimuli used in the training phase. The main idea that connectionist models are based on is that language acquisition operates on the basis of analogy or similarity and statistical frequency.

To illustrate how connectionism perceives the process of language acquisition, we will use an aspect of acquisition that has been extensively examined within this framework, namely the acquisition of English past tense.

Connectionists claim that the acquisition of regular and irregular past tense forms emerges through associations between the phonetic properties of verb stems and the phonetic properties of their past forms and in generalizing these associations to similar-sounding words (Rumelhart and McClelland 1986). In other words children learn that verbs ending in *alk* (e.g. *talk*, *walk* etc) are associated with the past tense form *alked*; similarly verbs that have the pattern

*consonant+(consonant)+i-nk* (e.g. *drink*) are associated with a past tense form in which *-i-* turns into *-a-* (i.e. *drank*). Thus children will exploit these associations to form the past tense of verbs and whenever presented with a new verb they will be able to form the past tense based on the specific phonetic pattern that the verb is associated with (Rumelhart and McClelland 1986, Plunkett and Marchman 1993 among others).

On closer inspection there are several problems with this framework. As Marcus (1995) points out connectionist model “overregularise vowel-change verbs (*sing* becomes *singed*, rather than *sang*) less frequently than no-vowel-change verbs, while children overregularise the former more frequently than the later. Moreover these models cease to overregularise verbs only after an abrupt change in the training input, while children do the same although there is no change in the input”. Stromswold (1990) found that children treat verbs like *have*, *be* and *do* differently when these are used as main verbs from when these are used as auxiliaries. For instance, children say *I doed it* instead of *I did it* and *I haved it* instead of *I had it*, but they do not say *Doed you come* instead of *did you come* or *I haved eaten* rather than *I had eaten*. Guasti (2002) also discusses cases of people with language impairment whose production of regular and irregular verbs is differently affected.

It is therefore unclear how these models can explain all the intrinsic and abstract aspects of linguistic knowledge, as these are discussed in Chomsky’s review of Skinner (1957). Very little work has been done in the acquisition of syntax within these models but it seems difficult if not impossible that they can account for the ambiguity of sentences or constraints accounting for weak ungrammaticalities.

However associative methods shed light on some components of grammar and by investigating the precise form of the emergence of knowledge can enlighten us with respect to how parts of grammar get activated. One such example is Pinker (1997), who includes in his word-and-rule theory both rule-based and associative components. It seems therefore compelling at this stage that any connectionist model would have to incorporate innate structure, rule-based mechanisms and constraints as well as associations.

**iv. The Innateness Hypothesis:** The lack of a satisfactory answer to the (initial) question of where language comes from led Chomsky (1959) to argue that language is partially innate. This hypothesis was mainly developed by Chomsky, arguing against behaviourist views. The essential idea is that certain aspects of our linguistic knowledge are “genetically determined”. The most compelling arguments are the universal properties of language and the poverty of the stimulus, that is, that humans know more than it is possible for them to have learned given the input they are exposed to. Consequently children do not learn language via a single specific mechanism; mechanisms of learnability in this framework are understood as the triggers for developing the linguistic capacity of human beings.

In the next Section I discuss some of the basic notions and concepts of the innateness hypothesis to make it clear how language is perceived within this framework.

## **4.2 Language Acquisition within the framework of Generative Grammar**

### **4.2.1 Basic notions and concepts in the study of language acquisition**

Within the framework of generative grammar some aspects of our linguistic knowledge are argued to be innate. This hypothesis is maintained throughout my account of the acquisition of pronominal elements. For this reason I start the discussion with some of the main concepts and considerations that are tightly linked to the analysis that follows.

According to the innateness hypothesis there is no explicit teaching. In first language acquisition, and unlike second language acquisition, no systematic instruction takes place. Parents do not teach their children the rules of the language, nor do they instruct them in different ways of expressing their thoughts. Language development is thus spontaneous.

Naturally there is exposure to **linguistic input**. Language is assumed to be triggered by exposure to the linguistic community.<sup>2</sup> Consequently, children learn on the basis of their innate endowment supplemented by what they hear, that is,

---

<sup>2</sup> For a discussion of how language is triggered see Gibson and Wexler (1994).

on the basis of **positive evidence**. Children are very rarely corrected and if so, they are usually corrected with respect to pragmatic rules (that is politeness etc.) and not with respect to grammatical relations. Parents' corrections that would inform children of what is not possible in their language would be called **negative evidence**. As noted in Section 4.1, negative evidence is rare and it does not seem to improve children's knowledge/linguistic behaviour (see McNeill's 1966 famous example of how a parent's correction fails to be taken into account with double negation). In recent years many studies have been conducted to establish the relation between negative evidence and children's linguistic behaviour (see Bohannon and Stanowicz 1988, Demetras, Post and Snow 1986, Hirsh-Pasek, Treiman and Schneiderman 1984, Brown and Hanlon 1970, Bowerman 1988), Morgan and Travis 1989, Marcus 1993). Although this is still an issue of debate, it would be fair to say that, in general, negative evidence is not considered a systematic source of information for children (see Guasti 2002).

Children's language acquisition goes through parallel stages across languages. This is considered to be an important argument for the innateness hypothesis and the existence of a Universal Grammar. Regardless of the specific language that children are exposed to, their linguistic behaviour is alike crosslinguistically. The assumption until the late '80s was that languages are characterized by universal principles, some of which are absolute (e.g. the principle of structure dependence), and some of which are parameterised, providing a set of alternatives (e.g. the null subject parameter). In more recent developments of the theory parameterization is associated with the features of functional and lexical categories. Given that languages differ in principled ways, the question at this point concerns children's linguistic behaviour on those components of universal grammar that are responsible for the differences among languages, that is, the parameters.

This question brings us to the issue of **parameter setting** that has been a central issue in acquisition studies since the early '80s. Despite the work that has been done regarding the question of how children acquire the parameters that characterize their language, there seem to be no decisive answer at a theoretical level. Smith and Cormack (2002/2005) discussing the issue, chart the possibilities

that the literature provide us with: default setting, random settings and no settings. Each of these three approaches has some viability.

**i. Default Setting Hypothesis:** Hyams (1986), representing the first possibility, argued that the pro-drop parameter has a default positive setting, accounting in this way for the absence of parametric differences in the output of children learning pro-drop and non-pro-drop languages. However the null subjects in the language of children learning a pro-drop language (e.g. Italian) have different properties from the null subjects in the language of children learning a non-pro-drop language (e.g. English). Moreover the notion of default runs into the theoretical problem that it seems to be arbitrary and its principled characterisation proved to be impossible (Borer and Wexler 1987).

**ii. Random Setting Hypothesis:** Turning to the possibility of random settings, the idea is that different children might assign different values to the same parameter. Indications of such a possibility, apart from variation in children's output, can be found in adult language, that is, in the existence of dialectal and idiolectal differences among speakers of the otherwise same language.

**iii. Unfixed Setting Hypothesis:** Finally, according to the third possibility, parameter setting might simply remain unfixed. There is a temporary stage in the process of first language acquisition in which children's categories are un-set or underspecified (e.g. Hyams 1996). Such an idea finds support in the optionality that appears in child grammar. Anderson's (2002) discussion of *tough*-movement is an example of how children accept and produce both adult-like and non-adult – like interpretations for sentences like “The frog is hard to ride”. The explanation is that the relevant parameter, associated with a small set of lexical items, has not been specified.

The theoretical problem with this scenario concerns the temporal point when parameters are finally set. Even if we assume that the idea of underspecification, which is characteristic of child grammars, can account for early developmental stages, it remains unclear how and when speakers set their parameters right.

A natural suggestion on the other hand is to assume that parameters have been set from very early on but complexities of the computational system affect children's grammar (e.g. Wexler 1998). In this approach difficulties and non-adult like behaviour result from principles that constrain child grammar in specific ways. These constraints disappear as time goes by, by being replaced with adult-like ones. However, the question remains how exactly child grammar grows. In general, there are two approaches to this question which have triggered extensive discussion in the literature since the early '80s: the issue of Continuity versus Maturation.<sup>3</sup>

The **Continuity** versus **Maturation** discussion addresses a major issue in first language acquisition, attempting to determine and explain children's transition from one stage of development to another. According to the continuity hypothesis (e.g. Pinker 1984, Hyams 1987) the development is viewed as a process in which the child acquires parametric values when they are presented with the relevant linguistic input. It is thus presupposed that structures pre-exist and are associated with parametric values that have not been activated yet (Hyams 1987, Pierce 1992, Weissenborn 1990, Wexler 1994). The child grammar gradually changes and there are transitional steps from one stage of acquisition to the next one. What triggers these transitions is linguistic data and when the process is complete the mental representation of the grammar has reached its mature (final) stage.

According to the maturation hypothesis the crucial role for reaching the final stage is played not only by the triggering input but also by intrinsic changes that happen by a biological programme affecting the language module exclusively. Thus maturational constraints can affect particular principles of universal grammar (e.g. Felix 1984, Borer and Wexler 1987, 1992), or, according to a different school within the maturation approach, it can affect only the maturation of the set of functional categories, that have been arguably missing at very early

---

<sup>3</sup> To a certain extent the debate regarding Continuity versus Maturation is rather confusing, mainly for the reason that one can hardly observe any significant difference in the predictions that the two hypotheses make for syntactic structures in child grammar. Nevertheless, the questions addressed from both hypotheses are particularly relevant to any study of language acquisition and introduce considerations that demand more research.

stages (e.g. Guilfoyle and Noonan 1988, Radford 1990, Tsimpli 1992 among others).

#### **4.2.2 Reflections of child grammar on syntactic theory**

As discussed in the previous section, it has been an uncontroversial assumption within the framework of Generative Grammar that language acquisition cannot be achieved unless the child is endowed with substantial innate linguistic knowledge. This assumption generates the need for a theory of Universal Grammar, that is, a grammar that includes the set of principles that unify the underlying structure of human language as well as the set of parameters that define the range of variation among languages.

Consequently a theory of acquisition must provide an approach and ideally an answer to how linguistic knowledge emerges. In order to explain how language is acquired, one needs to establish first what children know at the various stages. Theories of syntax that deal with the adult-like stage cannot provide us with information regarding the emergence of the linguistic knowledge; after a certain stage, native speakers do not produce ungrammatical sentences (putting performance errors aside). The ungrammatical minimal pairs that linguists create do not always derive from any possible grammar. On the contrary children, as they go through developmental stages, provide us with the information of what is present at each stage and what is not. Thus, we could argue that at every stage a possible human language is produced, despite the fact that children's utterances might be ungrammatical in the language they are acquiring.

The ideal description and explanation of these grammars determines the validity of any syntactic theory.<sup>4</sup> Accordingly, the importance of developmental studies lies in the fact that child grammars can lead us to the various problems that a syntactic theory needs to account for, e.g. what types of principles are violated at each stage, as well as the adherence to principles of Universal Grammar that are not overtly manifest in the ambient language. The violation of principles that lead

---

<sup>4</sup> The question of how to evaluate syntactic theories depends on how we describe the facts of language acquisition. In this respect the problem for incorporating more data from developmental studies into theoretical syntactic accounts is still a methodological one.



to ungrammaticality could be related to different components of grammar at each stage.

Acquisition studies of pronominal elements have traditionally focused on the grammatical knowledge of syntactic properties of binding relations (Chien and Wexler 1990, Grodzinsky and Reinhart 1993, Thornton and Wexler 1999 among others). In particular studies of acquisition of pronominal reference have shown that children are sensitive to rich inflectional morphology and that the presence in Spanish and in Greek of syntactic object clitics and the absence of those elements in Germanic languages (e.g. Dutch) accounts for the absence of the Delay of Principle B Effect in Spanish and in Greek and its presence in child Dutch (see Baauw 2000 for comparison between Spanish and Dutch, and Varlokosta 2001 for Greek). However these studies provide us with very little information regarding the nature of pronominal reference in the early stages of grammar, the emergence of pronominal elements, their syntactic position and their relation to other syntactic phenomena.

One of the aims of this thesis is to explore and determine the limits of early grammar with respect to the emergence of pronominal clitics. Pronominal clitics have raised a number of questions for syntactic theories in the last four decades (see discussion in Chapter 2 and 3); nevertheless the tentative interaction of parameters determining the properties of clitics with other parameters and the provisional role of clitics in the development of other constructions remain unaddressed. Thus acquisition of pronominal clitics can provide insight into the structure of Universal Grammar. More specifically it can enlighten us about the acquisition of argument structure, incorporation-phenomena, functional structure, the computational system of the grammar and the semantic/pragmatic knowledge of the pronominal system in general. In this thesis I explore the interaction of the knowledge of the checking mechanisms in a clitic-language with the appearance of the clitics in this particular language.

In the next section I discuss the general morphosyntactic properties of clitics that are relevant for the developmental studies that are presented in the following section.

### 4.3 General morphosyntactic properties of pronominal clitics

Clitics' syntactic behaviour differs from that of full pronouns and full argument DPs (see Kayne 1975 and Cardinaletti and Starke 1999).<sup>5</sup> The main properties that distinguish them from the other NPs are that they cannot be used in isolation, they cannot be conjoined, they cannot be modified, cannot receive focal stress and cannot be separated from the verb (unless by another clitic, or under very special circumstances in some Romance varieties, as Hamann et al, 1996 report). These properties seem to hold for both subject and object clitics as demonstrated in the examples below (the French examples from Hamann et al, 1996 show the aforementioned properties for subject-clitics, while the Greek ones exhibit the similar behaviour of object clitics).

- (5) a. Qui est venu? \*Il.  
Who has come? He
- b. Pjion idhes? \*Ton  
who-acc see-2<sup>nd</sup> sg-past? He-cl-acc  
“Who did you see? \*’im”
- (6) a. \*Il et elle viendront.  
He and she will come
- b. \*Ton ke tin ksero/ ton ke aftin ksero  
him-cl-acc-masc and her-cl-acc-fm know-1<sup>st</sup> sg-present/ him-cl-acc-masc and her-full pronoun-acc-fem know-1<sup>st</sup> sg-present  
“I know him and her”
- (7) a. \*Ils deux viendront  
They two will come
- b. \*Dio tus ksero  
two them-cl-acc-pl know-1<sup>st</sup> sg present  
“I know them both”
- (8) a. \*IL viendra (pas Marie)  
He will come (not Marie)

---

<sup>5</sup> The term “full pronouns” refer to both *weak* and *strong* pronouns in the Cardinaletti and Starke (1994) sense. For the purposes of the discussion here the distinction does not appear to be relevant.

- b. \*TON ksero (ohi ti Maria)<sup>6</sup>  
 him-cl-acc know-1<sup>st</sup> sg-present (not the Maria)  
 “I know HIM (not Mary)”
- (9) a. \*Il probablement viendra  
 He probably will come
- b. \*O Iannis ton profanos kseri  
 the John-nom him-cl-acc obviously know-3<sup>rd</sup> sg-present  
 \*“John knows obviously him”

#### 4.4 Evaluating the predictions of syntactic theories of clitics

##### 4.4.1. The placement and the emergence of clitics

One of the important questions that concern us is the structural position of the clitics in child language. Ideally their position will enable us to differentiate among different syntactic approaches, although it is hard to have definitive evidence from acquisition that rules out any particular syntactic theory. In the literature there is little consensus regarding the position of the clitics, as it is not even obvious what the location that clitics reside in is. Thus the predictions of any syntactic theory are hard to evaluate on the basis of developmental data.

Nevertheless, as discussed in Chapter 2, syntactic theories can be grouped into three main approaches: the movement approach, the base-generation approach, and the functional approach (Sportiche 1996). According to movement approaches, clitics are base generated in the canonical object position and adjoin to the verb by incorporation. It is natural then to expect to find a stage in child language at which children misplace clitics. That is, we would expect the initial

---

<sup>6</sup> Clitics cannot be stressed and cannot be contrastively focused vis-à-vis a full DP. However, a clitic can receive contrastive stress when in corrective use of focus. E.g.

- (i) Speaker A: Ipes oti tin kseris?  
 Said-you that her-cl-acc know-you  
 “Did you say that you know her?”
- Speaker B: Ohi, ipa oti TON ksero.  
 No, said-I that him-cl-acc know-I  
 “No, I said I know HIM”.

order observed to be verb-clitic, as opposed to the clitic-verb order of adult language.

However, object clitics characteristically appear in the right position. Clark (1985) mentions that she finds a number of different kinds of errors involving clitics but she suggests that the use of the clitic after the finite verb in simple declarative sentences poses no problem for child grammar.<sup>7</sup> Moreover Pierce (1992) showed that French-speaking children (at ages ranging from the end of the first year to about 2;6) do not make errors in positioning clitics with respect to the main verb. Guasti (1993) provides a systematic account of clitic word order from production data in normally developing Italian-speaking children at the same age as Pierce's and she shows the same pattern with clitics adjoined to finite verbs: the clitic is always placed before the verb and not in a thematic object position after the verb. Additionally Schaeffer (1997) studying Italian object clitic pronouns in children aged from 2;1 to 2;6 found that object clitics did not follow the finite verb, as they should if they were generated in the thematic object position. Also Marinis (2000) studying the production of Modern Greek clitics reports that there are no mistakes with respect to their position.

Accordingly, we have quite consistent evidence in the literature that the position of the clitics in children's language is adult-like in both proclitic and enclitic environments; object proclitics never appear in the canonical object position, that is, postverbally.<sup>8</sup>

However one could claim that when children start using clitics, they have already acquired the movement properties that characterize them and therefore the lack of any positional errors does not tell us anything about the initial position that

---

<sup>7</sup> The errors reported by Clark (1985) refer mainly to the order of indirect-direct object clitics.

<sup>8</sup> However, there is indeed some evidence that children do not always place clitics in the right position. Petinou and Terzi (2000) point out a striking case of misplaced clitics from early typical and SLI Cypriot Greek children, where clitics often follow the finite verb, even in contexts where this is not allowed by adults. They attribute the misplacement of the clitics to children's incomplete knowledge of the properties of the Infl particles and their subsequent interaction with finite verb movement to M (located higher than T) that takes place in the language and is responsible for enclisis. Their claim is that children perceive Infl particles as phrasal, and are thus unable to check the V-features of M; consequently, they fail to perform V-to-M movement, with clitic misplacement as a result. This study illustrates an instance of clitic misplacement, a linguistic fact that calls into question the children's knowledge of the movement properties of clitics and their incorporation to the verb.

clitics start from. In such a case very little can be said about the predictions of movement theories with respect to the placement of clitics.

On the other hand, neither under the base-generation approach nor under Sportiche's view would one expect problems in child language with the position that clitics are realised.

In particular Sportiche's view seems at a first sight to be favoured by acquisition data in terms of the placement as well as the emergence of the clitic. According to his theory, accusative clitics are fully referential elements, which function as specificity markers. Schaeffer (1997/2000) exploring the implications of his theory, proposes that children fail to make the distinction between discourse-related and non-discourse-related referentiality. In the absence of this distinction children are allowed to optionally determine referentiality directly rather than through syntax, an option which is unavailable to adults. Hence, in her account syntactic marking of referentiality is not required in the early grammar. The predictions of this approach are confirmed as far as the emergence of clitics and weak pronouns is concerned in Italian and in Dutch respectively.

However recent studies on the emergence of clitics show that they do not appear simultaneously crosslinguistically. Thus, many studies report that clitics are often omitted until the age of 3 in languages like French (Rizzi et al. 1996, Friedemann 1993/1994, Hamann, Rizzi and Frauenfelder 1994, Jakubowicz, Muller, Kang, Riemer and Rigaut 1996, Jakubowicz, Muller, Riemer and Rigaut 1997). The same findings are confirmed for Italian early clitics (Schaeffer 1997/2000, Guasti 1993/94). On the other hand recent studies show that the emergence of clitics in Greek, Spanish and Romanian is fully acquired by the age of 2;4 (Tsimpli 2002, Tsakali and Wexler 2003, Wexler, Gavarro and Torrens 2003, Babyonyshev and Marin 2005). In the next Chapter I present my account for this crosslinguistic variation of clitic omission, where I discuss the findings of previous studies at length.

#### **4.4.2 Differences in the acquisition of Indirect and Direct Object Clitics**

The acquisition of indirect object clitics has received little attention up to now crosslinguistically while the acquisition of direct objects has been examined extensively in a number of languages, within both natural speech and elicited production studies. To my knowledge, Spanish (Lyczkowski 1999, Blasco 2000, and Andres 1988) and Romanian (Babyonyshev and Marin 2005) are the only languages in which the developmental properties of indirect clitics have been studied.

The results of these studies suggest that children have no particular problems with indirect object clitics and there is no significant difference between the development of direct and indirect object clitics. Lyczkowski (1999) analyzed the natural speech of three monolingual Spanish children available on CHILDES and found that indirect object clitics were produced fairly early (with the earliest point of production being 1;7, similarly to the direct object clitics) and were not omitted in obligatory environments (omission rate less than 1%). Wexler and Torrens (2000) examined the production of clitics within clitic doubling environments in the natural speech data of a monolingual Spanish child aged 1;7 to 3;11, and discovered that dative clitics were not problematic, with 23 indirect clitics out of 24 in obligatory environments. Moreover, Blasco (2000) elicited the production of dative and accusative clitics in simple clitic constructions and clitic doubling constructions by Spanish speaking children aged 1;9-2;10 and 2;2-2;10, respectively. According to her findings, clitics were omitted 17.7% of the time at the earliest ages (1;9-1;10), while the omission decreases to 4.5% by the age of 2;1, and completely disappears at the age of 2;2 and afterwards. Blasco points out that children's performance was similar for dative and accusative clitics. Finally, Anders (1988) run an elicitation experiment on Spanish indirect object clitics and reports that at least 68% of the 40 children tested (aged 2;0-3;10) show perfect use of all pronominal clitics, including indirect object ones. However, from the way that the data and the discussion are presented it is not clear what the precise pattern for indirect object clitics with the 32% of children is.

Turning to Romanian, Babyonyshev and Marin (2005) report that Romanian children show production of both direct and indirect objects at similar rates. However it seems that overall children perform slightly worse with indirect

object clitics than with direct object clitics, regardless of whether they are grouped by age or MLU, and that indirect object clitic production is more variable than direct object clitic production across subjects. Thus, production of indirect object clitics is lower than direct clitics at a rate of 4%-16% of the times. According to the authors the difference is determined by some developmental order, that is, they do not conclude that direct object clitics are acquired earlier than indirect object clitics and they attribute the difference to the nature of the experimental task coupled with the special properties of the indirect object clitic construction not shared by the direct object clitic construction. They point out that data from adult controls confirms this.

Similar differences related to the structural role of the clitic are also reported with respect to subject versus object clitics. A first interesting finding emerging from Rizzi et al (1996), and Hamann (2002), has shown subject clitics emerge earlier and they are used at a more frequent rate than object clitics at the same age (1;11 to 2;3). Hamann, Rizzi, and Frauenfelder (1996) account for this difference within the theory of Cardinaletti and Starke (1994/99) by treating subject clitics as weak pronouns, which are less deficient.

#### **4.4.3 The emergence of Clitic Doubling**

The only studies reported so far on the acquisition of clitic doubling are two: the thesis by Varela (1988) and a paper by Torrens and Wexler (2000), both regarding Spanish.

Varela's study tested the comprehension of sentences with non pronominal indirect objects. It is therefore impossible to conclude what children know about the obligatoriness of clitic doubling and its optionality in other contexts.

Torrens and Wexler (2000) investigate whether there is evidence of clitic doubling in early language. The aim of their research is to find evidence for the productivity of clitic doubling in a range of different possible contexts and to study the relation between the acquisition of clitic doubling and other constructions like dative experiencers, clitic left dislocation, floating quantifiers, scrambling and passives. The data come from the CHILDES database and is a

longitudinal study of one child (Maria), who is a speaker of Standard Spanish. The child's age ranges from 1;7 to 3;11, and there is a gap between 3;1 and 3;6.

The study shows that this particular child knows all the properties of clitic doubling, that is, the obligatoriness, the optionality as well as the impossibility of clitic doubling in certain contexts. The authors report that in the transcripts only one error was found in Maria's speech. In a single instance Maria did not double an indirect pronominal element that is obligatorily doubled in the adult language. Moreover there were no instances of doubling where the adult grammar disallows doubling.

As Torrens and Wexler point out, this study provides evidence against the proposal that patterns clitic doubling and passive constructions together (Fox and Grodzinsky 1994 and Fox, Grodzinsky and Crain 1995). According to these proposals passives in English and clitic doubling have the same underlying structure, suggesting that the delay in the acquisition of passives is based on the lack of clitic doubling, predicting therefore that clitic doubling constructions in languages like Spanish will also be delayed.



## **4.5 Conclusions**

The acquisition studies of pronominal clitics so far have shown that there is a general consensus regarding the placement of the clitic in child language. Clitic placement in child language seems to obey the same distributional constraints as for adults. Thus, from the time they emerge, clitics are correctly placed in relation to the verb. This seems to hold true crosslinguistically. On the other hand, the issue of the emergence of the clitics is more problematic as they do not seem to emerge simultaneously across languages. Broadly speaking, French and Italian clitics seem to be delayed compared to Greek and Spanish. In early periods, clitics are comparable to full objects and are often omitted from structures in which they are obligatory. This raises many questions, some of which I attempt to answer in the next Chapter. Omission of clitics though seems not to be affected by their theta-marking, as the differences reported in the emergence of direct versus indirect clitics do not seem to be significant. There are differences though in the emergence of subject versus object clitics; the former are realised much earlier than the latter. Finally the emergence of Clitic Doubling does not seem to be delayed in relation to single clitic constructions.

## CHAPTER 5

### CLITIC OMISSION ACROSS LANGUAGES

#### 5.0 Introduction

In this Chapter I investigate the developmental properties of direct object clitics across languages; in particular I focus on the status of clitic omission in child Greek and whether it occurs to the same extent as in other clitic-languages. Thus the question I attempt to answer is whether clitic omission is a universal stage that all children speaking a clitic-language go through or whether this holds only for some languages. I will show that the latter is the case and this parameterization calls for an explanation.

The theory I develop here is a further attempt to unify universal properties of development across constructions, including object positions as well as subject positions (see Wexler, to appear). In particular, following Wexler (1998, to appear), Tsakali and Wexler (2003) and Wexler, Gavarro and Torrens (2003), I pursue a unification of the Optional Infinitive (OI) stage with the Clitic Omission Stage (CIO). Such a hypothesis enables us to account for the apparent variation in the development of pronominal clitics across languages by showing that it can be explained if we adopt the same assumptions that are needed to explain the facts of the Optional Infinitive stage; that is, the interaction of a universal developmental constraint (the Unique Checking Constraint) with the particular syntactic properties of different types of language. In this proposal, clitic omission and its crosslinguistic variation stem from a universal principle that prevents children from carrying out certain computational processes of syntax, (namely the Unique Checking Constraint or some version of it), that applies to the Grammar as a whole and allows children to accept and produce ungrammatical constructions. Therefore, under this view, clitic omission results from constraints that are principles in children's grammar and not imperfections. Such a claim entails that, in this respect, children's grammar is more highly constrained than adult grammar (Wexler 2004).

The Chapter is organized as follows: Section 5.1 starts with a summary of the main properties of the normal development of clitics. In Section 5.2 I present the crosslinguistic variation regarding clitic omission in early French, Italian and Spanish, and I then proceed to the Greek child data in Section 5.3. In Section 5.4 I discuss some of the differences that characterize clitic-languages, that is, the presence versus absence of Participle Agreement and how it correlates with Clitic Doubling. In Section 5.5 I develop an account for this correlation in the theoretical framework outlined in Chapter 3. My specific proposal is along the lines of the Unique Checking Constraint (Wexler 1998). Finally, in Section 5.6 I conclude.

### **5.1 Developmental properties of object clitics**

In the previous Chapter (Section 4.5), I discussed the acquisition of pronominal clitics. Summarizing the main points, in typical development object clitics have the following properties across languages:

- (1) *PROPERTIES OF OBJECT CLITICS:*
- a. Object clitics are never misplaced, that is they never appear in the wrong position with respect to the verb, as illustrated by the contrast in (2a) versus (2b) below.<sup>1</sup> This seems to be true in all languages studied, in particular French, Italian, Greek and Spanish.<sup>2</sup>
  - b. In early periods clitics are quite rare as a percentage of grammatical objects overall. Even when the object is not omitted, young children use non-clitic objects at a rate much greater than older children or adults.
  - c. Clitics are often omitted from structures in which they are obligatory as in the examples (3) and (4) from Greek. This property seems to be parameterised, despite the fact that in all languages

---

<sup>1</sup> For a violation of this property see footnote 8 in Chapter 4.

<sup>2</sup> I take no position on questions concerning clitic clusters. It has been claimed (Clark, 1985) that French children often violate the relative order of two clitics.

studied there is at least some low percentage of clitic omission as (3) and (4) suggest.<sup>3</sup>

- d.* The age at which the clitics are omitted is roughly the same age at which children show Optional Infinitive effects (roughly until the age of three).
- (2) a. To ftiahno (Mary, 1;9)  
it-cl-acc make-1<sup>st</sup> sg-indicative  
'I'm making it'.
- b. \*ftiahno to  
make-1<sup>st</sup> sg-indicative it-cl-acc
- (3) a. Sikose \_\_ (Mary 1;9) (from CHILDES)  
b. Sikose **to** (target utterance)  
Lift-2<sup>nd</sup>-sg-imperative (it-cl-acc)  
"Lift it".
- (4) a. \_\_ thelo (Spiros, 1,9) (from CHILDES)  
b. **to** thelo (target utterance)  
(It-cl-acc) want-1<sup>st</sup> sg-indicative  
"I want it".

Property (1a) has been discussed in Section 4.5.1 of the previous Chapter. In what follows, I will concentrate on properties (1b-c) as these are the ones that address the issue of clitic omission at a crosslinguistic level. The term clitic omission involves two issues; on the one hand omission of object clitics after they appear in children's speech and on the other hand, extremely low use of clitics at the age of 2-3 in some languages (Italian and French), versus frequent use in others (e.g. Spanish and Greek). Wexler, Gavarro and Torrens (2003) have shown that children omit object clitics in Spanish much less often than in French or Italian, and I will show that early Greek patterns with Spanish in this respect.

---

<sup>3</sup> In Modern Greek clitics follow the verb in Imperatives (as in (3)) (and the so-called "gerunds") and precede the verb in Indicatives (as in (4)) and the Subjunctive. Acquisition studies have shown that the majority of the very first instances of clitics appear in Imperative constructions (see Tsimpli 2002 and Tzakosta 2003). However, there is no evidence linking the position of the clitic to clitic omission.

The question arising from (1d) concerns the correlation between clitic omission and the appearance of Early Non-Finite verb forms. 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 in the same age-range (Wexler 1998; 1999). Moreover, Guasti (1993/94) has provided evidence that Italian children omit object clitics during the age-range that corresponds to the optional infinitive stage. Additionally, Dutch children omit subject clitics and object clitics in sentences involving optional infinitives (Haegeman 1996).

The correlation in (1d) is a stage-specific one; it should not be understood as an attempt to link the syntactic properties of the optional infinitives to the omission of the clitics. In other words the appearance of optional infinitives in a language does not result in clitic omission; the two phenomena are syntactically independent. The link between the two lies in the fact that both occur at the same stage and in the hypothesis that both stem from the same principle, namely the Unique Checking Constraint. In Section 5.5, I discuss the hypothesis that links the two phenomena; at this point it is crucial to note that whether or not children developing language *L* omit clitics is independent of whether or not children developing *L* go through the OI stage. We know that many languages go through the OI stage while others do not. Similarly many languages go through the Clitic Omission Stage and others do not. The two properties are not correlated within a language. For example, Italian does not go through the OI stage but it does go through the Clitic Omission Stage. Spanish does not go through the OI stage and it also does not go through the Clitic Omission stage.

## **5.2 Cross-linguistic variation with respect to clitic omission**

Recent studies address the question of the presence versus absence of object clitics in the acquisition of various languages at various developmental stages. Yet, there remains an open question of what the data actually are in different languages. One of the problems that any study of pronominal clitics faces at this stage is that there is no uniform method for evaluating clitic omission

across languages. In some studies the data come from spontaneous speech collection, while in others the data come from experimental studies. Moreover in the calculation of the percentages in the naturalistic data, in some studies the context has been taken into account while in others it has not. Thus at this stage we are bound to compare data that are not collected in a similar fashion, and we may therefore need to have recourse to more indirect evidence.

Nevertheless, despite any discrepancy in the data, there seems to have emerged a clear pattern of what the situation is in the various clitic-languages with respect to the clitic omission stages.

In the next three subsections, I will present the findings of the developmental studies that deal with the use of clitics in French, Italian, Spanish and Catalan, and I will afterwards proceed to the presentation of the data in early Greek.

### 5.2.1 Object clitics in early French

Friedemann (1993/94) studied the emergence of clitics in two monolingual French speaking children, Grégoire and Philippe from the Leveillé corpus (CHILDES database). In this study the focus is on the differences between subject and object clitics. The author reports that Grégoire from the age of 1;11 through 2;3 produced 1 clitic out of 92 object-complements, that is a clitic use of slightly over 1%. Philippe, for the period from 2;1 to 2;3 produced 42 clitics out of 625 object-complements, for a clitic use of 6.7%. However, his production of object clitics increased to 35% in complement contexts at the age of 2;6 and from that age and up to 3;3 there were 99 clitics out of 150 complements, for a clitic use rate of 66%. In the next table I present the figures that the author reports for Philippe and Grégoire.

Table (1): *Percentages of clitic use in Philippe's and Grégoire's speech*

	AGE	Subject Clitics	Object Clitics
Philippe	2;1-2;3	18%	6.7%
Grégoire	2;0-2;3	17%	2.5%

Turning to another case, Hamann, Rizzi and Frauenfelder (1996) studied the development of the monolingual French speaking child, Augustine, for a period of approximately 10 months, for the ages 2;02 to 2;10. They found that object clitics are nearly absent in the period 2;00-2;6 and show an increase only in the last two recordings (2;9). Aside from tracking the raw frequency of clitics, they calculate the number of object clitics out of the total number of utterances with a verb that needs a complement. For the ages 2;0 through 2;6;16 there were 3 object clitics out of 441 utterances with a verb (a rate of clitic usage less than 1%). At the age of 2;9 there were 10 object clitics out of 175 utterances with a verb (a rate of 14,2%), while at the age of 2;9;30 there were already 22 object clitics in 155 utterances with a verb. In the following table the authors report the use of object clitics in comparison with lexical objects and object omission.<sup>4</sup>

Table (2): *Use of clitic versus full DPs and clitic omission in Augustine's speech*

AGE	Complement contexts	Null objects	%	Object clitics	%	Lexical objects	%
2;0,2	12	4	33.3	0	0	8	66.6
2;0,23	20	5	25	0	0	15	75
2;1,15	10	4	40	0	0	6	60
2;2,13	19	5	26.3	1	3.8	13	69.9
2;3,10	23	9	39.1	0	0	14	60.9
2;4,1	20	5	25	0	0	15	75
2;4,22	21	4	19	1	5	16	76
2;6,16	50	10	20	2	3.9	38	76.1
2;9,2	69	10	14.4	10	14.3	49	71.3
2,9,30	65	14	21.5	22	33.9	29	44.7
Total	309	70	22.6	36	11.6	203	65.7

<sup>4</sup> The figures reported as clitic and object omission do not take context into account. This is a very important point that we will come back to in Section 5.3 in discussing the Greek data.

The figures in the table above do not inform us about the real percentage of clitic omission given that the context was not taken into account. However, the raw numbers of the clitics present in the child's speech are significant. Moreover, independently of the information that the context could provide, it is important for present purposes that in Augustine's speech there is object/clitic omission at a rate up to 40% until the age of 2;4,1 which decreases to 21.5% from the ages 2;4,22 to 2,9.30.

The two studies presented so far are not the only ones studying the emergence of object clitics in early French. Similar results are also reported by Jakubowicz, Muller, Kang, Riemer and Rigaut (1996) and Jakubowicz, Muller, Riemer and Rigaut (1997), showing a substantial delay of object clitics. As discussed in Hamann (2002), the authors made a cross-sectional study of the natural production of object and subject clitics in five children with  $MLU < 3.5$  and compared this to the production of four children with an  $MLU > 3.5$ . The basic result regarding object clitics is that object clitics are used under 10% of the time by the children with a smaller MLU. The ages of the children ranged from 2;5 to 2;7 in the first group and 2;4 to 2;5 in the second group. The following table (from Hamann's (2002) Table (11)) shows the relevant figures.

Table (3): *Correlation of MLU to clitic use and clitic omission*

	AGE	Omission	Use of object clitics	Use of lexical objects
MLU<3.5	2;5-2;7	15%	9%	68%
MLU>3.5	2;4-2;5	10%	30%	60%

As in the previous studies, whether the context required a full DP or a clitic is not specified, so, it is difficult to say if the percentage of DP-omission corresponds strictly to the percentage of clitic omission. However there are two aspects of the study that are very telling for a crosslinguistic study: a) children with  $MLU < 3.5$  (and at the age of 2;5 to 2;7) use clitics only 9% of the times as the authors report, and b) computing proportions from Table (3), we find that the



clitic omission rate for the smaller MLU children is 15/24, that is 63%, while for children with larger MLU, the clitic omission rate is 10/40, that is, 25%.

Wexler (1999) reports that Jakubowicz et al. (1996) also ran an elicitation experiment with the same nine children to test clitic omission. The children who participated were put into discourse contexts in which an object clitic was the correct grammatical response. The experimental method was the following: the researchers showed pictures to the children and then asked questions of the type *que fait X à Y?* (“What is X doing to Y?”). The adult control test showed that adults used object clitics in these environments 90% of the time, while they used full DPs 10% of the time and they never used a strong pronoun<sup>5</sup>. The percentages reported in Wexler (1999) show that the first group of children use clitics only about 10% of the time, while they omit object clitics 60% of the time. The remaining 30% were filled in with strong pronouns and full lexical objects. The second group of children produced about 40% clitic objects, 2% strong pronouns and 30% lexical DPs. Omission was calculated at 12%.

### 5.2.2 Object clitics in early Italian

Turning to Italian, Guasti studied object clitic properties in three Italian children. The first child, Martina, up to age 2;1 produced 21 object clitics and omitted 25 objects. The rate of clitic omission then is 54%; the proportions are calculated as number of missing objects divided by the total of clitic objects that are present plus the number of missing objects<sup>6</sup>, that is, 21 objects present +25 missing objects = 46 total objects => 25/46 = 54%. The second child, Diana, up to the same age (2;1) produced 21 clitics and omitted 10. Thus her clitic omission

---

<sup>5</sup> This is a difference from Schaeffer’s (1997) experiments (see next Section), as in Schaeffer’s Italian study adults performed 100% correctly in contexts that required a clitic. The experiments were slightly different in that Schaeffer used rich discourse context, while Jakubowicz et al. used pictures.

<sup>6</sup> By these calculations I assume that the missing objects are missing clitics. If we simply count the proportion of missing objects by dividing the number of missing objects by the total of clitic objects plus non-clitic objects, the rates would be smaller. However I follow this method of calculation since the theory of object omission I pursue predicts that clitics will be omitted for syntactic reasons. This is to the best of my understanding a common assumption for all theories of object omission, irrespectively of any specific syntactic explanation.

rate is 32%. The third child's files, Guglielmo, start at the age of 2;2. Through age 2;3 he produced 10 clitics and omitted 3, an omission rate of 23%.

Omission rates seem to decrease with age. Martina, at the age of 2;5 to 2;7, produces 36 clitics and omits 3 (8% omission), while Diana at the same age produces 154 clitics and omits 9 (6% omission). Finally Guglielmo, at the age of 2;7, produces 42 clitics and omits 4 (9% omission).

Schaeffer (1997/2000) did an elicitation experiment on pronominal object clitics in Italian. The experiment was run on 35 monolingual Italian children. A control group of 15 Italian speaking adults was also recruited to perform the task. She controlled the contexts in such ways that only object clitics would be expected. This is obvious from the 100% clitic responses that the adult group gave. The children's age ranged from 2;1 up to 5;11. The following table (a combination of Schaeffer's (2000) tables 3.2 and 4.7) presents the findings of Schaeffer's experiments.

Table (4): *Elicited clitic omission in Italian*

AGE	Mean Age	Overt clitics	Omitted clitics	Full direct objects
2;1-2;6	2;5	22% (22)	64% (63)	14% (14)
3;1-3;11	3;5	62% (179)	15%(43)	23% (68)
4;1-4;10	4;6	89% (237)	0% (0)	11% (28)
5;0-5;11	5;6	91% (227)	0% (0)	9% (23)
Adults	>19	100% (439)	0% (0)	0% (0)

The table above provides strong evidence that there is clitic omission in early Italian. The first group of children, aged 2;1 to 2;6 (mean age 2;5), produced 14% direct lexical objects and only 22% clitics. Thus, the rate of omission of the clitics for this group is not simply 64%, but 78% (the 64% represents the raw omission of arguments, but given that the discourse strongly favoured clitics over lexical objects it would be fair to add the rate of usage of full-DPs to that of the omitted clitics). Similarly, for the age group 3;1 to 3;11 (mean age 3;5), children produced 23% full direct object and 62% overt clitics: a clitic omission rate of 38%. The

difference between the first and second group is considered by Schaeffer to signify the transition to the next stage, since there is a huge leap towards acquiring an intrinsic property of clitics, i.e. referentiality. Independently of the point that there is a transition from one stage of acquisition to the next, the omission of the clitics decreases significantly with the third group (aged 4;1-4;10, mean age 4;6), when the rate of omission can be calculated at 11% and even more with the fourth group (aged 5;0-5;11, mean age 5;6), when the omission drops to 9%.

### **5.2.3 Object clitics in early Spanish and Catalan**

Wexler, Gavarro and Torrens (2003) performed an elicitation task with 31 monolingual Catalan speaking children and 28 monolingual Spanish speaking children. They grouped the children into 3 age groups: 2 year-olds, 3 year-olds and 4 year-olds, on a cross sectional design. The elicitation method is similar to the one discussed above regarding Schaeffer's experiments. It comprised a tale performed with puppets, where an experimenter introduced the characters and told a story to the child. A second experimenter gave an incorrect continuation of the story, which the child had to correct by using a sentence with a clitic, since the referent was already introduced. The discourse was set up in a way that strongly favoured the use of clitics, as opposed to lexical DPs. For each language two sentence-types were tested: sentences in the present tense (4 items) and sentences in the present perfect (4 items).

Regarding the rate of clitic omission the authors report that they found a significant difference in the number of sentences with an omitted clitic between Catalan and Spanish. Children speaking Catalan omit clitics more frequently than children speaking Spanish. The following table present the rates that the authors give.

Table (5): *Clitic omission in Catalan in present tense contexts*

Age Range	Mean age	Clitics used	Clitic omission	Lexical objects used
1;10-2;11,24	2;3,5	22.6% (7/31)	74.2% (23/31)	3.2% (1/31)
3;0,8-3;11,29	3;6,7	68.2% (30/44)	25% (11/44)	6.8% (3/44)
4;3,1-5;1,0	4;6,27	95.7% (45/47)	4.2% (2/47)	0 % (0/47)

Table (6): *Clitic omission in Spanish in present tense contexts*

Age Range	Mean age	Clitics used	Clitic omission	Lexical objects used
2;6,7-2;11,6	2;8,18	100% (32/32)	0% (0/32)	0% (0/32)
3;5,2-3;11,13	3;7,14	97.5% (39/40)	2.5% (1/40)	0% (0/40)
4;4,9-4;11,23	4;,13	100% (40/40)	0% (0/40)	0% (0/40)

Again with respect to the rate of clitic omission in the present perfect tense, the authors report that Catalan speaking children omit clitics more frequently than Spanish speaking children. The following tables report their findings.

Table (7): *Clitic omission in Catalan in present perfect tense contexts*

Age Range	Mean age	Clitics used	Clitic omission	Lexical objects used
1;10-2;11,24	2;3,5	12.9% (4/31)	83.9% (26/31)	3.2% (1/31)
3;0,8-3;11,29	3;6,7	71.4% (30/42)	19% (8/42)	9.5% (4/42)
4;3,1-5;1,0	4;6,27	85.1% (40/47)	6.4% (3/47)	8.5% (4/47)

Table (8): *Clitic omission in Spanish in present perfect tense contexts*

Age Range	Mean age	Clitics used	Clitic omission	Lexical objects used
2;6,7-2;11,6	2;8,18	81.25% (26/32)	15.62% (5/32)	3.12% (1/32)
3;5,2-3;11,13	3;7,14	97.5% (39/40)	0% (0/40)	2.5% (1/40)
4;4,9-4;11,23	4;,13	100% (40/40)	0% (0/40)	0% (0/40)

The findings of Wexler et al's (2003) experiment are consistent with those found in a study of spontaneous speech by Lyczkowski (1999). Lyczkowski studied three Spanish speaking children (Maria, from 1;8 to 3;11, Juan from 2;6 to 4;11 and Koki, from 1;7 to 2;11) and found that the omission of the clitics in all the files is at a very low rate. Moreover he found that the rate of direct object omission in total is low. The following table summarizes his findings, as reported in Wexler et al (2003).

Table (9): *Spanish, direct clitic objects in spontaneous speech* (Lyczkowski 1999, as reported in Wexler et al. 2003)

Clitics used	Full DPs used	Doubled obj	Missing obj	Other
34.44% (364)	57.71% (610)	2.74% (29)	1.89% (20)	3.22% (34)

#### **5.2.4. Object clitics in early Romanian**

The first study to describe the acquisition of direct object clitics in Romanian is that of Avram (1999). Avram ran an elicitation experiment following Schaeffer's methodology. The main finding of this study is that early Romanian speaking children omit clitics at a rate of 42% at the age of 2, while at the age of 3 the omission decreases to 25%, and at the age of 4, the omission rate is 10%. The following Table (from Babyonyshev and Marin, 2005) summarizes the results.

Table (10): *Clitic omissions in early Romanian (Avram study)*

Romanian	Overall omission	Average omission (CV)	Response rate
Age 2 (2;4, N=3)	15/25	42% (1.02)	34%
Age 3 (3;2, N=8)	32/133	25% (1.00)	56%
Age 4+ (4;3, N=5)	7/56	10% (1.70)	44%
Total (3;4, N=16)	54/214	24% (1.13)	48%

However, Avram's study was challenged by that of Babyonyshev's and Marin's. The latter study focusing on the differences in the acquisition of direct clitics versus indirect clitics, designed an elicitation experiment that included a large number of distinct conditions (8), with 4 tokens of each condition, which resulted in a total of 32 elicitation stories, each containing a different obligatorily transitive verb. The independent variables were the tense of the question/target sentence (past tense vs. present tense), the gender of the direct object (feminine vs. masculine), and the type of direct object (definite DP vs. proper name).<sup>7</sup> In addition, they included target sentences with proper name objects. The experiment was conducted with 25 monolingual Romanian children, aged 2;0 – 3;10. Table (11) summarizes their results.

<sup>7</sup> In this study Babyonyshev and Marin were interested in manipulating the tense, as well as the gender of the object clitic, because the position of the feminine clitic in past tense sentences is different from the ones in present tense and from that of any other clitic.

Table (11): *Clitic omissions in early Romanian (Babyonyshev and Marin study)*

	Direct object		Full DP object		Object omission	
	clitic					
Age 2 N=12	94/193	38%	3/193	2%	96/193	60%
Age 3 N=13	361/387	93%	2/387	0.5%	24/387	6.5%
<2 MLU <sub>w</sub> N=7	25/104	16%	1/104	2%	78/104	82%
>2 MLU <sub>w</sub> N=18	430/476	86%	4/476	1%	42/476	13%

Babyonyshev and Marin accounting for the differences in their result as compared to those by Avram suggest that these differences stem from difficulties with eliciting clitics in Romanian. For this reason they tried to control as many syntactic parameters as possible. Moreover they point out that the response rate in Avram's study is extremely low (48%) and the omission rate of the 4 and 5 year old children is significantly high compared with any other study in other languages. They take these two points to suggest that experimental confounds are present and the elicitation procedure did not work successfully.

The authors comparing various aspects of their data conclude that there is no significant clitic omission in early Romanian and that Romanian does not pattern with French and Italian. However they reckon that the rate of clitic omission at the age of 2 does not match that of Spanish and, as we shall see below, Greek. The explanation they provide is that age is not what determines the clitic omission but the mean length of utterance. Thus, their 2-year old children have MLU lower than 2, which is required for full production of clitics.

## 5.3 The Greek Data

### 5.3.1 Previous studies

Marinis (2000) studied the production of object clitics as well as in comparison with the production of Clitic Doubling constructions and Clitic Left Dislocation. Moreover he examined the sensitivity of clitic omission to the finite versus non-finite distinction and its correlation with the omission of the definite article. He based his study on naturalistic data from the CHILDES database and the Christofidou Corpus, a longitudinal study of a monolingual Greek child (Christos) covering the age of 1;7 to 2;8.

Summarizing his results, he reports that for four of the five children there is no stage in which they do not use clitics at all. That is, Christos (from Christofidou Corpus) does not produce any clitic from the age of 1;7 to 1;10, while during the age of 1;11 to 2;0 there is only one instance of a clitic. However from the age of 2;1 there are 26 clitics used and the number increases in each file after this age. A second finding in Marinis's study is that he finds object omission at a very early age, roughly until the age of 2;3.<sup>8</sup> Given that the context is not taken into account in his study, he reports that there is no evidence for clitic omission per se, but rather for object omission in general. Moreover he finds that clitics in early Greek are not sensitive to the tensed/untensed distinction.

Tsimpli (2002) studied the spontaneously produced utterances of two Greek speaking children (Alexia and Elli), from the ages of 1;11-2;2 and 1;9-2;1 respectively. The following Tables (12) and (13) (from Tsimpli 2003) show the production of object clitics as well as the clitic omission rates in Alexia's and Elli's speech.

---

<sup>8</sup> The objective of Marinis's study was not clitic omission per se, and from the tables it is sometimes difficult to be sure what his figures show regarding clitic omission. Accordingly, I base my discussion on his results as summarized in his paper and on personal communication with him.



Table (12): *Alexia's use of object clitics and clitic omission*

AGE	Clitics Used	Clitic Omission	Full-DP omission
1;11	1 (50%)	1 (50%)	0
2;0	4 (80%)	0	0
2;1	19 (76%)	0	0
2;2	68 (84%)	0	0

Table (13): *Elli's use of object clitics and clitic omission*

AGE	Clitics Used	Clitic Omission	Full-DP omission
1;9	3 (20%)	11 (73%)	0
1;10	12 (55%)	7 (32%)	1 (4.5%)
1;11	12 (92%)	0	0
2;0	33 (82%)	4 (10%)	0
2;1	36 (89%)	0	0

According to Tsimpli's analysis there is a very early stage (roughly before the age of 2;00), in which clitics are omitted in early Greek. This stage coincides with the so-called Prefunctional stage and is characterized by the absence of certain morphemes and, arguably, their corresponding projections. I return to this point in Section 5.6.2.

For my study it is particularly relevant that from a very early age children do not omit clitics (or omit them at a very low rate) compared to Italian and French. I will come back to this point in Section 5.4 when discussing the crosslinguistic differences in clitic omission.

### 5.3.2 Naturalistic data

The data presented in this subsection are naturalistic and come from two sources: the CHILDES database for Greek (Stephany Corpus, 1997) and the Doukas Corpus (2000).<sup>9</sup>

<sup>9</sup> I'm grateful to Thomas Doukas for letting me have access to Maria's data.

I will first go through the data from the CHILDES database, consisting of four children, (Spiros, Maria, Janna and Mairi), aged from 1;9 to 2;9. It is important to point out that the numbers and the percentages which follow have been calculated taking context into account (to the extent that this was possible). Thus I have estimated the percentages of clitic omission separately from the omission of full DPs/CPs. However for methodological reasons, (given that in most of the studies presented so far, the context was not made explicit), the omission rate in the comparison will include the total omission rate.

The Table below presents the use of clitics by the four CHILDES children.<sup>10</sup>

Table (14): *Clitic omission of the Greek speaking CHILDES children*

Name	Age	MLU	Clitics Used	Rate of clitic Omission
Spiros	1;9	1.6	10	19.5%
Janna	1;11	1.4	10	15.5%
	2;5	2.4	50	1.1%
Mairi	1;9	2.0	143	5.6%
	2;3	2.2	184	4.8%
Maria	2;3	2.3	31	5.9%
	2;9	2.9	87	0.6%

The following table presents the use of objects other than clitics and the omission rate as expected from the context.

<sup>10</sup> Marinis reports that Spiros at the age 1;9 used 6 clitics and Janna at the age of 1;11 used 6 clitics as well. This could be due to the CLAN program. However, given that this discrepancy on the numbers does not make any difference in the overall crosslinguistic comparison and does not affect my claim, I will not look into it further.

Table (15): *Full-object omission of the Greek speaking CHILDES children*

Name	Age	MLU	Full objects Used	Rate of object Omission
Spiros	1;9	1.6	35	12.9%
Janna	1;11	1.4	23	6.5%
	2;5	2.4	41	2.3%
Mairi	1;9	2.0	82	3.6%
	2;3	2.2	78	1.6%
Maria	2;3	2.3	29	7.3%
	2;9	2.9	44	0.6%

I will now proceed to a discussion of the Doukas corpus. This is a study of one monolingual Greek speaking child (Maria). The child was recorded from the age of 2;0,24 until 2;8,27. During this period, Maria was recorded 8 times, while the intervening time from one recording to the next one is mostly more than a month.

In the following Table (16) I present the use of clitics and the rate of omission of object clitics, while Table (17) shows the use of full lexical objects and their omission rate. I have followed the same methodology with this corpus as for the CHILDES data.

Table (16): *Clitic omission in DOUKAS corpus*

NAME	AGE	Clitics used	Clitic omission
Maria	2;0,24	6	4,1%
	2;2,8	39	2,5%
	2;3,18	46	3,7%
	2;5,4	46	2%
	2;5,24	36	0%
	2;7,1	37	0%
	2;8,27	35	0%

Table (17): *Full-object mission in DOUKAS corpus*

NAME	AGE	Lexical objects used	Lexical object omission
Maria	2;0,24	15	8,3%
	2;2,8	35	1,2%
	2;3,18	27	0%
	2;5,4	50	4%
	2;5,24	37	4,2%
	2;7,1	24	0%
	2;8,27	57	0%

Summarizing the discussion regarding the omission of clitics in early Greek so far, we could claim that the naturalistic data show that from the age of 2 there is no real clitic/object omission in early Modern Greek. Comparing the number of clitic used in French with the clitics used in early Greek, as in Table (14)-(17), we observe that there is a clear Clitic Omission Stage extending past age 2 for French and Italian, but no such stage for Greek. On the other hand, differences in how the naturalistic data are analyzed cause difficulties for a direct crosslinguistic study. For this reason, in discussing clitic omission properties one must compare not just the rates of clitic omission but also the raw numbers of the clitics present in each language and at each stage. Moreover, in order to account for the variation observed so far I present an elicitation experiment, which makes the comparison stronger and clearer.

### 5.3.3 Experimental results

*i. Method and procedure:* In order to test clitic omission in obligatory contexts, I performed an elicitation task on 25 monolingual Greek children. The age of the subjects varied from 2;4 to 3;6. According to their age, children were divided into two separate groups: the first group consisted of 15 children, from the

age of 2;3 to 3;00 (mean age 2;7), and the second group consisted of children, from the age of 3;00 to 3;6 (mean age 3;3).<sup>11</sup> All children spoke Standard Greek.

The experiment replicated Schaeffer's (1997/2000) methodology and it was designed as follows.<sup>12</sup> The experimenter showed a picture to the child in which two characters/items figured in some sort of relation to each other, e.g. in one picture a little boy would kiss a little girl. Subsequently the experimenter asked questions about the characters and the picture, to make sure that the child was familiar with the story and to introduce every relevant part of the picture.<sup>13</sup> Importantly the experimenter made sure that the child had not heard the utterance being elicited, and all the questions addressed to the children were designed not to test the central phenomenon of the study; instead they elicited an unrelated sentence type, preferably a structure that the child finds easy. In this respect these questions during the introduction of the child to "the world of the picture" functioned as *fillers*. The verbs that were involved in the experiment were picked in such a way that would be easily recognised by the child. These verbs were: *filao* ("kiss"), *pleno* ("wash"), *htenizo* ("comb") and *spao* ("break").<sup>14</sup>

In the elicitation task five different pictures were used followed by questions for controlled answers. The pictures involved the following scenarios:<sup>15</sup>

---

<sup>11</sup> The initial motivation for the two age-groups was that 3 is roughly the end of the Optional Infinitive stage. Moreover as discussed in Section 5.2.2, Schaeffer argues that around the age of 3 is approximately when children move to the next developmental stage in their acquisition of pronominal reference. Thus, I considered the division into these two groups methodologically necessary in order to check if there is any difference in the acquisition of direct object clitics in Greek. However it turns out that for Greek it does not make any difference whether we have one or two groups.

<sup>12</sup> Schaeffer used a combination of Truth Value Judgment and an Elicited Production Task. In my experiments the Truth Value Judgment was not employed unless the child remained silent. An example of this was that when a child did not respond to the experimenter, then he or she was given a wrong sentence and asked what he or she thought. In some cases the child corrected the false statement and in some other he/she remained silent (!).

<sup>13</sup> Given that a D-linked definite object will appear in a clitic form, the conversation between the experimenter and the children facilitated the D-linking purposes.

<sup>14</sup> In the experiment the different tenses were not tested, since they should not play any role according to the hypothesis. The indication from the naturalistic data is that grammatical aspect does not affect the presence of the clitics in Modern Greek.

<sup>15</sup> The scenarios were introduced with two sentences with neuter clitic, two with feminine and one with masculine. However the aim of the experiment was not to test at that stage whether children have difficulties with the gender of the clitic.

- a) A little boy kissing a little girl,
- b) A mother washing (bathing) a baby,
- c) A mother combing the hair of her little daughter,
- d) A little boy eating a sweet, and
- e) A little boy hitting another little boy.

The target utterances all involved a direct object clitic; that is, the questions were devised to eliminate the possibility of using a DP instead of the clitic. The scenario is exemplified in (5).

- (5) *Experimenter's Question:* ***Ti kani edho to agoraki sto koritsaki?***  
 What is the boy doing here to the little girl?  
*Expected Answer:* ***To filai.***  
 He is kissing her

Importantly all the expected answers require a clitic in Modern adult Greek. That is, for the questions used, one cannot easily turn it into an unergative/unaccusative construction. The experiment was first tested on a group of 15 adults. The responses of the adults were 100% clitics.

**ii. Results:** From all the 125 environments (5 pictures multiplied by 25 children) only one child (aged 2;6) omitted a clitic once (this was also the only omission of an object). Table (18) presents the results:

Table (18): *Elicited clitic omission in Greek*

Age Range	Mean Age	Clitics used	Clitic omission	Full DPs used
2;3,09-2,9,28	2;7	98.6% (74/75)	2.4% (1/75)	0% (0/75)
3;0,08-3;6,01	3;3	100% (50/50)	0% (0/50)	0% (0/50)

This table shows that the percentage of clitic omission in early Greek for the groups under investigation is 2.4% for the age of 2;3 up to 3;0 and 0%, for the age 3;0 to 3;6. In a combination of the two age-groups the total rate of clitic omission

is 0,8%. This percentage is comparable to object pronoun omission in English (Hyams and Wexler, 1993), in fact even less.<sup>16</sup>

#### 5.4 Comparative conclusions from the acquisition studies on clitics

A comparison of all the studies presented so far regarding the emergence/omission of object clitics, lead us to conclude that there seems to be systematic variation in the developmental properties of object clitics across languages, even between languages that are closely related like Spanish and Catalan.

A comparison between elicited Italian and Greek clitics shows that there is a massive difference in clitic omission between the two languages. The same conclusion can be drawn from comparing Spanish with Italian. Schaeffer's two year-old Italian children omitted object clitics 62% of the time; yet in the same experiment done on Greek 2 year-old children, the omission rate is about 2;5%. Moreover Schaeffer's 3 year-olds omitted the object clitics 15% of the time (compared to 0% for our Greek 3 year-olds). By the same token, Italian 2 year-olds gave a full DP answer 14% of the time and the 3 year-olds gave a full DP answer 23% of the time. Greek children gave *no* full DP (without clitic) responses.<sup>17</sup>

Comparing Greek with French, the conclusion again is that there seems to be a significant delay in the emergence of clitics in French. This is shown by both experimental and naturalistic studies. In Philippe's (age 2;1 to 2;3) data (Friedemann 1993/94) object clitics are used at a rate of 6.7% (see Table (1)). At the same period Augustine's (Hamann et al. 1996) object clitic use is 3.8% (see Table (2)). Comparing the French data with Greek naturalistic data, the figures

---

<sup>16</sup> It is important to note that many children used clitic doubling constructions in their answers, which by adult standards are not perfectly felicitous. Nevertheless given that the aim of the experiment was to see if children drop the clitic or not and since clitic doubling constructions involve an overt clitic, I will not pursue this issue further. An additional reason for why I am not attempting to account for this deviation between children's data from the adult group's data, is that children's answers that involve allegedly clitic doubling constructions involved verb focusing and therefore it is not certain that these were genuine instances of clitic doubling or clitic right dislocation. For discussion of the differences between the two constructions, see Anagnostopoulou 1994, 2003 and the discussion included in Chapter 2 and 3 of this thesis.

<sup>17</sup> See footnote 16.

from Tables (12)-(17) suggest that the use of clitic in Greek ranges from 70% to 89%.

Moreover the comparison of Spanish and Catalan as presented in Wexler et al. (2003) shows that the two languages, although very closely related do not behave alike in the acquisition of object clitics. The elicitation experiment shows that clitic omission in Spanish is 0% for the 2-year old children in context with forms in the present tense, while the rate of omission for Catalan at the same age is almost 75%. During the same age range, the Spanish omission in context with present perfect tenses is about 15.5%, while in Catalan it is about 84%.

On the other hand, if we compare the Greek data with Spanish we observe hardly any significant difference. The two languages show very similar rates of both clitic omission and clitic usage.

Thus, the crosslinguistic examination of clitic omission of direct objects in child languages seems to indicate that early grammars pattern languages into two separate groups: On the one hand Greek, Spanish and Romanian, and on the other French, Italian and Catalan.

In the next Section I will discuss the syntactic differences and crosslinguistic variation that characterises each of these groups and by referring to the discussion in Chapter 3, I will return to the point that the languages under discussion pattern in the same fashion with respect to other of their morphosyntactic properties.

### **5.5 Crosslinguistic differences in clitic languages: The correlation between Clitic Doubling and Participle Agreement**

In Chapter 3, I outlined a syntactic proposal that explores the non-accidental link between the availability of Clitic Doubling and Participle Agreement across languages. The crosslinguistic investigation of the morphosyntactic properties of clitic-languages led to the conclusion that the two are in complementary distribution, as stated in (1) in Chapter 3 (repeated here as (6)).



(6) THE DOUBLING/AGREEMENT CORRELATION

*If a language has clitic doubling it lacks participle agreement.*

*If a language has participle agreement it lacks clitic doubling*

In order to account for (6), I suggest that clitic-languages are divided into two separate groups:

(7) GROUP 1: *Bundling languages* (no participle agreement)

GROUP 2: *Split-languages* (grammaticalized participle agreement)

The two groups differ with respect to their checking feature properties. Thus, languages of GROUP 1 check all the direct object-features against one functional head, that is, the Clitic Phrase. Languages of GROUP 2 on the other hand, check their direct object-features against two functional heads, that is, *[gender]* and *[number]* against AgrO (where participle agreement resides) and *[person]* against Clitic Phrase. I thus argue that clitic-languages with split-checking fail to have an overt DP-object, that is, fail to exhibit overt Clitic Doubling.

The crosslinguistic investigation shows that all clitic doubling-languages are *bundling*-languages, while all the languages with overt participle agreement are *split*-languages. The account then patterns Spanish and Greek together as bundling-languages, and Italian, French and Catalan in the same group as split-checking languages. The classification of the languages according to their syntactic properties is the same as that resulting from the crosslinguistic variation of clitic omission in early language.

Consequently the proposed syntactic account has been demonstrated to make the right predictions for the acquisition of pronominal clitics, as regards the omission of clitics, and finds empirical support in the variation of clitic omission across languages. In what follows I will argue that there is also theoretical support for the syntactic account. Within the framework of Wexler's (1998) Unique Checking Constraint theory, I will show in what follows that the idea of dividing

languages into split-checking and bundling ones allows us to unify theories from the perspective of both syntax and acquisition.

In the next Section, I will present the main theoretical claims and motivations for the Unique Checking Constraint, outlining its predictions for the acquisition of clitics, and I will then proceed to the modification of the Unique Checking Constraint.

## **5.6 The Optional Infinitive Stage and the Unique Checking Constraint**

### **5.6.1 Theoretical background**

The theory of Optional Infinitives (OI) in normal children has been the subject of much investigation; the Unique Checking Constraint (UCC) (Wexler 1998) attempts to capture a wide variety of empirical phenomena in clausal development in terms of a simple theory of development and to account for cross-linguistic differences with respect to these phenomena. Before I enter into the discussion of how UCC correlates the cross-linguistic differences with respect to object properties, I need to explain some basic properties of the OI Stage and the UCC.

In a nutshell, the basic properties of the OI Stage (Wexler 1990 ff.) can be summarised as follows:<sup>18</sup>

- (8) OI STAGE PROPERTIES
  - (a) *Root non-finite sentences are produced*
  - (b) *Finite sentences are produced in the same time period*
  - (c) *Nevertheless children know the grammatical properties of finiteness and non-finiteness.*
  - (d) *In English, children produce non-NOM subjects (e.g. him go), as well as NOM subjects (he go, he goes) but don't produce non-NOM subjects when agreement is present (\*him goes).*

---

<sup>18</sup> Reference to Wexler (1990ff.) is an abbreviation for Wexler (1990, 1992, 1994, 1996, 1998)

In order to account for the puzzling facts above and especially for (8d), Schutze and Wexler (1996) developed the AGREEMENT/TENSE OMISSION MODEL.<sup>19</sup>

They argued that the Tense-Omission model that was originally proposed by Wexler (1990, 1992, 1994) in order to account for properties (8a-c) of OI, was insufficient to explain data concerning subject case in the OI stage. In particular they showed that during the OI-stage in English, children producing OI (non-finite) verbs allowed either NOM (*he go*) or ACC (*him go*) subjects. At the same stage, children producing finite agreeing verbs allow only NOM subjects (*he goes*) but not ACC subjects (*\*him goes*) (the asterisk means that the form does not occur in child speech). Thus Schutze and Wexler argued that AGR assigns NOM case and that when AGR is missing default case (ACC in English) case is produced on the subject; when AGR exists only NOM case is produced. Thus the AGREEMENT/TENSE OMISSION MODEL (ATOM) was developed:

- (9) AGREEMENT TENSE OMISSION MODEL (ATOM)
- (a) *Children in the Optional Infinitive stage omit either AGRS or TNS or neither*
  - (b) *Children know the morphological features, e.g. that –s in English is [+3<sup>rd</sup>, +sing, +present tense]*
  - (c) *Children insert inflectional features according to the correct model of morphology (for Schutze and Wexler this was Distributed Morphology, Halle and Marantz, 1993)*
  - (d) *AGR assigns NOM case to the subject; otherwise default case (ACC in English) is chosen*

From ATOM the case facts follow; in particular there is no way to derive *him goes*. In languages like German or Dutch, where the default case is NOM,

---

<sup>19</sup> For detailed discussion of how and why ATOM is essential to the theory of UCC see Schutze and Wexler 1996, Schutze 1997 and Wexler 1998)

ATOM predicts that there will be no ACC subjects at all, even for OI's. This was correctly predicted as discussed in Schutze and Wexler (1996).<sup>20</sup>

However ATOM did not predict the empirical fact that many languages do not go through the OI stage. Wexler (1996, 1998) proposed the correlation between the Null-Subject parameter and the Optional Infinitive, as given in (10):

- (10) THE NULL SUBJECT/OPTIONAL INFINITE CORRELATION (NS/OI)  
*A language goes through an OI stage if and only if the language is not an INFL-licensed null-subject language.*

Italian is a classic example of an INFL-licensed null-subject language which does not go through the OI stage (i.e. the proportions of non-finite root forms produced is extremely small compared to OI languages). On the other hand, languages like German or Swedish are not null-subject languages, and they *do* go through the OI stage. According to NS/OI, the reason is that *INFL-licensed* predicts that only languages that are pro-drop in virtue of properties of their inflectional system will not go through the OI stage; while languages that can omit subjects for discourse reasons (e.g. Russian) are not considered as proper pro-drop languages.

The problem now is how to derive ATOM together with NS/OI. A theory that attempts to capture the essence of both is the Unique Checking Constraint (in conjunction with Minimize Violations below) (Wexler 1998):

- (11) UNIQUE CHECKING CONSTRAINT (UCC)  
*The D-feature of a DP can only check against one functional category.*<sup>21</sup>

The theory of UCC lies in the assumption that the Extended Projection Principle (EPP) feature is not a Case feature but rather, some other feature (taken to be a *D-feature*) (see Chomsky 1995) on INFL which must be checked by a D-

---

<sup>20</sup>For extensive argumentation on default case, see Schutze (1997).

<sup>21</sup>The D-feature is essentially what checks the EPP feature. So an equivalent way of stating the UCC is: a DP can check the EPP feature of at most one functional category.

feature on the subject. This is taken to be the reason why subjects raise to INFL. Following Chomsky, Wexler further assumes that the D-feature on INFL, a functional category, is uninterpretable, and therefore must be deleted after checking. Furthermore, it must be deleted or else the derivation will not converge, since an uninterpretable feature remains at LF. The D-feature on DP is *[+interpretable]*, and therefore does not delete after checking. Unlike Chomsky, Wexler assumes that AGR as well as TNS exists as a functional projection in a finite utterance.<sup>22</sup> Moreover, AGR also has an uninterpretable D-feature which must be checked. Therefore, to derive a finite sentence, the subject-DP raises first to TNS and then to AgrS to check its D-feature.<sup>23</sup> Under this view the D-feature on the subject-DP must check twice against uninterpretable D-features on the relevant functional categories in adult grammar.

The Unique Checking Constraint, however, prevents the checking against the two functional categories in child grammar. If the D-feature on DP checks the D-feature on TNS it cannot check the D-feature on AGR.<sup>24</sup> And similarly if the D-feature on DP passes TNS and checks the D-feature on AgrS it cannot check the D-feature on TNS any longer. In either case the sentence doesn't converge because there is an unchecked [-interpretable] D-feature.

It is essential for this theory that the child grammar chooses a grammatical representation by picking the least violating structure, as expressed in MINIMIZE VIOLATIONS (MV) in (12).

(12) MINIMIZE VIOLATIONS (MV)

*Given an LF, choose a numeration whose derivation violates as few grammatical properties as possible. If two numerations are both minimal violators, either one may be chosen.*

---

<sup>22</sup> For evidence from acquisition for the existence of both AgrS and TNS as two distinct categories see Guasti and Rizzi (1999), while for an opposite view see Bobaljik and Thráinsson (1998).

<sup>23</sup> The D-feature being [+interpretable] does not delete after checking against TNS and can therefore check with AgrS as well.

<sup>24</sup> See Wexler (1998) for the possibility that the D-feature on DP deletes after the first checking and the implications that this derivation has.

Thus UCC together with MV and ATOM account for the following child data:

- (13) a. she likes ice cream (no violation)  
b. she like ice cream (TNS is omitted)  
c. her like ice cream (AgrS is omitted)
- (14) her likes ice cream (ungrammatical in the OI stage-not attested)

The question at this point is why both the finite and non-finite structures are optional during the OI stage? That is why (8a) and (8b) hold true for child grammar? The answer is given by MV: they both contain violations, but they are tied for the minimum number of violations. The "optionality" is the result of a tie in the meeting of constraints, namely UCC and MV.

In the next Section I will examine the implication of the UCC-theory for objects and more specifically for object-clitics.

### **5.6.2 Implications of the Unique Checking Constraint for object omission – Deriving the Clitic Omission Stage - The modification of UCC**

Following Wexler (2000), Tsakali and Wexler (2003) and Wexler et al. (2003), I consider the omission of clitics to follow from the Unique Checking Constraint. The essential idea is that there is double-checking in the derivation of the object clitics in some languages (i.e. French, Italian, Catalan) while there is single checking in others (i.e. Greek, Spanish).<sup>25</sup> The assumption is that double-checking occurs when participial agreement is present in a language (see also Wexler, Gavarro and Torrens (2003) for a full discussion concerning Spanish versus Catalan). Before I explain the specifics of the acquisition theory which I adopt and which attempts to capture the correlation between participial agreement and clitics, I summarize in (15) certain facts that seem to hold throughout the

---

<sup>25</sup> In Tsakali and Wexler (2003) the double-checking was described as double D-checking, that is, double checking of the categorial feature of the DP-object. In the present proposal I depart from the claim that double checking is driven by the D-feature of the object. However the essence of the idea, namely that UCC and double checking are responsible for the clitic omission stage, remains intact as in the original proposal by Wexler (2000), Wexler et al (2003) and Tsakali and Wexler (2003).

development of object clitics. On analogy with (and in parallel to) the OI STAGE PROPERTIES, Tsakali and Wexler (2003) argue for a CLITIC OMISSION STAGE (CLOS) that has the following characteristics:

- (15) PROPERTIES OF CLITIC OMISSION STAGE (CLOS)
- (a) *Object clitic arguments are often omitted*
  - (b) *In the same period object clitic arguments are sometimes produced*
  - (c) *The participial agreement is sometimes omitted in the same period*
  - (d) *Children know that clitics have to agree with the participle while the full DP objects do not*

The fundamental idea of Wexler's (1998) theory of UCC is that a D-feature cannot be checked against two functional categories in child grammar, for the reason that it is not allowed by their computation system. Assuming that UCC holds in the derivation of Romance object clitics, one would expect omission of any element that needs to be checked against two functional categories.

Note that Tsakali's and Wexler's proposal groups languages in the same way I have, the syntactic implementation of their analysis is based on categorial feature checking and Case checking. The proposal developed in Chapter 3 is a *split-phi-feature-checking* approach. Under this view the principle of UCC can be reformulated as follows:

- (16) RESTATING THE UNIQUE CHECKING CONSTRAINT
- Phi-features cannot undergo split checking against two functional categories (in child grammar)*

The constraint in (16) would correctly derive clitic omission in languages like French and Italian, and the lack of it in Greek, Spanish and Catalan.

The syntactic configuration I assume is as presented in Chapter 3. Following Sportiche (1992/96), the clitic is base generated as the head of the Clitic Phrase (CIP). Given the assumptions I made in Chapter 3, I will now explore the various options for the derivations in child grammar. Recall that a central assumption of

my proposal is that clitic-languages differ with respect to the way they check their phi-features. Thus I will name DERIVATION TYPE I the checking mechanism of ‘bundling’-languages, and DERIVATION TYPE II the checking relations in *split*-languages.

#### DERIVATION TYPE I (Greek, Spanish and Romanian)

In this type of derivation DP / *pro* checks all its features with the Clitic Phrase. According to both the Unique Checking Constraint and its Restatement I proposed, there is no constraint that prevents adult-like checking in child grammar. Thus, clitic omission is not expected. As discussed throughout this chapter this is borne out in early Greek and Spanish.

However there is an issue that has been addressed (in Section 5.3.1) but not answered, namely that at a very early stage we can observe some clitic omission in these languages as well.

Although this age range (roughly until the age of 2) is beyond the scope of this thesis and we have no elicited data from this stage to be able to judge with certainty what the actual rate of clitic omission is, I believe that the reason for the percentages of clitic omission at this stage could be due to the fact that children have not set the relevant parameter yet. That is, children do not know yet if Greek is a *bundling*-language or *split*-language.

On a different view, given that we also observe equivalent rates of DP-omission, the omission of the clitics at this stage could indicate lack of knowledge of the transitive properties of the verb. In this scenario, children do not know if certain verbs are transitive or intransitive.

#### DERIVATION TYPE II (French, Italian, and Catalan):

Option 1: the DP-object / *pro* has to check its [*number*] and [*gender*] feature against AgrO. The next step involves checking of the [*person*] feature against the Clitic Phrase. This is the adult-like derivation that appears optionally in child grammar as predicted by MINIMIZE VIOLATION in (12). The result on this derivation is that both the clitic and the participle agreement (when required) will be present.

Option 2: the DP-object/*pro* checks its [*number*] and [*gender*] feature against AgrO. The next step involves checking off the [*person*] feature against the Clitic



Phrase. When *pro* reaches CIP, it will also have to agree with the clitic there, so we see how the agreement properties of the clitic with the participle are transmitted to the clitic through *pro*. This is the point where the RESTATEMENT OF THE UNIQUE CHECKING CONSTRAINT is relevant. Thus if *[person]* in the Clitic Phrase is not eliminated the clitic cannot be spelled out, since it has not been checked. In this case we have a derivation which does not crash but violates one Interface property, the requirement of *[person]* feature on CIP being checked: for a functional category to be spelled out all the uninterpretable features of the category must have been eliminated. The surface effect is that there is an “omitted clitic” (15a).

Option 3: If *[number]* and/or *[gender]* are not eliminated against AgrO then participle agreement will be omitted (15c). The question then in this derivation is what happens with the *[person]* feature on *pro*? Can the child check *[person]* directly without checking first *[gender]* and *[number]*? What are the implications for the grammar, and more particularly for parameter setting in this case?

Although nothing of what I have said so far prevents *pro* from checking its *[person]* feature directly with CIP, the answer to the questions above is negative.

Looking at constructions with present tense forms, one can decide whether the relevant features have been checked with AgrO. Thus, we have to look at the presence of clitics in constructions with overt participle agreement. This is the issue in the next Section.

### **5.6.3 Interaction of clitics with Participle Agreement**

Assuming that the derivation is such that it permits CIP to check the *[person]* feature without it having checked *[gender]* and *[number]* with AgrO, the result of this derivation would be an overt clitic with no overt participle agreement. Assuming Chomsky’s (2001, 2003 and 2005) and Wexler’s (2004) Phase-theory such a result would imply that the higher probe (CIP) has access to the DP/*pro* although there is an intervener probe (AgrO). For *pro* to check its *[person]* feature it needs to move to the edge of the first phase to be visible to the higher probe (CIP). Otherwise the implications for the theory would be that children omit

AgrOP (or vP), which according to Wexler (2004) is not attested in child language. If the clitic has not moved to the edge of the first phase, it cannot check its features further; thus the clitic will be omitted (and so will participle agreement). If now it has moved to the edge of the phase (that is, it has checked its features with AgrO), it has the option (as given by the Restatement of UCC) of moving higher up and checking [*person*] as well, or staying lower resulting in clitic omission again (but with participle agreement present).

Thus the checking-theory I assume makes very strong predictions regarding the interaction of clitics with participle agreement. First it makes the prediction for (13c), namely that during the CLO STAGE, Participle Agreement is sometimes omitted. Secondly it makes the prediction that omission of Participle Agreement results in omission of the clitic (15d). This has the following implication: whenever the child checks [*person*] with CIP it means that he/she has checked [*gender*] and [*number*] correctly (that, is no agreement errors).

Empirical evidence validating this prediction comes from Italian.<sup>26</sup> If we look at the child data with overt participle agreement, the alternatives for the clitic are two: either to be present or absent. This is shown in Table (19) (from Schaeffer 2000).

Table (19): *Proportion of omitted clitics with and without agreement in passato prossimo*

AGE	Mean Age	Omission-agreement	Omission-no agreement
2;1-2;6	2;5	20% (2)	80% (8)
3;1-3;11	3;5	100% (1)	0% (0)
4;1-4;10	4;6	0% (0)	0% (0)
5;0-5;11	5;6	0% (0)	0% (0)
Adults	>19	0% (0)	0% (0)

From Table (19) (column *Omission-Agreement*) we see that the clitic might be omitted in the presence of participle agreement. More importantly, in the same

<sup>26</sup> Unfortunately the studies in French do not provide information of this sort, so the point can only be shown in Italian.

Table (column *Omission-no agreement*), we get an indication that if when the clitic is omitted so is participle agreement (80% of the times the child omitted both, while 20% of the time the child omitted the clitic but not the participle agreement). However, in order to make sure that the prediction is indeed borne out, one needs to look at data where the participle agreement is overtly realised and observe the distribution of clitics in these contexts.

Looking into Italian again, Schaeffer (1997/2000) reports that Italian children never make agreement errors with overt clitics. Table (20) (from Schaeffer 2000) shows the proportions of overt clitics with correct agreement and agreement errors in *passato prossimo*. In the presence of an overt clitic, agreement is also overtly realised.

Table (20): *Proportion of overt clitic and agreement errors*

AGE	Mean Age	Correct Agreement	Agreement errors
2;1-2;6	2;5	100% (8)	0% (0)
3;1-3;11	3;5	100% (57)	0% (0)
4;1-4;10	4;6	100% (77)	0% (0)
5;0-5;11	5;6	100% (72)	0% (0)
Adults	>19	100% (130)	0% (0)

Thus to clarify the prediction, whenever agreement is present the clitic might be present or omitted; though, whenever the clitic is present, agreement must be overt. In other words, if the first step of the derivation is complete the second might happen or not; but if the first step of the derivation is not complete the next one cannot be computed. The alternatives of the interaction between participle agreement and clitics are summarized in (21).

- (21) a. Participle Agreement missing → Clitic missing  
 b. Participle agreement overt → i. Clitic Overt  
 ii. Clitic missing

Thus for the four logical possibilities that this interaction gives us, only the three are possible; the fourth one (Clitic Overt and Participle Agreement missing) is not attested.<sup>27</sup>

The data from Tables (19) and (20) are predicted by the construal of Checking Theory I adopt. Under my view, omission of clitics results from the hypothesis that children during the OI stage cannot check phi-features which are split over two functional categories. This hypothesis predicts correctly that problems in the emergence of clitics, will only be observed in languages that are split-checking-languages, but not in bundling-languages.

Moreover the hypothesis predicts that in bundling-languages, where no clitic omission is attested (i.e. Greek, Spanish and Romanian) constructions with Clitic Doubling must occur at approximately the same period as single clitic constructions. This is actually borne out in both Spanish and Greek (unfortunately we do not know about Romanian). Torrens and Wexler (2000) claim that Clitic Doubling is attested at the same period that single clitics are produced. Similarly Marinis (2000) reports that Christos (Christofidou corpus) starts using all clitic constructions at the same age, while the four children from CHILDES start using Clitic Doubling a little later after they start using single clitics. The data from my experiments also point in this direction. As mentioned already (footnote 14), children would very often reply with Clitic Doubling, although Clitic Doubling was not obligatory in these contexts.

---

<sup>27</sup> The data discussed in Table (19) show the equivalent phenomenon that we observe with Case on the subject during the OI, discussed in the previous Section: children producing finite agreeing verbs allow only NOM subjects (*he goes*) but not ACC subjects (*\*him goes*).

## **5.7 Conclusions-further discussion**

In this Chapter I have discussed the properties of clitics with respect to their omission across languages and I have shown that there is no significant clitic omission in early Greek. Moreover I have shown that the cross-linguistic differences with respect to clitic omission pattern languages into two groups, depending on the availability of participial agreement in a language or not.

Assuming the insights of the Unique Checking Constraint I accounted for the differences expected between the two language-groups. Thus, assuming that checking relations in each group differ with respect to the checking of phi-features, I showed that Greek and Spanish child grammars behave alike and lack clitic omission, while children in French, Italian and Catalan go through the Clitic Omission Stage and thus clitic omission occurs.

From the group of languages under investigation all languages with clitic omission (French, Italian and Catalan) are non clitic doubling languages while languages with no clitic omission (Greek, Spanish and Romanian) are clitic doubling languages. Thus the results from developmental studies confirm the syntactic proposal based on the correlation that a language that shows overt Participle Agreement lacks Clitic Doubling and vice versa.

Subject to further investigation, it would be interesting to see whether the generalisation holds true for developmental studies in more languages.

## CONCLUSIONS

In the first part of this thesis (Chapter 2 and 3) I focus on the syntactic properties of Clitic Doubling constructions. On the basis of new data from Modern Greek with Clitic Doubling of first and second person full pronouns and Clitic Doubling of complement clauses I show that Clitic Doubling remains linked to Case theory to a certain extent. However the Case-theoretical considerations posed by the Clitic Doubling constructions do not lead me to the conclusion that Clitic Doubling depends on case assignment. The conclusion from this set of data is that Clitic Doubling is only licensed as long as a well-formed chain can be established between the clitic and its associate. From this point of view Clitic Doubling behaves like an expletive associate chain and the syntax of the two can be assimilated. The chain as a whole is a well-formed entity that needs to share features as required by Visibility.

However the availability of Clitic Doubling in a particular language should not be attributed to Case. In Chapter 3, I argue that the parameter regulating the availability of Clitic Doubling constructions across languages is the presence of participle agreement within a particular language. The generalisation defended in this thesis is that, a clitic-language will lack Clitic Doubling if it shows object agreement with the participle. The derivation of the generalization is based on the checking mechanism of phi-features in a clitic-language: languages differ with respect to whether their phi-features enter into Agree relations in the functional domain as a bundle or split. Split checking will result in phonologically null categories. Thus, if a clitic-language has participle agreement, it needs to check its phi-features separately, (gender and number with participle and person with the clitic): overt associates of clitics are prevented. On the other hand, if a language does not show object agreement with the participle, it checks all its phi-features against Clitic Phrase: Clitic Doubling will optionally show up.

Like all studies on Clitic Doubling so far, my thesis dealt with the conditions that determine the syntactic impossibility of Clitic Doubling in a language. I do not attempt to answer the question of why Clitic Doubling appears in the first place. This is subject to further research. Moreover one topic which remains to be

investigated is the interaction of the agreement with the object in languages like Hindi, where the participle agreement does not always agree with the object.

In the second part of my thesis I focus on the developmental properties of clitics, in particular on the issue of clitic omission and I develop the predictions of the Doubling/Agreement Correlation from Chapter 3. I argue that children obey a constraint similar to the Unique Checking Constraint that prevents them from allowing split checking. I then argue that clitic omission will not be found in bundling languages while it should be expected in split-languages. Crosslinguistic developmental data from first language acquisition support this hypothesis: the Clitic Omission Stage is attested in non-clitic-doubling languages while it is nearly absent in clitic-doubling languages. The crosslinguistic typology derived from my proposal is supported by syntactic empirical evidence as well as from acquisition data: Greek, Spanish and Romanian child grammars behave alike and lack clitic omission, while children in French, Italian and Catalan go through the Clitic Omission Stage and thus clitic omission occurs.

Subject to further investigation is to investigate whether the generalisation holds true for developmental studies in more languages. Moreover it would be interesting to see what happens in clitic-second languages, for which the current proposal does not make any predictions; second position clitic languages are actually the ones that lack both participle agreement and Clitic Doubling. For mainly this reason it is intriguing to test first if there is a clitic omission stage and what it correlates to.

Additional issues for further investigations raised by this thesis concern possible errors that children make with respect to person or gender in the clitic emergence. As far as I know there is no comparative elicitation task that has explored exactly errors of the features of the clitics in the various environments.





## APPENDIX

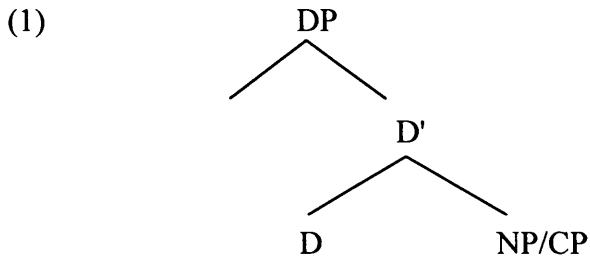
### 1. Nominalization and its relation to Clitic Doubling

Nominalization, a parameterised phenomenon across languages, is the process where a complement clause can be preceded by some sort of a determiner (either a demonstrative or a definite article).

Nominalization of different types of CP-clauses is very productive in Greek, and systematically uses the definite article to introduce the clause (Roussou 1991). Thus, *wh*-clauses, *oti* (that)-clauses, *na* (subjunctive)-clauses and *an* (if)-clauses can all be preceded by the definite article, as long as the clause is an argument of the verb or is co-referent with the argument of the verb.

Kayne's (1982) original proposal was that the complementizer in argument-sentences functions as a nominalizer. Its role is to give the clause a nominal categorial status so that it can function as an argument. Szabolcsi (1987) and Ouhalla (1987) also argue that the role of C is to turn the proposition into something that can act as an argument. It has been further argued that nominalization will take place for purposes of Case assignment (Roussou, 1991). The main conclusion of Roussou's analysis is that nominalized clauses occur in those positions where Case needs to be assigned. Thus, in some languages (e.g. Hungarian, Greek, and Hebrew among others), it is possible for a CP-argument to employ a Determiner which is obligatory in order for the CP to receive Case.

Roussou (1991) and Tsimpli & Stavrakaki (1999) assume that the definite article is a D element bearing case and resumptive agreement features; thus nominalization is understood to involve a DP introduced by the expletive definite article with a complement CP. Therefore the structure of the nominalized clause would look like (1):



Roussou (1991), discussing the properties of the determiner has claimed that in Greek the determiner is obligatory for subject clauses and dislocated object clauses but optional in any position when focused.

The phenomenon of nominalization raises certain questions: (i) is the nature of a complement clause always nominal, (ii) if the determiner serves as Case absorber, why isn't it always obligatory, (iii) does the presence of the determiner affect the meaning of the sentence, and (iv) is the D-projection always available in the structure, even when phonologically null?

The answers to the questions above pave the way to my claim that nominalization is not driven by case requirements, despite the fact that a nominalized clause can only occur in potential case positions. This is signified by the realisation of the phi-features of the determiner and the optionality of the determiner, which I consider obligatory only in non focused subject positions and with CPs that function as the argument of a Preposition. The differences, then, between overtly nominalized clauses versus non-overtly nominalized ones are driven by different-discourse-properties.

Before entering into a discussion of the specific questions, I present first the distribution of the determiner (Section 2), as well as the types of clauses that can undergo nominalization in Greek (Section 3).

**2. When is the Determiner obligatory?**

The distribution of the Determiner associated with a doubled CP in Greek is given in examples (2)-(10):

WITH SUBJECT-CPs: D OBLIGATORY

- (2) \*(To) oti ehis filus simeni pola.  
The-def that have-you friends means a lot.  
“That you have friends means a lot.”

WITH FOCUSED SUBJECT-CPS: D OPTIONAL

- (3) (TO) OTI EHIS FILUS simeni pola.  
that have-you friends means a lot.  
“That you have friends means a lot.”

WITH DISLOCATED SUBJECT-CPS: D OPTIONAL

- (4) (To) na ehis filus, I Maria elege oti ine simantiko.  
The-def subjunctive have-you friends, Maria was saying that it is important.  
“That you have friends, Maria was saying that it is important.”

WITH SUBJECTS OF SMALL CLAUSES: D OBLIGATORY

- (5) To perimena [to oti piges dhiakopes] na se ananeosi.  
It-cl-acc expected-I the-def that went-you holidays to-subj you-cl-acc feel new.  
“I expected it to be good for you that you went on holiday”.

WITH OBJECT-CPS: D OPTIONAL

- (6) Ksero (to) oti petihe stis eksetasis.  
Know-I the-def that passed-he the exams.  
“I know that he passed the exams.”

WITH FOCUSED OBJECT-CPS: D OPTIONAL

- (7) (TO) OTI PETIHE STIS EKSETASIS ksero.  
The-def that passed-he the exams know-I.  
“I know that he passed the exams.”

WITH DISLOCATED OBJECT-CPS: D OPTIONAL

- (8) (To) oti petihe stis eksetasis, to ksero.  
The-def that passed-he the exams, it-cl know-I.  
“That he passed the exams, I know it.”

WITH PREPOSITIONAL CPS: D OBLIGATORY

- (9) milisame gia to pos tha lisume to provlima  
talked-1<sup>st</sup> plural about the-def how FUT solve-1<sup>st</sup> plural the problem-acc

“We talked about how to solve the problem”

WITH ADJUNCT CPs: NO DETERMINER

- (10) Thelo na agoraso spiti, (\*to) an mazepso hrimata  
 want-1<sup>st</sup> sing subjunctive buy-1<sup>st</sup> sing a house, if collect-1<sup>st</sup> sing money  
 “I want to buy a house, if I collect the money”

Table (1) summarizes the possibility of the realisation of the definite article with CPs:

Table (1)

<b>DEFINITE ARTICLE</b>	<b>OBLIGATORY</b>	<b>DISALLOWED</b>
SUBJECT CP	+	-
FOCUSED SUBJECT CP	-	-
DISLOCATED SUBJECT CP	-	-
SUBJECT OF SMALL CLAUSE	+	-
OBJECT CP	-	-
FOCUSED OBJECT CP	-	-
DISLOCATED OBJECT CP	-	-
PREPOSITIONAL CP	+	-
ADJUNCT CP	-	+

The description of the data tells us that determiners are obligatory in subject-clauses (either subjects of the main clause or subjects of a small clause) as long as they are in their canonical position, and with prepositional CPs, while they are banned in adjuncts CPs. I will claim that the Determiner is not licensed for Case reasons but instead its presence makes the clause an *old* or *given* topic. Then it comes as no surprise that subjects that are topics have to be introduced with a determiner.

The obligatoriness of the determiner in prepositional CPs causes more opacity in challenging the case dependency of the determiner. It seems as if prepositions select for nominal elements and by always being Case assigners, the determiner cannot be omitted.

However, it is not clear that the determiner is there for case reasons, as it seems to be a general restriction that prepositions require an overt determiner with their singular NP-arguments; a condition that seems to be true for all languages

that cannot have bare singulars like Greek and English.<sup>1</sup> The reason why the determiner has to be overt in PP is not clear; however I do not see any straightforward connection to Case.

- (11) a. for \*(a/the/this) girl /because of \*(an/the/this accident)/from \*(a/the/this) boy/on \*(a/the/this) table  
b. gia \*(to/ena/kapjio) pedhi/ me \*(to/ena/kapjio) koritsi/

Nominalised CPs are always [+singular]. Example (12) shows that the definite article remains unaffected by the number of clausal arguments.

- (12) Speaker A: Ti katalaves apo to ergo?  
“What did you understand from the movie?”  
Speaker B: Katalava to/\*ta oti skotose ton Kesara o Vrutos ke oti o Kassios itan o ithikos afturgos.  
“I understood that Brutus killed Caesar and that Cassius was the one who organised the crime”

Moreover, the assumption that phi-features and case are closely linked (Chomsky 2000, 2001), casts further doubt on the idea that the determiner absorbs the case from the main verb. Thus, it is questionable whether the obligatoriness of the determiner should be connected to case requirements.

### 3. What type of clauses can be nominalized?

The data below ((13)-(16)) demonstrate that nominalization can take place with all the different types of clauses that act as the argument of the verb, namely *na* (subjunctive)-clauses, *oti* (that)-clauses, *an* (if)-clauses and *wh*-clauses.<sup>2,3</sup> The

---

<sup>1</sup> The restriction seems to loosen up with plural NPs or generic NPs. For example:  
i. for girls/because of accidents/from boys/on tables

<sup>2</sup> There is a further type of argumental clause: *pu*-clause. However *pu*-clauses in Modern Greek constantly resist nominalization (Roussou 1991, 1994). The reason for that could be that *pu* is lexically specified as nominal and therefore could not co-occur with the definite article. This is can

same examples also show that Clitic Doubling is also always possible with all the different types of clauses.

*NA-CLAUSES:*

- (13) (To) apofevgo [<sub>CP</sub>(to) na sinantiso ta pedhia]  
 It-cl-acc avoid-I the-def to meet-I the kids-acc  
 “I avoid it, meeting the kids”

*THAT-CLAUSES:*

- (14) (To) ksero (to) oti efige.  
 It-cl-acc know-I the-def that left-he.  
 “I know it, that he left”

*IF-CLAUSES:*

- (15) Dhen (to) gnorizo (to) an tha figi i ohi.  
 NEG it-cl-acc know-I the-def if fut-prt leave-he or not.  
 “I don’t know if he is going to leave or not”

*WH-CLAUSES:*

- (16) Dhen sou (to) leo (to) pjos martirise to mistiko.  
 NEG you-cl-gen it-cl-acc tell-I who told the secret.  
 “I’m not telling you who revealed it, the secret”.

---

be indicated by the fact that *pu* can occur in subject positions (more likely with psych-verbs) and also by the fact that verbs that do not assign Case like *dhistazo* (hesitate) cannot take *pu*-clauses as their complements. E.g:

- (i) Me pirakse pu me paratise  
 Me-cl-acc annoyed-3<sup>rd</sup>-sg that me-cl-acc left-3<sup>rd</sup> sg  
 “That he left me annoyed me”.

<sup>3</sup> It is possible in Greek to have the structure CP-subject Verb CP-object. For example:

- (i) To oti proponite deka ores tin imera diloni oti tu aresi afto pu kani  
 the-def that practice-3<sup>rd</sup> sing ten hours the day means that him-cl-dat like-3<sup>rd</sup> sing what do-3<sup>rd</sup> sing  
 “That he is practicing ten hours per day means that he likes what he does”

However it is impossible to have the order CP CP V, or V CP CP despite the fact that these orders are perfectly grammatical with DP-arguments. The pattern though that prevents two CP-arguments from being adjacent, seems to hold for all languages with relatively free word order like Greek (to the extent of my knowledge). We don’t know if it is disallowed by some syntactic principles or due to processing difficulties.



“I hesitate to go”

- (20) a. \*Distazo afto (Greek)  
 Hesitate-I this  
 \*“I hesitate this”  
 b. \*Habozott +DP-object (Hungarian)

Examples (18)-(20) clearly suggest that nominalisation of CPs is not always possible and is strictly dependent on the selectional properties of the verb. This means that a CP-argument cannot be always analysed as [DP+CP]. The verb *distazo* (hesitate) s-selects for a propositional argument but c-selects for a *plain-CP* (as opposed to *D-C*). So from a semantic point of view, verbs like *distazo* (hesitate) in (18a), like the verb *habozott* (hesitated) in Hungarian in (20b), and *ksero* (know) in (6) behave in the same way, but from the syntactic point of view they appear to have different requirements. This opens the following possibilities (depicted in Table 2), as far as categorial and semantic selection of the verb is concerned.

Table (2)

	c-selection	s-selection
Verb Class I	a) DP→D-NP	Entity
	b) D-CP	Entity
Verb Class II	CP	Proposition

The comparison of the two verb classes leads to the following descriptive generalisation:

- (21) *Nominalization will be possible only as long as the verb assigns Case to its complement.*

Therefore argument-CPs are not necessarily nominal. The nominalization process provides a diagnostic test for which class a verb belongs to, while in



languages in which nominalization is not an option the relevant diagnostic test would be the replacement of the CP with a DP.

As expected, whenever the appearance of the definite article is not possible, the clitic is not allowed either (example (21)). The unavailability of the Det entails that the CP cannot be doubled by a clitic and nor can it be replaced by a pronominal element. Interestingly the same idiosyncratic properties of nominalized CPs apply to Hungarian. In addition, a verb of Class II, that c-selects for a plain-CP like *erősködött* (stress the point) in (23), is not marked for definiteness, as it typically is the case with definite DP and D-CP complements (22).

(22) \*Erősködte hogy ide jön  
 Stressed-3<sup>rd</sup>-sing-past-def that prt come-3<sup>rd</sup>-sing-present

(23) Erősködött hogy ide jön.  
 Stressed-3<sup>rd</sup>-sing-past-indef that prt come-3<sup>rd</sup>-sing-present  
 “He stressed the point that he would come”.

## 5. The structure of the D-CP

I will now turn to question (iv) from Section 1, namely, is the D-projection above CP always available, even when it is not phonologically realised? My answer is negative; apart from the fact that it seems conceptually unnecessary to assume that some projection exists even when we do not have any syntactic evidence for it, there are data that actually suggest that it is not. Consider the differences between (24) and (25):

(24) Apofevgo ta pedhia na ta sinantiso.  
 Avoid-I the kids-acc subj them-cl-acc meet-I  
 “I avoid meeting the kids”

(25) Apofevgo ta pedhia (\*to) na ta sinantiso.  
 It-cl-acc avoid-I the kids-acc the-def subj them-cl-acc meet-I  
 “I avoid meeting the kids”

In example (24) the DP *ta pedhia* (the kids) has moved from the object position of the embedded clause to some position which is higher than the embedded C.<sup>6</sup> However, in the presence of an overt determiner, (25) the example becomes ungrammatical. These data support the idea that a DP projection is not structurally always available above the CP. More insight on this question comes in the next section, where I discuss the nature of nominalized clauses.

## 6. Why nominalisation at all?

Summarizing the discussion so far, we have seen that:

- (i) Determiner insertion is obligatory only with non focused subjects and prepositional CPs, but is optional in every other case.
- (ii) There is no good reason to associate the obligatoriness of the determiner with Case, despite the fact that the presence of the determiner will only occur in Case related positions.
- (iii) Not all CP-arguments are nominal in nature.

I have deliberately left out of the discussion so far the issue of the nature of nominalization. That is, if nominalization is not driven by syntactic reasons, what is the interpretational import of a nominalized clause as opposed to one which is not nominalized?

Although it is hard to observe consistent differences between the sentences where the definite article is present and the ones where it is not, I argue that the presence of the determiner is context dependent and is tolerated only in those cases, where the embedded clause is discourse linked and conveys old information. I will further argue that the determiner acts as a conventional presuppositional element. Therefore the presence of the determiner will be infelicitous in contexts in which the embedded clause is new information. Therefore, the claim to be defended reads as in (26).

### (26) NOMINALIZER OVERTNESS CONSTRAINT (NOC)

---

<sup>6</sup> For simplicity I assume here that the embedded clause is always a CP. However there are good arguments (Iatridou 1993) why the “na”-clauses (subjunctive clauses) are IP and not CPs.

*Determiner insertion is linked to discourse old information CPs.*

I will start the discussion by showing that sentences with an overt nominalizer are infelicitous under a novel reading. Consider the following example:

- (27) Pistevi tipota o Jiannis (apo afta pu tu ipame)?  
believe-3<sup>rd</sup> sg anything-acc the John-nom (from what we told him)  
“Does John believe anything (of what we told him)?”
- a. Pistevi oti i Maria ton agapai  
believe-3<sup>rd</sup> sg that the Mary-nom him-cl-acc love-3<sup>rd</sup> sg  
“He believes that Mary loves him”
- b. #Pistevi to oti i Maria ton agapai  
believe-3<sup>rd</sup> sg the that the Mary-nom him-cl-acc love-3<sup>rd</sup> sg  
“He believes that Mary loves him”
- (28) Ti pistevi o Jiannis (apo afta pu tu ipame)?  
What-acc believe-3<sup>rd</sup> sg the John-nom (of what we told him)  
“What does John believe (from what we told him)?”
- a. Pistevi oti i Maria ton agapai  
believe-3<sup>rd</sup> sg that the Mary-nom love-3<sup>rd</sup> sg him-cl-acc  
“He believes that Mary loves him”
- b. Pistevi to oti i Maria ton agapai  
believe-3<sup>rd</sup> sg the that the Mary-nom love-3<sup>rd</sup> sg him-cl-acc  
“He believes that Mary loves him”

Example (27a) is the natural answer to the question, while (27b) is infelicitous in this context. To the extent that native speakers find (27b) felicitous, it is only when *tipota* is assigned a special meaning, which comes from some previous discussion about something that John wants to tell Mary that we happen to know. In (28) both answers are natural. The difference in the questions which allows both (28a) and (28b) as an answer is that the question in (28) presupposes the knowledge of something that John told Mary.

Moreover, adopting Hegarty's (1991) proposal on extraction out of factive complements, the fact that the overtly nominalized clauses are strong islands for any type of extraction, as discussed briefly in Section 5, supports their link to discourse oldness.

Hegarty (1991) argues against the generalization that all factive complements are islands for adverbial extraction, and that factivity is the reason for this. Showing that there are some factives that pattern with nonfactives while there are also some nonfactives that pattern with factives, he argues that the operative distinction for adverbial *wh*-extraction is not the one between factives and nonfactives, but rather the distinction between familiar and non-familiar complements.

In the same spirit, by saying that an embedded clause with an overt nominalizer is discourse linked, I mean that there is a property F that makes the complement clause familiar. Adopting Hegarty's notion of property F, it can in a nutshell be formulated as in (29) (taken from Hegarty 1991, see also Roussou 1994):

(29) F=assumed by the speaker to be familiar to the listener

In this identification of F, the notion of familiarity should be construed as a relation between the listener, the content of the complement clause and the linguistic and pragmatic context. This relation can be satisfied under any of the circumstances given in (30).

- (30)
- i. The content of the complement has been established earlier in the discourse, so that it is thereafter presupposed in the discourse.
  - ii. The content of the complement is background knowledge that the listener brings to the discourse, where the relevant background knowledge is evoked by something in the linguistic or pragmatic context.
  - iii. The content of the complement has been established earlier in the discourse as a point at issue or of controversy, or a point of discussion in the discourse, and is not necessarily presupposed.

iv. The content of the complement is a point of discussion that is evoked for the listener by something in the linguistic or pragmatic context.

## REFERENCES

- Adger, D. (1994). *Functional Heds and Interpretation*. PhD Dissertation, University of Edinburgh.
- Adger, D. and D. Harbour. (to appear). The syntax and syncretisms of the person case constraint. To appear in *Syntax*.
- Agouraki, G. (1993). *Spec/Head Licensing: The Cases of Foci, Clitic Constructions and Polarity Items. A Study of Modern Greek*. Ph.D. Dissertation, UCL.
- Alexiadou, A. (1999). On the Properties of some Greek Word Order Patterns. In: Artemis Alexiadou, Geoffrey Horrocks, and Melita Stavrou (eds), *Studies in Greek Syntax*, 46-55. Dordrecht: Kluwer Academic Publishers.
- Alexiadou, A. (2001). *Functional Structure in Nominals. Nominalization and ergativity*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Alexiadou, A. and E. Anagnostopoulou (1997) Toward a Uniform Account of Scrambling and Clitic Doubling. In Werner Abraham and Elly van Gelderen (eds.), *German: Syntactic Problems- Problematic Syntax*, 142-161. Tübingen: Max Niemeyer Verlag.
- Alexiadou, A. and E. Anagnostopoulou (2001) The Subject In-situ Generalization, and the role of Case in driving computations. *Linguistic Inquiry* 32: 193-231.
- Alexiadou, A. and E. Anagnostopoulou (2006). The Subject-in-Situ Generalization Revisited. To appear in Gartner H.-M. and U. Sauerland, eds., *Proceeding of The Workshop on Interfaces+Recursion=Language?*, Mouton de Gruyter.

Anagnostopoulou, E. (1994). Clitic Dependencies in Modern Greek. Ph.D. dissertation, Department of Linguistics, University of Salzburg.

Anagnostopoulou, E. (1997). Clitic Left Dislocation and Contrastive Left Dislocation. In: Elena Anagnostopoulou, Henk van Riemsdijk and Frans Zwarts (eds.), *Materials on Left Dislocation*: 151-192. Amsterdam/Philadelphia: John Benjamins Publishing Company.

Anagnostopoulou, E. (1999). Conditions on Clitic Doubling in Greek. In: Henk van Riemsdijk (ed.), *Clitics in the Languages of Europe*, 762-798. Language Typology, Volume III. Berlin/New York: Mouton de Gruyter.

Anagnostopoulou, E. (2002). Case 17: Clitic Doubling. *Syntax Companion (SYNCOM) Project*. <http://www-uilots.let.uu.nl/syncom/index.html>.

Anagnostopoulou, E. (2003) *The Syntax of Ditransitives. Evidence from Clitics*. Berlin / New York: Mouton de Gruyter.

Anagnostopoulou, E. and A. Giannakidou (1995). Clitics and Prominence or Why Specificity is not Enough. In A. Dainora, R. Hemphill, B. Luka, B. Need, and S. Pragman (eds), *CLS 31: Papers from the 31st Annual Meeting of the Chicago Linguistic Society*, Volume 2: Parasession on Clitics. University of Chicago. 1-15.

Anagnostopoulou, E., H. van Riemsdijk and F. Zwarts (1997) *Materials on Left Dislocation*. Amsterdam: Benjamins.

Anderson, G. D. (2002). Case Marked Claussal Subordination in Burushaski Complex Sentence Structure. In *Studies in Language* 26/3: 547-71.

Antinucci, F. and R. Miller (1976) How Children Talk About What Happened, *Journal of Child Language* 3, 167-189.

Aoun, J. (1981). *The Formal Nature of Anaphoric Relations*. Ph.D. dissertation, MIT.

Aoun, J. (1999). Clitic-Doubled Arguments. In K. Johnson and I. Roberts (eds.), *Beyond Principles and Parameters. Essays in Memory of Osvaldo Jaeggli*, 13-42. Dordrecht: Kluwer Academic Publishers.

Avram, L. (2000) Clitic omission in child Romanian, talk given at the *Psycholinguistic Colloquium* at the University of Potsdam, Potsdam, January 2000.

Baauw, S. (2000). *Grammatical Features and the Acquisition of Reference: A comparative study of Dutch and Spanish*. PhD Dissertation, Utrecht.

Babyonyshev, M. and S. Marin. (2005). Acquisition of pronominal clitics in Romanian. Ms. University of Yale.

Baker, M. (1996). *The Polysynthesis Parameter*. Oxford/ New York: Oxford University Press.

Barrenechea, A. M. and T. Orecchia. (1979). La duplicación de objetos directos e indirectos en el español hablado en Buenos Aires. In J.M. Lope Blanch (ed.) *Estudios sobre el español hablado en las principales ciudades de América*, 351-381. Universidad Nacional Autónoma de Mexico. Mexico City.

Bleam, T. (1999) *Leísta Spanish and the Syntax of Clitic Doubling*. Ph.D. dissertation, University of Delaware. [Distributed by the Institute for Research in Cognitive Science, Philadelphia: University of Pennsylvania.]

Bohannon, J. N., and L. Stanowicz. (1988). The issue of negative evidence: Adult responses to children's language errors. *Developmental Psychology* 24, 684-689.



- Borer, H. (1984). *Parametric Syntax*. Dordrecht, Holland: Foris Publications.
- Borer, H. and K. Wexler (1987). The Maturation of Syntax. In T. Roeper & E. Williams (eds.) *Parameter Setting*, Reidel, Dordrecht, 123-172.
- Borer, H. and K. Wexler (1992) Bi-unique relations and the maturation of grammatical principles. *Natural Language and Linguistic Theory* 10, 147-189.
- Bouchard, D. (1982). On the content of empty categories, Ph.D. dissertation, MIT.
- Bottari, P., P. Cipriani, A.M. Chilosi, and L. Pfanner (1998) The Determiner System in a Group of Italian Children with SLI. *Language Acquisition* 7(2-4), 285-315.
- Bowerman, M. (1988). The “no negative evidence” problem: How do children avoid an overly general grammar? In J. Hawkins, ed., *Explaining language universals*. Oxford: Blackwell.
- Brody, M. (1995). *Lexico-Logical Form: a radically minimalist theory*. Cambridge Mass.: MIT Press.
- Brown, R., and C. Hanlon. (1970). Derivational complexity and the order of acquisition in child speech. In J. R. Hayes, ed., *Cognition and the development of language*. New York: Wiley.
- Burzio, L. (1986). *Italian Syntax*: Dordrecht: Reidel Publishers.
- Cardinaletti, A. (1997). Subjects and clause structure. In L. Haegeman (ed.) *The New Comparative Syntax*, 33-63. London: Longmans.

Cardinaletti, A. and M. Starke. (1999). The typology of structural deficiency: A case study of three classes of pronouns. In H. van Riessdijk, ed., *Clitics in the languages of Europe*. Berlin: Mouton de Gruyter.

Cheng, L. (1991). *On the Typology of WH-Questions*. Ph.D. dissertation, MIT.

Chomsky, N. (1959). A review of B. F. Skinner, Verbal behaviour. *Language* 35, 26-58.

Chomsky, N. (1981). *Lectures on Government and Binding*. Dordrecht: Foris Publications.

Chomsky, N. (1986). *Knowledge of language: Its nature, origin, and use*. New York: Praeger.

Chomsky, N. (1991). Some Notes on Economy of Derivation and Representation. In R. Freidin (ed.) *Principles and Parameters in Comparative Grammar*, 417- 454. Cambridge Mass: MIT Press.

Chomsky, N. (1993). A Minimalist Program for Linguistic Theory. In Ken Hale and Jay Keyser (eds.), *The View From Building 20*, 1-52. Cambridge, Massachusetts: MIT Press.

Chomsky, N. (1995). *The Minimalist Program*. Cambridge, Massachusetts: MIT Press.

Chomsky, N. (2000). Minimalist Inquiries: The framework. In R. Martin, D. Michaels and J. Uriagereka (eds.), *Step by Step: Essays on minimalist syntax in honor of Howard Lasnik*, 89-155. Cambridge, Mass: MIT Press.

Chomsky, N. (2001). Derivation by phase. In: Michael Kenstowicz (ed.), *Ken Hale. A Life in Language*, 1-52. Cambridge, Mass.: MIT Press.

Chomsky, N. (2004). Beyond explanatory adequacy. In A. Belletti (ed), *Structures and Beyond*, Oxford University Press, Oxford.

Chomsky, N. (2005). On Phases. ms.MIT

Cinque, G. (1990). *Types of A'-Dependencies*. Cambridge, Massachusetts: MIT Press.

Cinque, G. (1993). A Null Theory of Phrase and Compound Stress. *Linguistic Inquiry* 24: 239-298.

Clark, E.V. (1985) The Acquisition of Romance, With Special Reference to French. In D. I. Slobin (ed), *The Crosslinguistic Study of Language Acquisition*, Vol.I.

Cuervo, C. (2003). *Datives at Large*. PhD. Dissertation, MIT.

Demetras, M. J., K. N. Post, and C. E. Snow. (1986). Feedback to first language learners: The role of repetition and clarification questions. *Journal of Child Language* 13, 275-292.

Deprez, V. A. (1998). On the semantic Impact of Syntactic Agreement: The case of French Participle Agreement. *Probus*, Mouton de Gruyter, Paris.

Deprez, V. A. and A. Pierce (1993) Negation and Functional Projections in Early Grammar. *Linguistic Inquiry* 23, 25-67.

Diesing, M. (1992). *Indefinites*. Cambridge, Mass: MIT Press.

Diesing, M. (1993) NP Types and Conditions on Interpretation. Paper presented that the *Research Institute for Language and Speech*, University of Utrecht, October 30, 1993.

Diesing, M. and E. Jelinek (1995). Distributing Arguments. *Natural Language Semantics* 3: 123-176.

Dimitriadis, A. (1999). On Clitics, Prepositions and Case Licensing in Standard and Macedonian Greek. In: Artemis Alexiadou, Geoffrey Horrocks and Melita Stavrou (eds.), *Studies in Greek Syntax*, 95-113. Dordrecht: Kluwer Academic Publishers.

Dobrovie-Sorin, C. (1990). Clitic Doubling, Wh-Movement, and Quantification in Romanian. *Linguistic Inquiry* 21: 351-398.

Doukas, Thomas (1998). Null Subject Parameter and Non-Finite forms in Modern Greek; Study of a case, Sienna, unpublished ms.

Drachman, Gaberell. (1983). Parameters and functions of clitic doubling in Modern Greek. Paper presented at the 4<sup>th</sup> Meeting on Greek Linguistics, University of Thessaloniki.

Elman, J. L. (1993). Learning and development in neural networks: The importance of starting small. *Cognition* 48, 71-99.

Elman, J. L., E. A. Bates, M. H. Johnson, A. Karmiloff-Smith, D. Parisi, and K. Plunkett. (1996). *Rethinking innateness*. Cambridge, Mass: MIT Press.

Felix, S. (1984). Maturational aspects of Universal Grammar. In A. Davies, C. Criper and A. Howatt ,eds., *Interlanguage*, Edinburgh: Edinburgh University Press.

Ferdinand, A. (1996) *The Development of Functional Categories: The Acquisition of the Subject in French*, *Holland Institute of Generative Linguistics*, Dordrecht, The Netherlands.

Fox, D. and Y. Grodzinsky. (1994). Children's passive: A view from the by-Phrase. Ms. MIT and Tel-Aviv University.

Fox, D., Y. Grodzinsky and S. Crain (1995). An experimental study of children's passive. In C. Schutze, J. Ganger, K. Broihier, eds., *Papers on Language Processing and Acquisition. MIT Working papers in Linguistics* 26, 249-264.

Friedemann, M.-A. (1993/1994) 'The underlying position of external arguments in French: A study in adult and child grammar'. *Language Acquisition* 3 (3), 209-255.

Fykias, Ioannis. (1988). *Aspekte der Neugriechischen Syntax: eine rektions- und bindungstheoretische Untersuchung von Kasus-Mechanismen des Neugriechischen*. Ph.D. dissertation, University of Salzburg.

Giorgi, A. and Longobardi, G. (1991) *The syntax of Noun Phrases: Configurations, Parameters and Empty Categories*. Cambridge, Cambridge University Press.

Giusti, G. and M. Stavrou (to appear). Possessive clitic in the DP: Doubling or Dislocation? In Kalluli, D. and L. Tasmowski, eds. *Clitic Doubling in Balkan Languages*.

Grodzinsky, J. and T. Reinhart. (1993). The innateness of Binding and Coreference. *Linguistic Inquiry*, 24, 69-102.

Grohmann, Kleanthes. (2003). *Prolific Domains. On the Anti-Locality of Movement Dependencies*. Amsterdam / Philadelphia: Benjamins.

Guasti, T. (1993-1994) 'Verb syntax in Italian child grammar: Finite and nonfinite verbs'. *Language Acquisition* 3, 1-40.

Guasti, M. T. (2002). *Language Acquisition: The Growth of Grammar*. Cambridge, MIT Press.

Guilfoyle, E. and M. Noonan. (1988). Functional categories and language acquisition. In the Proceedings of the 13<sup>th</sup> Annual Boston University Conference on Language Acquisition.

Haegeman, L. (1996) Root infinitives, clitics and truncated structure. In: H. Clahsen (ed.) *Generative Perspectives on Language Acquisition*. Amsterdam: Benjamins, 271-309.

Halpern, A. (1995). *On the Placement and Morphology of Clitics*. Stanford: CSLI Publications.

Hamann, C., L. Rizzi, and U. Frauenfelder (1996) On the acquisition of the pronominal system in French. In: H. Clahsen (ed.) *Generative Perspectives on Language Acquisition*. Amsterdam: Benjamins.

Hamann, C. (1997). *From Syntax to Discourse: Children's Use of Pronominal Clitics, Null Arguments, Infinitives and Operators*. Habilitationsschrift, University of Geneva.

Halle, M., and A. Marantz (1993) Distributed morphology and the pieces of inflection, In K. Hale and S. J. Keyser (eds.), *View from building 20: Essays in linguistics in honor of Sylvain Bromberger*. Cambridge:MIT press.

Heim, I. (1982). *The Semantics of Definite and Indefinite Noun Phrases*. Ph.D. dissertation, University of Massachusetts, Amherst.

Hirsh-Pasek, K., R. Treiman, and M. Scneiderman. (1984). Brown and Hanlon revisited: Mother's sensitivity to ungrammatical forms. *Journal of Child Language* 11, 269-286.

Hoop, H. de. (1992). *Case Configuration and Noun Phrase Interpretation*. Ph.D. dissertation, Rijksuniversiteit Groningen.

Hurtado, A. (1984). On the Properties of LF. *Cornell Working Papers in Linguistics* 5.

Hyams, N. (1986). *Language acquisition and the theory of parameters*. Dordrecht: Reidel.

Hyams, N. (1987). The theory of parameters and syntactic development. In T. Roeper and E. Williams, eds., *Parameter Setting*, Dordrecht: Reidel

Hyams, N. (1996). The underspecification of functional categories in early Grammar. In H. Clahsen, ed., *Generative perspectives on language acquisition*. Amsterdam: John Benjamins.

Hyams, N. and Wexler, K. (1993). On the grammatical basis of null subjects in child language. *Linguistic Inquiry*, 24.

Iatridou, S. (1988). Clitics, anaphors, and a problem of coindexation. *Linguistic Inquiry* 19: 698-703.

Iatridou, S. (1990). About Agr(P). *Linguistic Inquiry* 21.4: 551-576.

Iatridou, S. (1991). Clitics and Island Effects. Ms., Department of Linguistics and Philosophy, MIT.

Iatridou, S. (1993). On Nominative Case assignment and a few related things. *MIT Working Papers in Linguistics 19: Papers on Case and Agreement II*: 175-196. Cambridge, Mass.: MITWPL, Department of Linguistics and Philosophy, MIT.

Iatridou, Sabine (1995) To Have and to Have not: on the Deconstruction Approach. *In the Proceeding of WCCFL*, 14.

Iatridou, S. (1999). Clitics: a Partial Overview. *Lectures notes*, MIT.

Jaeggli, O. (1982). *Topics in Romance Syntax*. Dordrecht Holland: Foris Publications.

Jaeggli, O. (1986). Three issues in the theory of clitics: case, doubled NPs, and extraction. In Hagit Borer (ed.) *The Syntax of Pronominal Clitics*, 15-42. New York: Academic Press.

Jakubowicz, C. (1989) Maturation or Invariance of Universal Grammar Principles in Language Acquisition. *Probus* 3, 283-340.

Jakubowicz, C. and C. Rigaut (in press) L'acquisition des clitiques nominatifs et des clitiques objets en français [The Acquisition of Nominative and Object Clitics in French]. *Revue Canadienne de Linguistique*.

Jakubowicz, C., L. Nash, C. Rigaut, and C.-L. Gerard (1998). Determiners and clitic pronouns in French-speaking children with SLI. *Language Acquisition* 7, 113-160.

Jakubowicz, C., N. Müller, O.-K. Kang, B. Riemer, and C. Rigaut (1996). On the acquisition of the pronominal system in French and German. In: A. Stringfellow, et al. (eds.) *BUCLD 20*. Somerville MA: Cascadilla Press, 374-385.



Jakubowicz, C., N. Müller, B. Riemer, and C. Rigaut (1997). The case of subject and object omission in French and German. In: E. Hughes, M. Hughes, and A. Greenhill (eds.) *BUCLD 21*. Somerville MA: Cascadilla Press, 331-342.

Kalluli, D. (1999). *The Comparative Syntax of Albanian: On the Contribution of Syntactic Types to Propositional Interpretation*. Ph.D. Dissertation, University of Durham.

Kayne, R. (1972). Subject Inversion in French interrogatives. In J. Casagrande and B. Saciuk, eds., *Generative Studies in Romance Languages*, Rowley, Mass.: Newbury House, 70-126.

Kayne, R. (1975). *French Syntax: the Transformational Cycle*. Cambridge, Mass.: MIT Press.

Kayne, R. (1982). Predicates and Arguments, Verbs and Nouns. Paper presented at the GLOW Conference, *GLOW Newsletter*, 8, 24.

Kayne, R. (1984). *Connectedness and Binary Branching*. Dordrecht: Foris Publications.

Kayne, R. (1989). Null Subjects and Clitic Climbing. In: Osvaldo Jaeggli and Ken Safir (eds.), *The Null Subject Parameter*, 239-261. Dordrecht: Kluwer Academic Publishers.

Kayne, R. (1989/2000). Facets of Romance Past Participle Agreement. In: Paola Benincà (ed.), *Dialect Variation and the Theory of Grammar*, 85-103. Dordrecht: Foris Publications.

Kayne, R. (1991). Romance Clitics, Verb Movement, and PRO. *Linguistic Inquiry* 22: 647-686.

Kayne, R. (1994). *The Antisymmetry of Syntax*. Cambridge, Mass.: MIT Press.

Kayne, R. (1998/2000). Person Morphemes and Reflexives. In *Parameters and Universals*. Oxford: Oxford University Press.

Kayne, R. (1999). A Note on Clitic Doubling in French. In *Parameters and Universals*. Oxford: Oxford University Press.

Kayne, R. (2000). *Parameters and Universals*. Oxford: Oxford University Press.

Kayne, R. (2002). Pronouns and Their Antecedents. In Epstein S. and T. D. Seely (eds), *Derivation and Explanation in the Minimalist Program*, Blackwell Publishing, 133-166.

Kayne, R. and J.-Y. Pollock (1978). Stylistic Inversion and successive Cyclicity and move NP in French. *Linguistic Inquiry* 9: 595-621.

Kayne, R. and J.-Y. Pollock (1998). New thoughts on stylistic inversion. Paper presented at the *Workshop on Inversion in Romance*. May 1998, Amsterdam. Published in Kayne, R. (2005), *Movement and Silence*, Oxford University Press, Oxford.

Klavans, J. (1985). The independence of syntax and phonology in cliticization. *Language* 61, 95-120.

Lyzckowski, D. (1999). *Adquieretelo: On the Acquisition of Pronominal Object Clitics in Spanish*. Harvard University, doctoral dissertation.

Marantz, A. (1991). Case and licensing. *ESCOL '91: Proceedings of the Eighth Eastern States Conference on Linguistics*, 234-253. [Distributed by the ESCOL Publications Committee.]

Marcus, G. F. (1993). Negative evidence in language acquisition. *Cognition* 46, 53-85.

Marcus, G. F. (1995). The acquisition of English past tense in children and multi-layered connectionist networks. *Cognition* 56, 271-279.

Marinis, T. (2000). The Acquisition of Clitic Objects in Modern Greek: Single Clitics, Clitic Doubling, Clitic Left Dislocation. *ZAS Papers in Linguistics 2000*. 259-281.

Massey, V. (1992). *Compositionality and constituency in Albanian*. Ph.D. dissertation. University of North Carolina, Chapel Hill. [Distributed by MITWPL: *MIT Occasional Papers in Linguistics* 3. Department of Linguistics and Philosophy, MIT.]

Mavrogiorgos, M. (2005). "Greek clitics as independent  $\phi$ -Phrases. Evidence and implications". Talk given in the LSA, Workshop in the Greek Morpho-Syntax, Harvard, Cambridge.

McNeill, D. (1966). Developmental psycholinguistics. In F. Smith and G. A. Miller, eds., *The genesis of language*. Cambridge, Mass.: MIT Press.

Miller, P. (1992). Postlexical cliticisation versus affixation: coordination criteria. In C. Cankis, G. Chan and J. Denton, eds., *Proceedings of the 30<sup>th</sup> Regional Meeting of the Chicago Linguistic Society*. Chicago, 382-396.

Miller, P. and I. Sag. (1993/95). French clitic movement without clitics or movement. *Paper presented at LSA annual meeting*. Los Angeles.

Monachesi, P. (1995). A Grammar of Italian Clitics. Ph.D. dissertation, University of Tilburg.

Morgan, J. L. and L. Travis. (1989). Limits on negative information in language input. *Journal of Child Language* 16, 531-552.

Müller, N., B. Crysmann and G.A. Kaiser (1996) Interactions Between the Acquisition of French Object Drop and the Development of the C-System. *Language Acquisition* 5(1), 35-63.

Obenauer, H.-G. (1992). L'interprétation des structures wh et l'accord du participe passé. In Obenauer, H.-G. and Zribi-Hertz, eds., *Structure de la phrase et théorie du liage*. Presses Universitaires de Vincennes, 169-193.

Obenauer, H.-G. (1994). *Aspects de la syntaxe A-barre. Effets d'intervention et mouvements des quantifieurs*. These de doctorat d'Etat, Université de Paris VIII.

Ordóñez, F. (1997). *Word Order and Clause Structure in Spanish and Other Romance Languages*. Ph.D. dissertation, CUNY.

Ordóñez, F. (1998). Postverbal Asymmetries in Spanish. *Natural Language and Linguistic Theory* 16, 313-346.

Ouhalla, J. (1987). *The Syntax of Head Movement: A Study of Berber*. PhD Dissertation, University College London.

Ouhalla, J. (2001). 'Clitic-placement, grammaticalization and reanalysis in Berber', to appear in Richard Kayne and Guglielmo Cinque (eds.) *Handbook of Comparative Syntax*, New York/Oxford: Oxford University Press.

Ouhalla, J. (2004). Agreement Features, Agreement and antiagreement, ms. Dublin.

Petinou, K. and A. Terzi (2002). Clitic (mis)placement in Cypriot Greek Normally Developing and Language Impaired Children. *Language Acquisition* 10: 1-28.

Petkova Schick, I. (2000). Clitic Doubling Constructions in Balkan-Slavic Languages. In F. Beukema and M. den Dikken (eds.) *Clitic Phenomena in European Languages*, 259-292. Amsterdam/ Philadelphia: John Benjamins Publishing Company.

Philippaki-Warbuton, I. (1977). Modern Greek Clitic Pronouns and the 'Surface Structure Constraints'. *Journal of Linguistics* 13: 259-281.

Philippaki-Warbuton, I. (1985). Word Order in Modern Greek. *Transactions of the Philological Society* 2: 113-143.

Philippaki-Warbuton, I. (1987). The theory of empty categories and the Pro-drop parameter in Modern Greek. *Journal of Linguistics* 23. 289-318.

Philippaki-Warbuton, I. (1992). On Mood and Complementizers in Modern Greek. *Reading University Working Papers in Linguistics* 1: 5-41.

Pierce, A. (1992). *Language acquisition and syntactic theory: A comparative analysis of French and English child grammar*. Dordrecht: Kluwer.

Pinker, S. (1984). *Language learnability and language development*. Cambridge, Mass. Harvard University Press.

Pinker, S. (1997). *Words and rules*. New York: Basic Books.

Plunkett, K., and V. Marchman. (1993). From rote learning to system building: Acquiring verb morphology in children and connectionist nets. *Cognition* 48, 21-69.

Radford, A. (1990). *Syntactic Theory and the Acquisition of English Syntax: The Nature of Early Child Grammars of English*. Oxford: Basil Blackwell.

Ramsey, M. (1956). *A Textbook of Modern Spanish*. New York: Holt, Rinehart and Winston.

Richards, N. (2001). *Movement in Language*. Oxford University Press.

Riemsdijk, Henk van (1999). Clitics: A state-of-the-art report. In: Henk van Riemsdijk (ed.), *Clitics in the Languages of Europe*, 1-30. *Language Typology*, Volume III. Berlin/New York: Mouton de Gruyter.

Rivas, A. (1977). *A Theory of Clitics*. Ph.D. dissertation, MIT.

Rivero, M.L. (1994). Clause Structure and V-Movement in the Languages of the Balkans. *Natural Languages and Linguistic Theory* 12, 63-120.

Rizzi, L. (1994) Early null subjects and root null subjects. In: T. Hoekstra and B. Schwartz (eds.) *Language Acquisition Studies in Generative Grammar*. Amsterdam: Benjamins, 151-176.

Rizzi, Luigi. (1991). Residual Verb Second and the Wh-Criterion. *Technical Report in Formal and Computational Linguistics* 2, Faculty of Letters, University of Geneva.

Rohde, D. L. T., and D. Plaut. (1999). Language acquisition in the absence of explicit negative evidence: How important is starting small? *Cognition* 72, 67-109.

Roussou, A. (1991). Nominalized clauses in the syntax of Modern Greek. *UCL Working Papers* 3.

Roussou, A. (1994). *The Syntax of Complementisers*. PhD Dissertation, University College London.

Rumelhart, D. E., and J. L. McClelland. (1986). On learning the past tense of English verbs. In D. E. Rumelhart and J. L. McClelland, *Parallel distributed processing*. Vol. 2, *Psychological and biological models*. Cambridge, Mass.: MIT. [Reprinted in P. Bloom, ed., *Language acquisition*. Cambridge, Mass.: MIT Press, 1994].

Schaeffer, J. (1997/2000) *Direct Object Scrambling in Dutch and Italian Child Language*. UCLA Dissertations in Linguistics, Number 17.

Schutze, C. and K. Wexler (1996). Subject case licensing and English root infinitives. In A. Stringfellow, et al. (eds.) *BUCLD 20*. Somerville MA: Cascadilla Press, 670-682.

Skinner, B.F. (1957). *Verbal Behavior*. New York: Appleton-Century-Crofts.

Smith, N.V. and A. Cormack (2002). Parametric poverty. *Glott International*. 6:285-287; [Reprinted in: N.V. Smith (2005) *Language, Frogs and Savants*]

Spencer, A. (1991). *Morphological Theory: an introduction to word structure in generative grammar*. Oxford: Blackwell Publishing.

Spiropoulos V. and I. Philippaki-Warbuton. (2001). Subject and EPP in Greek: the discontinuous subject hypothesis. *Journal of Greek Linguistics* 2, 149-186.

Sportiche, D. (1988). A Theory of Floating Quantifiers and its Corollaries for Constituent Structure. *Linguistic Inquiry* 19: 425-449.

Sportiche, D. (1989). Le mouvement syntaxique : contraintes et parametres. *Langages* 95, 35-80.

Sportiche, D. (1990/98). Movement, Agreement and Case. Reprinted as Chapter 3 of *Partitions and Atoms of Clause Structure. Subjects, agreement, case and clitics*. London/ New York: Routledge.

Sportiche, D. (1996) 'Clitic Constructions', in: J. Rooryck and L. Zaring, (eds.) *Phrase Structure and the Lexicon*. Dordrecht: Kluwer, 213-276.

Sportiche, D. (1998). *Partitions and Atoms of Clause Structure. Subjects, agreement, case and clitics*. London/ New York: Routledge.

Stephany, U. (1997). The acquisition of Greek. In D. I. Slobin (ed.) *The crosslinguistic study of language acquisition*. Hillsdall: NJ: Erlbaum, 183-333.

Stromswold, K. (1990). *Learnability and the acquisition of auxiliaries*. Doctoral dissertation, MIT.

Strozer, J. (1976). *Clitics in Spanish*. Ph.D. dissertation, UCLA.

Suñer, M. (1988). The Role of Agreement in Clitic-Doubled Constructions. *Natural Language and Linguistic Theory* 6: 391-434.

Szabolcsi, A. (1987). Functional Categories in the Noun Phrase. In I. Kenesei (ed.), *Approaches to Hungarian*. JATE, Szeged.

Terzi, A. (1992). PRO in Finite Clauses. A study of the Inflectional Heads of the Balkan Languages. Ph.D. dissertation, New York: City University of New York.

Terzi, A. (1999). Clitic Combinations, their Hosts and their Ordering. *Natural Language and Linguistic Theory* 17: 85-121.

Thornton, R. And K. Wexler (1999). *Principle B, VP Ellipsis, and Interpretation in Child Grammar*. Cambridge, Mass.: MIT Press.



Torrens, V. and K. Wexler (2000). The Acquisition of Clitic Doubling in Spanish. In Powers, S. and C. Hamann, eds. *The Acquisition of Scrambling and Cliticization*, Kluwer Academic Publishers.

Torrego, E. (1988). A DP Analysis of Spanish Nominals. Ms., University of Massachusetts, Boston.

Torrego, E. (1998). *The Dependencies of Objects*. Cambridge Mass.: MIT Press.

Tsakali, V. and K. Wexler (2003): Why Children Omit Clitics in Some Languages but not in Others: New Evidence from Greek, *Proceedings of GALA 2003*.

Tsakali, V. and E. Anagnostopoulou (to appear). Rethinking the Clitic Doubling Parameter. To appear in Kalulli, D. and L. Tamsowski, eds., *Clitic Doubling in Balkan Languages*.

Tsimpli, I.-M. (1990). The Clause Structure and Word Order of Modern Greek. In *UCL Working Papers in Linguistics 2*: 226-255.

Tsimpli, I.-M. (1992). *Functional Categories and Maturation: The Prefunctional Stage of Language Acquisition*. PhD Thesis, University College London.

Tsimpli, I.-M. (1995). Focusing in Modern Greek. In Kiss, K. E. (ed.), *Discourse Configurational Languages*. Oxford Studies in Comparative Syntax. New York/Oxford: Oxford University Press. 176-206.

Tsimpli, I.-M. (2001). LF-interpretability and language development: A study of verbal and nominal features in normally developing and SLI Greek children. *Brain and Language 77*: 432-448.

Tsimpli, I.-M. (2002). Interpretability of Features in First and Second Language Acquisition: Greek clitics and determiners. Ms. University of Thessaloniki.

Tsimpli, I.-M. and M. Mastropavlou (to appear). Clitics and Determiners in Child L1, Child L2 and SLI: evidence from Greek. Features and Minimalism in Language Acquisition. H.Goodluck, J. Licerias and H. Zobl, eds., Benjamins Publishing Company.

Tzakosta, M. (2003). Four of a Kind: Stress Patterns in Child Language. In *Proceedings of the 23<sup>rd</sup> Annual Meeting of Greek Linguistics*, 467-478. Thessaloniki; Aristotle University of Thessaloniki.

Uriagereka, Juan. (1988). *On Government*. Ph.D. dissertation. University of Connecticut.

Uriagereka, Juan. (1995). Aspects of the Syntax of Clitic Placement in Western Romance. *Linguistic Inquiry* 26: 79-124.

Valois, D. (1991). *The internal syntax of DP*. PhD Dissertation, UCLA.

Varela, A. (1988). *Binding in Spanish: A theoretical and experimental study*. PhD. Dissertation, University of Connecticut.

Vallduví, E. (1990). *The Informational Component*. Ph.D. dissertation, University of Pennsylvania.

Varlokosta, S. (2001). The Acquisition of pronominal reference in Greek, talk given at UCL, Department of Phonetics and Linguistics.

Vergnaud, Jean-Roger. (1974). *French Relative Clauses*. Ph.D. dissertation, MIT.

Weissenborn, J. (1990). Functional categories and verb movement: The acquisition of German syntax reconsidered. In M. Rothweiler, ed. *Spracherwerb und Grammatik: Linguistische Untersuchungen zum Erwerb von Syntax und Morphologie*. Linguistische Berichte.

Wexler, K. (1990). Optional infinitives, head movement and the economy of derivations in child grammar. Paper presented at the *Annual Meeting of the Society of Cognitive Science*, MIT.

Wexler, K. (1992). Optional infinitives, head movement and the economy of derivation in child grammar, Occasional paper #45. Center for Cognitive Science, MIT.

Wexler, K. (1994). Optional infinitives, head movement and the economy of derivations. In D. Lightfoot and N. Hornstein (eds.), *Verb Movement*. Cambridge, United Kingdom: Cambridge University Press.

Wexler, K. (1996). The development of inflection in a biologically based theory of language acquisition. In M. L. Rice (Ed.), *Toward a genetics of Language*. Mahwah, NJ: Lawrence Erlbaum Associates.

Wexler, K. (1998). Very early parameter setting and the unique checking constraint: A new explanation of the optional infinitive stage. *Lingua* 106.

Wexler, K. (2000). The Unique Checking Constraint as the explanation of clitic omission in SLI and normal development. To appear in Jakubowicz, C., L. Nash and K. Wexler (eds.).

Wexler, K., A. Gavarro and V. Torrens (2003). Feature Checking and Object Clitic Omission in Child Catalan and Spanish. In the *Proceedings of Going Romance*, 2003.

Zagona, K. (1982). *Government and proper government of verbal projection*. PhD Dissertation, University of Washington, Seattle.

Zribi-Hertz, A. (1984). Prepositions orphelines and pronoms nulls. *Recherches Linguistiques* 12, 46-91.

Zubizarreta, M.-L. (1994). Grammatical Representation of Topic and Focus; Implications for the Structure of the Clause. *Cuadernos de Linguística del I.U. Ortega y Gasset* 2 : 181-208.

Zubizarreta, M.-L. (1998). *Prosody, Focus, and Word Order*. Cambridge Mass.: MIT Press.

Zwicky, A. (1977). *On Clitics*. Ohio: IULC, Bloomington.

Zwicky, A. and G. Pullum (1983). Cliticisation versus inflection: English n't. *Language* 59, 502-513.