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Building Verbs in Maltese

A dissertation submitted in partial satisfaction of the
requirements for the degree of

DOCTOR OF PHILOSOPHY

in

LINGUISTICS

by

Matthew Alan Tucker

September 2013

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Contents

Contents	iii
List of Tables	vii
List of Trees	viii
Acknowledgments	xii
Abbreviations	xvi
1 Introduction	1
1.1 Major Themes	1
1.2 Maltese Background	3
1.2.1 Major Grammatical Features	4
1.2.2 Data Sources	9
1.2.3 Why Maltese?	11
1.3 Theoretical Framework	12
1.3.1 Syntactic Assumptions	13
1.3.2 Morphological Assumptions	16
1.4 Outline	18
2 Constituency & Agreement	21

2.1	Introduction	21
2.2	Basic Word Order & Agreement	23
2.2.1	Basic Word Order	23
2.2.2	Basic Agreement	25
2.3	Major Constituencies	30
2.3.1	The <i>vP</i>	31
2.3.2	Tense, Mood, and Aspect	34
2.3.3	Negation	43
2.3.4	The Complementizer Layer	46
2.4	Compound Tense Constructions: More Data	50
2.4.1	<i>Kien</i>	51
2.4.2	<i>Qiegħed</i> and <i>Sejjer</i>	55
2.5	Complex Tense Constructions: Analysis	59
2.5.1	A Cyclic Agreement Account	60
2.5.2	A Successive-Cyclic Account	62
2.5.3	Deciding between Analyses	64
2.6	Conclusions	68
3	Maltese Causatives	70
3.1	Introduction: The Relevance of Causatives	70
3.1.1	The Relevance of Causatives to Verb Building	72
3.1.2	Causation in Maltese	74
3.2	Two Types of Causatives in Maltese: Initial Motivations	78
3.2.1	Previous Characterizations of Split Causatives	78
3.2.2	Syntactic and Morphological Causatives in Maltese	80
3.3	The Basic Analysis: Two Kinds of Selection	94

3.3.1	Morphological Causatives	95
3.3.2	Syntactic Causatives	100
3.3.3	Predictions	111
3.4	Case Marking in Causatives	114
3.4.1	Crosslinguistic Generalizations	115
3.4.2	Case in Maltese Causatives	117
3.4.3	Understanding Maltese Causative Case-Marking	122
3.5	Passivization and Causation	133
3.5.1	Passives in Causatives: Previous Observations	134
3.5.2	Maltese Passives and Causatives	135
3.5.3	Understanding the Maltese Passive Patterns	141
3.6	Conclusions	145
4	Maltese Object Clitics	149
4.1	Introduction	149
4.1.1	Roadmap	156
4.2	Ontological Considerations	157
4.2.1	Morphological Considerations	160
4.2.2	Doubling Considerations	169
4.3	The Syntax of Clitics	177
4.3.1	Argumental Prominence	179
4.3.2	Clitics, and A Passive Puzzle	188
4.3.3	Deriving Clitic Clusters in Maltese	196
4.4	Conclusions	227
5	PCC Effects in Maltese	231
5.1	The Empirical Landscape	234

5.1.1	PCC Effects in Maltese	234
5.1.2	PCC Effects in Other Arabic Varieties	244
5.2	Previous Accounts of the PCC	254
5.2.1	Common Features	256
5.2.2	Other Syntactic Implementations	266
5.3	An Analysis of the Maltese PCC	277
5.3.1	Further Syntactic Considerations	278
5.3.2	A Morphological Approach	282
5.4	Conclusions about Clitic Restrictions	296
	Appendices	298
5.A	Double Accusative Pronouns in Classical Arabic: The Facts . .	298
5.A.1	Qur‘anic Examples	298
5.A.2	Siibawayhi’s Examples	301
6	Conclusions	306
6.1	Conclusions about Clause Structure	306
6.2	Conclusions about Causation	308
6.3	Conclusions about Case and Agreement	309
6.4	Conclusions about Interfaces	310
	Bibliography	312

List of Tables

2.1	Perfect Agreement Morphology in Maltese	26
2.2	Imperfect Agreement Morphology in Maltese	26
2.3	Maltese Adjectival Agreement Morphology	56
4.1	Clitics in Maltese	150
4.2	Agreement Affixes in Maltese (Repeated)	166
5.1	PCC Effects Schema — Maltese	240
5.2	Clitics in Moroccan Arabic	245
5.3	PCC Effects Schema — Classical Arabic	251
5.4	Predicted Clitic Clusters — Basic Intervention	264
5.5	Nevins (2007) PCC Analysis — Strong PCC	275
5.6	Nevins (2007) PCC Analysis — Maltese Predictions	276

List of Trees

1	The Maltese Clausal Spine	31
2	A Cyclic Agree Account of Complex Tense	61
3	Successive-Cyclic Analysis of Complex Tense	63
4	ν P Level for Morphological Causatives, First Pass	96
5	ν P Level for Morphological Causatives, Final Pass	99
6	ν P Level for <i>gieghel</i> Causatives	109
7	Structural Approach to Morphological Causative Case-Assignment	124
8	ν P Level For Majority-Class Verbs	197
9	ν P Level for <i>wera</i> -Class Verbs, Actives	202
10	ν P Level for <i>wera</i> -Class Verbs, Goal Passives	205
11	ν P Level for <i>wera</i> -Class Verbs, Theme Passives	206
12	Syntactic Output of Cliticization — Single Accusative Clitic	217
13	Syntactic Output of Cliticization — Single Dative Clitic	220
14	Syntactic Output of Cliticization — Two Clitics	222
15	Intervention Model of the PCC	257

Building Verbs in Maltese

Matthew A. Tucker

Abstract

This dissertation examines the morphosyntactic implications of verb-building in the Semitic language Maltese. Theoretically, the dissertation examines the role of functional heads in defining clausal morphosyntactic properties and the interaction of syntax and morphology in the domain of cliticization. The phenomena examined herein are: (i) the major clausal constituency of Maltese and the derivation of subject agreement morphology in periphrastic complex tense constructions, (ii) morphological and periphrastic causative formation and the absence of non-finite verb forms, (iii) the argument structure of ditransitives and the syntax of cliticization, and (iv) the implications of ditransitive argument structure as it pertains to analyses of the Person Case Constraint. The dissertation shows that these phenomena support a view of syntax wherein lexical properties of heads determine agreement morphology and the structure of clausal complements and a view of morphology wherein morphological constraints can influence the output of syntactic computation.

I show that a pervasive feature of Maltese is the appearance of φ -features on lexical items which would be devoid of φ -features in other languages. Data from floating quantification and word order in complex tense constructions are used to argue that verbs in periphrastic tense constructions receive agreement features via successive-cyclic movement of the subject through intermediate specifier positions. Data from available morphology and adverbial interpretation are presented which suggests that periphrastic causatives in Maltese embed a reduced clause wherein a polarity phrase may host agreement features,

accounting for finite verb forms in semantically non-finite causative complements. Moreover, agreement and case are argued to be computed distinctly, given that causative subjects appear with accusative case yet still trigger subject agreement on the complement predicate. I show that while AGREE can account for subject agreement in the usual way, the Maltese causative facts necessitate pairing AGREE with a theory of case in which morphological case values are assigned disjunctively based on the number of nominals in a clause.

I also show that Maltese non-causative ditransitives bifurcate into two distinct classes: (i) a majority class which only allows prepositional dative constructions and (ii) a minority, lexically idiosyncratic class which allows a limited double object construction involving two accusatives. I show that these facts can be accounted for by positing a VP-movement in these ditransitives which interacts with structural Case licensing to derive the appearance of a restricted double accusative case frame.

Finally, I show that data from potential intervention contexts require treating cliticization in Maltese as an instance of head movement of a simultaneously minimal and maximal determiner element. This view of cliticization is shown to be more appropriate than phrasal movement for the Maltese facts insofar as it correctly predicts that clitic movement should be possible despite the presence of a DP between the base generation site of the clitic and its position on the verb. This view of cliticization is also shown to have ramifications for syntactic treatments of the Person Case Constraint as dative intervention: I argue that not all datives are generated higher than accusatives, falsifying predictions made by syntactic accounts of the Person Case Constraint based on AGREE. In place of these, I provide a modern morphological account which calls off cliticization in the morphology in Person Case Constraint-violating contexts.

For Alan and Rae Anne, my parents.

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Abbreviations in Glosses

Abbreviation	Meaning
1	1 st Person
2	2 nd Person
3	3 rd Person
?IYYA	Arabic Accusative Clitic Host
ACC	Accusative Case
ADDR	Addressee
ASP	Aspect
CAUS	Causative
COMP	Complementizer
DAT	Dative Case
DEF	Semitic Definite Article
DOM	Differential Object Marking
DUAL	Dual Number
FEM	Feminine Gender
FUT	Future
IMPER	Imperative
IMPF	Imperfect Aspect
JUSS	Jussive
MASC	Masculine Gender
NEG	Negation
NOM	Nominative Case
PASS	Passive
Q	Question Particle
SG	Singular Number
SPKR	Speaker
PRT	Participle
PART	Participant
PAST	Past Tense
PERF	Perfect Aspect
PL	Plural Number
SE	Romance Reflexive Clitic
SP	Subject Agreement Prefix
TNS	Tense
TOP	Topic

Chapter 1

Introduction

1.1 Major Themes

A linguistic theory is only as good as its empirical coverage. The studies in this dissertation fit into the general tradition of attempts to expand linguistic theorizing by broadening its empirical scope beyond the well-studied languages of the Indo-European family. While the theoretical themes in the dissertation fit into well-established traditions examining the interaction of argument structure, case, and verb morphology, the empirical focus is on a relatively understudied Semitic language: Maltese. The major purpose of this dissertation is to ask what Maltese can tell us about the architecture of language more generally by attempting to extend current syntactic theory to account for the language.

The dissertation as a whole has two broad themes which are repeated in variations throughout. The first of these is a set of questions concerning how a verb integrates into its clausal context. Syntactic theory has often taken morphologically complex words to be built up of parts which originate in different sections of the clause. The first two chapters examine how this clausal con-

text integrates with verbal morphology in Maltese, in both large and small clausal domains. There is thus examination of both monoclausal periphrastic tense constructions and bi-clausal causative constructions. Along the way, the overarching question is whether modern approaches to argument structure and agreement can account for Maltese, with the answer in the affirmative.

The second major question in this dissertation concerns the nature of cliticization and its relation to the syntax of verb phrases. There are detailed examinations of both the syntax of cliticization as well as gaps in the inventory of available clitic clusters. Throughout this portion of the dissertation, I advance the idea that morphology matters to cliticization. Specifically, it will be shown that cliticization in Maltese can be profitably analyzed as a late process which respects syntactic structure where it can, but yields to morphological well-formedness conditions where it cannot. The result is a view of cliticization where the syntax presents morphology with a structure which the morphology does its best to realize faithfully, but which can be augmented to satisfy morphological principles.

The two overarching themes are unifiable insofar as they both relate to the way verbs are constructed morphologically and situated syntactically in a single language. While syntactic structure will be shown to figure prominently in the construction of verbs, we shall see ways in which morphology asserts its primacy after syntactic structure-building is complete. This introductory chapter serves to set the backdrop for this morphosyntactic discussion to come: §1.2 provides the necessary background on Maltese, §1.3 provides a very brief introduction to the assumed framework, and §1.4 provides an outline of the dissertation in its entirety.

1.2 Maltese Background

The primary object of study in this dissertation is the Semitic language Maltese, a language spoken by approximately 400,000 native speakers worldwide (Lewis, 2009). Most of these speakers reside in the Republic of Malta, a nation-state located about sixty miles to the south of Sicily in the Maltese Archipelago. The archipelago itself contains only two inhabited islands, Malta, home of the capital city of Valletta, and Gozo (*Għawdex*). In addition to these two islands, many communities elsewhere in the world contain relatively large concentrations of Maltese speakers, including Detroit, Michigan, San Francisco, California, and Toronto, Ontario, among others.

The history of the Maltese language is largely parallel with the history of imperialist conquest of the Mediterranean Sea, and as such the language has been heavily influenced by Italian and English.¹ The language is thus no longer prototypically Semitic in many ways. For one, Maltese is the only Semitic language written in the Roman alphabet. Furthermore, as the only Semitic language spoken in the European Union, Maltese has many lexical items which entered the language from contact with Italian and English, meaning that the language has only partially preserved the non-concatenative morphological properties which identify Semitic languages most uniquely (see §1.2.1). While the Maltese government has done much to preserve the status of Maltese in the Republic itself, many speakers have extensive experience with English and/or Italian, in addition to Maltese.

1. The history of language use in Malta is the subject of the seminal study of Brincat (2011), to which the interested reader is referred for historical information on Maltese. Much, if not all, of the discussion in this introduction owes a great debt to Brincat's work.

This section briefly outlines some major grammatical features of Maltese (§1.2.1) which are useful to bear in mind in the chapters which follow. Additionally, I provide some methodological discussion of data sources used in §1.2.2 and the relevance of Maltese to linguistic theorizing in §1.2.3.

1.2.1 Major Grammatical Features

Data in this dissertation are presented in the Maltese orthography, and it is useful to have some background on this orthography when examining such examples. In its vowel inventory, Maltese is most like Hebrew insofar as the loss of historically emphatic consonants from Semitic has yielded a five-vowel inventory: *a*, *e*, *i*, *o*, and *u*. These vowels have the same phonemic values that they do in modern Romance languages. In addition to this Maltese has several diphthongs which are, for the most part, transparently represented in the orthography. The only exception to this is the diphthong *ie*, which is rendered by my consultants as the diphthong /iə/. In the consonant inventory, the loss of the Semitic emphatics has greatly simplified the orthography, with a great many of the consonants taking on the IPA values one would expect from the study of Romance languages. The exceptions to this transparency include *ċ* (/tʃ/), *ġ* (/dʒ/), *ħ* (/ħ/), *x* (/ʃ/), *z* (/ts/) and *ż* (/z/). Finally, Maltese has lost the Semitic voiced pharyngeal fricative, *ʕ*, though it is still represented orthographically as *gh*. This digraph is still used because the historical presence of the pharyngeal has synchronic artifacts in modern pronunciation; for my consultants this is a combination of vowel lengthening and alternations in vowel color. For more discussion of the remnants of the Maltese pharyngeal, see Comrie (1986) and Walter (2006).

The most striking feature of Maltese seen throughout the data in this dissertation is its lexical inventory, which includes many nativized borrowings from Italian and English. A prime example of this tripartite lexical division is seen in the verbal domain, where verbs from any of these three strata can appear in everyday Maltese. Examples of these three strata are shown in (1):

- (1)a. Imma x' = kien dak li ġiegħel lil 'il-Mument'
 Now what = was that COMP made.3.SG.MASC DOM Il-Mument
tikteb artiklu dwar dan ...?
write.3.SG.FEM article about this ...
 “Now what was it that made Il-Mument [a newspaper] write an article about this ...?”
(Borg *et al.*, 2012:par11681)
- b. ...ġiegħel lill-membri tal-Eżekuttiv **jivvutaw** fuq
 ...made.3.SG.MASC DOM.DEF-members of.the-Executive **vote.3.PL** on
 gidba li ħoloq hu stess.
 lie COMP created he himself
 “...that he made the members of the Executive [council] vote on a lie he himself created.”
(Borg *et al.*, 2012:press_mrn37316)
- c. ...il-Partit Laburista ġiegħel lis-Sindku Laburista
 ...DEF-Party Labor made.3.SG.MASC DOM.DEF-Mayor Labor
 tal-Fgura **jirriżenja**.
 of-Fgura **resigns3.SG.MASC**
 “...The Labor Party forced the Laborite Mayor to resign.”
(Borg *et al.*, 2012:press_mrn29351)

(1a) includes the Semitic-stratum verb *kiteb* (\sqrt{KTB}), (1b) the Italian-stratum verb *jivvuta* (from Italian *votare*) and (1c) the English-stratum verb *jirriżenja*

(from English *resign*). It is useful to think of these borrowings as constituting *bona fide* lexical strata and not instances of code-switching since they have been adapted to Maltese phonology and native speakers have clear intuitions concerning what constitutes an integrated borrowing from simple uses of Italian or English lexical items.

Despite this heterogeneous lexicon, some integration with a clearly Semitic morphology can be seen in these different strata. For instance, all verbs in the language take their subject agreement morphology in a prototypically Semitic fashion with two verbal tenses/aspects and circumfixal agreement morphology (see Chapter 2 for exemplification of these paradigms). In this vein, many verbs in the English and Italian strata take inflectional morphology as though they were a Semitic root which is vowel-final. Examples of this behavior can be found throughout the dissertation and in the comprehensive appendices in Borg & Azzopardi-Alexander (1997). Moreover, *all* verbs are candidates to host object clitics which Maltese shares along with several other Semitic languages. The complete inventory of Maltese clitics is given in Chapter 4.

A prototypical Semitic property is the use of non-concatenative root-and-pattern morphology instead of pure affixation for verbal derivation. Maltese preserves a great deal of this non-concatenative morphology, but to a much lower degree than is found in other Semitic languages (Hoberman & Aronoff, 2003; Spagnol, 2011b). While one can find verbs which are related by a Semitic root-and-pattern process, such as underived *sema'*, “he listened,” and causative *semma'*, “he was made to listen,” these derivations are not fully productive and often involve semantic and phonological idiosyncrasy (see especially Chapter 3

for discussion of this in the domain of causatives).² Throughout this dissertation, then, the reader expecting to discussions of Semitic root-and-pattern morphology will find such alternations relegated to the lexicon in many places.

Another striking property of Maltese which figures in the discussion in this dissertation is the absence of morphological infinitives in the language. Maltese, like other Semitic languages, has no infinitive forms for verbs. In contexts where Romance or Germanic languages would use non-finite verb forms, Maltese has fully-inflected verbs. This is exemplified in the complement of the causative predicate *giegħel*, “he caused, forced,” and the desiderative verb *irrid* “he wanted,” in (2):

- (2)a. ...għalhekk giegħel lil kullhadd **jitgħallem**
 ...thus make.3.SG.MASC DOM everyone **learn.3.SG.MASC**
 il-lingwa Għarbija.
 DEF-language Arabic
 “...thus [it] made everyone learn Arabic.” (Borg *et al.*, 2012:parl1775)
- b. Irrid (li) **t-hobb** l-għalliem il-ġdid.
 want.1.SG COMP **2.SG-love** DEF-teacher DEF-new
 “(lit.) I want that you love the new teacher.”
 (Haspelmath & Caruana, 2000:250)

This absence of infinitive forms will be relevant especially in Chapter 3, where it is shown to correspond to the absence of a syntactic projection for tense in certain embedded clauses, with ramifications for the theory of agreement more generally. Throughout this dissertation, I follow the Semitic practice of giving the third singular masculine perfect verb form as the citation form;

2. This is not to say that these root-and-pattern alternations play no role in the synchronic language. They have been shown to influence processing in ways that are familiar from studies of Hebrew and Arabic. See Twist (2006) and Ussishkin & Twist (2007); Ussishkin *et al.* (2011).

accordingly, the translations of these citation forms involve a third singular masculine pronoun and finite English verb.

Finally, much of this dissertation is concerned with patterns of morphological and abstract case, so a brief word concerning the case-marking of objects is in order. Maltese, like several other languages, has DIFFERENTIAL OBJECT MARKING. Specifically, human accusative objects are obligatorily marked with the preposition *li*, which is the same preposition used for datives more generally. This is shown in (3):

- (3)a. Pietru ihobb *(**li**) Marija.
Peter loves *(**DOM**) Maria
“Peter loves Maria.”
- b. Pietru ihobb *(**li**) lingwistika.
Peter loves *(**DOM**) linguistics
“Peter loves linguistics”

In (3a), the human object *Marija* must be differentially marked, whereas the non-human object *lingwistika* in (3b) must not be. Throughout this dissertation, I gloss differentially-marked accusatives with DOM to separate them from normal datives in the language. Note that this separation is possible in principle because the pronominal system involves distinct accusative and dative pronouns, meaning the two kinds of object marking are distinct. Wherever one finds DOM in a gloss, it can be assumed that a pronoun substituted for the DP with differential marking would surface as accusative and not dative. For more on differential object marking in Maltese, see the discussion in Borg (1981).

1.2.2 Data Sources

The data in this dissertation come from three main sources which are used roughly equally : (i) available descriptive grammars of the Maltese language, (ii) fieldwork conducted with the Maltese community in the San Francisco Bay Area, and (iii) the Maltese Language Resource Server's *Korpus Malti*. This section briefly outlines each of these sources and their use in the dissertation.

The Maltese language has been well-studied descriptively by Maltese linguists, and I rely heavily on their work here. The two main sources for descriptive data used in this dissertation are the grammar and related dictionary compiled by Joseph Aquilina (Aquilina, 1959; 1965/1995; 2006) and the more recent theoretically informed grammar by Borg & Azzopardi-Alexander (1997). Joseph Aquilina's work is particularly relevant because it seriously considers the role of Italian and English stratum lexical items, a methodological point of view not always shared by other grammarians contemporary to Aquilina. Aquilina's descriptive studies form the core of the Maltese linguistic tradition, and I draw heavily on his work in much of the dissertation. I also rely heavily on the work by Borg & Azzopardi-Alexander (1997), who provide a theoretically informed descriptive treatment of Maltese in their grammar. Beyond these two main sources, I have also benefited from consulting the grammatical studies of Cremona (1929); Sutcliffe (1936); and Mifsud (1995).

As useful as the aforementioned descriptive studies are, much of the data required for a theoretical treatment of a language can only be found in the fieldwork setting. To that end, many of the data from this dissertation come from my primary fieldwork with members of the Maltese diaspora community in the San Francisco Bay Area. This fieldwork involved many members of the community, mostly speakers from the cities of Mgarr and Mosta in west-central

Malta. While these cities do not have identical dialects, the data presented in this dissertation are those data for which all three regular consultants agreed on grammaticality. Where a source for data is not given, the data come from this fieldwork.

Finally, since this fieldwork was conducted with members of a diaspora community, some of whom may be of heritage status, judgments are supplemented throughout the dissertation with data from the *Korpus Malti*, a corpus which has been in development for several years at the University of Malta (*L-Università ta' Malta*). This corpus has existed in two forms throughout the period in which this dissertation was prepared: v1.0 (Borg *et al.*, 2011; 100 million tokens) and v.2.0 (Borg *et al.*, 2012; 130 million tokens). I draw from both corpora heavily, and the version which data are gathered from is noted in citations. *Korpus Malti* consists of data gathered from several sources, including transcripts of the Parliament of Malta, literary texts, legal documents, and newspaper articles. Where possible, I limit myself to data from the Parliament transcript sub-corpus, as these data are transcripts of spoken Maltese, though data from the other sub-corpora are used as well. In all cases, a datum from the *Korpus Malti* is cited along with its unique corpus identifier which marks the text from which the datum is taken.

Along with these three excellent sources of un-analyzed Maltese data, I have also drawn heavily on the theoretical treatments of Maltese which already exist. These are cited throughout the dissertation and are too numerous to list completely here. However, I wish to acknowledge the central role that several of these studies have played in the preparation of this dissertation, including Brame (1972; 1974); Comrie & Borg (1985); Fabri (1993; 1996; 2009); Borg (1995); Haspelmath & Caruana (2000; 1996); Gatt (2003); Camil-

leri & Sadler (2011b); Camilleri (2011); Camilleri & Sadler (2011a); Spagnol (2011a;b); Kiparsky (2012); and Sadler (2012a;b).

1.2.3 Why Maltese?

Maltese provides a particularly fertile empirical ground for theoretical study because of its relatively understudied status compared to other languages and its unique sociolinguistic position. While Maltese most certainly has received some theoretical treatment before this dissertation (see especially Fabri, 1993 and Müller, 2008; 2009), many of these treatments come from disparate theoretical backgrounds (including HEAD-DRIVEN PHRASE STRUCTURE GRAMMAR and LEXICAL-FUNCTIONAL GRAMMAR), and no attempts to integrate the findings of these researchers working in distinct theoretical traditions have been made. Moreover, *none* of these prior studies assumed the theoretical frameworks of Minimalism (Chomsky, 1995b) and Distributed Morphology (Halle & Marantz, 1993; 1994) that are assumed in this dissertation (see §1.3). Thus, any attempts to analyze Maltese in these frameworks constitutes novel theoretical territory.

Additionally, the unique sociolinguistic status of Maltese makes it an attractive language to study. As noted in §1.2.1, Maltese contains lexical items which originated in three distinct languages: Arabic, Italian, and English. One of the primary empirical goals of this dissertation is to understand how these three distinct vocabularies are integrated into a gestalt which is used by speakers. This is a useful goal theoretically, as well, since English and Italian are two of the most-studied languages in generative syntactic theory. Maltese is a particularly rich empirical domain since, as we shall see, it combines aspects of the syntax of all three of these source languages, meaning that the language

provides an excellent testing ground for the extensibility of theories built on English and Italian to data from the Semitic language family. The rich linguistic tradition inside Maltese itself combined with this sociolinguistic background makes the language a worthy object of theoretical study.

1.3 Theoretical Framework

Since the focus of this dissertation is the examination of the theoretical consequences of verb-building in Maltese, it is useful to fix a set of theoretical assumptions which constitute the working framework for the studies which follow. The general framework of this dissertation is the approach to syntax which goes by the name of THE MINIMALIST PROGRAM advanced initially by Chomsky (1993; 1995b; 2000; 2001b; 2008). This framework takes the human language faculty to be an optimal solution to the design problem of pairing phonetic form with meaning, and the investigations here take the understanding of language as whole to go hand-in-hand with an understanding of theoretical studies of grammar. In addition to this syntactic framework, the studies here also share many assumptions with the approach to morphological phenomena known as DISTRIBUTED MORPHOLOGY, advanced initially by Halle & Marantz (1993; 1994) and extended by Embick & Noyer (2001); Embick & Marantz (2008), and Embick (2010). This section briefly outlines some of the core assumptions of these frameworks used in the dissertation, first for the syntactic component (§1.3.1) and then for the morphology (§1.3.2).

1.3.1 Syntactic Assumptions

The general approach to the theory of language which is assumed here is *modular* insofar as it takes the human language faculty to be composed of several logically autonomous modules responsible for different components of sound-meaning pairings. Specifically, I assume a variant of the Y-MODEL given in Figure 1.1. In this model, the language faculty is assumed to crucially involve a mapping from lexical items to sound and meaning interfaces which is called syntax and is the sole generative engine responsible for the construction of grammatical representations.

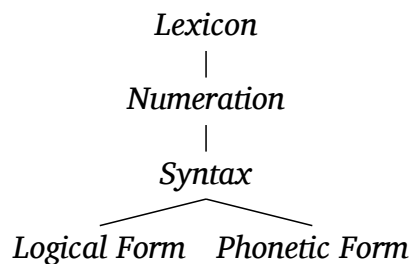


Figure 1.1: The Modified Y-Model

Following the proposals by Chomsky (1995b; 2000; 2001b; 2008), it is assumed here that syntax is responsible for mapping a finite subset of the feature bundles which constitute lexical entries (the NUMERATION) to structural representations which include constituent structure and relations between constituents. By hypothesis, this module is taken to be composed of just three operations, listed in (4):

- (4)a. MERGE: an operation which recursively builds constituents out of other smaller units
- b. MOVE: an operation which relates two distinct positions containing the same syntactic material

- c. AGREE: an operation which relates formal features in different syntactic positions to one another

The operation MERGE is one of two operations responsible for structure-building in this account. Following the discussion in Chomsky (2000), MERGE is taken to be an operation which takes any two elements α and β and delivers a constituent which combines α and β and has a label, γ . As Chomsky has noted, in the simplest case, the result is simply the set $\{\alpha, \beta\}$ where the label, γ , is simply the HEAD of the resulting constituent. In all the cases in this dissertation, the head will be one of either α or β . This assumption that the label is simply the head which projects places the studies here within the framework known as BARE PHRASE STRUCTURE (Chomsky, 1995a), insofar as there are no separate phrasal labels.³

In addition to MERGE, the syntactic component is also assumed to have an operation, MOVE, which can be thought of as an operation of MERGE where one of the elements comes from inside the structure already built. MOVE thus relates an already merged syntactic object to a new position elsewhere in the tree. Following the discussion in Chomsky (1995a), I take this movement to simply involve copying of the moved element from its base position to the target position of movement, an approach which is often called the COPY THEORY OF MOVEMENT. This is in contrast to earlier approaches (following Chomsky, 1981 and much subsequent work) where movement was said to leave a special kind of empty category called a trace.⁴ Instead of a trace, the base position

3. However, in many of the trees in this dissertation I mark phrases with the standard label XP for convenience.

4. Though for simplicity's sake I will often represent the base position of movement with a t so that the resulting trees are maximally easy to interpret.

of movement will here be assumed to be a phonetically unrealized copy of the moved element.

Finally, the operation AGREE is responsible for relating sets of features in the syntactic component. This operation is triggered by the need of some head, called a PROBE, to enter into a relationship with other elements in the derivation for well-formedness reasons. Generally speaking, this need is represented by endowing the probe with an uninterpretable feature which must find an interpretable counterpart inside its c-command domain in order for the derivation to converge. The operation AGREE is responsible for establishing such a relation between a probe α and a GOAL β where the constraints in (5) hold:

- (5)a. α c-commands β ⁵
 - b. β has interpretable counterparts to some subset of α 's uninterpretable features
 - c. α and β are in the same cyclic domain
 - d. There is no γ such that: (i) γ is a possible goal for α and (ii) γ c-commands β but β does not c-command α

The conditions in (5) are the standard set of assumptions for AGREE following Chomsky (2000; 2001b; 2008). The first two conditions are straightforward and simply fix the directionality of AGREE and require that probe and goal match.⁶ The condition in (5c) is predicated on the assumption that the syntactic derivation proceeds in chunks which define cyclic domains called PHASES.

5. In this dissertation, α c-commands β iff: α does not dominate β and the first branching node which dominates α also dominates β .

6. In this dissertation, I will assume that AGREE only ever operates downward, though this is a condition which has been called into question in some studies. See Baker (2008) and references therein for some discussion.

Once a phase is built by the syntax, all of the phase except the specifier of the phase head (the SPELL-OUT DOMAIN) is sent to the interfaces and constitutes an opaque domain to further operations. In this dissertation, the inventory of phase-defining heads will be limited to ν and C, with the defined phases being ν P and CP. Finally, the constraint in (5d) is known as the Intervention Condition and requires that the goal chosen is in fact the *closest* goal available, where closest is defined in terms of c-command.

1.3.2 Morphological Assumptions

In addition to the Minimalist syntactic framework, this dissertation also utilizes some of the assumptions of the Distributed Morphology approach to word-building. This framework has a large number of possible assumptions, but here I crucially utilize three: (i) the terminal nodes in syntax do not contain phonological material, (ii) the insertion of phonological material is governed by a disjunctive principle, and (iii) syntax is the only generative engine for word-building. I briefly discuss each of these three assumptions in turn here.

The first of these assumptions, that the syntax does not manipulate representations containing phonological information, is known sometimes called the SEPARATIONIST HYPOTHESIS following Beard (1966). This assumption states that the syntax manipulates bundles of formal features *only*. After the syntax has completed computation on a cyclic domain, phonological material is inserted into the terminal nodes to lexicalize portions of the syntactic structure.⁷ When the syntax has completed structure building, the assumption in

7. One debate which appears in the literature on Distributed Morphology which I will attempt to sidestep in this dissertation is the question of whether or not this late insertion of phonological material extends to roots or is limited to the functional vocabulary only. See Embick (2000; 2010) and Haugen & Siddiqi (2012) for discussion of this issue.

Distributed Morphology is that vocabulary items are inserted into terminal nodes by a process known as VOCABULARY INSERTION, which is guided by the SUBSET PRINCIPLE from Halle & Idsardi (1997):

(6) The Subset Principle:

- a. The phonological exponent of a Vocabulary Item is inserted into a position if the item matches all or a subset of the features specified in that position.
- b. Insertion does not take place if the Vocabulary Item contains features not present in the morpheme.
- c. Where several Vocabulary Items meet the condition for insertion, the item matching the greatest number of features specified in the terminal morpheme must be chosen.

The Subset Principle thus enforces a kind of Paninian Elsewhere logic on the insertion of phonologically. Additionally, I assume that linearization happens immediately before this vocabulary insertion in line with the discussion in Embick (2007; 2010). The result is a theory of morphology where words are built up of late-linearized feature bundles into which vocabulary items are inserted.

Finally, perhaps the most important assumption from Distributed Morphology for this dissertation is the third assumption, sometimes referred to as SYNTAX ALL THE WAY DOWN, which holds that there is no word-building process in the language faculty beyond the syntactic component and the mechanisms of Distributed Morphology. Most crucially, this means that words are not ever *built* in the lexicon, but result from the insertion of vocabulary items to realize particular feature bundles that have been created syntactically. This further entails that there can be no “lexical” accounts of idiosyncrasy, a corollary of this

principle which is discussed by Arad (2003; 2005); Kramer (2009); Gribanova (2010); Marantz (2010), and others.

1.4 Outline

The contentful portion of this dissertation is composed of four chapters which take up the major themes outlined in §1.1 in two parts. The first two chapters deal with Maltese verbs in their clausal context and analyze their major morphological components theoretically. The first of these chapters, Chapter 2, provides the empirical and analytical background on clauses in Maltese which is required for situating the discussion in the rest of the dissertation. In this chapter, I also treat the subject agreement morphology in the language theoretically. Specifically, it is claimed that subject agreement morphology results from the insertion of multiple vocabulary items to realize a single bundle of φ -features. Moreover, data are also presented which suggests that independent φ -features seen on more than one verbal element in a single clause arises from successive-cyclic movement of the subject from its position of first MERGE to its ultimate surface position.

The second of these two chapters, Chapter 3, takes up the question of how causation is expressed in Maltese. This chapter takes up both the major themes of the dissertation simultaneously insofar as it examines two kinds of causatives: (i) a morphological, synthetic causative formed by the Semitic derivational process of root consonant gemination and (ii) a syntactic, periphrastic causative utilizing the causative predicate *giegħel* and clausal complementation. We shall see in this chapter that the morphological causative has many properties of so-called “lexical” causatives, though the analysis of those

verbs is given in terms of modern decompositional approaches to argument structure. The syntactic causative, on the other hand, will be shown to involve a reduced clausal complementation structure wherein *giegħel* selects for a verb phrase and optional negation. The appearance of subject agreement morphology in *giegħel*'s complement is shown to motivate a dissociation between subject agreement and nominative case, and a disjunctive theory of case à la Marantz (1991) will be shown to be needed to account for case morphology in both kinds of causatives.

The next two chapters concern themselves with the object pronominal clitics which Maltese has for both accusative and dative internal arguments. Chapter 4 does this by first examining the ontology of these markers, demonstrating that there is much to be gained by treating the pronouns as clitics which do not participate in doubling outside of constructions that have come to be known as clitic dislocations. Furthermore, this chapter also examines the syntax of non-causative ditransitive verbs in Maltese, as their syntax determines much of what is possible with object clitics in the language. The major conclusion here is that clitic placement in Maltese should be seen as an instance of the more general syntactic operation of head movement. Moreover, we will also see that ditransitive verbs are not homogeneous in their behavior: while the majority of verbs allow only a prepositional dative construction where datives are realized with the preposition *li*, a small subset of verbs behave idiosyncratically as though they allow a double object construction. This contrast is analyzed as one which is memorized by the learner, and an account in terms of lexical selection is advanced.

The final content chapter, Chapter 5, concerns itself with a systematic gap in possible clitic cluster combinations in Maltese. There it is shown that this

gap has all the hallmarks of the PERSON CASE CONSTRAINT first discussed by Perlmutter (1971) and Bonet (1991). This constraint requires that clitic clusters always contain a third person accusative clitic, regardless of the person, number, or gender of the dative clitic. In that chapter a comparison between the constraint as evidenced in better-studied languages is undertaken, as well as an empirical consolidation of the facts concerning this constraint's appearance in closely-related varieties of Arabic. The theoretical discussion in this chapter shows that the argument structure of Maltese ditransitives actually poses a serious problem for contemporary treatments of this effect in terms of the theoretical mechanism of intervention on the AGREE relation discussed in §1.3. In place of such an account, I offer a return to the morphological mapping accounts of Bonet (1991) and related studies, but recast in the terminology of Distributed Morphology. The resulting conception of the PCC is one in which the constraint is a morphological output constraint which, when violated, forces the syntax to realize the clitics as freestanding strong form pronominals.

Chapter 2

Major Constituent Order & Subject Agreement

2.1 Introduction

A verb does not exist in a vacuum. In a great many languages, verbs appear with overt argument nominals which refer to participants in the event which those verbs denote. These argument nominals often trigger agreement morphology which indexes these participants with formal features, meaning that the syntactic expression of verbal arguments is intimately connected with the construction of verbal morphology. Moreover, verbs in many languages often come with morphology which indicates temporal information, whether that be tense information which anchors the event in time or aspectual information which describes the boundedness of the event itself. Because of this interconnection between a verb and its syntactic context, it is not possible to examine the construction of verbs themselves without also addressing some of the clausal context in which a verb appears. The purpose of this first chapter is

to establish the empirical generalizations concerning Maltese clause structure and to analyze the syntactic context in which the Maltese verb may appear. This discussion will necessarily involve treatment of not only verbal agreement with the subject, but also the makeup of the Maltese clause itself. This clausal background will be important for the chapters which follow, since many of the diagnostics used in those chapters will rely on the clausal architecture I will propose here.

This chapter is organized as follows: in §2.2, I first discuss basic word order and agreement facts in Maltese. There I lay out the empirical domain as far as word order and agreement are concerned and provide an analysis of the agreement morphology seen in Maltese using a conjunction of proposals concerning the late insertion of phonetic material (Halle & Marantz, 1993; *et seq.*) and the featural makeup of person values (Harley & Ritter, 2002). In §2.3 I then leverage the word-order generalizations discussed in the previous section to examine the major constituents involved in the construction of the Maltese clause. Most importantly, there I propose that the Maltese inflectional layer above *vP* contains a separate projection for both tense and aspect, along with projections for the hosting of negation and the complementizer. In §2.4 I then turn a more careful analytical eye to what I will term COMPOUND TENSE constructions — clauses in which a main verb appears with one or more auxiliaries, many of which inflect along with the verb for subject agreement. In §2.5 I provide an analysis of these Compound Tense constructions, arguing that they document the need for successive-cyclic movement of the subject through the inflectional layers in the language. Finally, in §2.6 I conclude with some remaining questions as well as avenues for future research.

2.2 Basic Word Order & Agreement

As will become clear throughout this dissertation, it is impossible to divorce the construction of verbs from their syntactic contexts, either entirely or in part. This is not only because the modern conception of syntactic theory takes clauses to be, in some sense, headed by verbs themselves (see Grimshaw (1991) and references therein). This is also because the Maltese verb is constructed out of parts which reference this context, several of which will be the focus of later portions of this chapter. Specifically, the Maltese verb is made up of a verbal root to which several kinds of affixes may be added: (i) subject agreement, (ii) tense and aspect morphology and (iii) a circumfix expressing negation.

This section treats two parts of this clausal context. First, in §2.2.1 I outline the rudimentary facts of word order in clauses which contain phonetically overt verbs. After this, in §2.2.2, I discuss the subject agreement morphology which appears on the verb.

2.2.1 Basic Word Order

Maltese is, essentially, an SVO language insofar as the subject is typically the first element in a clause.¹ Thus in information-structurally neutral discourse

1. In presenting things in this way, it is important to distinguish surface word order from the order of the syntactic constituents themselves in the syntax. Crucially, I will assume here that syntax is not ordered intrinsically, nor does it obey any universal constraints on the mapping of syntactic structures on to linear precedence (*contra* Kayne, 1994). While in all the cases which will be discussed here would be workable in an approach which utilized Kayne's LINEAR CORRESPONDENCE AXIOM, this assumption will greatly reduce the complexity of the movements required. Additionally, I wish to leave open the possibility that an alternative analysis of the dative arguments discussed in Chapters 3 and 4 could make crucial use of rightward specifiers. However, the proposals about clitic placement in Chapter 4 requires abandoning the corollary of the LCA which states that head movement universally creates suffixation.

contexts, a transitive verb is preceded by its subject and followed by any internal arguments (objects). This can be seen in the basic contrasts in (1):²

- (1)a. Luqa sema' il-għanja.
Luke listened DEF-song
"Luke listened to the song."
b. *Sema' Luqa il-għanja.
listened Luke DEF-song
c. *Sema' il-għanja Luqa.
listened DEF-song Luke
d. *Il-għanja sema' Luqa.
DEF-song listened Luke
e. *Il-għanja Luqa sema'.
DEF-song Luke listened
f. *Luqa il-għanja sema'.
Luke DEF-song listened

As the contrast between (1a) and (1b–f) shows, the word order used in neutral contexts is subject-verb-object. Some of the other word orders in (1) are possible, but only under limited conditions or with additional changes.³ Since these other word orders require non-neutral contexts, I will not discuss them here.

In addition to any arguments, verbs in Maltese can appear with one of several auxiliaries, all of which will precede it in linear order. The most common of these auxiliaries is the copula *kien*, which appears with both perfect and imperfect verbs (see §2.2.2 for discussion of these forms). Throughout this chapter

2. This has been discussed quite widely in the previous literature on Maltese. See Borg & Azzopardi-Alexander (1997:56–8) for a descriptive treatment. The only theoretical treatments of which I am aware appear in Fabri (1993) and Müller (2008; 2009).

3. For instance, §2.3.4 will discuss how (1b) is possible in A-bar movement contexts. Moreover, Chapter 3 discusses how all of the word orders in (1c–f) are possible if the direct object is resumed with a clitic on the verb.

I will refer to these examples as COMPOUND TENSE constructions, since *kien* provides a past tense temporal interpretation. Examples of these compound tense constructions appear in (2):

- (2)a. Per eżempju, jekk għand = ek area li fi = ha normalment
 For example, if at = 2.SG area COMP in = 3.SG.FEM normally
kien jintefa' l-methyl bromide ...
was place.PASS DEF-methyl bromide ...
 “For example, if you have an area into which methyl bromide was
 being placed ...” (Borg *et al.*, 2012:parl1862)
- b. Fl-1996 gvern Laburista **kien sab** it-turizmu settur
 In.DEF-1996 government Labor **was found** DEF-tourism sector
 abbandunat ...
 abandoned ...
 “In 1996, the Labor Government had found the tourism sector
 abandoned...” (Borg *et al.*, 2012:parl1862)

As (2b), one can see that the appearance of this auxiliary does not disrupt the normal S-V-O order (though see §2.4 for more on the position of the subject in this construction). In §2.3.1, this word order will be derived by positing that external arguments are generated in a specifier of *v*P, below the base-generation site of auxiliaries such as *kien*, and then undergo raising to the specifier of a higher TP, resulting in linearization to the left of the auxiliaries in compound tense examples.

2.2.2 Basic Agreement

Maltese has two distinct agreement paradigms for realizing the φ -features of the subject, the choice between which is mediated by tense and aspectual prop-

erties of the clause (see §2.3.2 for more on the mediating factors). The traditional labels for these paradigms, which I will use, are the PERFECT and IMPERFECT; the former is also typically the citation form for verbs, as there are no infinitive forms in this language.⁴ The perfect agreement morphology is completely suffixal and appears in Table 2.1. The imperfect agreement morphology, on the other hand, is prefixal for the portion which realizes person (1st, 2nd, or 3rd) and gender (masculine or feminine). A suffix *-u* is present with the corresponding prefix for all plurals in this paradigm. The complete sequence of morphemes appears in Table 2.2, where the ellipsis indicates the position of the verbal root and *V* a stem-idiosyncratic vowel which is most often realized as *i*.

PERS/GEN	SG	PL
1	-t	-na
2	-t	-tu
3.MASC	-∅	-u
3.FEM	-et	

Table 2.1: Perfect Agreement Morphology in Maltese

PERS/GEN	SG	PL
1	nV-	nV-...-u
2	tV-	tV-...-u
3.MASC	jV-	jV-...-u
3.FEM	tV-	

Table 2.2: Imperfect Agreement Morphology in Maltese

We can give the paradigms in Tables 2.1 and 2.2 an analysis in the context of the assumptions made in Chapter 1, specifically the assumption that Vocab-

4. However, in Chapter 3, I will suggest that the opposite is true, based upon the fact that the imperfect is what appears in reduced clausal complements with no independent specification of tense or aspect.

ulary Insertion is mediated by a principle of disjunctivity such as the SUBSET PRINCIPLE used in the framework of Distributed Morphology.⁵ However, in order to do this, a feature inventory is needed upon which to base the relevant vocabulary entries. The one which I will use here is that proposed by Harley & Ritter (2002), since I will also make crucial use of this system in Chapter 5. In this approach, person values are decomposed into a set of features which form an ordered set. Simplifying somewhat, the relevant features appear in (3):⁶

(3) Features Decomposing [PERS] in Harley & Ritter (2002):

- a. $[\pi]$, the generic feature present for all persons
- b. [PARTICIPANT], the feature present for all persons who participate in the discourse
- c. [SP(EA)K(E)R], the feature present for persons representing the speaker

Thus in this account third person is the set $\{[\pi]\}$, second person is the set $\{[\pi], [\text{PART}]\}$, and first person the set $\{[\pi], [\text{PART}], [\text{SPKR}]\}$.

This feature set allows us to do more than be consistent with the proposals in Chapter 5; it also allows for a uniform understanding of sub-regularities in both paradigms in Tables 2.1 and 2.2. This will be important in the context of Chapter 5, where the same feature inventory will be used to derive Person Case Constraint effects in the language. It is therefore necessary that we understand how the basic agreement system can be derived with this same feature set. For the perfect, this allows us to posit a uniform exponent of [PART] in the cases in which it is realized as /-t/. If we combine this with the assumption that the

5. For discussion of this principle and its proper definition, see Halle & Marantz (1993; 1994); Embick & Noyer (2001); Hankamer & Mikkelsen (2005); and Embick & Marantz (2008).

6. In particular, there is no reason to assume the existence of an [ADDRESSEE] feature in Maltese; see Harley & Ritter (2002:§2) and Nevins (2007) for discussion of such a feature.

third singular masculine form is the elsewhere realization, this leads to the set of vocabulary items in (4):⁷

- (4)a. $[\pi, \text{SPKR}, \text{PL}] \leftrightarrow -na$
- b. $[\pi, \text{FEM}] \leftrightarrow -et$
- c. $[\text{PART}] \leftrightarrow -t$
- d. $[\text{PL}] \leftrightarrow -u$
- e. $\text{ELSEWHERE} \leftrightarrow \emptyset$

The inclusion of a decompositional theory of person values thus allows entries such as (4c-d), which in turn allow the analysis to relate the *-t* found in the second person plural to that found in the first and second persons singular.

For the imperfect, the relevant vocabulary entries would be those in (5):

- (5)a. $[\pi, \text{FEM}] \leftrightarrow tV-$
- b. $[\pi, \text{SPKR}] \leftrightarrow nV-$
- c. $[\pi, \text{PART}] \leftrightarrow tV-$
- d. $[\pi] \leftrightarrow jV-$
- e. $[\text{PL}] \leftrightarrow -u$

In the entries in (5), I have chosen to separate the *tV-* which expresses third feminine singular from the other *tV-* items found elsewhere in the paradigm.

This is not a necessary move — we could instead take *tV-* to be an elsewhere

7. Ideally, one would like independent justification for the claim that the third singular masculine is a better default realization than the more numerous exponent *-t*. One piece of such evidence is that this form is one of the few inflectional forms which does not undergo any of the syncope processes discussed immediately below.

form — but the entries in (5) parallel the decompositions in (4) insofar as both involve a more specified entry for [π , FEM].⁸

In addition to the overt morphemes in Tables 2.1 and 2.2, the expression of particular combinations of person, number, and gender includes syncope of root-medial vowels.⁹ Thus the verb *wassal*, “he arrived” is *wassl-et* in the third singular feminine, and not **wassal-et*, for instance. However, this syncope only applies to roots from the Semitic lexical stratum in the language — borrowings from English and Italian appear only with the morphemes shown above, and do not participate in root vowel syncope processes. I will, however, not treat these Semitic-stratum syncope facts here, as the phenomenon of vowel syncope in Arabic and Maltese inflectional morphology has been widely discussed in the phonological literature.¹⁰ For Maltese in particular, there have even been claims that there is no deeper non-concatenative generalization to be had in the Semitic stratum, as many of the irregularities seen in other Semitic languages have been leveled in Maltese or replaced by patterns drawn from Romance (Hoberman & Aronoff, 2003). Resolving this debate would take this chapter too far afield, so I leave this debate to others, and will simply assume the existence of a series of readjustment rules (in the sense of Halle & Marantz, 1993; 1994;

8. One thing I have not discussed here is how a bundle of φ -features comes to be realized by more than one vocabulary item. What is needed here is a system in which Vocabulary Insertion allows features to be discharged upon realization, leaving any other unrealized features available for insertion. There are two such proposals on the market: (1) the DISCONTINUOUS BLEEDING theory of Noyer (1997) and (2) the articulated theory of FISSION discussed most comprehensively by Arregi & Nevins (2012). As far as I can tell, either of these proposals is compatible with the facts in Maltese.

9. This is widely discussed in its own right. See Borg & Azzopardi-Alexander (1997:243–52) for complete discussion of the empirical domain.

10. Theoretical discussion of patterns like these appears in Brame (1970; 1974); McCarthy (1981; 1985); McCarthy & Prince (1990); McCarthy (1993; 2005); Moore (1990); Noyer (1997); Kiparsky (2000; 2012); and Wolf (2011); to name just a few.

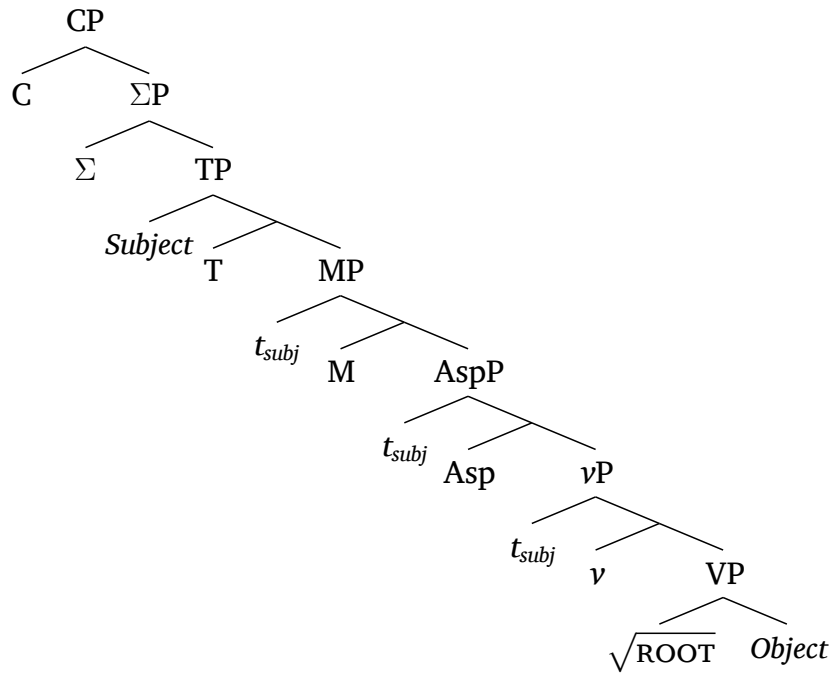
and Embick & Noyer, 2001) which effects the needed syncope in the verbal root when the featural context is appropriate.

We now have an understanding of the basic word order and agreement facts in Maltese and a morphological analysis of the exponence of agreement features. For a complete understanding of the Maltese clause, we now need: (i) a picture of the major clausal architecture itself and (ii) an analysis of how agreement features come to be shared between the verb and its subject. These two topics are central concerns of the sections which follow.

2.3 Major Constituencies

A basic picture of the Maltese clause will be important if we want to understand the key components of the verb in Maltese, including agreement morphology and the morphology marking temporal information. The purpose of this section is to provide such a picture and an analysis of the major portions of the clause. This picture will involve four major parts, which are discussed in turn: (i) the *vP* layer (§2.3.1); (ii) the inflectional extended projection of the verb, which includes positions for tense, mood, and aspect heads (§2.3.2); (iii) the position of negation (§2.3.3); and (iv) the complementizer layer (§2.3.4). Along the way, we will also lay the empirical groundwork for an analysis of the subject case and agreement system as it interacts with the formation of compound tense constructions consisting of more than one inflected verb. The complete picture of the clause which will result from this discussion is shown in Tree 1, where *AspP* is an aspectual projection and *MP* a projection of irrealis mood.¹¹

11. In this tree, as elsewhere in this dissertation, I use the symbol t_x to represent a position from which x has moved. This is purely for typographic convenience and clarity; I do not presume that a trace is the result of movement. Instead, I mean this symbol to stand for a



Tree 1: The Maltese Clausal Spine

2.3.1 The vP

In order to get started, certain assumptions should be laid out in advance. Aside from the theoretical assumptions discussed in Chapter 1, here I will also make crucial use of the Kratzer (1996) version of the VP-INTERNAL SUBJECT HYPOTHESIS.¹² This approach takes the position of the external argument to be the specifier of a head which itself takes a complement VP containing a verb and its internal arguments.¹³ Following more recent work by Chomsky (2000;

phonetically unrealized copy of the moved element, per the COPY THEORY OF MOVEMENT put forth in Chomsky (1993) and subsequent work.

12. While I make use of the instantiation of this in Kratzer (1996), that thematic subjects are generated inside the verbal projection is an idea which predates that paper. See Kuroda (1981); Diesing (1990); Koopman & Sportiche (1991); and references therein for more discussion of the empirical motivations of this assumption.

13. Two issues I will not address here are whether or not the VP node should be taken to consist of a category-neutral root and a verbalizing head (Marantz, 1995; 1997b) and whether or not the arguments of a verbal root are in fact direct arguments of that root or are instead arguments of a small clause which is itself an argument of the functional structure around the

2001b), I will call the head which introduces the external argument v (though later chapters will propose different “flavors” of this head with different labels), leading to the structure in (6):

(6) $[_{VP} \text{ Subject } [v [_{VP} \sqrt{\text{ROOT}} \text{ Object }]]]$

One prediction of such an account is that the subject should, of course, pattern for purposes of binding as though it were in a position which asymmetrically c-commands the internal arguments throughout the derivation; this is true. For instance, binding of anaphors and quantifier-variable binding both show familiar subject-object contrasts. This is shown for binding of the reflexive *lilhom innifishom* and the reciprocal *xulxin* in (7):¹⁴

(7)a. **Marju u Lwiġi raw lilhom innifishom / xulxin**

Mario and Luigi saw themselves / each other
fil-rittrat.

in.DEF-picture

“Mario and Luigi saw themselves/each other in the picture.”

b. ***Lilhom innifishom / Xulxin raw lil Marju u Lwiġi**

themselves / each other saw DOM Mario and Luigi
fil-rittrat.

in.DEF-picture

“Themselves/each other saw Mario and Luigi in the picture.”

In (7a), we see that both an object reflexive and reciprocal can be bound by a subject, but in (7b) shows that the reverse is not possible. The same asymmetry

verbal root. These proposals raise issues which are orthogonal to the present discussion and would also needlessly complicate the trees involved.

14. It is worth bearing in mind while reading examples with reflexives that the Maltese reflexive is comprised of a strong form pronoun (*lilhom* in (7)) and the nominal root *nifs* with an attached possessive pronoun (yielding *innifishom* in (7)).

is found in the binding of pronouns by quantificational NPs such as *kull tifel* and *kull kelb* in (8):

- (8)a. [**Kull tifel**]_i kiel tuffieħa tiegħ = **u**_i.
 [**Each boy**]_i ate apple of = **3.SG.MASC**_i
 “[Each boy]_i ate his_i apple.”
- b. *Sid = **u**_i iħobb [**kull kelb**]_i.
 Owner = **3.SG.MASC**_i loves [**each dog**]_i
 “*Intended*: Its_i owner loves [each dog]_i.”

While a bound interpretation is possible in (8a), this interpretation is impossible in (8b) (however, the sentence is grammatical on an irrelevant reading where the clitic pronoun *u* is not bound). Both of these facts can be straightforwardly understood as binding of an internal argument by a c-commanding antecedent (the external argument), given the structure in (6). Moreover, as we shall see, the only A-movement which occurs from structures like (6) is movement of the external argument to [Spec,TP], the eventual position of the subject. Since binding relations are commonly thought to be fed by A-movement, it is crucial that the only A-movement out of (6) be one which does not create or destroy c-command relationships between the external and internal arguments.

Chapters 3 and 4 are dedicated to examining the *v*P layer more closely. These chapters will show that there is reason to postulate an additional applicative projection situated between the verbal root and *v* in order to host certain dative arguments.

2.3.2 Tense, Mood, and Aspect

This section deals with the inflectional layer of clauses in Maltese, where inflectional layer is understood as shorthand for the clausal extended projection situated between vP and the position of the complementizer (see §2.3.4 for more on the complementizer layer). As we shall see, Maltese has a class of auxiliary elements which motivate the need for three additional projections above vP (from the bottom up): (i) an ASP(ECT) Phrase, (ii) a M(OOD) Phrase, and (iii) a T(ENSE) Phrase. These projections are motivated by the need to host several pieces of morphology which can appear in these positions. The aspect position (§ 2.3.2.1) hosts the appearance of perfect morphology and a progressive auxiliary *qiegħed*, the mood position (§ 2.3.2.2) hosts the future particle *se* or its agreeing auxiliary counterpart *sejjer*, and the tense position (§ 2.3.2.3) hosts the auxiliary verb *kien*. The following sections address each of these positions in turn.

The ultimate picture which emerges is one in which the Maltese verb itself presents two morphosyntactic distinctions based on temporal information: imperfect and perfect aspect. The former has no reference to tense, but describes an event as unbounded or perpetual. The latter, on the other hand, can be used for simple past, but demonstrably marks only aspect in complex tense/aspect combinations. In addition to these two morphological distinctions, Maltese adds a number of verbal auxiliaries which express future mood, past tense, and continuous aspect.

Here we motivate only the *existence* of these projections. The interactions they enter into (agreement, for example) are considered later in the chapter. Accordingly, in the examples in this section, I leave φ -featural agreement un-glossed unless it is germane to the point at hand.

2.3.2.1 Aspect

Maltese has several means of expressing aspectual information about an event, where “aspect” is to be understood in terms of the boundedness of the event denoted by the verb with respect to time. Aspect is also the basis for the distinction between the two kinds of verbal φ -agreement morphology discussed in §2.2.2, above. The claim that these forms express only aspectual information is only partly correct, however, as many have noted for the cognate morphology in modern-day Arabic dialects.¹⁵ It is partly correct insofar as a single main verb in either the perfect or imperfect form carries some information concerning whether or not the denoted event is completed, but incorrect insofar as these forms also carry some information about tense when used without any associated auxiliaries. This can be seen for the perfect in (9), where the possible continuations do not allow an interpretation of the verb in anything other than a perfect aspect:

(9) Ċikku kiel il-ghagin.

Chikku ate(.PERF) DEF-pasta

“Chikku ate the pasta.”

Impossible Continuation: “...but he did not finish the pasta.”

Possible Continuation: “...and so there’s none left for us.”

In the case of a sole imperfect main verb, however, this aspectual characterization is closer to correct, as in these examples the verb itself carries no information about tense — as Borg & Azzopardi-Alexander (1997:221) put it, the imperfect has “timeless overtones.” Specifically, a sole imperfect verb can

15. See Bahloul (1994a); Benmamoun (2000); Fassi Fehri (2004); and Aoun *et al.* (2010) for more on this issue in Arabic.

only be used for events which are not completed; as such, they are much more natural with overt expressions of tense such as *kull jum*, “every day” in (10):

(10) Marku **jiekol** għagin kull jum.

Mark **ate(.IMPF)** (DEF-)pasta every day

“Mark eats pasta every day.”

Comment: “He can’t eat a single pasta over and over again.”

Without *kull jum* my consultants have difficulty associating examples like (10) with any temporal information at all. The proper characterization of the perfect and imperfect in the absence of other temporal morphology seems to be that the perfect alone can be used to indicate both perfect aspect and past tense, whereas the imperfect is not associated with non-past tense, only imperfect aspect.

As the eventual picture of the Maltese clause involves an aspect head which I take to be present in all derivations, we can preliminary identify examples such as (9–10) as involving head movement of the verbal root through Asp into T. These collected aspect and tense heads, however, have no exponence of their own, but instead trigger allomorphy of both the verbal root and the φ -featural agreement morphology.

Despite this conflation of tense and aspect in simple cases, there are instances where the two notions come apart in Maltese. Specifically, Maltese allows for a number of inflected auxiliaries to appear to the left of main verbs which denote aspectual distinctions.¹⁶ In this chapter I will focus on one such auxiliary, the participle *qiegħed*, which often appears as the non-inflected par-

16. For a more comprehensive overview than I can give here, see Borg & Azzopardi-Alexander (1997:229–36).

ticle *qed* with no change in meaning.¹⁷ Meaning literally “to remain” or “to continue,” *qieghed* is used to denote continuous aspect, as the translation of (11) makes clear:

- (11) Marku **qieghed/qed** jiekol il-ghagin.
Mark **continues** eating DEF-pasta
“Mark is eating the pasta.”

Such uses of *qieghed* can co-occur with overt tense material such as the auxiliary *kien* discussed in §2.3.2.3, below. In such cases, the interpretation is one of continued action (imperfect aspect) in the past tense; here the main verb must also appear in the imperfect aspect, as (12) shows:

- (12) Marija **kienet qieghda/qed** tiekol ghagin
Marija **was continues eat.(IMPF)** DEF-pasta
“Marija was eating pasta.”

While *qed* and *qieghed* can co-appear with *kien*, the simultaneous appearance of this auxiliary with perfect aspect morphology is impossible; consultants report that this is a semantic failure, insofar as completed events cannot be simultaneously continuing. This is shown in (13):

- (13) *Tereza **qieghda/qed** kielet il-ghagin
Theresa **continues eat.PERF** DEF-PASTA

Moreover, it is impossible for *qed* or *qieghed* to be co-present with the expression of future, *se*, which is discussed in the next section. Here again, consultants

17. I call this word *qieghed* and its mood counterpart *sejjer* participles because, as §2.4.2 discusses, they inflect like adjectives and not like verbs. For both *qieghed* and *sejjer* (see the following section), there are homophonous uses which are demonstrably verbal insofar as they inflect with the morphology discussed in §2.2.2 and occupy the linear position of main verbs; I will not treat these uses of *qieghed* and *sejjer* here.

report a semantic inconsistency: *se* is a marker of futurity, and without considerable support from the context, it is not semantically possible for a future event to be ongoing. This is thus the reason for the ill-formedness of examples such as (14) in most cases (though see the following example for some exceptions to this generalization):

- (14) *Tereza **se qieghda/qed** tiekol il-ghagin
 Theresa **FUT continues** eating DEF-pasta
Intended:“Theresa will be eating the pasta.”

Given that a position for *qieghed* is required when it appears, we might then ask where this position would sit relative to the *vP* in which the verb originates. As (15) shows, the order of the auxiliary *qieghed* and the main verb is fixed; the verb-*qieghed* order is impossible.

- (15)a. Matthew **qieghed/qed isstudja** lingwistika.
 Matthew **continues** **studying** linguistics
 “Matthew is studying linguistics.”
 b. *Matthew **isstudja qieghed/qed** lingwistika.
 Matthew **studying continues** linguistics

If we assume that the Asp projection sits immediately above *vP*, then we can explain this fact as derivative of a linearization algorithm which directly follows asymmetric c-command relations; since *qieghed* in Asp c-commands the main verb (in *v*), then *qieghed* will always be linearized to the left, given the independent linearization principles in Maltese.

2.3.2.2 Mood

Maltese has another particle and associated inflected form which appears between the position of tense and the verbal root itself — the particle *se*, which is itself a shorted form of the participial auxiliary *sejjer*, with the meaning “going.” These inflectional elements are used to express futurity insofar as the event which the verbal root denotes must not yet have happened. As with *qiegħed*, the unshortened *sejjer* is inflected like a participle, a fact which is discussed more in §2.4.2. However, by way of example, (16a) shows the position of *se* or the plural *sejrin* in between the subject and the verbal root; the other order is not possible (16b):

(16)a. Dawn **se/sejrin jsegwu** korsijiet f' = għadd ta' oqsma ...

These **FUT** **attends** courses in = number of areas ...

“These [students] will attend courses in a number of areas...”

(Borg *et al.*, 2012:um46)

b. *Dawn **jsegwu se/sejrin** korsijiet f' = għadd ta' oqsma ...

These **attend** **FUT** courses in = number of areas ...

I place *se* in a dedicated mood position for a simple reason: it can co-occur with the element which demonstrably appears in the Tense position, such as *kien* (see the next section). This is shown in examples such as (17) and provide a good argument for treating *se* and its expression of future, not as tense-marking, but as a kind of irrealis mood. This will allow an understanding of the examples where both *kien* and *se* are present in the clause simultaneously. Note, additionally, that unlike Standard Arabic (see Ryding, 2005), Maltese does not have any morphological expression of irrealis mood over and above this particle *se*, such as a subjunctive.

- (17) Marija **kienet se/sejra** tiekol il-ghagin.
 Marija **was FUT eat.IMP** DEF-pasta
 “Maria was going to eat the pasta.”

As to the location of this dedicated mood projection, the linear order of *kien* and *se* indicate that the future marker must be lower than the position of tense, but it is not easy to locate this projection with respect to the aspectual head discussed in the preceding section. This is because there are clear selectional relationships between *se* and elements to its right; for one, it is not possible for *se* or *sejjer* to appear with a perfect verb form, as shown in (18):

- (18) *Marija **se/sejra kiolet** il-ghagin.
 Maria **FUT eat.PERF** DEF-pasta
Intended: “Maria will have eaten the pasta.”

Moreover, *se* and the other expression of the aspect head, *qed/qieghed* do not easily co-appear. My consultants dislike all such examples, but rare examples of *se* and *qed* can be found in corpora. However, like the example in (19), most of these examples involve the copular main verb *ikun*:

- (19) **Se qed tkun** partigġjan ...?
FUT continue be.2.SG partisan ...
 “Will you continue to be partisan...?” (Borg *et al.*, 2012:par19926)

Given the equivocal status of examples such as (19) where *se* precedes *qed*, I will tentatively conclude that the mood position appears between the position of the aspectual morphology and the position of tense discussed in the next section.

2.3.2.3 Tense

Above the position of both mood and aspect is the position which hosts the syntactic locus of tense in Maltese — the position of the auxiliary *kien*. That this position is associated with tense can be seen in examples where both past tense *kien* and a main verb appear; in these cases, the auxiliary adds a past-tense interpretation to the aspect denoted by the main verb agreement morphology. For combinations of *kien* and a perfect verb, the interpretation is one of a completed action in the past (20):

- (20) Mona **kienet kielet** l-ghagin.
Mona **was ate(.PERF)** DEF-pasta
“Mona had eaten the pasta.”

Note that by itself, the verb *kielet* would have the same interpretation as the English simple past (9), whereas the addition of *kienet* in (20) indicates a perfect aspect in the past tense.¹⁸

When *kien* appears with an imperfect main verb, the interpretation is one of past habituality, as in the translation of *kienet tiekol* in examples such as (21):

- (21) Mona **kienet tiekol** il-ghagin.
Mona **was eats(.IMPF)** DEF-pasta
“Mona was eating the pasta.”

Here again the main verb imperfect morphology expresses aspect only. In this case, the tenselessness of *tiekol* can be observed by contrasting the interpretation of (21) with that of (10) and the surrounding discussion — by itself, *tiekol*, like all imperfections, does not express any notion of tense in and of itself.

18. For more on the semantics of this *kien* + PERFECT, see Borg & Azzopardi-Alexander (1997:222).

As we saw in the preceding section (*cf.*, example (17) and those like it), *kien* can co-occur with the future mood marker *se* or its inflected form *sejjer*. In addition to this, *kien* can co-occur with *qed* and its related *qieghed*, showing that the position of tense precedes (and therefore by assumption c-commands) the position of *qieghed* in Asp, as well. Examples such as (22) show that this is possible:

- (22) **Kienet qed** iddoqq il-pjanu tajjeb dan l-aħħar ...
Was continues play DEF-piano well this DEF-last ...
 “She had been playing the piano well recently ...”

Borg & Azzopardi-Alexander, 1997:231//

Here, as with the uses of *qed/qieghed* discussed in §2.3.2.1, the interpretation is one of continued action, but the addition of *kienet* locates this continuous action in the past.

Because the linear order of *kien se* and *kien qed* is fixed (*i.e.*, both **se kien* and **qed kien* are ungrammatical), the position which hosts the tense-denoting *kien* must be higher than the position which hosts mood and aspect. In the proposed structure in Tree 1, this is accounted for by assuming that *kien* appears in T, whereas *se* and *qed* both occupy positions lower than this (M and Asp, respectively).

At this point, we have a fairly complete characterization of the Maltese inflectional layer consisting of the heads Tense, Mood, and Aspect and their associated projections. In the next section, I turn to the position of negation, as it can be shown to appear above the inflectional layer.

2.3.3 Negation

Negation in Maltese is expressed via concatenative affixation, by which I mean morphological devices which do not trigger vowel ablaut in the verbal stem. The affix which expresses negation consists of two distinct parts, a prefixal or clitic *ma-* and a suffixal *-x* (pronounced /ʃ/).¹⁹ The prefix portion, *ma*, does not appear with its final vowel when the following segment of the host is a vowel. The negative marker can attach to verbal predicates of all kinds — this includes not only lexical and auxiliary verbs (23a-b), but also the so-called “pronominal copula” which is found in many Semitic languages (23c):

- (23)a. Louis **ma ra-x** lil Ċikku.
Louis NEG see-NEG DOM Chikku
“Louis didn’t see Chikku.”
- b. Louis **ma kien-x** ra lil Ċikku.
Louis NEG was-NEG see DOM Chikku
“Louis had not seen Chikku.”
- c. Paċik **m-hu-x** tabib.
Patrick NEG-is.3.SG.MASC-NEG doctor
“Patrick is not a doctor.”

19. I will not take a position here on the affixal or clitic status of the element *ma*. It is clear it is not a freestanding word, as it cannot be separated from the verbal root by any material, such as the subject DP, as in (i):

(i) ***Ma Sam ra-x** lit-tifel.
NEG Sam see-NEG DOM.DEF-boy
“Intended: Sam did not see the boy.”

But there are no means, as far as I can tell, to distinguish a clitic from an affixal analysis of *ma*. I will tacitly assume throughout this dissertation that it is a clitic, but as far as I can tell, nothing crucial hinges on this move. For more discussion of negation in Maltese, see (Borg & Azzopardi-Alexander, 1997:88–93), as well as Haspelmath & Caruana (1996) for some discussion of NPIs in the language.

Given that the focus of this dissertation is on the morphosyntax of verbs, I will not discuss examples like (23c), which include most instances of constituent negation, any further. The focus here will be on instances where *ma...x* attaches to verbs.

The linear placement of the negative marker *ma...x* as the outermost element on the verb suggests that it is introduced into the clause quite high in the inflectional layer, a finding which is consonant with other researchers' results on the position of clausal negation in related languages.²⁰ In Maltese, this boils down to the observation that when a clause contains an auxiliary *kien*, the negative marker must attach to *kien* and may not attach to the finite verb (see §2.4 for more on this construction):

(24)a. **Ma kont-x** smajt l-istorija koll = ha.

NEG was.1.SG-NEG heard.1.SG DEF-story all = 3.SG.FEM

“I had not heard the whole story.”(Borg & Azzopardi-Alexander, 1997:88)

b. *Kont **ma smajt-x** l-istorija koll = ha.

was **NEG heard-NEG** DEF-story all = 3.SG.FEM

“*Intended*: I had not heard the whole story.”

(Based upon Borg & Azzopardi-Alexander, 1997:88)

Data such as (24) suggest that the highest head in the inflectional layer (in this case, T) is what comes to host negation at the end of the derivation. There are several different ways to incorporate this idea into the present analysis, but following Laka (1994), I will assume that there is a dedicated head position above TP which hosts negation called ΣP .²¹ If we assume that T undergoes head

20. See especially the studies in Ouhalla (1991; 1993); Benmamoun (1992; 1996; 1997); Bahloul (1994b); Bahloul (1996b).

21. Note that this is not the only proposal on the market which suggests that negation has a dedicated head position which is quite high in the clause. See Ouhalla (1988; 1990); Pollock

movement from TP to the c-commanding Σ position, then we can account for the placement of negation on the highest verbal element in the clause.

However, when the main verb is preceded by a non-agreeing inflectional particle such as the *se* which expresses future tense, discussed in the previous section, then placement of negation on the main verb is impossible. Instead, the negative marker appears attached to a pronoun which agrees with the subject in person, number, and gender (25):

(25)a. **M-hu-x se jmur id-dar.**

NEG-he-NEG FUT go.3.SG.MASC DEF-house

“He is not going to go home.” (Borg & Azzopardi-Alexander, 1997:88)

b. ***Se ma-jmur-x id-dar.**

FUT NEG-go-NEG DEF-home

“*Intended*: He is not going to go home.”

(Borg & Azzopardi-Alexander, 1997:88)

We can understand this state of affairs as akin to English *do*-support if we take the presence of *se* and *qed* to block head raising of the verb through Asp and into T. If this is the case, then the pronominal copula which appears can be seen as a last-resort attempt to provide a host in T for the negative circumfix *ma...x*. The resulting picture of the inflectional layer in Maltese is one in which the verb raises to T in clauses without *se* or *qed*, and that T universally raises to Σ , regardless of its eventual phonological content. In cases where T does not

(1989); Chomsky (1991); Zanuttini (1991; 1996; 2001); Benmamoun (1992); Bahloul (1994b; 1996b); and Bahloul (1996a) for other theories. Choosing among these approaches where they are inconsistent would take us too far afield here. It is also worth noting that Maltese has no positive polarity items that I know of which are hosted in ΣP , as Laka (1994) suggests is possible in other languages.

provide lexical material at Spell-Out, the Semitic pronominal copula is inserted to provide a host for T.²²

With this picture of the inflectional layer in hand, we can now turn to the final region of the clause: the complementizer layer.

2.3.4 The Complementizer Layer

Above tense and aspect predicates and negation in Maltese is the complementizer layer.²³ This layer needs to minimally include a position for the most common complementizer found in Maltese, *li*.²⁴ This is the complementizer used for most embedded clauses in the language, whether they be clausal complements to verbs (26a), nouns (26b), adjectives (26c), or relative clauses (26d):

- (26)a. **Jidher li** l-Fakultà tal-Medicina kienet l-unika waħda
seems COMP DEF-faculty of.the-medicine was DEF-only one
li kien fi = ha għalliema Maltin ...
COMP was in = it teachers Maltese ...
“It seems that the Faculty of Medicine was the only one which had
Maltese instructors ...”

(Borg *et al.*, 2012:um24)

22. See immediately above about *mhux* for more on the copular pronoun in Maltese, which is made up of the discontinuous negation affix *ma...x* and the pronoun *hu*. The pronominal copula has received some attention in other Semitic languages, as well; see Berman & Grosu (1976); Eid (1983); Doron (1986); Retsö (1987); and Shlonsky (2000); among others.

23. By intentionally using the phrase “complementizer layer” instead of simply “complementizer position,” I am attempting to leave room for additional projections for focus and topicalization movements, should they be necessary (Rizzi, 1997 *et seq.*). The linear order of *li* with respect to focused elements in embedded clauses (see Chapter 4) almost certainly requires a FocusP to exist between TP and CP.

24. For descriptive discussion of *li*, see Borg & Azzopardi-Alexander (1997:30).

- b. ... l-unika **biza' li** ghand-u l-Onor. Austin Gatt
 ... DEF-only **fear COMP** has-3.SG.MASC DEF-Honorable Austin Gatt
 hija dwar kif se ssir il-ħatra ta' dan il-maġistrat
 is about how FUT be DEF-appointment of this DEF-magistrate
 investigattiv speċjali.
 investigative special
 "...the only fear the Hon. Austin Gatt has is about how this special
 investigative magistrate will be appointed."

(Borg *et al.*, 2012:parl9897)

- c. Anzi, huwa **kburi li** huwa poeta.
 Rather, he **proud COMP** he poet
 "On the contrary, he was proud that he was a poet."

(Borg *et al.*, 2012:lit43)

- d. ... taht il-kunsiderazzjonijiet lingwistiċi **li ippropona**
 ... under DEF-considerations linguistic **COMP proposed**
Vassalli ...
Vassalli ...

"...under the linguistic considerations which Vassalli proposed ..."

(Borg *et al.*, 2012:acad19)

In the case of clausal complementation, it can be shown that the complementizer position precedes T; this is shown in (27), where the complementizer *li* precedes a negated *kien*:

- (27) ...l-Kap tal-Oppożizzjoni kien kiteb li ma kien-x jaf
 ...DEF-Head of.DEF-opposition had wrote COMP NEG had-NEG knew
 xi htieġa kien hemm għali = ha.
 any need was there for = it
 “...the head of the Opposition had written that he had not known of
 any need for it.”

(Borg *et al.*, 2012:parl1288)

Given that the preceding sections have established that negation and tense appear at the top of the inflectional layer, we can conclude from data such as (27) that the complementizer position sits immediately above ΣP . The resulting picture is then complete when one notes that no other positions are needed between Σ and C. The overall view which emerges, then, is that shown in Tree 1 on page 31.

However, as the careful reader will have noted, the order of the subject and verb is not fixed in embedded clauses. Examples such as (26d) have shown that in some clauses, the verb may precede the external argument. In point of fact, this is a more general *option*, as the following data show:

- (28)a. Din il-ittra li baġhat Ġużepp lit-tifel.
 this DEF-letter COMP sent Joseph to.DEF-boy
 “This is the letter that Joseph sent to the boy.”
 b. Din il-ittra li Ġużepp baġhat lit-tifel.
 This DEF-letter COMP Joseph sent to.DEF-boy
 “This is the letter that Joseph sent to the boy.”

The inversion of the subject and verb is, as far as I can tell, completely optional, as the judgments in (28) show.

What I would like to suggest is that this is a process akin to the phenomenon of **STYLISTIC INVERSION** found in French (Kayne & Pollock, 1978, and much subsequent work). Stylistic inversion is a phenomenon which can be thought of as the optional inversion of the subject and verb when an A-bar movement has targeted a non-subject. The optional subject-verb reordering in (28) has all the hallmarks of stylistic inversion: (i) it does not normally occur in embedded clauses which do not have an instance of A-bar movement (29a), (ii) it is triggered by constituent questions in addition to the relative clauses shown above (29b), (iii) it does not apply in polarity question contexts (29c).

(29)a. *Louis jaf li **ihobb** Marku lil Marija.

Louis knew COMP likes Mark DOM Maria

“Louis knew that Mark likes Maria.”

b. X' = **bagħat** Louis lil Marija?

what = **sent** Louis to Maria

“What did Louis send to Maria?”

c. ***Qiegħed** l-**arogġ** fuq il-meda?

located DEF-watch on DEF-table

“Is the watch located on the table?”

(Based upon Borg & Azzopardi-Alexander, 1997:(11))

If these facts show that this patten reflects the application of something like stylistic inversion, then the analyses proposed for that construction become available for (28). Specifically, several authors have proposed that stylistic inversion results from an interplay between the complementizer responsible for A-bar movement and the head which is normally responsible for movement

of the subject from its ν P-internal position to [Spec,TP].²⁵ I will not attempt to decide between various implementations of this line of analysis, but will simply note here that any of them would work for the Maltese data, provided that the parallel between the facts in (28) and stylistic inversion is granted.

2.4 Compound Tense Constructions: More Data

With an overall view of the clausal spine in hand, we can turn to an additional set of puzzles in Maltese. These puzzles turn on the observation that in compound tense constructions containing a main verb and an auxiliary (*kien* especially, but also *qiegħed* and *sejjer*), *all the predicates appear with full agreement*. This is in stark contrast to English, where only one of the elements in a sequence of verbal elements ever hosts agreement, and does so in the same morpheme which expresses tense (at least in the present tense, where agreement is not null or unexpressed). However, the Maltese state of affairs is familiar from the Bantu languages, which routinely involve more than one inflected verbal element in a single clause. Following the terminology in Ouali & Fortin (2005), I will refer to such examples as COMPLEX TENSE sequences, an example of which appears in (30) from Swahili (examples from Carstens, 2001:150):

25. For more on this, see Valois & Dupuis (1990) and Kayne & Pollock (2001), as well as references therein. This idea has been made explicit in recent work by Chomsky (2008), though without direct reference to stylistic inversion itself.

- (30)a. Juma **a-li-kuwa a-me-pika** chakula.
 Juma **3.SG-pst-be 3.SG-perf-cook** food
 “Juma had cooked food.”
- b. (Mimi) **Ni-li-kuwa ni-ngali ni-ki-fanya** kazi.
 I **1.SG-PST-be 1.SG-still 1.SG-perf-do** work
 “I was still working.”

In these examples, both the main verb (*pika* and *fanya*, respectively) and its associated auxiliaries carry agreement morphology which cross-references the subject regardless of whether or not the subject is overt (*cf.*, (30b)). In this section, we shall see that *kien*, *qieghed*, and *sejjer* all behave similarly.²⁶

2.4.1 *Kien*

One of the properties of the compound tense construction which will be most important to the analysis presented in §2.5 has to do with the expression of agreement with the subject on the predicates involved. The generalization which emerges from the data is a simple one: all the predicates in a compound tense construction agree with the external argument in person, number, and gender. This is shown for gender in (31), below:

26. Note that the shortened versions of *qieghed* and *sejjer*, *qed* and *se* respectively, do not inflect, and so are not treated in this section.

(31)a. F' = Ottubru ta' l-1999 l-ETC **kien-et**

In = October of DEF-1999 DEF-ETC **was-3.SG.FEM**
waqf-et **ti-ġbor** id-data dwar

stopped-3.SG.FEM 3.SG.FEM-collecting DEF-data on
l-impjiegi temporanji ...

DEF-temporary employment ...

“In October of 1999, the ETC had stopped collecting data on
temporary employment.”

(Borg *et al.*, 2012:parl1839)

b. *F' = Ottubru ta' l-1999 l-ETC **kien**

In = October of DEF-1999 DEF-ETC **was(3.SG.MASC)**
waqf-et **ti-ġbor** id-data dwar

stopped-3.SG.FEM 3.SG.FEM-collecting DEF-data on
l-impjiegi temporanji ...

DEF-temporary employment ...

“In October of 1999, the ETC had stopped collecting data on
temporary employment.”

c. *F' = Ottubru ta' l-1999 l-ETC **kien-et**

In = October of DEF-1999 DEF-ETC **was-3.SG.FEM**
waqaf **ti-ġbor** id-data dwar

stopped(.3.SG.MASC) 3.SG.FEM-collecting DEF-data on
l-impjiegi temporanji ...

DEF-temporary employment ...

“In October of 1999, the ETC had stopped collecting data on
temporary employment.”

In (31a) we see the only grammatical expression of the two verbs *kienet waqfet*.

If either *kien* (31b) or *waqaf* (31c) is masculine, the result is ungrammatical.

The same thing can be seen with respect to number agreement in (32):

(32)a. L-akkuzi kontra dawn il-membri tal-Korp **kien-u**
 DEF-charges against these DEF-members of.DEF-Corps **was-3.PL**
j-inklud-u dizubbidjenza ta' ordnijiet ...
3-including-PL disobedience of orders ...
 “The charges against the members of this Corps had included
 disobedience of orders...”

(Borg *et al.*, 2012:parl1839)

b. *L-akkuzi kontra dawn il-membri tal-Korp
 DEF-charges against these DEF-members of.DEF-Corps
kien j-inklud-u dizubbidjenza ta' ordnijiet ...
was(.3.SG.MASC) 3-including-PL disobedience of orders ...
 “The charges against the members of this Corps had included
 disobedience of orders...”

c. *L-akkuzi kontra dawn il-membri tal-Korp **kien-u**
 DEF-charges against these DEF-members of.DEF-Corps **was-3.PL**
jinkluda dizubbidjenza ta' ordnijiet ...
including(3.SG.MASC) disobedience of orders ...
 “The charges against the members of this Corps had included
 disobedience of orders...”

In (32a) we again see the only grammatical expression of this compound tense sequence, the one with two plural verbs. A singular *kien* (32b) or a singular *jinkluda* (32c) yields the same ungrammaticality as seen in (31), above. The same set of facts holds of person agreement (even if the controller of this agreement is *pro*); this is shown in (33):

(33)a. **Kont** **sma-jt** l-istorija koll = ha.

Had.1.SG heard-1.SG DEF-story all = 3.SG.FEM

“I had heard the whole story.”

(Based upon Borg & Azzopardi-Alexander, 1997:88)

b. ***Kien** **sma-jt** l-istorija koll = ha.

Had(.3.SG.MASC) heard-1.SG DEF-story all = 3.SG.FEM

“I had heard the whole story.”

c. ***Kont** **sema'** l-istorija koll = ha.

Had.1.SG heard-3.SG.MASC DEF-story all = 3.SG.FEM

“I had heard the whole story.”

Combining the observations from (31–33), we can see that the auxiliary *kien*, when present, displays subject agreement. However, despite the presence of subject agreement morphology on the auxiliary, the main verb must also agree. In the following section, we shall see that this is a general fact about the auxiliaries under discussion in this chapter, *modulo* certain lexical differences.

In this sense Maltese is similar to every variety of Arabic. In these languages, the cognate *kaan* also agrees for person, number, and gender, as the following data from Harbert & Bahloul (2002) show for Modern Standard Arabic:²⁷

27. Similar facts have been analyzed in the literature on Moroccan Arabic; see Benmamoun (1992; 1999a; 2000) and Ouali & Fortin (2005). Note that I have suppressed a confound in the Modern Standard Arabic data, namely, a contrast in agreement when the subject is postverbal, which it can be in that language (Harbert & Bahloul, 2002:16). Note, also, that the availability of the subject in postverbal position lends further crosslinguistic support for the successive-cyclic analysis developed in §2.5.

- (34)a. Al-bint-aani **kaan-ataa** **ta-ktub-aani** darsa-humaa.
 DEF-girl-DUAL **was-3.FEM.DUAL** **3.FEM-write-DUAL** lesson-their
 “The two girls were writing their lesson.” (Harbert & Bahloul, 2002:(5))
- b. *Al-bint-aani **kaan-at** **ta-ktub-aani** darsa-humaa.
 DEF-girl-DUAL **was-3.FEM.SG** **3.FEM-write-DUAL** lesson-their
 “The two girls were writing their lesson.” (Harbert & Bahloul, 2002:(5))
- c. *Al-bint-aani **kaan-ataa** **ta-ktub-u** darsa-humaa.
 DEF-girl-DUAL **was-3.FEM.SG** **3.FEM-write-SG** lesson-their
 “The two girls were writing their lesson.”

(Based upon Harbert & Bahloul, 2002:(5))

Similar observations apply for person and gender, though they are not shown here. Thus, the puzzle of multiple agreement is not unique to Maltese, and the analysis developed in §2.5 will apply equally to constructions in Arabic with *kaan*.

2.4.2 *Qiegħed* and *Sejjer*

As mentioned briefly in §2.3.2, the auxiliaries *qiegħed* and *sejjer* are best understood as participles rather than as full-fledged verbs. There are two reasons for this, one of which we saw in §2.3.3: when clauses containing these lexical items are negated, the nominal negation *mhux* appears and not the verbal negation *ma...x*. In addition, the auxiliaries *qiegħed* and *sejjer* both agree as though they were adjectives, not verbs. I exemplify this behavior in what follows.

To see how agreement leads to an analysis of *qiegħed* and *sejjer* as participles, it is first necessary to note that adjectives in Maltese do not inflect using the

same agreement morphology discussed in §2.2.2 for verbs.²⁸ Instead of this paradigm, adjectives generally utilize the paradigm shown in Table 2.3. These are the agreement morphemes which *qiegħed* and *sejjer* use.

GENDER	SG	PL
MASC	∅	-in
FEM	-a	

Table 2.3: Maltese Adjectival Agreement Morphology

The most important thing to observe about Table 2.3 is that the agreement which *qiegħed* and *sejjer* expresses does not include agreement for person. As mentioned in §2.3.2, this is precisely what distinguishes the auxiliary versions of *qiegħed* and *sejjer* from the verbal versions — the main verbs agree for person as well, utilizing the morphology discussed in §2.2.2. Because these auxiliaries agree like adjectives and appear in structures with the same copula used with predicative adjectives, I will call *qiegħed* and *sejjer* participles. Combined with the analysis in §2.3, this suggests the conclusion that these participles select a *vP* complement.

While they are not verbs *per se*, *qiegħed* and *sejjer* do agree obligatorily in complex tense expressions, like the auxiliary *kien*. However, since they do not agree for person more generally, this agreement is for number and gender only. As (35) shows, agreement for gender is obligatory on both the auxiliary *qiegħed* and the main verb; the facts are identical for *sejjer*, though they are not shown.²⁹

28. I say “most” here because there are, of course, exceptions; some adjectives are invariable in form, including a great many Romance adjectives. See Borg & Azzopardi-Alexander (1997:260) for discussion.

29. Note that the addition of any agreement morphology to *qiegħed* and *sejjer* induces allomorphy in the stem to which it is attached. For *sejjer*, this is cashed out as degemination of *jj*, whereas for *qiegħed*, this is cashed out as shortening of the first vowel from *ie* to *e*.

- (35)a. Malta **qegħda** **t-bati** minħabba dan
 Malta(.FEM) **continues.FEM.SG 3.SG.FEM-suffer** because this
 in-nuqqas ta' ħarsien ...
 DEF-lack of protection ...
 “Malta continues to suffer from this lack of protection...”
 (Borg *et al.*, 2012:acad21)
- b. *Malta **qieghed** **t-bati** minħabba dan
 Malta(.FEM) **continues.MASC.SG 3.SG.FEM-suffer** because this
 in-nuqqas ta' ħarsien ...
 DEF-lack of protection ...
 “Malta continues to suffer from this lack of protection...”
 (Based upon Borg *et al.*, 2012:acad21)
- c. *Malta **qegħda** **j-bati** minħabba dan
 Malta(.FEM) **continues.FEM 3.SG.MASC-suffer** because this
 in-nuqqas ta' ħarsien ...
 DEF-lack of protection ...
 “Malta continues to suffer from this lack of protection...”
 (Based upon Borg *et al.*, 2012:acad21)

In (35a–b), it can be seen that only the feminine *qegħda* and not the masculine *qieghed* is possible. Similarly, the main verb *bata* can only appear in the feminine *t-bati* and not the masculine *j-bati* (35a,c).

Number agreement is also required between the subject and the participles. This is shown in (36):

- (36)a. Tlieta u tletin istudenti **qegħdin** **j-attend-u** dan il-kors.
 three and thirty students **continue.PL 3-attend-PL** this DEF-course
 “Thirty three students are attending this course.”
 (Borg *et al.*, 2012:um16)

- b. *Tlieta u tletin istudenti **qegħed** **j-attend-u** dan
three and thirty students **continue.SG.MASC 3-attend-PL** this
il-kors.

DEF-course

“Thirty three students are attending this course.”

(Based upon Borg *et al.*, 2012:um16)

- c. *Tlieta u tletin istudenti **qegħdin** **j-attend-a** dan
three and thirty students **continue.PL 3.MASC-attend-SG** this
il-kors.

DEF-course

“Thirty three students are attending this course.”

(Borg *et al.*, 2012:um16)

Here the presence of the plural *istudenti* forces both *qegħdin* and the main verb *jattendu* to appear in the plural (36a). Neither the singular *qieghed* (36b) nor the singular *jattenda* (36b) is acceptable. Again, identical facts can be mustered for *sejjer*, though the relevant examples are omitted here.

The general conclusion is that all the heads in the Maltese inflectional layer must agree with the subject. This is a theoretically interesting result, given that: (i) this agreement does not disrupt the normal agreement found on the lexical verb, (ii) this agreement is unlike the situation found in languages like English, where only one element in the inflectional layer displays agreement morphology. At a more basic level, these agreement patterns make the complex tense constructions in Maltese an ideal place to examine the mechanics of agreement and phrasal movement, given that movement of the subject is what places it in initial position to the left of the inflectional layer. I develop an analysis of these facts in the section which follows.

2.5 Complex Tense Constructions: Analysis

There are several theoretically interesting questions which the agreement facts in the previous section raise. At the core of these issues is the interaction between agreement and movement. In the framework I am assuming in this dissertation, agreement morphology is a byproduct of the establishment of a syntactic AGREE relation between an element which lacks values for φ -features and an element which possesses values for those features (Chomsky, 2000; 2001b). The appearance of agreement on each of the auxiliaries in a complex tense construction suggests the establishment of multiple agreement relationships inside such clauses. What is less clear at present is the number of needed AGREE relations and which elements are involved.

In addition to the theory of AGREE, the Maltese complex tense facts also have implications for the theory of movement. The subject which controls the agreement morphology appears to the left of the inflectional layer, in a position that I have argued is [Spec,TP]. What remains unclear at present is whether or not the movement from [Spec, ν P] to [Spec,TP] is direct or proceeds through a series of specifier positions.³⁰

I will try to clarify these matters in this section by considering two possible accounts of these phenomena — a CYCLIC AGREE account according to which agreement relations are established directly between functional heads (without the mediation of a raised DP), and a SUCCESSIVE CYCLIC account, according to which the agreement is established by way of a succession of local movements through a series of specifier positions. Each of these accounts is taken up in turn in the following two sections.

30. For proposals of this kind, see Carstens (2001; 2005; 2011). This is also a more basic point underscored in the discussion on the MINIMAL LINK CONDITION of Chomsky (1995b:ch.4).

2.5.1 A Cyclic Agreement Account

I begin with the CYCLIC AGREE account, which posits that the subject itself only moves once in the course of a derivation involving a complex tense construction, whereas the multiple instances of φ -featural morphology arise from AGREE relations established directly between functional heads themselves. I call this account a CYCLIC AGREE account because it crucially relies on the notion that functional heads participate as goals in AGREE relations under the right conditions (Legate, 2005).³¹

The basic idea behind this account is that any agreeing elements beyond the rightmost (*i.e.*, lowest) agreeing head do not get their φ -featural values from the subject directly, but instead get them from an AGREE relation established between these elements and the rightmost head which itself has already participated in AGREE with the subject. To see how this works, let us consider the derivation of an example such as (37), below:

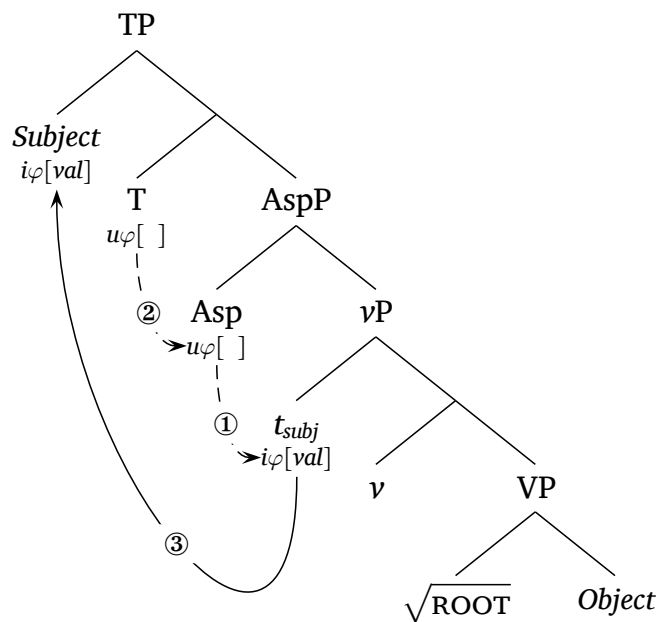
- (37) Tona **kien-et** **ra-t** l-ahbar.
Toni **was-3.SG.FEM** **see-3.SG.FEM** DEF-news
“Toni had seen the news.”

In this example both the verb and auxiliary *kien* have agreement morphology which indexes *Tona*. Given the discussion in §2.3.2, the verb has raised to Asp, since it bears perfect morphology.³² The idea behind the cyclic agreement ac-

31. However, it is important to note that the data in Legate (2005) comes from Irish, and so my application of her proposals to Semitic constitutes an extension of the original idea as she conceived it. Moreover, it is also worth noting that the parallelism between this account and the account of the Person Case Constraint I discuss in Chapter 5 is in name only; these two sets of proposals have many differences and should not be equated at any deeper level.

32. Because Maltese only has one mood marker, the future *se*, I assume for simplicity that the mood projection is not present when *se* does not appear. This is not a necessary assumption, but it does simplify the resulting discussion; if MP were present even when mood was not overt, this would mean that the verb would raise from Asp to M, as well.

count is that the verb itself has directly agreed with the subject after moving from v to Asp, while the agreement morphology on *kienet* results from AGREE between T and Asp directly, without reference to the subject.³³ Here is where the proposal of Legate (2005) becomes relevant, as that work documents the need for functional heads to participate in agreement relations with each other. The complete derivation is given in Tree 2. In this tree, the dashed lines represent AGREE relations, the solid lines represent movement relations, and the numbers give the derivational ordering of instances of MOVE and AGREE.



Tree 2: A Cyclic Agree Account of Complex Tense

33. One question I will not take up here is whether the uninterpretable φ -features which the verb comes to probe with are enumerated directly on the verbal root, v , or Asp. This is in part because I can see no way to decide between these accounts in the empirical domain of this chapter. However, see Chapter 3, where I give data which suggest that the correct approach is to take the φ -features to be higher than v .

A related question one might ask is whether or not this AGREE relation needs to be established before or after head movement of the verbal root from v to Asp. The theory is coherent under either assumption. I will take the position that head movement occurs first, but the output would be the same if head movement applied after AGREE. The derivation would involve a Asp with no lexical content probing and finding the subject in [Spec, v P], followed by v head-moving to Asp. At present, I can think of no way to differentiate these two implementations empirically.

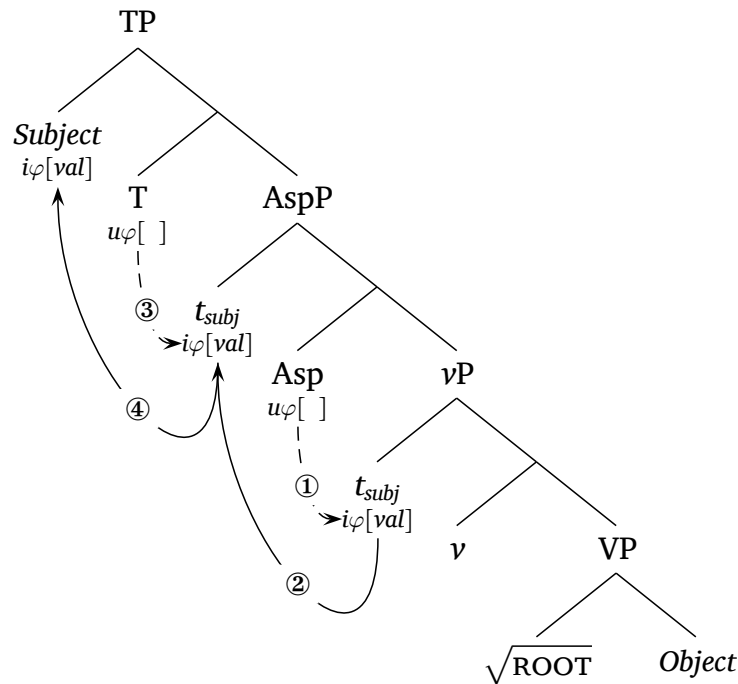
In this derivation, the subject is first merged into the [Spec, ν P] position (Kratzer, 1996). After this, the verb raises to Asp, following the arguments in §2.3. From here the subject is in the c-command domain of the verb in Asp, meaning that AGREE may apply between the verb and subject. However, by hypothesis, the Asp head itself does not come with an [EPP] feature of its own, meaning that there is no movement of the subject to a specifier of AspP after this agreement. When the uninterpretable φ -features of T probe to find values, then, they must enter into AGREE with Asp directly, as the φ -features of Asp asymmetrically c-command the subject at this point. This agreement results in the φ -features of the subject being transmitted to T via AGREE with Asp. However, Asp, as a head, cannot satisfy the [EPP] property of T, meaning that the subject must vacate its base position and move to [Spec,TP]. The result is a subject-*kien*-verb word order without intermediate movement of the subject to [Spec,Asp].

While this account can handle both the word order and the agreement facts in Maltese complex tense constructions, it relies crucially on the idea that heads enter into AGREE relations just as phrases do. While there is nothing *a priori* wrong with this account, it does extend the operation of AGREE beyond its usual domain of use where a head agrees with a phrasal goal. For this reason, the following section sketches a more theoretically conservative account which trades this extension of AGREE for additional subject movements.

2.5.2 A Successive-Cyclic Account

In contrast to the cyclic agreement account, we might instead imagine that the subject *does* make intermediate stops on its way to [Spec,TP]. This is, in fact,

a common account of the analogous complex tense facts in Bantu.³⁴ In this account, each instance of AGREE is followed by an instance of MOVE, owing to the presence of an [EPP] feature on the intermediate heads in the inflectional layer. Taking the same datum as in the preceding section for exemplification, this would lead to the derivation shown in Tree 3, again abstracting away from the head movement of the verb to the highest unoccupied inflectional position.



Tree 3: Successive-Cyclic Analysis of Complex Tense

In this account, the subject is base-generated in the [Spec,vP] position, exactly as in the Cyclic Agree account. Also as in the previous account, the first operation involves head movement of the main verb to Asp and the establishment of an AGREE relation between the verb in Asp and the subject in [Spec,vP]. However, unlike in the cyclic agreement account, this AGREE relation is followed by movement of the subject to [Spec,AspP]. From here, the subject is

34. I am thinking specifically here of the proposals in Carstens (2001; 2005; 2011).

the target of an AGREE relation with T, an AGREE relation which is also followed by movement of the subject to [Spec,TP]. The AGREE relations satisfy the need for φ -feature values for T and Asp, whereas the movements satisfy the [EPP] properties of those same heads.

The successive-cyclic movement account thus trades off allowing the possibility of direct agreement between functional heads for an extra set of phrasal movements. Both accounts allow an understanding of the agreement and word order facts discussed thus far in this chapter, but can the two be differentiated on empirical grounds? This question is answered in the affirmative in the subsequent section.

2.5.3 Deciding between Analyses

The accounts discussed in the preceding sections differ most crucially in the number of movements the subject must undergo. It is therefore along this dimension that we can contrast the two accounts. This section discusses data from word order and floating quantifiers and argues that the better account is the successive-cyclic derivation discussed in §2.5.1.

At first blush, it might seem that the position of the subject might argue against the successive-cyclic account. This is because the subject cannot surface in any of the positions through which it would be expected to move on this account. As (38) shows, the subject in complex tense constructions may only surface to the left of all the inflectional elements.

(38)a. **Manwel kien** jistudja lingwistika.

Manwel was studying linguistics

“Manwel was studying linguistics.”

- b. ***Kien Manwel** jistudja lingwistika.
 was Manwel studying linguistics
- c. ***Kien** jistudja **Manwel** lingwistika.
 Was studying **Manwel** linguistics

In (38a), we see the only possible position of the subject in such cases. It is impossible for the subject to appear between *kien* and the verb or in the position between the verb and any internal arguments. Given the assumptions from §2.3, we might take these data to show that the subject cannot appear in either the [Spec,vP] or the [Spec,AspP] positions. This is because we have assumed that the verb raises to the highest inflectional head not occupied by lexical material; in the examples in (38) this would be Aspect. (38b) thus could be taken to show that [Spec,AspP] is not a possible landing site and (38c) could be taken to show that [Spec,vP] is not a possible final position, either.

However, this kind of reasoning ignores the observation that the [EPP] on T in Maltese is generally obligatory. As (39) shows, Maltese subjects generally must move to [Spec,TP]; post-verbal subjects in simple clauses are generally not allowed, regardless of whether or not an expletive appears in the [Spec,TP] position:

- (39)a. **Luqa sema'** il-għanja.
 Luke listened DEF-song
 “Luke listened to the song.”
- b. (Huwa) **Sema'** **Luqa** il-għanja.
 (it) **listened Luke** DEF-song
 Intended: “Luke listened to the song.”

Given that the subject may not appear in its base position, as in (39b), we must admit that the [EPP] on T is not optional in Maltese.

However, once this is admitted, examples like (38) cease to be a problem for the successive-cyclic account. This is because the ungrammatical (38b–c) represent failures to satisfy the [EPP] feature on T. We might think that an element other than the subject could satisfy [EPP], but any such movement of a non-subject would necessarily involve a violation of the well-accepted minimality constraints on movement: since the subject asymmetrically c-commands all other potential moving phrases.

With this conclusion in mind, we might then ask whether there are any data which suggest that the Cyclic Agree account is incorrect. In fact, there are, and they come from the availability of floating quantifiers in the positions between the various inflectional heads. Maltese, like many languages, allows quantifiers such as *it-tnejn*, “both,” to be floated from positions out of which an argument has moved. The analysis of floating quantifiers is still an issue which is debated in the literature, but all previous proposals involve one of two solutions: (i) floating quantifiers are literally stranded in the course of phrasal movement when their host DP moves without them³⁵ (ii) they are phrases which are unique in requiring that they be merged with an element containing an A-trace.³⁶ and In either case, the availability of a floating quantifier in a particular position implies that this position is a possible argument position for the associated DP. In what follows, it will be helpful to have a particular understanding of floating quantifiers in mind, and I will adopt the

35. For proposals involving movement, see Kayne (1975); Sportiche (1988; 1996); Shlonsky (1991); Merchant (1996); McCloskey (2000); Starke (2001); and Bošković (2004); among others.

36. For proposals involving binding, see Klein (1976); Williams (1980); Dowty & Brodie (1984); Kayne (1984); Déprez (1989); Miyagawa (1989); Doetjes (1992; 1997); Bobaljik (1995; 1998); Baltin (1995); Torrego (1996); Brisson (1998); Morzycki (1998); de Cat (2000); and Fitzpatrick (2006); among others.

movement account, though I do not provide any justification of that decision here.

With this in mind, consider (40), which contain the quantifier *it-tnejn*, literally “the two,” but akin to English *both*:

- (40)a. It-tfal **it-tnejn** kienu ra-w il-kelb.
DEF-children **DEF-two** were saw-PL DEF-dog
“The children both had seen the dog.”
- b. It-tfal kienu **it-tnejn** ra-w il-kelb.
DEF-children were **DEF-two** saw-PL DEF-dog
“The children had both seen the dog.”
- c. It-tfal kienu raw **it-tnejn** il-kelb
DEF-children were saw-PL **DEF-two** DEF-dog
“The children had both seen the dog.”

Crucially, in (40b–c), we see that the floating quantifier is possible in the very positions through which the subject would be said to move on a successive-cyclic account. Identical facts can be shown for the participial auxiliaries *qiegħed* and *sejjer*, though these are not shown here. These facts can be understood easily in the successive-cyclic account as diagnostic of intermediate movements through specifier positions in the inflectional layer. In the cyclic Agree account, however, these observations are harder to interpret. They seem to require an account of quantifier float which is different from at least the movement account assumed here.

As mentioned in the previous section, the conclusion that the successive-cyclic account is correct for Maltese also fits sensibly into the proposals made by Carstens (2001) for Bantu. (30), above, showed that a similar set of agreement

facts obtains in many languages for that family. Carstens' results can thus be seen to be in harmony with the interpretation offered here for Maltese.

Given that I have shown that the successive-cyclic account can provide a straightforward interpretation of the floating quantifier facts and does not run afoul of data showing that post-verbal subjects are ungrammatical, I adopt that account here. The complex tense agreement facts thus reflect successive-cyclic movement of the subject through the specifier positions of those heads which make up the inflectional layer. At each step, the higher inflectional head participates in AGREE with the subject prior to the subsequent movement.

2.6 Conclusions

This chapter has had as its central concern a basic understanding of the clausal contexts in which verbs in Maltese can appear. We saw that the Maltese clause can be best understood as made up of three distinct layers comprised of functional heads which introduce various parts of the clausal context: (i) a *vP* layer; (ii) an inflectional layer made up of Tense, Mood, and Aspect phrases; and (iii) a complementizer layer. Moreover, we have seen that the best understanding of negation in Maltese is one in which it is sandwiched in between the complementizer layer and the inflectional layer.

Along the way, I also showed that various auxiliaries can appear in the positions in the inflectional layer in Maltese. These elements, including markers for future mood, various aspects, and tense, also agree with the subject obligatorily. This, in turn, required an understanding of subject agreement in Maltese, which I provided at both a syntactic and morphological level. The syntactic account in terms of AGREE, however, required an understanding of

how more than one verbal (or participial) element comes to agree with a subject. I argued that floating quantifiers provide a compelling argument for an account wherein the subject moves to intermediate specifier positions successively. Along the way, it can strand a quantifier, accounting for the floating quantifier facts and allowing an understanding of the agreement patterns, as well.

At this point, we have a reasonably detailed map of the syntax of finite clauses. However, one important region of the clause has been discussed only briefly, namely, the ν P layer. In the following two chapters, I turn to an exploration of that territory. This is done by examining causatives in Chapter 3 and then by examining other ditransitives in Chapter 4.

Chapter 3

Morphological and Syntactic Causatives in Maltese

3.1 Introduction: The Relevance of Causatives

The central question of this dissertation is how verbs are built syntactically and expressed morphologically in Maltese. In this chapter, I turn to a different aspect of how verbs are built in Maltese, namely, how verbs are related to other verbs. Maltese, like many — if not all — languages, has several different ways in which verbs are related to one another morphologically and syntactically. This chapter, focuses on what is arguably the most productive of these means for forming verbs from verbs: causativization. By “causativization” I mean a relationship between two sentences wherein one member of the pair (what I will call the CAUSATIVE member) denotes two events simultaneously: an event with the same semantics as the other member of the pair (which I will call the NON-CAUSATIVE member) and an event in which an entity *causes or brings about* this other event. As we shall see, Maltese has two means for expressing

such a relationship, one which is periphrastic, involving an auxiliary verb, and the other morphological, involving a single verb.

These two kinds of causatives have non-trivial implications for theories of verbal morphosyntax. Specifically, it will be shown that both involve a decomposition in the syntax whereby a functional head takes as its complement a phrasal element whose specifier is the subject of the non-causative member. One of the major differences to be accounted for will be the distinctions among the kinds of complements this causative predicate may take syntactically: for the periphrastic causative I will show that the complement of this head must allow for the inclusion of a functional head which denotes polarity — positive or negative assertive content.

Throughout the chapter, I will make the theoretical assumption that functional structure in the clause is not present if it is not necessary for morphological or semantic reasons. This will lead to the conclusion that the complement of the causative predicate in periphrastic causatives is not larger than vP plus an optional polarity head.¹ Many of the differences between these two kinds of causatives will be shown to follow from the proposed difference in the kind and size of the complement to the head which introduces the causee argument. Furthermore, a close examination of the available case-assignment patterns in the causatives will motivate not only the analysis in terms of differential selection, but also a theory of disjunctive case-assignment wherein the morphological distinctions in case-marking among arguments are resolved along the lines suggested initially by Marantz (1991). The result will be a theory of case and nominal licensing wherein nominals are licensed by an abstract

1. A similar tack is taken in the study of Germanic infinitives in Wurmbbrand (2001). See that work and references therein for discussion of monoclausal approaches to infinitival complements.

Case-assignment process mediated by AGREE, but morphological case values are computed along a separate dimension, where case values are assigned in a disjunctive manner.²

Before beginning this detailed examination, however, it will be useful to have some background on both the relevance of causative alternations to theories of verbal morphosyntax as well as the basic facts concerning Maltese causatives. I take up the first of these topics in the following section (§3.1.1) and the second in the subsequent section (§3.1.2).

3.1.1 The Relevance of Causatives to Verb Building

Causatives provide a uniquely rich domain in which to explore many core questions in syntactic theorizing, such as argument structure, case assignment, and complementation. The first of these, argument structure, is implicated in causatives insofar as they license the presence of an additional nominal in the causative member of the alternation which is not present in the non-causative member, as in English (1):

- (1)a. The dog walked toward the propane grill.
- b. **Hank** walked the dog toward the propane grill.

The bold DP in the causative (1b), which I will call the CAUSER argument, is not present in the non-causative (1a). This valence augmentation is a constitutive property of synthetic causatives, and a theory of the addition of these arguments is necessary.³

2. See Folli & Harley (2007a) and Legate (2008) for similar approaches and Baker & Vinokurova (2010) for a slightly different approach which combines these two notions of case.

3. One pressing issue in the syntax of causatives which I will *not* address in this chapter is whether the proper characterization of causation is one in which causatives are defined by

The theory of case is implicated in causative formation in the same way that the theory of argument structure is — via the inclusion of an additional nominal in the causative alternant. The addition of another nominal has been shown to influence the available patterns of case-assignment in a great number of languages.⁴ Again this can be seen even in English zero-derived causatives, such as the pair in (2):

(2)a. **She**/***her** worked until she was exhausted.

b. Her boss worked **her**/***she** until she was exhausted.

In (2a), the single argument of *work* appears in the nominative form, and cannot be accusative. When the causer argument is added in (2b), however, the internal argument of *work*, which I will call the CAUSEE argument, may no longer be morphologically nominative, but must be accusative. Again, any theory of verb building must be able to understand how case assignment alternates under causative formation like in (2).

Finally, the theory of clausal complementation is also implicated in causative formation insofar as the language under examination provides for periphrastic causative formation in ways which differ from regular CP complementation. Again, English provides a relevant introductory example with its causatives formed with *make*, *let*, or *have*. In *Todd made/had/let Joey swing the*

their ability to introduce a novel θ -role, CAUSER (as in, for instance, Doron, 1999 and Doron, 2003), or their ability to introduce a second event argument (as in, e.g., Parsons, 1990; Pykkänen, 2000; and Pykkänen, 2008). I assume that the latter approach is correct, though nothing I say in this chapter hinges upon this assumption. Furthermore, I will use the labels CAUSER and CAUSEE, as they are very convenient labels for picking out particular arguments in a causative structure, without committing to the θ -role analysis implied by these terms. Moreover, I will refer to internal arguments which are not causers or causees as THEMES, eschewing the differences between various object θ -roles which are irrelevant to the discussion at hand.

4. This is a fact that was discussed from the earliest work on causative formation; see Kuroda (1965); Kayne (1975); Aissen (1974; 1979); Marantz (1984); Gibson & Raposo (1986); Kitagawa (1986); and Folli & Harley (2007a).

bat, the causative predicate clearly takes as a complement a phrase containing a verb. One of the fundamental properties of such constructions is that the causer and theme arguments pattern as though they were in distinct clauses for purposes of, e.g., binding (**Todd made/had/let Mary see himself.*). However, the embedded verb in these constructions demonstrably cannot bear independent morphological specifications for tense, aspect, or agreement (**Todd made Joey swings the bat.*). Here, then, the important theoretical question becomes whether or not the complement of the causative predicate is a clause, in some sense of the word clause to be made precise later. Therefore, when a language allows periphrastic causative formation, the theory of clausal complementation must be sufficiently flexible to understand this dual nature of causative complement clauses.

With this background concerning the importance of causatives to studies of verb formation in hand, the following section turns to outlining the empirical domain of this chapter: the two kinds of causatives found in Maltese.

3.1.2 Causation in Maltese

Maltese, like English, has more than one way to express causation in its verbal morphosyntax. Specifically, Maltese has two kinds of causatives. The first, which I will call the MORPHOLOGICAL CAUSATIVE, appears in (3). In this kind of causative, a verb appears with its medial root consonant geminated in the causative version.⁵ Because this causative requires a root and pattern mor-

5. Spagnol (2011a;b) shows quite conclusively that this morphological pattern — gemination of the medial consonant of the root — is not solely indicative of causative argument structure. In particular, many inchoative-causative alternations mark the inchoative member of the pair, not the causative. In this chapter, I am not so much concerned with the directionality of the argument structure alternation as I am with the case marking and argument structure of the causative member. Thus, I will set aside the question of directionality in this chapter.

phology, it is impossible for roots borrowed from Italian and English — this is because there is not an appropriate prosodic structure over which to apply the gemination process.

(3)a. Il-poplu **għaraf** li dan huwa wiehed mill-agħar
 DEF-populace **knew3.SG.MASC** COMP this was one of.the-worst
 budgets ...

budgets ...

“The people knew that this was one of the worst budgets...”

(Borg *et al.*, 2012:parl5970)

b. ...Joseph Sammut **għarraf** lill-President li
 ...Joseph Sammut **CAUS.know.3.SG.MASC** DOM.DEF-president that
 se jkun assenti sa l-aħħar ta’ Settembru ...

FUT be3.SG.MASC absent until DEF-last of September ...

“...Joseph Sammut let the president know that he would be absent

until the last day of September...” (Borg *et al.*, 2012:press_mrn:36128)

In the morphological causative alternation in (3), the non-causative member, *għaraf* takes a nominative experiencer and a clausal complement in (3a). With the causative member (3b), this experiencer appears as an internal argument of *għarraf* along with the clausal complement. Moreover, in (3b) the verb now takes an additional argument, *Joseph Sammut*, which is the causer.

In contrast to this morphological causative, Maltese has another option for expressing causation, shown in (4), which I will call the SYNTACTIC CAUSATIVE. In this construction, the verb which denotes the caused event appears as a complement of the lexical verb *giegħel*, which literally means “to cause or make.” Since this causative construction does not make reference to the consonantal root, it is perhaps unsurprising that borrowings from Italian and English can ap-

pear as the complement verb. In (4b), this creates a periphrastic causative with an embedded clause containing the verb *għallem*, which can appear outside of this context, as well (4a).

- (4)a. ...m' = għand-nie = x akkademja li **jitgħallem** lingwi
 ...NEG = have-1.PL-NEG academy COMP **taught** languages
 differenti lid-diplomatici differenti ...
 different to.the-diplomats different ...
 “...we do not have an academy that teaches different languages to the
 different diplomats...” (Borg *et al.*, 2012:parl1835)
- b. ...għalhekk **giegħel** lil kullhadd **jitgħallem**
 ...thus **make.3.SG.MASC** DOM everyone **learn.3.SG.MASC**
 il-lingwa Għarbija.
 DEF-language Arabic
 “...thus [it] made everyone learn Arabic.” (Borg *et al.*, 2012:parl1775)

The examples in (4) show the verb *jitgħallem* appearing as the complement of *giegħel* in (4a). The causer argument appears in the nominative, whereas the causee argument appears with the marker *lil*, the status of which I will return to later. Of particular importance is the observation that the verb appearing in *giegħel*'s complement is finite and inflected for the φ -features of this causee.

While the morphological causative in (3) has received some discussion in the literature (see especially Spagnol, 2011a;b and references therein), the syntactic causative in (4) has received no sustained attention, to my knowledge. Moreover, this causative raises a number of interesting empirical and theoretical questions, namely:

- What is the range of predicates which can appear in the complement of *giegħel*?

- What are the available cliticizations of the arguments of *gieghel* and its complement?
- Which morphological cases do the arguments of the causative construction bear?
- What is the range of aspectual and tense distinctions that *gieghel*'s complement can have?
- How large is the complement of *gieghel*, structurally?
- How does the complement verb come to have agreement morphology?

The purposes of this chapter are twofold: (1) to conduct the necessary empirical investigation to delimit the similarities and differences of these two causative constructions and provide a syntactic analysis and (2) to answer the questions posed immediately above.

In particular, I will argue that the two types of causatives differ most crucially in the syntactic status of the complement selected by the causative predicate. In the syntactic causative, this causative predicate is overt (*gieghel*), whereas in the morphological causative, this predicate is a phonologically null functional head which induces a kind of stem allomorphy in the form of medial consonant gemination. With the syntactic causative construction, I will claim that the complement of *gieghel* is clause-like insofar as it allows sentential negation to appear, but not clause-like insofar as there is no independent expression of tense or aspect. This will be argued to best understood if the periphrastic causatives are built out of recursive *v*Ps. However, we shall see that an analysis of this kind requires radical changes to the theory of finiteness and agreement, as the complement verb in the *gieghel*-causative construction still displays subject agreement (*cf.* the situation in Turkish as discussed by George & Kornfilt, 1981 and much subsequent work).

This chapter is organized as follows: In §3.2 I first discuss the differences between the two kinds of causatives shown in (3–4), motivating the idea that both kinds of causatives require distinct syntactic analyses. Next in §3.4, I examine the morphological case-marking patterns seen in these two kinds of causatives and discuss the implications of those patterns for theories of case-assignment. In §3.5, I discuss how passivization interacts with causative formation and propose a case-based theory of passivization in Maltese. Finally, §3.6 concludes the chapter and discusses directions for future work.

3.2 Two Types of Causatives in Maltese: Initial Motivations

This section begins with discussion of the similarities and differences between the two causative constructions in Maltese and by placing that bipartite distinction in its cross-linguistic perspective. This is done in two parts: first (§3.2.1), I briefly discuss other distinctions among various ways of forming causatives that have been documented for other languages — especially Japanese and the Romance languages. Then (§3.2.2), I examine the two kinds of causatives along several different syntactic dimensions in order to build a sense for what a morphosyntactic analysis needs to accomplish.

3.2.1 Previous Characterizations of Split Causatives

The initial work on split causatives in generative grammar focused on the two types of causative in Japanese, which pattern differently along many dimen-

sions.⁶ For many years, the characterization of this difference was that the less productive, more idiosyncratic type of causatives were formed in the lexicon, whereas the more regular causatives were formed syntactically. However, given recent theoretical moves away from a generative lexicon, these facts have been reanalyzed by Harley (1995; 2006) in syntactic terms. For this reason, I will not be concerned with distinguishing causatives based solely on their productivity.

However, one distinction between two kinds of causatives has survived the architectural changes from lexicalism to modern decompositional approaches to argument structure. Specifically, many languages have been shown to have causatives which seem to be monoclausal alongside others which seem to be multi-clausal.⁷ English is one such language, having two kinds of causatives: zero-derived causatives formed from a single verbal root as well as the causatives with *make*, *let*, or *have*. While the former behave for binding tests as though they were monoclausal (5a), the latter behave as though the causer and theme argument were in distinct clauses (5b):

(5)a. The zebra cooled **itself** in the shade.

b. *The game warden_i made/let/had the zebra cool **himself**_i in the shade.

Whereas binding of a reflexive in the internal argument position of *cool* is possible with an external argument antecedent in (5a), this is not the case for the *make* causative in (5b). In this latter example the only available binder for a reflexive in the position of *himself* is *the zebra* — *the game warden* behaves as though it were in a distinct binding domain. The English zero-derived and

6. See Miyagawa (1980) (and references therein) and more recently, Harley (1995; 2006).

7. See Kayne (1975) and Aissen (1974; 1979) for initial discussion of this point. This is amply discussed by Baker (1988a:Ch.4).

periphrastic causatives, therefore, differ in whether or not their complements constitute closed binding domains. A standard, and plausible, interpretation is that the complement of the periphrastic causative is large enough to include a “subject” in the sense relevant for anaphor binding (Chomsky, 1986).

As we will see in the next section, Maltese instantiates this same pattern, displaying two kinds of causatives that differ in the size of the complement of the causative predicate. Ultimately in §3.3, I will argue that one of these (the morphological causative) is unambiguously monoclausal, but that the other (the syntactic causative) is only bi-clausal along certain dimensions, necessitating a nuanced view of the definition of a “clause” in terms of the amount of functional material present above *vP*.

3.2.2 Syntactic and Morphological Causatives in Maltese

In this section I outline some of the major differences between the two kinds of causatives, syntactic and morphological, in Maltese. Note that I will defer discussion of two important notions until later: (i) the morphological case-assignment patterns in causatives and (ii) the available passive patterns with causatives. This is because it will be easier to understand those properties once a preliminary analysis is presented in §3.3. Here I limit myself to the following properties:

1. Patterns of allomorphy and productivity (§3.2.2.1).
2. Semantics and θ -role assignment (§3.2.2.2).
3. Anaphoric binding (§3.2.2.3).
4. Cliticization (§3.2.2.4).

As we shall see, these properties point to some core differences between the two constructions. Concretely, the first two properties suggest that the

syntactic head responsible for forming a morphological causative is closer to the verbal root than *giegħel* is in the periphrastic causative. The third property will be shown to distinguish two different sets of hierarchical relationships between arguments in the two causative constructions. However, the final property will show that along at least one dimension the two causatives appear to be monoclausal, necessitating a theory of the Maltese functional vocabulary which permits selection of constituents smaller than CP in the seemingly biclausal periphrastic causative.

3.2.2.1 Allomorphy and Productivity

Taking the morphological causatives first, I have already noted in conjunction with (3), above, that this causative is formed by geminating the consonant radical of the root. This is a morphological process which is subject to considerable stem allomorphy. For one, there are roots which do not appear with an obvious medial consonant in their underived form, as is the case with *daq*, “he tasted” in (6a). When these verbs appear as causatives, however, a glide (/w/ or /j/) appears geminated in the medial position, as in (6b):

- (6)a. Pawlu **daq** l-ikel.
 Paul **tasted** DEF-food
 “Paul tasted the food.”
- b. Il-kok **dewwaq** lil Pawlu l-ikel.
 DEF-cook **CAUS.taste** DOM Paul DEF-food
 “The cook made/let/had Paul eat the food.”

These verbs are called “hollow verbs” in the traditional Arabist literature and are usually said to have a glide medial consonant which idiosyncratically disappears in the underived forms. Regardless of the directionality of derivation,

the relationship between the two alternants is one of idiosyncratic stem-based allomorphy.

Moreover, not all roots form their morphological causatives via medial gemination. For a small class of verbs, the morphological causative is expressed via lengthening of the initial vowel. Thus the causative of the verb *qagħad*, “he stays, resides, is situated” is *qiegħed*; there is no verb *qagħgħad*. Examples of this verb are given in (7):⁸

- (7)a. Pietru **qagħad** fil-karozza.
Peter **stayed** in.the-car
“Peter stayed in the car.”
- b. Pietru **qiegħed** il-kelb fil-karozza.
Peter **CAUS.stay** DEF-dog in.the-car
“Peter placed the dog in the car.”

Finally, this morphological process is not fully productive in the language in general. Recall from above that no morphological causatives exist for verbs which have been borrowed from Italian or English — indeed, since they lack a consonantal root, they could never be the target of a process which geminates a segment of the root. However, in addition to not having a morphological causative formed with stem allomorphy, they lack any other kind of morphological causative, as well. Moreover, there are some lexical items belonging to the native stratum which have a consonantal root but which lack any morphological causative whatsoever. Thus, while there is a verb *dineb*, “he sinned,”

8. Note that there is no long version of /e/ in Maltese — when morphological lengthening would apply to either /e/ or /a/ the result is /ie/. Furthermore, note that this causative form is homophonous with the aspectual verb *qiegħed* which is part of the expression of progressive aspect (see Chapter 2 for more on *qiegħed* in that use).

there is no corresponding verb **dinneb*, “he caused someone to sin” (Aquilina, 2006).

Turning now to the syntactic causatives in Maltese, this class of causative is much more regular than its morphological counterpart, in terms of both productivity and allomorphic variation. The fact that these causatives are regular from an allomorphic standpoint is trivial: the *giegħel* syntactic causative is a periphrastic construction and neither *giegħel* nor the complement verb show any allomorphic variation under the influence of one another. The *giegħel* causative is incredibly productive. In addition to forming causatives from native stratum verbs as in (8a), this construction is the only option for expressing causation with an Italian or English loan verb (8b-c):

(8)a. Imma x' = kien dak li **giegħel** lil 'il-Mument'

Now what = was that COMP **made.3.SG.MASC** DOM Il-Mument
tikteb artiklu dwar dan ...?

write.3.SG.FEM article about this ...

“Now what was it that made Il-Mument [a newspaper] write an article about this ...?”
(Borg *et al.*, 2012:parl1681)

b. ...**giegħel** lill-membri tal-Eżekuttiv **jivvutaw**

...**made.3.SG.MASC** DOM.DEF-members of.the-Executive **vote.3.PL**
fuq gidba li ħoloq hu stess.

on lie COMP created he himself

“...that he made the members of the Executive [council] vote on a lie he himself created.”
(Borg *et al.*, 2012:press_mrn37316)

- c. ...il-Partit Laburista **giegħel** lis-Sindku Laburista
 ...DEF-Party Labor **made.3.SG.MASC** DOM.DEF-Mayor Labor
 tal-Fgura **jirriżenja**.
 of-Fgura **resigns3.SG.MASC**
 “...The Labor Party forced the Laborite Mayor to resign.” (Borg *et al.*,
 2012::press_mrn29351)

In (8a) *giegħel* takes as its complement a phrase containing the Semitic stratum verb *kiteb*, forming the causative “force to write.” Similarly in (8b) its complement is headed by *jivvuta* (from Italian *votare*) and in (8c) its complement is headed by *jirreżenja* (from English *resign*). As far as I have been able to tell, there are no lexical restrictions on the verbs which *giegħel* may take in its complement. In this way, the causative with *giegħel* is bi-clausal, given that there does not appear to be any selectional relationship between *giegħel* and the verb in its complement.

3.2.2.2 (Lexical) Semantics

The two different causative constructions also differ in their semantics. The morphological causative allows for the set of readings which can be paraphrased in English with *make*, *let*, and *have*, as shown in (9), below:

- (9) Anton **dewwaq** il-kaponata tiegħ = u lit-tifel.
 Anton **taste.CAUS** DEF-caponata of = 3.SG.MASC to.the-boy
 “Anton **let/had/made** the boy taste his caponata.”

That is, with the morphological causative permission readings are possible, in addition to an obligation reading.

With the syntactic causative, however, this is not the case, as (10) shows:

- (10) Louis **gieghl** =u **jiokol** il-kapunata.
Louis **make** =3.SG.MASC.ACC **eat(.IMPF)** the-caponata
“Louis **made** him eat the caponata.”
Impossible: “Louis **let/had** him eat the caponata.”

In this causative with *gieghel*, only the obligation reading of the causative is possible. In the sections which follow, I will relate this semantic distinction between the two causatives to the fact that the syntactic causative embeds a fully articulated *vP* headed by an agentive *v*. The inclusion of an agentive *v* (which I will label *v_{ag}*) combined with the lexical semantics of *gieghel* will foreclose the possibility of a *let* or *have* reading (see §3.3.1 for more on this).

Another dimension on which the two kinds of causatives contrast has to do with the compositionality of the causative morpheme and the verbal root semantics. As we already saw in (7), the morphological process of root consonant gemination (or vowel lengthening) can be associated with semantic idiosyncrasy. Thus the causative of *qaghad* is “to place” and not the literal or compositional “cause to remain.” Such idiosyncrasy is a common with the morphological causatives, but it is never observed the causatives formed with *gieghel*; these causatives are completely compositional insofar as no idiosyncratic root meaning is introduced by the presence of *gieghel* itself that is not present in the complement verb when it appears in isolation. Later in §3.3.1, this will be shown to be a byproduct of the local relationship between the head which introduces the causee in the morphological causatives and the verbal root, a close relationship which will not be present in the syntactic causatives.

One way in which the two causatives actually behave similarly, however, has to do with the preservation of idiosyncratic root semantics. When a verb in

its underived form has an idiomatic interpretation, this idiomatic interpretation persists with either kind of causative, as (11) shows:

- (11)a. Fernando *bela'* fil-propoganda Nazzjonalista.
 Fernando swallow in.DEF-propaganda Nationalist.
 “Fernando swallowed the Nationalist propaganda.”
- b. Bħalma l-Gvern Ingliz kien
 As DEF-Government English was.3.SG.MASC
bella' 'Defence Agreement' u 'Financial
 swallow.CAUS.3.SG.MASC Defense Agreement and Financial
 Agreement' lill-Gvern Nazzjonalista ...
 Agreement to.the-Government Nationalist ...
 “As the English government made the Nationalist Government accept
 a 'Defense Agreement' and 'Financial Agreement'...”
 (Borg *et al.*, 2012:press_orizzont66468)
- c. ...l-poplu ġie mgieġhel jibla'
 ...DEF-populace was.3.SG.MASC PASS.made swallow
 fil-propaganda Nazzjonalista.
 in.DEF-propaganda Nationalist
 “...the people were made to swallow the Nationalist propaganda.”
 (Borg *et al.*, 2012:press_orizzont7760)

Like its analogue in English, the Maltese verb *bela'*, “he swallowed” has a possible idiomatic interpretation of “to believe contrary to fact,” and this interpretation remains with the morphological causative *bella'* in (11b) and the syntactic (passive) causative *imgieġhel jibla'* in (11c). For the syntactic causatives, this is perhaps unsurprising, as the causative verb takes a complement built around a free-standing finite verb. However, for the morphological causatives this can be used to show that while idiosyncratic meaning is *possible*, it is not *neces-*

sary — many morphological causatives involve transparent semantic relations between the non-causative and causative member.

3.2.2.3 Anaphoric Binding

Before discussing binding possibilities, it will be useful to understand an important fact about internal arguments in Maltese: the order of arguments in a verb phrase with more than one internal argument is uniformly *accusative–dative*. Thus (12a) is the preferred linearization following the causative *għallem*, and (12b) is generally rated as awkward but weakly acceptable:⁹

- (12)a. Louis tghallem Malti lil Matthew.
Louis taught Maltese to Matthew
“Louis taught Maltese to Matthew.”
- b.?? Louis tghallem (lil) Matthew Malti.
Louis taught to Matthew Maltese
“*Intended*: Louis taught Maltese to Matthew.”

With these word order preliminaries in mind, we can now turn to binding possibilities in the language. Maltese, like English, has an anaphoric reciprocal and reflexive elements which must be bound by a c-commanding antecedent.¹⁰

9. For causatives, this is true. For other ditransitives, this second order is uniformly ungrammatical unless the accusative argument is prosodically heavy. See Chapter 4 for more on this. I denote the slight acceptability of (12b) relative to these other verbs with the diacritic ??.

10. This is also discussed in Chapter 4. Note that the standard subject-object contrast seen in English and other languages is found in Maltese:

- (i) a. It-tfal raw lil **xulxin**.
the-children saw DOM **each.other**
“The children saw each other.”
- b.*(Ix-)xulxin raw lit tfal.
The-each.other saw DOM children
“The children saw each other.”

Moreover, linear order is not a sufficient condition, as (ii) shows:

If we examine the binding possibilities open to anaphors in Maltese, they will provide us with a window into the c-command relations which hold between different arguments in these causative constructions. Moreover, the possibility of binding between any two arguments entails that these two arguments are in the same cyclic domain at some point during the computation, given current assumptions about the locality domain of anaphoric binding.¹¹

With the morphological causatives, the generalization which emerges is that while neither of the internal arguments of the causative verb may bind the other, binding of either of these arguments by the causer is perfectly licit. This latter fact is demonstrated in (13) for the reflexive *lilu innifsu* and the reciprocal *xulxin*:¹²

(13)a. Ċikku semma' il-kelba **lilu innifsu.**

Chikku(.MASC) CAUS.hear DEF-dog(.FEM) **himself**

“Chikku had/let/made himself listen to the dog.”

b. Ċikku semma' **lilu innifsu** lil Marija.

Chikku CAUS.hear **himself** to Maria

“*Lit.*, Chikku had Maria listen to himself.”

c. Louis u Ċikku semma' il-kelb lil **xulxin.**

Louis and Chikku CAUS.hear DEF-dog to **each.other**

“Louis and Chikku had/let/made the dog listen to each other.”

(ii) Ġenituri_i ta [Pietru u Louis]_j jìhobbu lil **xulxin**_{i/*j}.
 Parents_i of Peter and Louis_j love.3.PL DOM **each.other**_{i/*j}
 “Peter and Louis_j’ parents_i love each other_{i/*j}.”

The same is true of the reflexive marker *lilu innifsu* and its other inflected variants.

11. See Baker (1988a) and references therein.

12. It is worth noting that the Maltese reflexive anaphor, *lilu innifsu*, is morphologically complex: it is comprised of a strong form pronoun consisting of an object pronoun attached to the host *lil* and a possessive-marked noun *nifs*, meaning “soul.” The person, number, and gender of the binder is therefore reflected in the morphology of this anaphor, which is used to disambiguate potential binders in what follows.

d. Louis u Ćikku semma' lil **xulxin** lil Marija.

Louis and Chikku CAUS.hear DOM **each.other** to Maria

“*Lit.*, Louis and Chikku had/let/made Maria listen to each other.”

In (13a,c), the causer has bound the causee argument, showing that the causer is accessible to the causee (where accessibility is defined in terms of being in the same cyclic domain and standing in the correct c-command relationship). Similarly, the examples in (13b,d) show that the same is true of the causer and the theme of the causative verb.

It is not possible, however, for either internal argument to bind the other. This is shown in (14) for both causee to theme and theme to causee binding with the reflexive anaphor; the reciprocal is omitted for reasons of space, but patterns identically.

(14)a. *Ćikku semma' **lilha innifisha** lit-tifla.

Chikku CAUS.hear **herself** to.the-girl

“Chikku had/let/made the girl listen to herself.”

b. ?Marija semmghet il-kelb **lilu innifsu**.

Maria CAUS.hear DEF-dog **himself**

“Maria had/let/made the dog listen to himself.”

In (14), binding of one internal argument by the other is degraded.¹³ We might therefore infer that, at the relevant level of representation, neither of the internal arguments of *semma'* c-commands the other (though see note 13). This state of affairs might be odd under the assumption that the theme asymmetri-

13. My consultants consistently rate (14b) as degraded but not as bad as (14a). Similar facts are reported for the irregular causatives discussed in §4. As in that chapter, I interpret this judgment as a weak linear precedence effect, given that the judgment is not one of perfect grammaticality.

Moreover, when pressed, speakers will accept (14a) with the linear order of the complements reversed, as in (i):

cally c-commands the causee, or vice-versa. That this asymmetric c-command relation may not hold in either direction is further confirmed by the patterns of binding seen with quantifier-pronoun binding relationships:¹⁴

(15)a. *Louis semma' il-voçi tagħ = **ha**_i lil [**kull tifla**]_i.

Louis CAUS.hear DEF-voice of = **her**_i to [**each girl**]_i

“Louis had/let/made [each girl]_i hear her_i voice.”

b. ?Louis semma' [**kull kelb**]_i lill sid = **u**_i.

Louis CAUS.hear [**each dog**]_i to owner = **its**_i

“Louis had/let/made its_i owner hear [each dog]_i.”

The conclusion from both anaphoric and pronominal binding is therefore that the two internal arguments of morphological causatives are in a single binding domain with the external argument, but do not occupy structural positions which allow one to bind the other. We shall see in §3.3 that this fact can be understood by assuming that neither of these two arguments c-command the other.

Turning now to the syntactic causatives with *gieghel*, we see a very different pattern emerge. Here we see evidence for two binding domains with the causee participating in anaphoric binding with both the causer and theme. This is shown in the data in (16), again omitting parallel observations with the reciprocal *xulxin*:

(i) ?Çikku semma' **lit-tifla lilha innifisha**.

Chikku CAUS.hear **to.the-girl herself**

“Chikku had/let/made the girl listen to herself.”

Examples such as (i), like (14b), are not fully grammatical. However, when compared directly to (14b), (i) is judged as better by my consultants, a fact which the diacritic I have assigned it does not represent. In §3.3.1, below, I will relate this to the fact that morphological causatives have a mostly obligatory instance of VP movement involving the theme and the verbal root which can be called off under circumstances which remain unclear to me at present.

14. Of course, (15a) has a grammatical but irrelevant reading where *ha* is not bound by *kull tifla*.

- (16)a. Marku_i ġieghel **lilu innifsu_i** jiftaħ il-bieb.
 Mark_i made.3.SG.MASC **himself_i** open.3.SG.MASC DEF-door
 “Mark_i made himself_i open the door.”
- b. Marku ġieghel lil Pietru_i jara **lilu innifsu_i**
 Mark made.3.SG.MASC DOM Peter_i see.3.SG.MASC **himself_i**
 fil-mera.
 in.the-mirror
 “Mark made Peter_i see himself_i in the mirror.”
- c. *Marija_i ġieghlet lil Pietru jara **lilha innifsha_i**
 Maria_i made.3.SG.FEM DOM Peter see.3.SG.MASC **herself_i**
 fil-mera.
 in.the-mirror
 “Maria_i made Peter see herself_i in the mirror.”

In (16a), the reflexive *lilu innifsu* is bound by the matrix subject *Marku*, suggesting that the causer and causee may be in the same binding domain. In (16b), however, the causee argument *Pietru* binds the object of the lower verb, suggesting that they, too, are included in a single binding domain. Moreover, (16b) is unambiguous — the matrix subject *Louis* may not bind “across” the causee argument, a fact which the judgment given for (16c) reinforces. A way to understand these observations is to conclude that the matrix subject cannot be in the same binding domain as complements of the lower verb.

3.2.2.4 Cliticization

Despite the fact that Maltese clitics show morphological case distinctions (see especially Chapter 4 for more on this), I will reserve discussion of these distinctions until §3.4 when an analysis of the causatives is in place. In this sec-

tion I will discuss only the available hosts for cliticization in the two types of causatives.

Beginning with the morphological causatives, the data in (17) show that when the verb allows two internal arguments, either of the two objects may cliticize to the morphological causative *semma'*.¹⁵

- (17)a. Pawlu semmagħ = **ha** lit-tifel.
 Paul CAUS.listen = **3.SG.FEM.ACC** to.the-boy
 “Paul made/let/had the boy listen to it.”
- b. Pawlu semmagħ = **lu** il-ghanja.
 Paul CAUS.listen = **3.SG.MASC.DAT** DEF-song
 “Paul made/let/had him listen to the song.”

In addition, both of the two non-causer arguments may cliticize simultaneously to a morphological causative, though this cliticization is governed by the PERSON CASE CONSTRAINT (*cf.*, Bonet, 1991). Thus the example in (18a) is ungrammatical because the second person accusative clitic *ek* violates the Person Case Constraint (see Chapter 5 for discussion). However, the example in (18b), which respects this constraint, is perfectly fine:

- (18)a. *Pawlu semmagħ = **ek** = **lha**.
 Paul listened.CAUS = **2.SG.ACC** = **3.SG.FEM.DAT**
 “Paul had/made/let her listen to you.”
- b. Pawlu semmagħ = **hie** = **lu**.
 Paul CAUS.listen = **3.SG.FEM.ACC** = **3.SG.MASC.DAT**
 “Paul made her listen to it.”

15. This cliticization results in an orthographic change on the root, where the apostrophe seen in isolation changes to the digraph *gh*. This reflects the loss of a word-final glottal stop, but *gh* has phonological content of its own in the dialect under consideration in this dissertation. See Comrie (1986) for some discussion.

Moreover, the causative verb is the only available host for cliticization in these cases. Specifically, if the verb in examples like (18) is preceded by a verbal auxiliary, then it is *a priori* reasonable to ask whether or not clitics may attach to this auxiliary. However, as (19) shows, this is impossible for auxiliaries like *kien* — only the causative verb *semma'* is a licit host for the clitics:

(19)a. Pawlu kien **semmagħ** = **ha** lil

Paul was.3.SG.MASC CAUS.listen.3.SG.MASC = 3.SG.FEM to Matthew.

Matthew

“Paul had made/had/let Matthew listen to her.”

b. *Pawlu **kien** = **ha** semmagħ lil

Paul was.3.SG.MASC = 3.SG.FEM CAUS.listen.3.SG.MASC to Matthew.

Matthew

“Paul had made/had/let Matthew listen to her.”

In Chapter 4, I will propose that the relevant generalization is that all pronominals in Maltese encliticize to the verb which immediately c-commands them. For now, it will suffice to see that this same property does not hold of the *giegħel*-causative.

For the syntactic causatives, (20) shows that the only possible cliticizations in this construction are those in which the clitic attaches to the verb immediately to its left. Most importantly, this means that the only available host for the causee is the *causative* predicate, not the complement predicate *jiekol*:

- (20)a. Louis ġiegħl = u jiekol il-kapunata.
Louis make = **3.SG.MASC.ACC** eat(.IMPF) the-caponata
“Louis made him eat the caponata.”
- b. Louis ġiegħl = u jiekol = **ha**.
Louis made = **3.SG.MASC.ACC** eat = **3.SG.FEM.ACC**
“Louis made him eat it.”
- c. *Louis ġiegħl = u = **(I)ha** jiekol.
Louis made = **3.SG.MASC.ACC** = **3.SG.FEM** eat
Intended: “Louis made him eat it.”

Moreover, it is impossible for the lower clitic object of the complement predicate to attach to the causative predicate *ġiegħel* (20c). This makes Maltese unlike Romance languages where cliticization of the object of the caused predicate is to the causative predicate (see Aissen & Perlmutter, 1976 and much subsequent work).

At this point, we have a basic understanding of the causatives of Maltese. There is more to say, to be sure, but in order to better understand the contrast that remains, it will help to have a theory of the differences seen thus far. The following section aims to provide just that.

3.3 The Basic Analysis: Two Kinds of Selection

In this section, I will propose that the distinctions between the two kinds of causatives should not be traced to distinct modules of the grammar, but are instead best understood as reflecting differences in the size and type of the complement selected by the head which expresses causation. Specifically, I will argue that the morphological causatives consist of a functional head expressing causation whose complement is an APPLICATIVE phrase introducing the causee.

The syntactic causative, on the other hand, will be shown to allow for negation in the complement of *giegħel*, suggesting that, minimally, a polarity head must be present to host the negative particle. However, I will also show that higher elements of the inflectional layer of the clause (T, Asp, and C) are not possible to the right of *giegħel*, showing that the complement of *giegħel* is not a full CP. I will argue that the complement of *giegħel* is instead a polarity phrase (Σ P) whose own complement is a fully-formed ν P with an agentive ν . This analysis of *giegħel* in terms of a reduced clause will evoke previous discussions of restructuring predicates in Romance and Germanic, and will be shown to have nontrivial implications for theories of clausal finiteness and agreement.

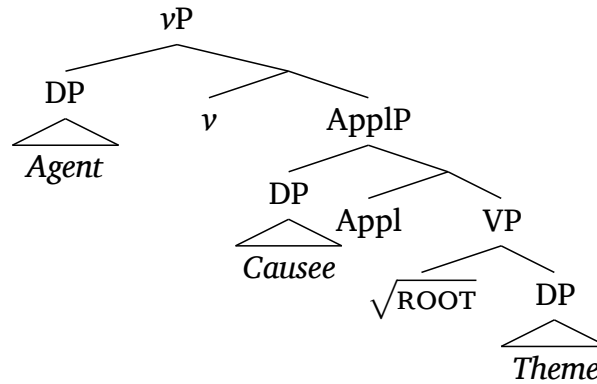
The discussion proceeds in three parts. The first two (§3.3.1 and §3.3.2) contain proposals for the morphological and syntactic causatives. The third (§3.3.3) discusses some predictions of the analysis and shows that they are confirmed by the data in Maltese.

3.3.1 Morphological Causatives

I will take as the starting point for the analysis of morphological causatives the proposals in Pylkkänen (2008) concerning the introduction of dative arguments: they are introduced as the specifier of an Appl(icative) head which itself appears above VP. Given this point of departure, I posit that the head ν which introduces the external argument takes as its complement a phrasal element containing the causee and the theme.¹⁶ There are numerous ways to represent this state of affairs, but I will follow Pylkkänen (2008:Ch.3) in call-

16. Throughout this chapter I will not provide arguments as to whether or not this ν head is an agentive ν or a causative ν , though I am assuming there is a difference between the two (see Folli & Harley (2005) and Folli & Harley (2007a) for some discussion). I will assume that the ν with *giegħel*-causatives is causative ν_{caus} , whereas the ν with morphological causatives is agentive ν_{ag} .

ing this phrase an APPL(LICATIVE) PHRASE.¹⁷ This is represented graphically in Tree 4. The head which projects this phrase, Appl, is responsible for selecting and semantically integrating the causee argument and in turn takes a VP consisting of the verbal root and its theme.



Tree 4: vP Level for Morphological Causatives, First Pass

To see how this structure accounts for the properties discussed in §3.2.2, let us first consider the pattern of productivity found with the morphological causatives — they are not productive and do not exist for many roots of the language (including all Italian and English strata roots). Positing that the crucial distinction between causative and non-causative members of this alternation is the presence of an Appl which selects for the VP implies that Appl could, in principle, place idiosyncratic selectional restrictions on the head of its complement.¹⁸ Root-modulated productivity with the morphological causatives,

17. Pylkkänen (2008:Ch.3) (and also McGinnis, 2001) discusses several diagnostics for distinguishing between different kinds of causatives which are predicted to exist based on the assumption that an applicative head could in principle attach at any position inside an articulated vP structure. Since my focus is on Maltese and not comparative evaluation of the theory proposed by Pylkkänen (2008), I will leave the examination of Maltese's behavior along these dimensions to future work. For now, I simply need it to be the case that a head which is selected for by v and itself selects VP exists.

18. In the BARE PHRASE STRUCTURE approach advanced by Chomsky (1995a) and others, this is because the label of VP is simply its head — the verbal root. It therefore follows that the

therefore, is simply a function of the lexical properties of Appl — in this case, only certain roots appear in the complement of this head (a group which, presumably, must be listed, as it is idiosyncratic; see Spagnol, 2011a;b for discussion).

This structure also allows us to understand the irregular allomorphic expression of the morphological causatives. Recall from §3.2.2.1 that the expression of the morphological causative has idiosyncratic, root-based allomorphic alternations. There are many different theories concerning the space of possible variation in allomorphic realization, but many of them assume that allomorphic interaction between two morphological elements is possible only if those elements are in a sufficiently local relationship.¹⁹ There is no closer relationship possible than the one created by head movement of the verbal root through Appl and *v*. The result is that idiosyncratic allomorphy is expected in this construction given current assumptions about the locality domain of idiosyncratic, root-based allomorphy.

Finally, the structure shown in Tree 4 also allows for an analysis of the wider range of meaning seen with the morphological causatives as compared to the syntactic causatives. As §3.2.2.2 discussed, morphological causatives, in contrast with syntactic causatives, allow for a reading in which there is no force or coercion involved in causing the event (indicated via translations with English *have* and *let*). This follows from the analytical assumption that *v* is the normal *v* which introduces the external argument in theories following Kratzer (1996),

verbal root is visible to selection by Appl. The theory of contextual allosemy with roots is discussed in Arad (2003; 2005) and Marantz (2010), and it is worth noting that this selectional relationship qualifies as “close enough” to the root to determine idiosyncratic root semantics in those approaches.

19. See Marantz (1995; 1997b); Arad (2003; 2005); Embick (2010); and much subsequent literature on this point.

a head which implies nothing about the obligation or permission semantics of the causing event, given that its sole purpose is to introduce an agent. In the following section I will propose that the syntactic causatives with *giegħel* in fact contain a v_{ag} embedded beneath a true v_{caus} , entailing that they have only the single *make* reading.

With the proposal shown in Tree 4, we thus have a way to understand the productivity, allomorphy, and semantic facts seen with the morphological causatives. But what of the binding facts? As we saw in §3.2.2.3, the morphological causatives in Maltese present a situation where either internal argument may be bound by the external argument, but neither internal argument may bind the other.²⁰ If the possibility of binding implies c-command in the syntax, then the facts in §3.2.2.3 imply that the external argument c-commands the internal arguments, and that neither internal argument c-commands the other. The problem with the proposals so far is that the causee is expected to be an available binder for the theme, as the former c-commands the latter in Tree 4. However, we can make some progress on this question by noting that there is no evidence for rightward specifiers in Maltese (see Chapter 2). Given this, the structure in Tree 4 also predicts an incorrect linear order: the causee argument should be linearized before, not after, the theme. However, such a word order is degraded in Maltese, as (21) shows:

(21)a. Il-kok kien i-dewwaq **l-ikel** **lill-mistidnin.**

DEF-cook was IMPF-CAUS.taste **DEF-food to.the-guests**

“The cook was having/letting/making the guests taste the food.”

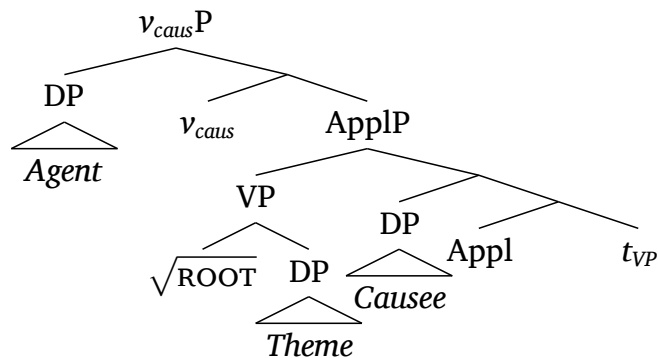
20. We might wonder if the relevant anaphors in Maltese are simply subject-oriented, accounting for the contrasts in external versus internal argument binding without recourse to the proposals in this section. However, in Chapter 4, I show that there is a class of ditransitives which allows binding from accusative to dative with these anaphors, which shows that they are not subject-oriented.

b.?? Il-kok kien i-dewwaq lill-mistidnin l-ikel.

DEF-cook was IMPF-CAUS.taste to.the-guests DEF-food

“*Intended*: The cook was having/letting/making the guests taste the food.”

As we saw in §3.2.2.3, the word order seen in (21b) is normally described as marginal unless some mitigating factor exists (such as a quantifier in the causee which is attempting to bind into the theme). If we posit that the word order in (21a) is derived via phrasal movement of the verb and its theme, as was done for Italian causatives by Burzio (1986) and Baker (1988a), then we can understand both the word order facts and the binding facts simultaneously. The binding facts follow from this movement because the resulting structure is one in which neither the theme nor the causee stand in a c-command relationship with the other, yet both are c-commanded by the external argument from the [Spec,v] position.²¹ This is the final proposal for the structure underlying the morphological causatives in Maltese.



Tree 5: vP Level for Morphological Causatives, Final Pass

21. In Tree 5, I assume that the landing site of this phrasal movement is the [Spec,Appl] position. I have no independent justification at present for this at present beyond the word-order facts. Furthermore, I represent this movement with a trace simply for graphical simplicity, without implying any commitment to the trace theory of movement dependencies.

I will take the structure shown in Tree 5 as given for the morphological causatives.²² In the following section, I turn to examining and proposing an analysis for the periphrastic *giegħel* causative.

3.3.2 Syntactic Causatives

In contrast to the morphological causatives, the causatives with *giegħel* show evidence for a reduced clause-like structure as a complement. The first evidence for this comes from the binding discussed in 3.2.2.3 — binding between the causer and theme was shown to be illicit, leaving only the more local binding between causer and causee as well as between causee and theme. If we take the possibility of binding of the theme by the causee as evidence that binder and bindee must be in the same minimal ν P (a “minimal” COMPLETE FUNCTIONAL COMPLEX in the sense of Chomsky, 1986) then it follows that the theme must be within a ν P which also includes the causee. It further follows, from the impossibility of causer to theme binding, that the theme must be contained within a ν P which excludes the causer. The simplest way to represent such a state of affairs would be with the causer initially merged in the specifier of a ν_{caus} whose associated VP in turn takes a complement which minimally includes a ν_{ag} introducing the causee as agent of the caused event.

Such a postulation immediately makes the prediction that there should be at least two attachment sites for ν P-modifying adverbs. This prediction is confirmed in Maltese. The agent-oriented modifiers *kontra qalbu*, “reluctantly” may ambiguously modify either the causer or the causee, as shown in (22):

22. At present, the only justification for this VP-movement is the binding and word order facts we find in Maltese causatives. However, in Chapter 4 we shall see that there is a class of ditransitives which share this VP-movement owing to their history as causatives in older forms of the language. These ditransitives provide evidence from passivization and cliticization for the VP-movement proposed here.

- (22)a. Toni se ġiegħel lil Marija tiekol kontra qalb
 Tony FUT made.3.SG.MASC DOM Marija eat.3.SG.FEM against heart
 = **u/ = ha.**
 = **3.SG.MASC/3.SG.FEM**
 “Tony made the Maria eat reluctantly.”
- b. Toni se ġiegħel lil Marija tiekol **apposta.**
 Tony FUT made.3.SG.MASC DOM Marija eat.3.SG.FEM deliberately
 “Tony made the Maria eat deliberately.”

Since here the possessive marker disambiguates the available interpretation of *kontra qalb* and both “her heart” and “his heart”, the availability of two distinct possessive markers suggests the presence of two adjunction sites in the syntax: (i) above the position of the causative event’s agent, *Louis* in (22) and (ii) above the position of the caused event’s agent, *Marija*. The same is true of the uninflected loan adverb *apposta*, meaning “deliberately.”

However, the preceding observations only *minimally* require the presence of another verbal functional head — nothing, at this point, is known about the *maximal* size of the complement of *ġiegħel*. There are several facts that, when combined with the clausal structure argued for in Chapter 2, suggest that this complement is a polarity phrase. The first of these observations comes from the availability of negation in the complement of *ġiegħel*. As (23) shows, the verbal negative particle *ma* may appear on either *ġiegħel* or its complement verb (in this case, *ġiekol*).

- (23)a. Tano **ma** ġiegħhel lil **ħadd** jiekol il-fażola.
 Tano NEG made.3.SG.MASC DOM **anyone** eat.3.SG.MASC DEF-beans.
 “Tano did not make anyone eat the beans.”
- b. Tano ġiegħhel lil Xandru **ma** jiekol lil
 Tano made.3.SG.MASC DOM Xander NEG eat.3.SG.MASC DOM
ħadd.
anyone
 “(lit.)Tano made Xander not eat anyone.”

This negative particle which appears is unambiguously the sentential negation for two reasons: (i) it has the morphological form of the sentential negation marker — constituent negation is expressed in Maltese via the distinct particle *mhux/mhiex* or as stem allomorphy and (ii) it can license Negative Polarity Items (as (23a–b) themselves show), which are illicit when in the scope of constituent negation. Taken together with the data from adverbs and binding, this suggests that the complement of *ġiegħhel* may include such a polarity projection in addition to the v_{ag} introducing the external argument of the complement verb. Following the terminology introduced in Laka (1994), I will call this projection ΣP .

Perhaps surprisingly, negation appears to be the *only* head above vP which may appear in the complement of *ġiegħhel*. Specifically, neither perfect aspect morphology nor overt tense-dependent elements may appear unambiguously in the complement of *ġiegħhel*. The first possibility is shown in (24). (24a) shows the only available option — (24b) with perfect morphology is impossible.

- (24)a. Luqa ġiegħel = u **jitlaq**
 Luke made.3.SG.MASC = 3.SG.MASC **leave.3.sg.masc.impf**
 mill-belt.
 from.the-city
 “Luke made him leave from the city.”
- b. *Luqa ġiegħel = u **telaq**
 Luke made.3.SG.MASC = 3.SG.MASC **leave.3.sg.masc.perf**
 mill-belt.
 from.the-city
 “Luke made him leave from the city.”

In Chapter 2 I argued that the presence of perfect morphology seen on Semitic stratum roots in Maltese required the co-presence of an Asp(ect) head above ν P to trigger morphophonological readjustment of the stem to the perfect form. Since the perfect is impossible in the *ġiegħel*-causative complement, it is reasonable to conclude that this Aspect head is not present in the complement of *ġiegħel*.

This intermediate conclusion about the absence of Asp can be further confirmed by examining the behavior of adverbial elements which require the presence of Asp for felicity. For instance, the adverb *diġà*, “already” is only semantically well-formed if the verb actually has perfect aspect. If such an adverb appears with a syntactic causative, then only a high interpretation where *diġà* modifies *ġiegħel* is possible — an interpretation with the complement predicate is impossible, as shown in (25):

- (25) Pietru kien ġiegħel lil Marku jiekol
 Peter had.3.SG.MASC made.3.SG.MASC DOM Mark eat.3.SG.MASC
 l-ikel **diġà**.
 DEF-food **already**.
Impossible: “Peter made Mark already eat the food.”
Only: “Peter already made Mark eat the food.”

Moreover, it is impossible to have elements in the complement of *ġiegħel* which require the presence of an independent tense head lower than *ġiegħel* itself. As we saw in Chapter 2, one element which can lexicalize tense in Maltese is the future marker *se* that ultimately procliticizes to the rightmost verbal element. While this marker can appear on *ġiegħel* itself, it cannot appear on the complement verb. Both of these observations can be made with reference to examples like (26):²³

- (26)a. *Pietru se iġiegħel lil Marku se jiekol
 Peter will make.3.SG.MASC DOM Mark **will** eat.3.SG.MASC
 l-ikel.
 DEF-food
 “Peter will make Mark eat the food (in the future).”
 b. Pietru se iġiegħel lil Marku jiekol l-ikel.
 Peter will make.3.SG.MASC DOM Mark eat.3.SG.MASC DEF-food
 “Peter will make Mark eat the food (in the future).”

If *se* were possible in the complement *vP* before *jiekol*, there would be evidence for the presence of a T head in the complement of *ġiegħel*; we see in (26a) that this is not possible. Taken together with the data from aspectual morphology, this fact also suggests that the sister of *ġiegħel* does not have independent tense

23. Similarly, temporal adjuncts such as *illum*, “today” and *l-bieraħ*, “yesterday” can only have scope over *ġiegħel* and not its complement.

available. Therefore, we can conclude that neither T nor Asp is available in the complement of the *giegħel*-causative.

At this point with neither T nor Asp available, there is only one additional functional head to examine which could possibly appear above *vP*, according to the analysis in Chapter 2: C. This is a particularly easy head to test for the presence of, as it has one prominent overt member of its category — the complementizer *li*. As (27) shows, it is impossible to have *li* with an overt accusative causee in Maltese:

(27)a. Louis *giegħel* *lil* *Matthew* *idaqq* *it-tuba*
Louis made.3.SG.MASC DOM *Matthew* play.3.SG.MASC DEF-tuba
tiegħ = u.

of = 3.SG.MASC

“Louis made Matthew play his tuba.”

b. *Louis *giegħel* *lil* *Matthew* ***li*** *idaqq*
Louis made.3.SG.MASC DOM *Matthew* **COMP** play.3.SG.MASC
it-tuba *tiegħ* = u.

DEF-tuba of = 3.SG.MASC

“Louis made Matthew play his tuba.”

As (27b) shows, *li* cannot appear between the accusative causee and the embedded verb. This is perhaps unsurprising given that the causee is thematically an argument of the embedded predicate yet it displays morphological accusative case and cliticizes to *giegħel* and not the complement verb (see §3.2.2.4 and §3.4). These two properties are reminiscent of Exceptional Case Marking (ECM) predicates in better-studied languages such as English where accusative case is assigned to a nominal which is thematically related to an embedded predicate. The analysis under consideration here, where the complement to *giegħel* is a

vP with no inflectional layer, makes sense of this fact, as accusative case assignment from *giegħel* will find the complement agent since no phase boundary intervenes.²⁴

At this point, an brief excursus on the logic of the preceding argumentation is in order. In suggesting that the absence of perfect morphology, *qiegħed*, *kien*, and *se* implies the absence in the syntax of the functional heads which host those lexical items, I am assuming that a proliferation of silent heads is not a viable alternative. Of course, it is logically possible to assume the existence of a silent T, Asp, or C in the complement of *giegħel*, the question is whether or not such a move is theoretically useful. In order to maintain that *giegħel* complements contain silent functional elements, one would have to assert that these silent heads do not have their usual interpretive consequences. In the case of T and Asp, this renders the resulting theory unfalsifiable, as one could always maintain that uninterpreted Asp and T heads are present in clausal complements, even when they have no independent temporal reference. Moreover, in the case of C, assuming the presence of a silent head would make incorrect predictions about the cyclic status of the complement of *giegħel*— the external argument of the embedded verb can demonstrably cliticize to *giegħel*, and assuming that C is present would predict that this embedded clause should be opaque to operations raising the embedded subject. Given these conclusions, I will follow Wurmbrand (2001) and the methodological presuppositions dis-

24. The picture is somewhat complicated in Maltese by the fact that *giegħel* can take a full CP complement with a meaning of “to bring it about that,” as in the following example:

- (i) Louis *giegħel* **li** **Ċikku** kiel il-tuffieħa.
 Louis made.3.SG.MASC **COMP** **Chikku** eat.3.SG.MASC.PERF DEF-apple
 “Louis brought it about that Chikku ate the apple.”

Notice, however, that in examples such as this the embedded verb may be perfect — this is shown by the possibility of *kiel* instead of *jiekol*. I take this to mean that *giegħel* optionally subcategorizes for both Σ P and CP, and set aside examples such as (i) for now.

cussed above and take the inability of lexical material to appear in a given functional head position to indicate that the functional head itself is not present.

If these arguments are reliable, then an interesting corollary results concerning the relationship between finiteness and agreement. Observe first that every example of a syntactic causative given thus far has involved subject agreement on the complement predicate. In fact, this agreement with the complement agent is required, as (28) shows:

- (28)a. Louis *giegħel* *lit-tfal* **jiekl**u *fażola*.
Louis made.3.SG.MASC DOM.DEF-children **eat.3.PL** beans
“Louis made the children eat the beans.”
- b. *Louis *giegħel* *lit-tfal* **jiekol** *fażola*.
Louis made.3.SG.MASC DOM.DEF-children **eat.3.SG.MASC** beans
“Louis made the children eat the beans.”

The example in (28b) is ungrammatical because of the agreement mismatch between the plural *lit-tfal* and singular *jiekol*. However, we have already seen that T is not present in the complement of *giegħel*. It therefore follows that there cannot be a necessary correlation between the presence of finite T and subject agreement in Maltese, as subject agreement is demonstrably present on the complement verb in (28).

This state of affairs is in stark contrast to the Germanic and Romance languages, where the presence of subject agreement correlates with embedded finiteness, as in the paradigm in (29-30) for English:

- (29)a. Malcolm told Olly **to phone** the Daily Mail.
b. *Malcolm told Olly **(to) phones** the Daily Mail.

(30)a. Malcolm told Olly that **he was phoning** the Daily Mail.

b. *Malcolm told Olly that **he (to) phone** the Daily Mail.

In (29) the verb *told* takes a non-finite complement and exceptionally case-marks the subject of this complement as accusative (*cf.*, pronominalization of *Olly* with accusative *him*). However, agreement is impossible with this subject, as the embedded verb *phone* must be in its stem form. However, when the complement of *told* is finite, as in (30), this set of facts reverses: the embedded subject is marked nominative (*cf.*, pronominalization with *he*) and must agree with the embedded predicate. This correlation between subject agreement and nominative case assignment on the one hand with verbal finiteness on the other has led many to posit that these three properties are necessarily unified theoretically — the usual story is that finite Tense assigns nominative case and also participates in AGREE with the subject in the process of case-marking it.²⁵

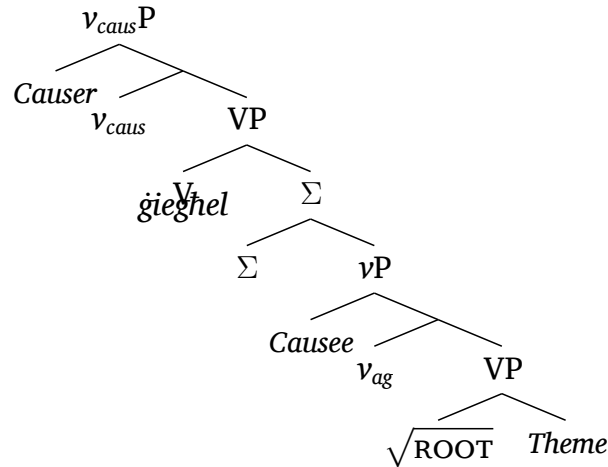
We have already seen that this cannot be the correct analysis of subject agreement in Maltese, since in the *giegħel*-causatives there is subject agreement but no tense.²⁶ Moreover, §3.4, immediately below, will demonstrate that the subject of *giegħel*'s complement cannot bear nominative case, but instead must be marked morphologically accusative. Taken together, these facts suggest that the connection between subject agreement and nominative case should be abandoned, as only the latter correlates with finiteness in Maltese.²⁷ As-

25. The modern implementation of this idea which I have in mind is that proposed in Chomsky (1995b), but the idea predates the Minimalist Program.

26. A similar state of affairs in Turkish is discussed by George & Kornfilt (1981).

27. This is not a novel claim, by any means, but one that has only received sporadic attention in the literature. Raposo (1987) documents inflecting infinitives in Portuguese, but shows that TPs containing these infinitival elements license nominative case on the embedded subject. A perhaps more fitting parallel to the Maltese facts is therefore the presence of finite embedded verbs in raising and control contexts in the Balkan languages (see, for instance, Terzi, 1992;

suming temporarily that the same is not true of accusative case assignment in Maltese (which *does* correlate with the ability of a verb to participate in AGREE in the language; see Chapter 4), then the preceding discussion would lead to the structural analysis shown in Tree 6 for the syntactic causative construction with *giegħel* in Maltese.²⁸



Tree 6: *vP* Level for *giegħel* Causatives

In this analysis, the v_{ag} in the complement of *giegħel* is responsible for AGREE with the theme argument, which itself appears inside a VP complement to v_{ag} that also contains the verbal root. The causee argument is introduced as the specifier of this v_{ag} , a position from which it cannot control agreement due to the absence of finite T. However, if we assume that the Σ which introduces polarity is the head responsible for subject agreement in syntactic causatives,

Iatridou, 1993; and Alexiadou & Anagnostopoulou, 1999). Since the scope of this dissertation is limited to Maltese, I will not attempt a proper cross-linguistic comparison of these phenomena.

28. Notice that this VP-movement is required regardless of whether the binding relations are fixed before or after movement. If we assumed, unlike the text discussion above, that binding relations are fixed before movement, then we would need to appeal to linear order to rule out causee to theme binding, which is ungrammatical yet predicted to be fine given that the causee c-commands the theme before VP-movement. Assuming VP-movement therefore destroys the relevant linear order required for causee to theme binding if binding relations are fixed before movement.

then we can account for the presence of subject agreement in the complement of *gieghel*. The set of φ -features on v_{ag} is implicated in AGREE with the theme argument, but that relation is not reflected in the appearance of overt morphology, since Maltese lacks object agreement (see Chapter 4). The set of φ -features on Σ , I will assume, is not tied to the assignment of case but nevertheless participates in AGREE with the causee argument. After the verb has raised to Σ , these features will then appear on the verbal root as subject agreement morphology. Then, after this agreement has occurred, subsequent AGREE with the v_{caus} head above *gieghel* provides structural case to the complement subject which is later realized as accusative (see §3.4, below).^{29,30}

To summarize, in this section I have proposed that the syntactic *gieghel* causative in Maltese involves a reduced clause-like complement which is ultimately headed by a Σ P polarity projection. This was done after it was demonstrated that (i) the complement of *gieghel* involves neither independent notions of tense or aspect, nor the ability to host a complementizer and (ii) the observation that sentential negation can appear inside this complement. Furthermore, we saw that this complement involves mandatory subject agreement, necessitating a distinction between nominative case assignment and finiteness on the

29. Note that this analysis requires no commitment on the question of whether or not the so-called ACTIVITY CONDITION of Chomsky (2001b), *et seq.*, holds. That is because this condition is typically framed in such a way that it is not AGREE *per se* which renders an available goal inactive for further AGREE relations, but rather the assignment of structural case to the goal. Since the AGREE relation that the complement subject undergoes with v_{ag} does not value case, the Activity Condition would not result in this argument being inactive for subsequent AGREE with v_{caus} head in the higher vP.

30. That the head which expresses polarity at the clausal level can be responsible for subject agreement finds some cross-linguistic support in the Semitic family. As is discussed by Benmamoun (2000); Ouhalla (1991); Aoun *et al.* (2010); and others, Modern Standard Arabic has a negative element which displays subject agreement morphology. Moreover, negation can license ellipsis in many languages, such as with the English *Mary asked that you go to the movie with her, and that I not*. If we take ellipsis to require a licensing head which is specified for agreement (Lobeck, 1987a;b; Zagana, 1988b;a; *et seq.*), then we have to admit that formal agreement features exist on Σ for these cases, as well.

one hand from subject agreement on the other. In §3.4 I will analyze these facts by dissociating the morphological realization of case from nominal licensing and agreement, arguing for a theoretical framework which can accommodate this dissociation.

3.3.3 Predictions

Given that the preceding sections have analyzed both the *gieghel* causatives and their morphological counterparts as syntactically complex, the question must arise as to how these two formations interact, if they do at all. This section examines this interaction briefly and shows that the observed patterns of interaction are predicted by the analyses offered in §3.3.

Beginning first with the morphological causatives, the analysis proposed in §3.3.1 predicts that we should find no multiple morphological causatives. This is because the Applicative head which is crucially involved in this particular causative selects for a verbal *root*, not a fully constructed *vP* of any kind. Indeed, this is what we find in the lexicon; if one wishes to form a causative of a verb which itself is a morphological causative, the only available strategy is shown in (31), using *gieghel*:

- (31) Mikel **gieghel** lill-kok idewwaq
 Michael **made.3.SG.MASC** DOM.DEF-cook taste.CAUS.3.SG.MASC
 l-ikel lill-mistidnin.
 DEF-food to.the-guests
 “Michael made the cook let the guests taste the food.”

With the syntactic causative analysis of §3.3.2, however, a different prediction emerges. Since the causative predicate *gieghel* has been analyzed as a v_{caus}

which takes a fully articulated ν P as its complement, there is an expectation that a *gieghel* causative should be able to appear as the complement of another *gieghel* causative. As predicted, this is true:

- (32) Mikel **gieghel** lil Louis **igieghel** lit-tifel
 Michael **made.3.SG.MASC** DOM Louis **make.3.SG.MASC** DOM.DEF-boy
 jiekol l-ikel tiegh = u.
 eat.3.SG.MASC DEF-food of = 3.SG.MASC
 “Michael made Louis make the boy eat his food.”

The example in (32), which is perfectly licit, shows that it is indeed possible to build recursive syntactic causatives. Not only is this fact predicted by the analysis of the *gieghel*-causative, it will turn out to be useful in confirming the ECM analysis of *gieghel* itself when paired with observations concerning the availability of passives in §3.5.2, below. For now, it is sufficient to note that the availability of (32) is consistent with the predictions of the proposed syntactic analysis of this construction.

While the two kinds of causatives pull apart with respect to the availability of double causatives, the two analyses offered in §3.3 do make an a set of similar predictions concerning constituency. In particular, in both causatives there is a constituent immediately beneath the ν which contains both the non-causer arguments (and, in the case of the syntactic causative, the complement verb, as well). Ideally, these constituents should be identifiable via some measure of constituency which demonstrates that they actually do form a phrase. They are, as the members of this phrase may be coordinated to the exclusion of all

other elements present in the utterance. This is shown with the coordinate structures in (33) for both kinds of causative:³¹

- (33)a. Louis *giegħel* [lit-tfal jieklu fażola u lil
Louis made.3.SG.MASC [DOM.DEF-children eat.3.PL beans and DOM
Marju isajjar il-kaponata]
Mario cook.3.SG.MASC DEF-caponata]
“Louis made the children eat the beans and Mario cook the caponata.”
- b. Louis *dewwaq* [il-fażola lit-tfal u il-kaponata lil
Louis CAUS.taste [DEF-beans to.the-children and DEF-caponata to
Marju].
Mario]
“Louis let the children taste the beans and Mario taste the caponata.”

In (33a), the complement of *giegħel* is a coordinate structure containing two complete v Ps headed by independent v_{ag} heads. In (33b), on the other hand, the coordination is of two ApplP complements to v_{caus} in the morphological case; they thus do not contain independent predicates but instead only contain the two internal arguments of the morphological causative.

31. It is, of course, possible that (ii) could be instead analyzed as gapped v Ps and not the coordination of complements of v_{caus} , assuming that the two constructions are distinct (but see Johnson, 2009). However, two facts mitigate against this account. The first is that two of my consultants do not like gapping in simple transitives such as (i):

- (i) *Fausto kiel il-kapunata u Toni il-ghagin.
Fausto ate DEF-caponata and Tony DEF-pasta
“Fausto ate the caponata and Tony the pasta.”

Despite rejecting examples like (i), those speakers accept (33). Moreover, these same speakers allow elements to the right of the putative gapping site, such as (ii):

- (ii) Louis *dewwaq* [il-fażola lit-tfal **il-bieraħ** u il-kaponata lil
Louis CAUS.taste [DEF-beans DEF-yesterday to.the-children and DEF-caponata to
Matthew **illum**].
Matthew today]
“Louis let the children taste the beans yesterday and Matthew taste the caponata today.”

At this juncture two important questions remain unanswered: (i) what is the mechanism by which morphological case is assigned in these two causatives? and (ii) how do these two causatives interact with other operations which affect argument structure, such as passivization? The following section will take up (i), paving a the way for a discussion of (ii) in §3.5.

3.4 Case Marking in Causatives

With a preliminary analysis of the two causatives in Maltese in hand, we are now in a position to examine the case-licensing of arguments in these constructions. Cross-linguistically, causative constructions show a well-understood pattern of variation in the morphological expression of case by verbal arguments which have been used to argue for particular theoretical proposals in the morphosyntax of case-marking.³² This section aims to add the facts from Maltese in the context of this larger theoretical discussion concerning the nature of case alternations, as well as extend the analysis of §3.3 to account for the observed patterns.

As we shall see, the morphological causatives in Maltese provide additional evidence for the observed cross-linguistic correlations between the available case patterns in simplex (non-causative) ditransitives and the available case patterns in causative constructions. However, the generalizations seen in Maltese will be shown to require a theory of morphological case which is disjunctive and not intimately connected to the computation of agreement or structural Case licensing. In the account I will advance here, structural Case is related to the morphological expression of case by an algorithm which assigns

32. See the initial discussion in Aissen (1979), as well as Gibson & Raposo (1986) and Folli & Harley (2007a) for more on this.

case according to a hierarchy of available morphological cases.³³ The syntactic causative, on the other hand, will be shown to provide evidence from its case-assignment patterns for the ECM analysis of *giegħel* and the syntactic decomposition of the entire construction as recursive *v*Ps.

Before this can be done, it will be useful to have some cross-linguistic context for the discussion of Maltese which is presented in §3.4.1. After this, I document and analyze the patterns of case-marking in Maltese in §§3.4.2–3.4.3.

3.4.1 Crosslinguistic Generalizations

It has been observed in several previous studies that the case-marking patterns seen in the causatives of transitive underlying verbs often correlate with the case-marking patterns seen in regular ditransitives.³⁴ Specifically, it has been observed that in many languages, if a causative verb allows both the causer and causee to appear in the same case, then both internal arguments of a ditransitive will also appear in that same case. This is perhaps shown most strikingly by Baker (1988a), who contrasts two dialects of the same language, Chichewa, along exactly this dimension. The first dialect requires the causee of a causative verb to appear in an oblique case (34a), which correlates with the case-marking seen in ditransitives (34b):

33. The popular citation for this idea is Marantz (1991), but it is also applied to causatives by Harley (2006) and Folli & Harley (2007a), and is prefigured by the discussion in Aissen (1979). Folli & Harley (2007a), Legate (2008), and Baker & Vinokurova (2010) all provide theories of case in which there is both a structural and morphological component, as I will do here.

34. This is discussed overtly first, to my knowledge, by Aissen (1979), who proposes an account which very much foreshadows the account given here and by Folli & Harley (2007a). This generalization is also central to the split approach to causatives developed by Baker (1988a).

- (34)a. Anyani a-na-meny-ets-a **ana** **kwa buluzi.**
 baboons SP-PAST-hit-CAUS-ASP **children to** **lizard**
 “The baboons made the lizard hit the children.” (Baker, 1988a:163)
- b. Amayi a-na-perek-a **mtsuko** **kwa ana.**
 woman SP-PAST-hand-ASP **waterpot to** **children**
 “The woman handed the waterpot to the children.” (Baker, 1988a:166)

This pattern is contrasted by Baker (1988a) with the pattern in a separate dialect of Chichewa, which allows the causee argument to appear in the same case as the causer (35a), a possibility which in turn correlates with the availability of an analogue to the English double object construction in which both internal arguments receive the same, structural case (35b):

- (35)a. Catherine a-na-kolol-ets-a **mwana wake chimanga.**
 Catherine SP-PAST-harvest-CAUS-ASP **child** **her** **corn**
 “Catherine made her child harvest the corn.” (Baker, 1988a:164)
- b. Joni a-na-pats-a **amai** **ake nthochi.**
 John SP-PAST-give-ASP **mother his** **bananas**
 “John gave his mothers the bananas.” (Baker, 1988a:166)

The generalization seems to be that if a language uses a case to mark causees that is distinct from the case used to mark themes, then that language will also lack a double object construction where both internal arguments are marked with the cases used for ordinary transitive objects. In §3.4.2 as well as Chapter 4, we shall see that Maltese conforms to this generalization by instantiating the same pattern as the first dialect of Chichewa discussed by Baker.

The other major generalization which emerges from cross-linguistic work on causatives is that the case-assignment patterns seen in causative structures

are often sensitive to the transitivity of the underlying non-causative verb.³⁵ This is illustrated for Italian in the data in (36) from Folli & Harley (2007a):

(36)a. Gianni ha fatto correre **Maria**.

Gianni has made run **Maria(.ACC)**

“Gianni made Maria run.” (Folli & Harley, 2007b:221)

b. Gianni ha fatto riparare la macchina **a Mario**.

Gianni has made repair the car **to Mario**

“Gianni got Mario to repair the car.” (Folli & Harley, 2007b:201)

In (36a) the causative is formed from an intransitive verb root, and the resulting causee argument is marked in the accusative case. This is not the situation found in (36b), where the causee, *Mario*, appears in the dative case marked by the preposition *a*. We will also see below that Maltese instantiates this same pattern, with the same consequences for the theory of case assignment discussed by Folli & Harley (2007a).

3.4.2 Case in Maltese Causatives

Beginning with the morphological causatives, we have two non-subject arguments whose case possibilities are of interest: (i) the causee and (ii) the theme/patient of the caused event. We will see immediately below that the patterns of case-marking are modulated by transitivity in the case of (i) but not (ii). As a result, I will begin by examining causatives of transitive predicates. Taking the theme/patient argument first, it is worth noting that the differential object marking seen in Maltese means that an inanimate theme is required to

35. See Kayne (1975); Aissen (1979); Gibson & Raposo (1986); Baker (1988a); Folli & Harley (2007a); and references therein for discussion of this. The generalization I am about to discuss is not universal, but I will not discuss the other observed pattern since it is not instantiated in Maltese. See Gibson & Raposo (1986) especially on this point.

differentiate between morphological dative and accusative case. The relevant data appear in (37):

- (37)a. Pawlu semma' **il-għanja** lit-tifel.
 Paul CAUS.listen **DEF-song** to.the-boy
 “Paul made/let/had the boy listen to the song.”
- b. *Pawlu semma' **lill-għanja** lit-tifel.
 Paul CAUS.listen **DEF.DAT-song** to.the-boy
 “Paul made/let/had the boy listen to the song.”

In (37a) we see that an inanimate theme may appear without the normal dative case marker *li* in Maltese.³⁶ In fact, if this dative marker appears, as in (37b), the result is ungrammatical. This suggests that the theme is obligatorily marked with morphological accusative case, a fact which is confirmed by the observation that pronominalization of this argument always yields an accusative clitic (38a) and never a dative clitic (38b):

- (38)a. Pawlu semmagħ = **ha** lit-tifel.
 Paul CAUS.listen = **3.SG.FEM.ACC** to.the-boy
 “Paul made/let/had the boy listen to it.”
- b. *Pawlu semmagħ = **lha** lit-tifel.
 Paul CAUS.listen = **3.SG.FEM.DAT** to.the-boy
 “Paul made/let/had the boy listen to it.”

When examining the case borne by the causee, we will not glean any useful information by examining lexical DPs — because of differential object marking the accusative and dative cases are homophonous in this position unless the

36. It is worth recalling that in Maltese most prepositions, including *li*, fuse with the definite article *il*. In the case of *li* this results in the compound preposition-determiner *lil*, the last segment of which undergoes place assimilation if the following segment is a coronal obstruent.

argument is inanimate. Fortunately, clitics provide the relevant distinction without the confound of differential object marking. As (39) shows, the case of these causees is obligatorily dative:

(39) Pawlu semmagħ = **lu** il-għanja.

Paul CAUS.listen = **3.SG.MASC.DAT** DEF-song

“Paul made/let/had him listen to the song.”

a. *Pawlu semmagħ = **u** il-għanja.

Paul CAUS.listen = **3.SG.MASC.ACC** DEF-song

“Paul made/let/had him listen to the song.”

Pronominalization of the causee obligatorily results in a dative clitic (39a) and never an accusative clitic (39b).

According to the cross-linguistic generalization on causative case-marking first discussed by Aissen (1974; 1979) and reviewed above in §3.4.1, the prediction here is that Maltese should lack ditransitive verbs where both internal arguments receive accusative case. This is, for the most part, true, as (40) shows:³⁷

(40)a. Emmanwel bagħat **l-ittra** **lill-knisja**.

Emmanuel sent **DEF-letter to.the-church**

“Emmanuel sent the letter to the church.”

b. *Emmanwel bagħat **il-knisja** **l-ittra**.

Emmanuel sent **DEF-church DEF-letter**

Intended: “Emmanuel sent the church a letter.”

37. I hedge somewhat in giving this generalization because, as Chapter 4 will show, there is a limited set of verbs which have a syntax strikingly similar to the causatives discussed here but which allow two accusative-marked objects, one of which *must* be a clitic. See that chapter for discussion of these verbs. I do not take these verbs to falsify the generalization concerning case in the text, as these verbs are few in number and conform to the generalization insofar as they allow double object structures.

Thus Maltese provides additional support for the generalization that a language has dative marking of the underlying transitive subject of a causative verb if and only if it lacks double accusative marking in its simple ditransitives. In §3.4.3 and Chapter 4 I will propose that this fact is derivative of the way that morphological case assignment proceeds, along the lines suggested by Aissen (1974; 1979); Marantz (1991); Harley (2006); Folli & Harley (2007a); Baker & Vinokurova (2010); and others.

Consider now causativized intransitives. If an intransitive verb is made causative, the case borne by the underlying single argument of the verb is not dative, but rather accusative. This is shown in (41) below for the verb *tella'*, “he was elected” and its causative version, *tela'*, “he raised up, he elected”.³⁸

- (41)a. **(Huma)** *telgħu*.
 (They.NOM) were.elected.3.PL
 “They were elected.”
- b. **(Aħna)** *tellaj-na* = **hom**.
 (We) elected-1.PL = **3.PL.ACC**
 “**We** elected them.”
- c. ***(Aħna)** *tellaj-na* = **lhom**.
 (We) elected-1.PL = **3.PL.DAT**
 “**We** elected them.”

38. The final ' of *tela'* is a glottal stop when it appears word-finally, but surfaces as *għ* when it appears word-medially. In the latter case, it is not pronounced but is instead a marker of vowel length and (in some varieties) vowel color. Moreover, in some particular combinations of φ -features, the final 'għ appears as the semivowel /j/. See Comrie (1986); Borg & Azzopardi-Alexander (1997); and Walter (2006) for the pharyngeal alternation and Borg & Azzopardi-Alexander (1997:364) for more on the semivowel allomorphy. Finally, it is worth noting that despite the translation in (41a), *telgħu* is demonstrably not passive, as can be seen by observing the absence of passive morphology.

When the single argument of *tella'* is pronominalized, as in (41b-c), we can see that only an accusative clitic is possible, not a dative clitic. For morphological case purposes, then, the single argument of an underlying intransitive is accusative in the derived causative version.

Moreover, lexically assigned case in the complement of the causativized verb is irrelevant for the determination of case on the single argument of an intransitive. The verb *tella'* also takes an optional complement PP headed by *f(i)*, usually translated as “at” or “on,” which expresses the goal of the electing event. As (42) shows, in the presence of this additional internal argument, the direct object of the causativized verb is still realized as an accusative.

- (42)a. **(Huma)** telghu fil-gvern.
 (They.NOM) were.elected.3.PL into.the-government
 “They were elected into government.”
- b. **(Aħna)** tellaj-na = **hom** fil-gvern.
 (We) elected-1.PL = **3.PL.ACC** into.the-government
 “We elected them. into government”
- c. ***(Aħna)** tellaj-na = **lhom** fil-gvern.
 (We) elected-1.PL = **3.PL.DAT** into.the-government
 “We elected them into government.”

We thus see that the assignment of lexically specified case has no effect on the computation of the morphological case borne by the theme argument of the underlying non-causative verb.

Turning now to the syntactic causative with *gieghel*, the basic generalization which emerges is that the underlying subject of the complement predicate, regardless of its transitivity, is marked morphologically accusative by *gieghel*. We can see in (43) that the agent argument of the transitive predicate *ħallas*,

“he paid,” is realized as the accusative clitic *na* (43a) and not the dative clitic *lna* (43b).

(43)a. ...l-Gvern ġieġhel = **na** nhallsu t-taxxa tal-VAT.
 ...DEF-Government make = **1.PL.ACC** pay.1.PL DEF-tax of.the-VAT.
 “...the Government made us pay the VAT.”

(Borg *et al.*, 2012:press_orizzont1757)

b. *...l-Gvern ġieġhel = **lna** nhallsu t-taxxa
 ...DEF-Government make = **1.PL.DAT** pay.1.PL DEF-tax
 tal-VAT.
 of.the-VAT.
 “...the Government made us pay the VAT.”

Beyond this case-marking of the causee argument as accusative, the remaining arguments of both verbs of a *ġieġhel*-causative are marked as one would expect: the causer argument of *ġieġhel* is marked nominative and the internal arguments of the complement verb marked accusative or dative, as they would be in the absence of *ġieġhel*.

3.4.3 Understanding Maltese Causative Case-Marking

As the preceding section has shown for the morphological causative construction, it is not possible to give a generalization about the case morphology which appears on arguments without referring to transitivity in the description. Moreover, as we saw in §3.4.1, this is a general pattern seen many in languages which mark the two internal arguments of a causative with distinct morphological cases. For Maltese, the relevant generalizations are in (44):

- (44)a. The theme argument is marked accusative in both the causative and non-causative contexts.
- b. The causer argument is marked nominative in both the causative and non-causative contexts.
- c. The causee is marked accusative when the underlying non-causative verb is intransitive and dative when it is transitive.
- d. Lexical case assignment is not relevant for the determination of nominative, accusative, or dative case on other nominals.

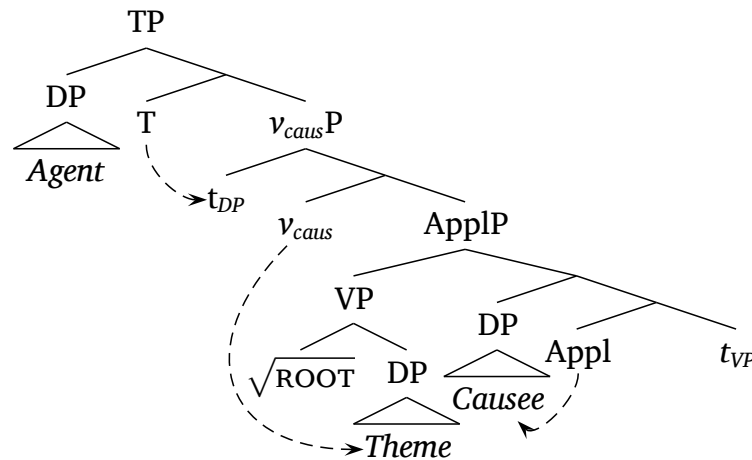
In this section I will argue that while (44a-b,d) are not problematic for theories of case which take them to be computed structurally, (44c) is less straightforward and is more easily captured in a disjunctive theory of morphological case-assignment like that proposed initially by Marantz (1991).

To see how this is, first consider how case is assigned in a what I will term a purely STRUCTURAL theory such as that proposed by Chomsky (2000; 2001b; 2008). In this account, the morphological realization of case is an artifact of the establishment of an AGREE relation in the syntax between a functional head with uninterpretable φ -features and a nominal bearing a matching set of interpretable φ -features. As a result of this AGREE relationship, case is assigned to or checked on the goal member of the relation, with the morphological form of this structural case being a function of the head with which the goal agreed.³⁹

The standard assumptions are that v is responsible for assigning accusative case whereas finite T is responsible for the assignment of nominative case. As

39. I use the disjunction “assigned to or checked on” because I wish to remain neutral about whether or not structural case is a feature which participates in AGREE or simply the morphological expression of the AGREE relation itself. I will use the term “assigns” as it seems to be the most theoretically neutral way to talk about the process. If structural case is to be understood as a feature *sui generis*, then “assigns” should be read instead as “checks.”

for the assignment of dative case, the picture is less clear, but the simplest assumption is that dative is assigned by the head which introduces the argument that ultimately surfaces as a dative.⁴⁰ This leads to a set of AGREE relations as shown graphically in Tree 7 by dashed lines.⁴¹ Importantly, in the structural approach the relationship between heads which AGREE and morphological cases is one-to-one; T always assigns nominative, v accusative, and Appl dative.



Tree 7: Structural Approach to Morphological Causative Case-Assignment

If we turn to the Maltese generalizations in (44), then it should be immediately clear how to deal with the generalizations in (44a-b): In Tree 7, assignment of nominative to the agent is a byproduct of the AGREE relation between T and the DP in [Spec, v_{caus}]. Similarly, assignment of accusative to the theme is the byproduct of the AGREE relation between v_{caus} and the theme argument inside VP. Moreover, we can integrate the generalization concerning lexical case

40. The other option would be to say that v assigns dative when it co-appears with the head which introduces the dative. Since this will lead to the same set of conclusions with respect to Maltese and discussion of it would only complicate the resulting prose, I will abstract away from this option here.

41. In this tree, as before, I abstract away from head movement of the verb and represent movement with traces for simplicity only, implying no theoretical commitment to the trace theory of movement.

in (44d) into this account by simply stating that these cases are the byproduct of agreement between the prepositions which introduce them and their complement DPs.

However, accounting for (44c) is nowhere near as straightforward, as has been observed by Harley (2006) and Folli & Harley (2007a). Specifically, the generalization seems to be modulated on transitivity and a counterexample to the idea that there is a one-to-one relationship between morphological cases and the heads which assign them. If it is correct that dative assignment is the function of AGREE with Appl, the head which introduces causees in this construction, then we need to say that this AGREE relation does not occur when the non-causative member is intransitive. For verbs like *tella'*, where the internal argument can be construed as a theme, this can be done by simply generating the sole internal argument as a complement to the verb. However, pairs like *daħak~daħħak*, “he laughed~he made someone laugh,” and *mexa~mexxa*, “he walked~he made someone walk,” this seems less plausible as a general solution, as it is hard to justify that the single internal argument is a theme for these verbs.

In contrast to the structural theory, the generalization in (44c) is easy to capture in what I will call the DISJUNCTIVE theory of case assignment.⁴² The disjunctive theory takes morphological case to be computed, not as a byproduct of AGREE, but as a separate computation which proceeds *disjunctively*: cases are assigned according to a particular hierarchy, and the determination of the value of lower cases is fed or bled by higher assignments made by the system. The

42. For proposals of this kind, see Marantz (1991); McFadden (2004); Harley (2006); Folli & Harley (2007a); Bobaljik (2008); Baker & Vinokurova (2010); and McFadden & Sundaresan (2011); among others.

theory also makes a distinction between at least four kinds of cases, as shown in (45):⁴³

- (45)a. LEXICALLY GOVERNED CASE: case assigned to a nominal which is associated with a specific θ -role.
- b. DEPENDENT CASE: case assigned to a nominal as the result of the presence of a *distinct nominal* elsewhere in a local domain.
- c. UNMARKED CASE: case assigned to a nominal when no other case-assigned nominal appears in the local domain (*i.e.*, GEN inside nominals and NOM inside clauses).
- d. DEFAULT CASE: case assigned to a nominal when no other case has been assigned.

Of these four kinds of case, the last, default case, will not be relevant to the discussion of Maltese, though I will continue to include it where applicable for completeness. The lexically governed cases are what I have thus far been calling “lexically assigned” or “inherent” – these are cases which particular verbs require along with particular thematic roles; often, this assignment is mediated by a preposition in Maltese. The unmarked cases are twofold, with the choice between the two mediated by the local context (*i.e.*, whether it is nominal or clausal), but here we will only be concerned with one: unmarked nominative which is assigned to particular nominals in the clause. Finally, the traditional discussion of disjunctive theories includes only accusative as a dependent case

43. There is a bifurcation in the previous proposals along these lines as to whether or not this disjunctive system exists instead of or alongside a structural Case-licensing component. I will be following Harley (2006) and Folli & Harley (2007a) in assuming that structural Case does play a role in the system, but that the particular morphological values that these structural cases ultimately receive are computed disjunctively. See §3.5 and Chapter 4. This assumption allows a structural treatment of the passive in terms of abstract Case alongside a descriptively adequate understanding of the patterns of morphological case.

— this case is assigned to a nominal when there is another nominal present in a suitably local domain.⁴⁴ Therefore, in this system, accusative is not necessarily the result of AGREE with v , but rather the result of the presence of another nominal (the agent or causer) inside the relevant domain.

The next necessary theoretical assumption in this framework is that case assignment obeys a disjunctive hierarchy: when a particular nominal's case is to be computed, the kind of case which appears is that which is highest on a stipulated hierarchy and for which the nominal meets the relevant prerequisites.⁴⁵ The hierarchy given by Marantz (1991:24), which I will use here, is given in (46):

- (46)a. lexically governed case
- b. dependent case
- c. unmarked case
- d. default case

The hierarchy in (46) ensures that if a nominal qualifies for lexically governed case, it will be realized as such before it can appear as dependent case. Similarly, if a nominal is a possible bearer of a dependent case, then this will supersede the assignment of unmarked case. A secondary feature of this hierarchy is that a nominal will be assigned dependent case when exactly two conditions

44. What constitutes a “suitably local domain” is a matter of some debate in theories of this kind; see Marantz (1991) for some discussion. Here I will assume that the v P constituent is at least one such local domain (see also McFadden, 2004). Whether or not others exist inside a single clause will be irrelevant for the discussion to follow.

45. Often, discussion of this framework uses a timing metaphor, with the idea being that cases higher on the hierarchy are assigned “before” cases lower on the hierarchy. However, this timing metaphor isn't inherent in the discussion in Marantz (1991), and nothing in the definitions therein preclude assigning case to all nominals simultaneously, provided that their realizations obey the relevant hierarchy.

are met: (i) there is a distinct nominal other than the candidate for dependent case and (ii) that distinct nominal is not assigned a lexical case.⁴⁶ In the case of English, for instance, accusative is assigned to internal arguments because a distinct nominal (the agent) which is not assigned lexical case appears inside *vP*. In the case of a verb with a lexically specified case for the single internal argument, the remaining argument will be assigned unmarked nominative, as the other nominal present does not meet condition (ii). Accusative, then, only appears when there are at least two nominals present, both of which are not candidates for lexically assigned case.

To see how this theory of case assignment will help to unify the analysis of case in Maltese causatives, consider what happens first for a morphological causative built from an intransitive non-causative such as *mexxa*, “he makes someone walk.” The relevant examples are in (47):

- (47)a. **(Jiena)** mexajt.
 (I.NOM) waked.1.SG
 “I walked.”
- b. (Huwa) mexxa = **ni**.
 (He.NOM) walked.3.SG.MASC = **1.SG.ACC**
 “He caused me to walk.”

In (47a), there is a single nominal, the pronominal *jiena* (or its silent counterpart, *pro*). Since *mexa* is not a verb which assigns any lexical case, (46a) does not apply. Moreover, neither does (46b), since there is no distinct nominal in (47) which is not assigned lexical case. Therefore, the pronoun is assigned the

46. As Marantz (1991) himself notes, (ii) only follows with some further assumptions. The basic observation has to be that lexically assigned cases need to remove a nominal from the domain over which dependent cases are assigned. The correctness of such a move, in turn, depends on details concerning languages with quirky datives, of which Maltese is not one.

only remaining available kind of case, (46c), or unmarked nominative. When we move to (47b), these same considerations do not apply, as the presence of *ni* means there are now two distinct nominals which do not qualify for lexical case. Since this is a nominative accusative language, the dependent case assigned to the lower of the two nominals is accusative and the higher nominative.⁴⁷

What happens, however, if the alternation in question involves an underlying transitive which has been made causative? This will be the case for examples such as (48):

(48)a. (Huwa) semagh = ha.

(He.NOM heard = 3.SG.FEM.ACC

“He heard it (*i.e.*, the song).”

b. Pawlu semmagh = **hie** = **lu**

Paul CAUS.listen = **3.SG.FEM.ACC** = **3.SG.MASC.DAT**

“Paul made/let/had him listen to it (*i.e.*, the song)..”

The assignment of case in (48a) works exactly as it did in (47b), above, with the accusative being assigned due to the presence of the distinct nominal *huwa*. With the example in (48b), however, we have one additional nominal which needs case. The idea needed to understand these facts is the one proposed in Harley (2006); Folli & Harley (2007a); and Baker & Vinokurova (2010) — *dative is a second dependent case* which is assigned only when another nominal appears which bears dependent case inside *vP*.⁴⁸ In (48b), this will be *hie*, the dependent case object. We have now shown that in the disjunctive case theory

47. See Marantz (1991:25) for the difference between nominative-accusative and ergative-absolutive languages in this system; in an ergative-absolutive language the assignments would be exactly reversed.

48. For now, the idea that *vP* is the relevant domain is an assumption, one which is shared by McFadden (2004). However, I will justify this assumption empirically in the discussion of the syntactic causative, below.

adding another nominal modulates case-assignment as a function of the number of nominals which are co-exist inside a ν P. When only one other nominal appears in the clause, the dependent nominal will receive accusative, whereas when two other nominals appear in the clause, the second dependent nominal will receive dative.

At present, this theory needs a way to ensure that the second of these two internal arguments receives dative case, and not the other way around. I can see a number of different ways to ensure this: (i) we could say that dependent case is computed cyclically from the bottom up, assigning dative when there are two distinct nominals inside ν P. (ii) we could say that dative is assigned idiosyncratically to the specifier of Applicative heads. (iii) we could say that linear order conditions the assignment of dative, with the second of the two nominals receiving dative. (i) is empirically inadequate for Maltese, as there are other verbs in Maltese which generate a dative argument lower than an accusative (see Chapter 4). (ii) seems to defeat the original conceptual and empirical goals of assuming the disjunctive theory, as it would tie the presence of dative case to the presence of the applicative head. Therefore, I will assume that (iii) is the relevant condition.

Finally, consider what happens if we introduce a nominal which will come to bear lexically-assigned case into any of the preceding examples. By the disjunctive interpretation of the hierarchy in (46), nothing should happen to the assignment of cases to the other available nominals. The calculus of the system is such that lexically assigned case is “invisible” for the assignment of dependent or unmarked case. This, along with the notion of dependent case itself, is what allows the disjunctive theory to account for the complete set of generalizations in (44) in a unified way.

If we turn now to the syntactic causatives with *giegħel*, we can begin by recalling from §3.3.2 that these causatives involve the causee argument being realized invariably as accusative. What is important about the analysis proposed in that section for the understanding of case facts is that the structure in Tree 6 has a set of properties which make it very much like the contemporary analysis of ECM verbs in languages such as English. Specifically, in English ECM constructions such as *Shawn wanted her to go to the store*, the key observation is that the accusative nominal *her* acts as though it were simultaneously in both the embedded and matrix clause. In modern approaches to ECM constructions, this is implemented by assuming that ECM verbs such as *want* select a TP complement. Because it is generated inside a complement TP, this accusative argument will behave as though it were a clause-mate of all the embedded arguments. However, TP is not a phase in the cyclic theory of Chomsky (2000; 2001b; 2008), and therefore there is only one cyclic domain in the complement of *want*, the embedded *v*P. For properties which are sensitive to phase boundaries, then, the ECM argument will act as though it is also a clause-mate of the matrix arguments.

The analysis of *giegħel* in Maltese in terms of recursive *v*Ps is similar insofar as the causee argument in the [Spec,*v*_{ag}] position will act as though it is simultaneously in the domain of both *giegħel* and its complement verb. It will act as though it were in the domain of the complement verb because it is generated inside *v*_{ag}, yet it occupies the escape hatch position of the *v*_{ag}P phase, meaning that it will also behave as though it were in the same domain as *giegħel*, as no other cyclic nodes such as C intervene between the two positions. It is this “biclausality” which will be crucial in understanding how a causee in a *giegħel*-causative can come to be marked accusative, a prediction which falls

out of the theory of case explicated above with only one independently-needed assumption.

To see how this works, consider how case is assigned in an example such as (49):

- (49) **Louis** *gieghel* = **u** *jiekol* **il-ghagin**.
Louis made.3.SG.MASC = **3.SG.MASC.ACC** eat.3.SG.MASC **DEF-pasta**
 “Louis made him eat the pasta.”

Looking first at the complement $v_{ag}P$ only, we can see that the principles of the disjunctive case theory will ensure that the complement theme is correctly marked accusative: there is a distinct nominal inside this $v_{ag}P$ which does not bear a lexically-assigned case. Thus, *il-ghagin*, is marked accusative. When we move to the $v_{caus}P$ headed by *gieghel*, the desired outcome is clear: we need the system to act as though there were only two nominals visible for the determination of case-assignment: *Louis* and the clitic *u*. If this is the case, then there will be two nominals present which do not bear lexically-assigned case, and we will correctly expect that the pronoun should surface in the accusative.

What kind of assumption could yield this result? The key observation is that it is the independently justified assumption of MULTIPLE SPELL-OUT (Chomsky, 2000; 2001b; 2008). In a system where computation proceeds in phases defined by at least v and C, the external argument of v_{ag} is, by hypothesis, not in the Spell-Out domain defined by v_{ag} (which is at most v_{ag} and its complement). If morphological case assignment proceeds cyclically but disjunctively, then the result is that the complement external argument “counts” as a distinct nominal for the assignment of accusative to *il-ghagin*, but does not itself receive nominative case in that complement since $[Spec, v_{ag}]$ is not in the Spell-Out do-

main of the v_{ag} P phase. [Spec, v_{ag}] is in the Spell-Out domain of the higher v_{caus} , however, meaning that the clitic in (49) should behave for determination of its own case as though it were in the higher v_{caus} P. This v_{caus} P contains a distinct nominal which does not bear lexically assigned case. This is exactly the desired result, and arriving at it required only the independently-needed idea of Multiple Spell-Out married with the disjunctive case theory advanced in the preceding paragraphs.

However, in setting up this unified analysis of case-marking in Maltese causatives, I have implicitly denied, as Marantz (1991) does explicitly, that morphological case has anything to do with nominal licensing inside the clause. It is thus an interesting question, within the present approach, to ask how I would propose to deal with other operations — such as passivization — which modulate a verb's argument structure with a demonstrable affect on nominal licensing possibilities. The penultimate section of this chapter will take up this question.

3.5 Passivization and Causation

The passive is an important additional empirical domain to consider insofar as it helps to confirm the predictions of the analysis of causatives, both in the domain of argument prominence inside v P and in the domain of case-marking. We shall see that Maltese only allows passives to appear in the complement of *giegħel*-causatives; it is not possible to apply a passive to the internal arguments of a morphological causative. This, in turn, will be shown to provide additional evidence for the analyses of these constructions proposed in §3.3

This section is organized much like the preceding one: First (§3.5.1), I briefly review some of the previous literature on the interaction of passives and causatives. After this (§§3.5.2–3.5.3), I document and analyze the facts from Maltese.

3.5.1 Passives in Causatives: Previous Observations

Outlining the conditions under which passive formation interacts with causative formation has been a central goal of researchers working on causative verb formation since the earliest generative studies.⁴⁹ The previous examinations have focused on whether or not a passive can appear independently of the appearance of a causative. One major point of variation in this dimension has been whether or not the structure which syntactically instantiates the caused event can be passivized independently of the higher causative. For many languages, this is impossible, as the pair from Chichewa in (50) shows:⁵⁰

- (50)a. Mphika u-na-umb-idw-a (ndi kalulu).
 cooking.pot SP-PAST-mold-PASS-ASP by hare
 “The waterpot was molded by the hair.” (Baker, 1988a:413)
- b. *Anyamata a-na-umb-idw-its-a mphika (ndi kalulu).
 boys SP-PAST-mold-PASS-CAUS-ASP cooking.pot by hare
 “The boys made the waterpot be molded by the hair.”
 (Baker, 1988a:413)

In (50b) we see it is impossible to passivize “under” the causative introduced by the morpheme *its*. Such an output is logically coherent, as the translation

49. The fact that passives are not allowed inside causative formation is thoroughly discussed as early as Aissen (1974; 1979).

50. See also the studies in Aissen (1974; 1979); Kayne (1975); Baker (1988a); and Folli & Harley (2007a).

implies, yet the result is simply not possible. From this Baker (1988a:413) concludes that a passive is not available in the complement structure which the morpheme *its* selects in Chichewa.

However, not all languages are like this, as Aissen (1974) and others have documented. In Japanese, such a causative can be formed of a passive verb, as in (51):

- (51) ?Boku wa wazato Mary o nagur-are-sase-te oita.
I TOP intentionally Mary ACC hit-PASS-CAUS-TNS still
“Intentionally I stood still, letting Mary be hit.”

Analogous facts in other languages such as Chamorro and Inuttut Eskimo are documented and discussed by Baker (1988a:414). It is therefore not the case that passives are universally barred from appearing beneath heads which introduce causative structures.

What can be concluded from this background discussion is that the theory of causative formation must be suitably flexible to allow for both kinds of languages and must, moreover, find a way to parameterize the differences between languages like Chichewa and Japanese. In the following section, I will show that Maltese morphological causatives pattern like Chichewa (50) and not Japanese. We will also see that both types of causative allow a higher passive on the causative head itself which must also be given an analysis for the picture to be complete.

3.5.2 Maltese Passives and Causatives

As we saw in §3.5.1, it is not always the case that passives are freely available in all combinations with causatives cross-linguistically, and it is therefore impor-

tant to understand how Maltese fits into this typology. Moreover, a clear set of empirical generalizations will pave the way for a discussion of how to integrate these passive facts into the theory of causatives developed so far in the chapter (a discussion which takes place in §3.5.3). Unlike the preceding sections, the discussion in this section will begin with the syntactic causative and then turn to the morphological causative. This is done for expository reasons: most of the interesting empirical results from causative-passive interactions in Maltese take place with the syntactic and not the morphological causative.

Before this is done, however, it will be useful to have some background on the formation of passive verbs in Maltese. There are three distinct ways of forming a passive in this language: (i) by morphological augmentation of the verbal root, a process which is accompanied by considerable allomorphic variation,⁵¹ (ii) by syntactic combination of the verb *kien*, “he was” with a past participle form of the verb and (iii) by syntactic combination of the verb *għie*, “he became” with a past participle form of the verb. Both kinds of passives in (ii-iii) involve number and gender agreement on the participle which matches the derived subject (much as in Romance). Examples of each of these passives appear in (52):

(52) Maltese Passive Formations:

- a. It-tabib **kien** **afdat** minn kullhadd.
DEF-doctor **was.3.SG.MASC trusted** from everybody
“The doctor was trusted by everybody.”

(Borg & Azzopardi-Alexander, 1997:214)

51. There are at least four allomorphs of the passive morpheme used in this third kind of passive: (i) a prefixal /t-/, (ii) an infixal /-t-/, (iii) prefixal /n-/ and (iv) the morpheme /nt-/, which can appear as a prefix or a discontinuous infix. See Chapter 4 for more discussion of the passive in Maltese.

- b. It-tabib **gie** **afdat** bil-kaž
 DEF-doctor **came.3.SG.MASC trusted** with.the-case
 “The doctor was entrusted with the case”

(Borg & Azzopardi-Alexander, 1997:214)

- c. Il-kappillan **in-ghata** l-ittra.
 DEF-parish.priest **PASS-gave** DEF-letter
 “The parish priest was given the letter.”

(Borg & Azzopardi-Alexander, 1997:215)

The stative passive with *kien* is restricted to verbal roots which express states or are otherwise not necessarily eventive. Given that this severely restricts the number of contexts in which its use is felicitous, I mostly set it aside in what follows, as is also done in Chapter 4. As far as I have been able to ascertain, the only difference between the two remaining passives has to do with whether a particular root can appear with a given passive; all of the passives behave identically with respect to any properties not mentioned above.⁵²

With this background in mind, we can now ask what the available combinations are of passives with syntactic causatives formed with *gieghel*. As the data in (53) show, it is possible to have a passive in the complement of *gieghel* in the syntactic causative:

52. Crucially, I have no evidence that the morphological passives behave differently than the passive with *gie*. It is possible that passives formed with the auxiliaries *kien* and *gie* are in fact adjectival passives — this is especially plausible given that the form of the verb following the auxiliary is a participle. However, all of the facts I document below concerning the availability of the passive are true of both the morphological and periphrastic passives. Since any of these arguments could be made with reference only to the morphological passive, I will abstract away from the possible adjectival nature of the periphrastic passives.

(53)a. ...dan kien il-fatt li ġiegħel il-bieba ta' wara
 ...this was DEF-fact COMP made.3.SG.MASC DEF-door of rear
tinfetaħ.

PASS.opened.3.SG.MASC

“...this is the fact that forced the rear door open.”

(Borg *et al.*, 2012:press_orizzont58344)

b. Louis ġiegħel lil Ċikku **jiġi**

Louis made.3.SG.MASC DOM Chikku **become.3.SG.MASC.IMPF**
introdott lil Mona.

introduced.MASC.SG to Mona

“Louis made Chikku be introduced to Mona.”

This is true whether or not the passive is formed morphologically with the prefix *t-* (53a) or periphrastically with the auxiliary verb *jiġi* (53b). In either case, the argument which becomes the derived object of *ġiegħel* is the argument which would normally become the derived subject of the complement verb were it to appear alone.⁵³

The causative predicate *ġiegħel* may itself be passivized using the auxiliary *ġie* and its participial form *imġiegħel*, the latter of which shows agreement like other participles. This is shown in the pair of sentences in (54):

53. For the vast majority of verbs in Maltese, this will be the accusative theme or patient argument. For a select group of verbs, however, this can also be a goal or a source argument which normally appears in the dative. See Comrie & Borg (1985) and Chapter 4 for more discussion of these verbs, which I will not treat in this chapter.

- (54)a. Louis ġieghel lit-tfal jisimghu il-mużika.
Louis made3.SG.MASC DOM.DEF-children listen.3.PL DEF-music
“Louis made the children listen to the music.”
- b. It-tfal ġew imġieghelin jisimghu il-mużika.
DEF-children **become.3.PL made.3.PL** listen.3.PL DEF-music
“The children were made to listen to the music.”

The passive in (54b) involves the raising of the external argument of the complement verb, *tfal*, to the derived subject position. Since this DP is plural, the participle *imġieghel* appears in its plural form, *imġieghelin*. However, it is not possible to raise any of the internal arguments of the complement predicate to the subject position; attempts to raise an object of the complement yield ungrammatical results, as shown in (55):

- (55) ***Il-mużika** ġiet imġieghela lit-tfal
DEF-music become.3.SG.FEM made.SG.FEM DOM.DEF-children
jisimghet.
listen.3.SG.FEM
“The music was made the children listen.”

If one wants to raise such an argument, the lower complement verb must also be passivized, as is characteristic of successive-cyclic A-movement derivations in other contexts. This is shown for both kinds of passives in (56):

- (56)a. Il-mużika ġiet imġieghela tinstema'
DEF-music **become.3.SG.FEM made.SG.FEM PASS.listen**
(mit-tfal).
(by.the-children).
“The music was made to be listened to by the children.”

b. Ċikku ġie imġieġhel ġie

Chikku **become.3.SG.MASC** **made.SG.MASC** **became.3.SG.MASC**
introdott lil Marija.

introduced.SG.MASC to Maria.

“Chikku was made to be introduced to Maria.”

Turning now to the morphological causative, we find a very different state of affairs. While it is always the case that a *ġieġhel* causative may appear with a passive in its complement, a passive “inside” a morphological causative is not available. In fact, it is not clear what such a verb would even look like — even for the morphological passive created by prefixation of *n-* or *t-*, this morpheme still attaches outside of the root augmentation which creates the morphological causative itself. Moreover, it is ungrammatical to attempt to mark the arguments of a verb containing both medial gemination and a passive morpheme as though the caused event had been passivized. This is shown for the root *bella'* in (57):

(57) *Louis t-bella' il-tuffieha **mit-tifel**.

Louis PASS-CAUS.swallow DEF-apple **by.the-boy**

“*Intended*: Louis made the apple be eaten by the boy.”

Normally, *by*-phrases of passives are marked with the preposition *minn* in Maltese, the last consonant of which undergoes assimilation for place with following coronals. In (57), marking the agent of the caused event, *it-tifel*, with this marker is ungrammatical, despite the presence of the passive morphology on the causative verb *bella'*. There is, therefore, no passive allowed inside of morphological causatives.

That being said, it is possible for a passive to be fed by morphological causativization. This is done by simply using the participial form of the mor-

phological causative with either passive auxiliary, *kien* or *gie*.⁵⁴ This is shown for the morphological causative *dawwar*, “he surrounded,” in (58):

(58) ...il-panew ma **jkun-x im-dawwar** b' = bordura jew faxxa
 ...DEF-panel NEG **is-NEG PRT-surrounded** by = border or band
 ikkulurita ...

colored

“...the panel is not surrounded by a colored border or band.”

(Borg *et al.*, 2012:law1766)

In contrast to passives inside morphological causatives, then, passives outside morphological causatives are perfectly well-formed in Maltese.

3.5.3 Understanding the Maltese Passive Patterns

The goal of this section is to show that once a proper understanding of the passive is added to the disjunctive theory of case assignment proposed in §3.4.3, the theoretical analysis of Maltese causatives advanced in §3.3 is sufficient to understand the patterns from passivization, as well. This is done in two parts: first, I discuss what a theory of passivization should look like in a disjunctive theory of case assignment where structural licensing of nominals is not indexed by morphological case. Then, I show how the structures proposed for Maltese

54. It is not clear to me at present what the status is of morphological passives outside morphological causatives. Some verbal roots allow for a passive of a morphological causative where the causee is the derived subject, such as *bela'*, “he swallowed,” whose morphological causative, *bella'*, has a passive *tbella'* with the meaning “he was made to swallow” but not “he was swallowed.” On the other hand, the root *lahaq*, “he was promoted” has a morphological causative, *lahhaq*, with a passive *tlahhaq* meaning “he was promoted.” However, transitivity of the underlying root does not determine which kind of passive is available, as the root *daħal*, “he entered, arrived” has a morphological causative *daħhal* with a passive *iddaħhal* with two meanings: (i) “he was entered” as well as (ii) “he was made to enter.” As far as I have been able to tell, there is no way to predict what the meaning of a passive of a morphological causative will be from the argument structure or root semantics of the verbal root involved. Because of the present empirical confusion, I must leave this matter for future research.

provide the proper framework for integrating the passive facts in the previous section.

As discussed in §3.4.3, the key insight in the disjunctive theory of case assignment is that morphological case is not related to the structural licensing of nominals in a clause. In the structural theory of case assignment via AGREE espoused by Chomsky (2000; 2001b; 2008), nominals are licensed in the clause via AGREE relationships which are established in the syntax. In the disjunctive theory, however, morphological case patterns are not directly related to AGREE, but are instead disjunctively computed over the available structural and inherent cases assigned in the syntax. We thus have a system where structural Cases are responsible for the licensing of nominals, but not the values of morphological case which those nominals ultimately bear.

The central idea required for understanding passivization in this framework is that a passive is characterized by the presence of a ν which does not introduce an external argument or participate in AGREE.⁵⁵ This lack of an external argument in turn helps to understand the adjunct status of the agent in a passive: it is not introduced by the ν which ultimately hosts the verb, and so if it is to appear it must have a head which selects it — in Maltese this is the preposition *minn*. However, this is only half the story with passives: the other characterizing property of passives is that one of the internal arguments appears in the structural position occupied by the subject. This can be effected via structural Case, even in a framework in which morphological case is not tied to AGREE. Following Baker *et al.* (1989) and much subsequent work, we can assume that the lack of an available AGREE relation from ν in passives means the highest

55. See Kratzer (1996) and Embick (1997) for proposals along this line, as well as Embick (2000) and Embick (2004) for applications.

internal argument must raise to T after participating in AGREE with that head and receiving structural Case.

Beginning with the syntactic causatives and their recursive ν P structure where a ν_{caus} selects for a polarity phrase or ν_{ag} P complement, we can exemplify this system. It follows immediately from this recursive ν P structure that there are two heads which could in principle be made passive, according to the theory of ν advanced by Kratzer (1996). If the lower ν_{ag} is made passive, the result is a passive in the complement of *gieghel*, yielding examples like (59) where an internal argument of the complement predicate raises to become the surface ECM argument of *gieghel*:

- (59) Louis gieghel lil Ćikku jigi
 Louis made.3.SG.MASC **DOM Chikku** become.3.SG.MASC.IMPF
 introdott lil Mona.
 introduced.MASC.SG to Mona
 “Louis made Chikku be introduced to Mona.”

On the other hand, if we were to instead passivize the higher ν_{caus} , there would be no external argument of *gieghel* itself, meaning that one of its internal arguments would be required to raise to satisfy [EPP]. The nominal which moves to satisfy this requirement is the highest nominal in the complement of *gieghel*, namely, the ECM object of *gieghel*. The result is examples such as (60):

- (60) **It-tfal** ġew imgieghelin jisimghu il-muzika.
DEF-children become.3.PL made.3.PL listen.3.PL DEF-music
 “The children were made to listen to the music.”

Furthermore, the unavailability of raising for internal arguments of the complement predicate (*cf.*, examples like (55), above) follows immediately from

these assumptions and any suitable theory of intervention and minimality in A-movement. When an attempt is made to move a lower internal argument instead of the external argument of the complement verb, this movement will be ill-formed owing to the presence of a higher available target.

Regardless of which passive option is taken, however, the effect of passivization on morphological case will be the same. In this approach the passive is defined in part by the fact that its ν licenses one fewer nominal than its active counterpart. Inserting this ν will therefore reduce the number of nominals present inside ν P because of the lack of a structural Case from ν , and this will in turn bleed the assignment of any dependent cases such as accusative. Because accusative is only assigned when another nominal not receiving lexical case appears inside ν P, the absence of an external argument will void the triggering condition for accusative assignment.

Turning now to the morphological causatives, we must first ask how it is that there can be no passives “inside” these morphological causatives. This fact follows from the structural analysis of these verbs in terms of a ν_{caus} selecting for an ApplP. In this structure there is only one ν which can be passivized, the ν which appears above ApplP. Thus, the earliest point at which passive could apply would be *after* the creation of the morphological causative with ApplP. We therefore derive the absence of inner passives in Maltese morphological causatives. Moreover, the passives of morphological causatives which do exist are analyzable exactly the same way as passives of morphologically simplex verbs: the ν_{caus} selecting for ApplP is replaced with a passive ν , yielding examples such as (61):

- (61) ...**il-panew** ma jkun-x im-dawwar b' = bordura jew faxxa
 ...**DEF-panel** NEG is-NEG PART-surrounded by = border or band
 ikkulurita ...
 colored
 “...the panel is not surrounded by a colored border or band.”

(Borg *et al.*, 2012:law1766)

At this point, we have seen that understanding the passive in structural terms, via the theory of ν proposed by Kratzer (1996), provides all the necessary theoretical assumptions needed to integrate passives with the theory of disjunctive case proposed in the preceding sections. Moreover, we have seen that the structures proposed for the various Maltese causatives provide exactly the correct number of ν 's to be passivized, yielding exactly the displayed range of passive-causative interactions in Maltese.

3.6 Conclusions

This chapter has had as its central goal an understanding of the available patterns of causative formation in Maltese. I have shown that the language allows two distinct kinds of causative constructions, a morphological causative and a syntactic causative formed by use of the causative verb *giegħel*. These two kinds of causatives were shown to correlate with other cross-linguistically observed bifurcations in causative formation which split the formations along regularity lines: the morphological causative is considerably less productive and regular than the syntactic formation.

The proposal I put forth was one in which what distinguishes the two kinds of causatives is the size and kind of the complement to the ν_{caus} head: whereas

the morphological causatives have an applicative phrase as a complement to v , the syntactic causatives have a v_{ag} with a ΣP complement that itself embeds a complete $v_{ag}P$. Moreover, we saw that one can understand the binding facts in the morphological causative cases via VP-movement of the kind proposed by authors such as Burzio (1986) and Baker (1988a). This is perhaps an unsurprising analysis in light of the observation that the VP-movement approach was first proposed for Italian, a language with which Maltese is known to have heavy contact.

However, assuming this theory for the syntactic causatives was also shown to have considerable consequences for other parts of the grammar. Specifically, we saw that the complement of *giegħel* may not contain any of the heads typically associated with the inflectional or complementizer layer of the clause such as T, Asp, or C, but nevertheless requires a verb which is fully inflected as it would be in a matrix finite clause. I analyzed this state of affairs by postulating that case and agreement are not inexorably linked in the grammar, but instead appear dissociated such that case correlates with finiteness, whereas agreement is driven by lexical properties of heads requiring the morphological expression of φ -features. One pressing issue for further research has to be how cross-linguistically valid such a separation is. A fruitful line of exploration would be micro-comparative: many if not all varieties of Arabic have a verb which is cognate with *giegħel* in Maltese (*dzaʕal*). My informal impression is that this verb will display a similar set of properties as *giegħel*, but this work remains to be done.

I then examined the patterns of case assignment in the two Maltese causatives and showed that in many respects Maltese patterns like the Romance languages when the morphological causatives are considered. These languages

have been known to mark the causee argument with morphological dative case since at least Aissen (1974), and Maltese patterns similarly in this regard. Moreover, Maltese also instantiates the Romance pattern of case alternation based on the transitivity of the underlying non-causative root. I leveraged this alternation to argue for a disjunctive, nonstructural theory of case-assignment like that proposed initially by Marantz (1991); again Maltese evokes thoughts of Italian, which has had a similar set of facts employed in an identical way by Folli & Harley (2007a). Here again a fruitful avenue for subsequent investigation would be a comparison of Maltese and varieties of contemporary Arabic. Those languages pattern heterogeneously — some (such as Moroccan) look like Maltese, whereas others (such as Modern Standard Arabic) instantiate the double-accusative pattern of causative case-marking. It is not clear at present how both patterns can be understood in a unified way.

Finally, I briefly examined the ways in which causatives interact with passivization in Maltese. I showed that once a proper characterization of passive formation in a disjunctive case theory is given, the available passivizations of syntactic causatives were exactly those predicted by the proposed analysis of these causatives. Moreover, this analysis of the passive in structural terms (via the presence or absence of passive ν) was shown to give a reasonable explanation for the absence of a lower passive with morphological causatives.

Thus far we have examined the major clausal properties of Maltese, including the formation of periphrastic tense and aspect constructions where multiple verbs have been inflected for agreement features. Moreover, after this chapter we also have an understanding of how additional nominals are added to the argument structures of causative verbs and what effects these additions have on the morphological expression of case. We therefore understand quite well how

complex verbs are formed and series of verbs linked syntactically. Throughout this discussion, however, I have systematically avoided the issue of how the complements of the verb participate in agreement and are marked for case when they are pronominal. This is exactly the question which is central to the chapters which follow.

Chapter 4

Object Clitics in Maltese

4.1 Introduction

In addition to the agreement morphology discussed in Chapter 2, most of the Semitic languages contain a set of markers which attach to the right of many different syntactic categories and which act as pronominals. Maltese is prototypically Semitic in this regard. These markers are arguably clitics, as will be shown in this chapter, and their inventory in Maltese is shown in Table 4.1.¹ In Maltese, they can function as possessor, direct object, or indirect object, like their counterparts in Modern Standard Arabic and many of the modern spoken dialects.²

1. Several morphological alternations occur with these clitics which will not be the focus here. They are, however, given in Table 4.1 for the sake of clarity, as the various allomorphs will be seen throughout the examples in this chapter. In general, the alternations depend on the preceding segment in the base to which they cliticize: consonant initial allomorphs are used after V-final bases and the vowel-initial alternates after C-final bases. When no alternate occurs for a given clitic and it follows a consonant-final base, then the vowel /i/ is epenthesized. For more on these alternations in Maltese, see Sutcliffe (1936:154–60); Aquilina (1959:288–94); Aquilina (1965/1995:99–104); Comrie & Borg (1985:125); and Borg & Azzopardi-Alexander (1997:274–5).

2. The Maltese references in the previous note have extensive documentation on these clitics. For Modern Standard Arabic, see Ryding (2005:301–14); Classical Arabic behaves somewhat

φ	POSS	DO	IO
1	i	ni	li
2	ek	(e)k	lek
3.m	u	h~u	lu
3.f	ha	ha	lha
1.pl	na	na	lna
2.pl	kom	kom	lkom
3.pl	hom	hom	lhom

Table 4.1: Clitics in Maltese

The purpose of this chapter is to investigate the syntax of the uses of these clitics in the verbal domain in Maltese, where they appear encliticized onto the verb *in lieu* of freestanding pronouns for direct and indirect objects.³ Specifically, in their object uses, these clitics must appear suffixed to the verb in clauses lacking auxiliaries and to the verb which appears last in monoclausal periphrastic constructions involving auxiliary *kien*.⁴ This can be seen in the following examples for both the direct object (1) and indirect object (2) forms of the clitics.⁵

differently from MSA in this regard: see (Wright, 1889a:100–4). For the dialects, the facts seem to vary from region to region. For Egyptian, see Woidich (2006:40–43, 257–8); for Gulf Arabic, Holes (1990:117, 120, 171, 219–20); for Iraqi, Erwin (2004:270–89); for Moroccan, Harrell (2004:ch.6); and for Syrian, Cowell (2005:438–40, 476–84).

3. Much of the material in this chapter has benefited from discussions and joint work with Nathan Arnett, particularly in regard to the morphophonological properties of the clitics in Table 4.1. I alone am responsible for the syntactic proposals and diachronic speculation (and any errors therein) which appear in this chapter, however.

4. See also Roberts & Shlonsky (1996) and Shlonsky (1997:ch.9) for similar observations in Hebrew and Arabic.

5. The clitic in (1) is feminine because its antecedent (several sentences prior and omitted here for space reasons) is the feminine DP *it-tazza tal-fidda*, “the silver cup.”

(1) Maltese Clitics on the Verb — Direct Object:

- a. ...forsì t-tabib kien **rebaħ = ha** f' = xi kompetizzjoni
...maybe DEF-doctor was **won = 3.FEM.SG** in = some competition
ta = t-tennis.
of = DEF-tennis
“...maybe the doctor won it in some tennis competition.”

(Borg *et al.*, 2011:lit105)

- b. * ...forsì t-tabib **kien = ha** rebaħ f' = xi kompetizzjoni ta = t-tennis.

(2) Maltese Clitics on the Verb — Indirect Object:

- a. L-enciklopedija ta' tnaħ il-volum li missier = ha
DEF-encyclopedia of twelve DEF-volumes COMP father = 3.SG.FEM
kien **bagħti = lha** għal għeluq snin = ha ...
was sent = 3.SG.FEM.DAT for closure years = 3.SG.FEM ...
“The encyclopedia of twelve volumes her father sent her for her
birthday.”

(Borg *et al.*, 2011:lit94)

- b. * ...li missier = ha **kien = ilha** bagħat għal għeluq snin = ha...

These object clitics in Maltese merit special attention for both empirical and theoretical reasons. On the empirical side, while every Semitic language described has some version of these markers, their distribution varies wildly from language to language. For instance, Borer (1984a) notes that there are no direct or indirect object clitics in Hebrew which are distinct from freestanding pronouns.⁶ Moreover, modern Arabic dialects have clitics which are obviously cognate with the markers in Table 4.1, but no more than one can appear on a

6. Though in the case of the direct object pronouns, there is a plausible historical source for the modern object pronouns which takes them to be derived from 'et, the accusative case marker, plus a pronominal suffix. See also Shlonsky (1997).

verb in most of the modern spoken varieties.⁷ However, more than one clitic can appear encliticized to the same verb in Maltese, as the following example shows for the verb *bagħat*, “he sent:”^{8,9}

- (3) Alla darba bagħat il-manna lill-Lhud u bagħat = **hie**
 God once sent DEF-manna to.the-Jews and sent = **3.SG.FEM.ACC**
 = **lhom** għal perijodu ...
 = **3.PL.DAT** for a short time ...
 “God once sent the manna to the Jews, and he sent it to them for a short time.” (Borg *et al.*, 2011:parl3353)

Thus there is considerable space for micro-comparative work in this area, once the extent of variation has been properly established. One of the principal goals of this chapter is to conduct the prerequisite descriptive work for Maltese.

On the theoretical side, many questions are raised by these clitics which relate to the way argument structure interacts with syntactic movement and agreement relations. As we will see immediately below (§4.2), these clitics are largely in complementary distribution with lexical DPs bearing the same argumental relation to the verb. Given this, one would like to understand how they are generated and placed in a way which would shed light on the absence of clitic doubling in the language. Additionally, the possibility of stacking more

7. The spoken varieties of North Africa and the Maghreb constitute exceptions to this generalization which will be briefly discussed below.

8. It was possible to have more than one clitic appear on a verb in Classical Arabic, the language of the Qur’an and poetry of the classical period (first discussed in generative linguistics by Fassi Fehri, 1988; 1993, though it is discussed somewhat famously by Siibawayhi, 1881). I will discuss this similarity in §4.3.3, below and Chapter 5. The phenomenon is found in other languages in a broader Afroasiatic context such as Akkadian and Ge’ez, though I will not discuss these facts here. See Gensler (1998; 2000) for a comparative historical discussion of double object marking in Afroasiatic.

9. The vowel in the third person feminine accusative clitic is augmented from *a* to *ie* in (1) as the result of a regular morphological process which lengthens and augments vowels in the syllable immediately preceding a clitic.

than one clitic on a single verb raises the question of how both clitics are integrated with the verb. These are old questions in the generative literature, to be sure, but they have received little attention in Maltese (with the notable exceptions of Fabri, 1993 and Camilleri, 2011).

In this chapter I provide a morphosyntactic analysis of these clitics which takes them to be placed syntactically onto the verb via head movement of a simultaneously minimal and maximal determiner element from an argument position to the verb.¹⁰ Along the way, I will show that evidence from passivization, binding and clitic combinations suggests that ditransitive verbs in Maltese are not a homogeneous class, but instead divide into two groups: (i) those which allow a double object variant involving a high applicative head (Marantz, 1993; McGinnis, 1998; Pykkänen, 2008) and movement of a projection including the verb (exactly like that posited for morphological causatives in Chapter 3) and a low accusative argument and (ii) those which have only a single prepositional goal construction. An important corollary of this discussion will be that some clitics are actually pronominal elements licensed by agreement with a head different from the head which licenses accusative clitics, entailing that cliticization to a verb is possible without all attached clitics agreeing with the same head. This is a theoretically interesting result, as it raises questions concerning the extent to which cliticization and agreement are underwritten by the same theoretical relationship. At the same time, Maltese will be shown to have a series of accusative clitics which *do* implicate agreement and case-marking in familiar ways.

10. Similar proposals have been advanced before for other languages, including for Arabic by Broselow (1976) and Fassi Fehri (1993:ch.3), though these authors were working under different theoretical assumptions and therefore do not describe their proposals as involving head movement.

The resulting picture is one in which Maltese provides evidence both for and against modern theories of clitics where AGREE with an inflectional-feature bearing functional head is a necessary precondition for cliticization.¹¹ For the accusative clitic series, we will see evidence that this is the correct idea, as passives do not allow accusative clitics, a fact I will suggest is related to the lack of available AGREE relation originating from a ν head. The dative series, however, provides no such evidence, and I will suggest this is because AGREE with ν is not a necessary precondition for dative cliticization.

Along the way, I will also engage several important questions having to do with the argument structure of ditransitive verbs in Maltese, as these verbs allow cliticization of both internal arguments. We shall see that previous work on Maltese has uncovered an asymmetry in the way the language treats internal arguments of verbs with respect to both passivization and cliticization which is supported by a set of observations about binding. The double object construction in Maltese is severely limited in productivity, involving only cases in which the goal is a pronoun, or the goal is to become the subject of a passive. In all other cases, double objects are ungrammatical in Maltese — the only available case patterns involve a prepositional goal or source. As a preliminary example, while (4a) is ungrammatical with or without the preposition *lil*, a single accusative clitic may be interpreted as a goal, as in (4b), and goal passives are possible with the same class of verbs which allow (4b), as in (4c):

(4)a. *Ir-raġel ta (lit)-tifla l-ballun.

DEF-man gave to.the-girl DEF-ball

“The man gave the ball to the girl.”

11. For proposals of this sort, see Marantz (1988); Anagnostopoulou (2003); Roberts (2010); Nevins (2011); Kramer (2011; To Appear); and Harizanov (To Appear).

- b. Marija ta-t = **u** / urie-t
 Maria gave-3.SG.FEM = **3.SG.MASC.ACC** / showed-3.SG.FEM
 = **u** l-ittra.
 = **3.SG.MASC/ACC** DEF-letter
 “Maria gave/showed him the letter.” (Comrie & Borg, 1985:117)
- c. **Pawlu** n-ghata / nt-wera l-ittra.
Paul PASS-gave / PASS-showed DEF-letter
 “Paul was given/shown the letter.” (Comrie & Borg, 1985:118)

I will contrast the behavior of Maltese in this regard with Classical and Modern Standard Arabic, in both of which the double object construction is much more productive. I will suggest that the Maltese facts can be understood as an interim stage in the historical loss of these double object verbs in favor of prepositional datives. This, in turn, explains how the resulting system could be so idiosyncratic in the use of the double object syntax. Given that the modern system in Maltese is learned independently of knowledge of Classical and Modern Standard Arabic, I suggest that the relatively few verbs which occur in double object contexts are simply memorized, and provide a theoretical approach based on the notion of categorical selection between functional heads in the syntactic domain responsible for argument structure in an analysis that will recall the VP-movement analysis of causatives put forth for Italian by Burzio (1986) and for other languages by Baker (1988a). The upshot of this move is that it preserves the uniform syntactic derivation of passive clauses, and allows direct encoding of a lexically idiosyncratic process in Maltese within a framework which eschews lexicalist treatments of passivization and clitic placement. As we will also see, this analysis will also allow for an understanding of asymmetries in binding between the two classes of verbs.

4.1.1 Roadmap

This chapter is organized as follows: in §4.2 I briefly discuss the proper characterization of the relevant pronominals in Table 4.1 as clitics which must be placed syntactically. Furthermore, I argue that there is no clitic doubling in Maltese, insofar as putative instances of clitic-doubling can be analyzed as dislocation structures; that is, Maltese has what Cinque (1990) calls Clitic Dislocation of the kind found in Romance languages, where an adjunct double on the right edge of the clause is related to a clitic in argument position.

In §4.3 I discuss evidence from ditransitive verbs which suggests that Maltese has available both prepositional goal construction and double object constructions, though both are not available for all verbs.¹² These two constructions feed cliticization in different ways leading to the observation that some cliticizations of thematic goals proceed via a double object syntax seen only with pronominals (essentially a version of what Kayne, 1975 and Demonte, 1995 propose for French and Spanish, respectively, but with a much more limited lexical scope). Furthermore, we will see in this section that the Maltese passive-clitic interactions lead us to posit a particular understanding of argument structure in ditransitives wherein most verbs appear only with prepositional goal complements while others force movement of a projection housing both the verb and its direct object. Finally, §4.4 concludes the chapter and suggests avenues for subsequent research.

12. I use the terms “prepositional dative” and “double object” to describe the Arabic facts in line with the terminology of studies of ditransitive verbs within generative grammar. For a Arabic-internal justification of these labels, see Soltan (2009).

4.2 Ontological Considerations

In this section I discuss the distribution of the clitics shown in Table 4.1 under the direct and indirect object columns and suggest that they are clitics and not agreement affixes. Specifically, I will argue that they pattern exactly like pronominals which simply happen to require attachment to the main verb.

That these markers are not freestanding words is very easy to demonstrate; for one, they cannot be conjoined:

- (5)a. *Ġoġġ ra =h u =kom fil-triq.
George saw =3.SG.MASC.ACC and =2.PL.ACC in.the-street
“George saw him and y’all in the street.”
- b. *Ġoġġ kiteb l-ittri =lha u =li.
George wrote DEF-letters =3.SG.FEM.DAT and =1.SG.ACC
“George wrote letters to her and me”

Moreover, these clitics are the only pronominals available for internal objects of the verb — there is a so-called “strong form” pronominal series, but these forms are comprised of the differential object marker for accusatives, *lil-*, and the pronominal enclitic appropriate for the φ -features of the referent.¹³

13. For details on the strong pronominal series, see the discussion and data in Sutcliffe (1936:170–1); Aquilina (1959:334); Aquilina (1965/1995:100–1); Fabri (1993:122–3); and Borg & Azzopardi-Alexander (1997:195–6). The pronominal systems for direct and indirect objects are similarly composed of a functional or semantically empty host plus a pronominal enclitic in many other Semitic languages, including: Modern Hebrew (see Borer, 1984a and Shlonsky, 1997); Modern Standard Arabic (Ryding, 2005:308–9), Moroccan, (Harrell, 2004:ch.6); and Syrian, Cowell (2005:438–40, 476–84), to name just a few. I will not discuss the differential object marker required for animate accusatives in Maltese, but will simply gloss it as DOM where appropriate. The reader is advised that the form of the differential object marker is homophonous with the preposition *lil*, “to/for” unless it is phonologically reduced to *l*, an option not available for *lil*. For excellent discussion of object marking in Maltese, see Borg (1981); Comrie & Borg (1985); and Borg & Azzopardi-Alexander (1997). I take up the question of the derivation of the strong-form pronominals in Chapter 5 in the context of Person Case Constraint avoidance strategies.

Arguably, the differential object marker forms a dummy prosodic host for the clitics, which are not allowed to appear as freestanding words.¹⁴ These pronouns are used in contrastive focus contexts and whenever independent constraints prohibit cliticization to the verb, as (6a–b) show for contrastive focus contexts, (6c) for a Person-Case Constraint violating configuration, (6d) for an object fronted around the verb, and (6e) for conjunctions of a clitic and a lexical noun phrase (*cf.*, McCloskey & Hale, 1984:501 on Irish and Fassi Fehri, 1993:104 on Arabic, both of which discuss similar data):

- (6)a. Raj-t **LIL = HA.**
 saw-1.SG DOM = **3.SG.FEM.ACC**
 “I saw [her]_{FOC} (and not anybody else).”
- b. Ir-riġal **lil = hom** tajtu.
 DEF-present **to = 3.PL** gave.1.SG
 “I gave the present [to them]_{FOC}.” (Borg & Azzopardi-Alexander, 1997:196)
- c. Xandru baġħat = kom **lil = ha.**
 Xander sent = 2.PL.ACC **to = 3.FEM.SG**
 “Xander sent y’all to her.”
- d. “Detentur ta’ liċenża” t-fisser persuna li **lil = ha**
 Holder of license 3.SG.FEM-means person COMP **to = her**
 toħorg = ilha liċenża.
 issued = 3.SG.FEM license
 “‘Licensee’ [in this context] means a person who, to her, a license was
 issued.” (Borg *et al.*, 2011:law914)

14. See Fassi Fehri, 1993 and Teeple, 2011 for similar accounts of the Arabic accusative marker *?iyya-* when it takes a clitic.

e. Jien taj-t il-ktieb lil=**ha** u 'l Marija.

I gave-1.SG DEF-book **to=her** and DAT Mary

“I gave the book to her and Mary.” (Sadler, 2012a:1)

These markers for direct and indirect objects simply never appear on their own without an overt host.¹⁵ They are thus obligatorily bound forms. However, two questions remain about their bound status: (i) are they agreement affixes or clitics? and (ii) what is the syntactic status of the host marker: is it a preposition or a distinct category responsible for hosting clitics which remain unattached to the verb?

The first indication that they have a status different than that expected for agreement affixes comes from the observation that, when they double an overt lexical DP, they introduce an element of focus which is not present in simple declarative sentences containing these same pronouns but no overt DP. If one attempts to double without this added meaning, ungrammaticality results. This is shown in (7):¹⁶

(7) Maltese Doubling (is Generally not Possible):

a. (Jien) rajt(* = **ha**) Ċettina.

(I) see.PERF.1.SG(* = **3.SG.FEM.ACC**) Cettina

“I saw Cettina.”

15. In predicate possessives, they appear attached to the genitive preposition *ta'*, which surfaces as *tiegħ-* in examples such as (i):

(i) Dak il-kitieb (huwa) **tiegħ = ek.**
 that DEF-book is of = **2.SG**
 “That book is yours.”

16. Teeple (2011:143–4) gives a similar paradigm for the object pronominal clitics in Standard Arabic which was the basis for constructing the examples in (7).

- b. (Jien) rajt = **ha** (***Ċettina**).
 (I) see.PERF.1.SG = **3.SG.FEM.ACC** (***Ċettina**)
 “I saw her.”
- c. **Ċettina**, (jien) rajt*(= **ha**).
Ċettina (I) see.PERF.1.SG*(= **3.SG.FEM.ACC**)
 “Ċettina, I saw her.”

It is hard to imagine how focus semantics and prosody can be triggered or required by agreement alone, given that dislocation of the double and prosodic de-emphasis of the following material (indicated by the comma in (7c)) occurs in examples where both the clitic and its double are present. However, as §4.2.2, below, will show, overt dislocation is not a necessary condition for doubling in Maltese, and so the data in (7) can only be taken as suggestive.

Taking seriously the notion that these markers are clitics, §4.2.1 discusses their morphological distribution and argues that when they appear without a double in Maltese, they must be placed syntactically (and not, say, in the phonology). §4.2.2 then presents some evidence that overtly doubled examples such as (7) are in fact dislocated structures with the double in adjunct position, suggesting that these examples are instances of either left- or right-dislocation with a resumptive clitic (in a sense of ‘dislocation’ to be defined in that section).

4.2.1 Morphological Considerations

The morphophonological character of these pronominals has been the subject of some debate in the phonological literature ever since the seminal study by Brame (1974), who noted that there are phonological reasons to believe that the markers in Table 4.1 are attached to the verb in a later cycle than the subject agreement markers, given that the latter induce syncope of unstressed vowels

in the stem whereas the former do not. The interpretation of this differential behavior with respect to syncope continues to be that the object markers do not attach to the verb in the same derivational step as the subject agreement markers, whether the implementation is in OPTIMAL INTERLEAVING (Wolf, 2011) or STRATAL OPTIMALITY THEORY (Kiparsky, 2012).¹⁷ Here I do not mean to suggest that cyclic effects (such as differential behavior with respect to syncope processes) necessarily imply isomorphic cyclic effects in syntax, but simply note that there is phonological evidence to suggest that these markers do not pattern like agreement morphology language-internally.

Many proposals about how to distinguish clitics from inflectional affixes employ arguments which originate in Zwicky & Pullum (1983), which establishes several diagnostics of the clitic/affix divide via a study of the English negative marker *n't*. These tests have been applied to Maltese by Camilleri (2011) and Arnett (2012), who both show that where a test from Zwicky & Pullum (1983) is applicable to Maltese, the object markers pattern as clitics distinct from the subject markers, which pattern as agreement. Thus these markers do not trigger irregular allomorphy of the verbal root (which the subject agreement markers do), display low selectivity with respect to their hosts, show no arbitrary paradigmatic gaps, and have transparent semantics.¹⁸

Additionally, two of the diagnostics give results which will be relevant to later discussion in this chapter. For one, these markers can stack in the order

17. These cyclic stories, while quite elegant, face some difficulty dealing with one observation, due to Odden (1993), that the syncope triggered by subject affixes is also triggered by the object markers when the latter attach to a *vowel*-final stem. This is at odds with the generalization due to Brame (1974), who only examined consonant-final roots. I will not attempt to resolve this contradiction here; for discussion, see the work of Odden (1993); Wolf (2011); and Kiparsky (2012).

18. The word “arbitrary” is crucial in the case of paradigmatic gaps, given that we shall see in Chapter 5, there are systematic gaps in Maltese clitic clusters owing to the activity of the Person Case Constraint (Bonet, 1991).

ACC — DAT, meaning that if clitic status is ceded to the accusative series, it must also be ceded to the dative series, assuming that agreement morphology does not attach outside clitics:¹⁹

(8) Maltese Double Stacking (ACC — DAT):

- a. Ta = **hu** = **li**.
 give.PERF = 3.SG.MASC.ACC = 1.SG.DAT
 “He gave it to me.”
- b. *Ta = **li** = **hu**.
- c. ***Hu** = ta = **li**.
- d. ***Hu** = **li** = ta.
- e. ***Li** = **hu** = ta.
- f. ***Li** = ta = **hu**.

The more interesting behavior with respect to the Zwicky & Pullum (1983) criteria is the fact that the markers in question appear to move with the verb when the latter undergoes head movement in the syntax. Thus, the negative marker *ma...x* appears *outside* these clitics when they appear on the verb. More broadly, this is a property of many (if not all) modern spoken Arabic languages, as the (b) example here demonstrates for Moroccan Arabic:

19. It is worth noting that stacking of the kind seen in (8) is quite uncommon in Arabic and nonexistent in other Semitic languages such as Hebrew. Classical Arabic allowed stacking (Siibawayhi, 1881; Fassi Fehri, 1993), though the validity of that data has been called into question by Shlonsky (1997). However, stacking is clearly grammatical in Maltese (shown here) and Moroccan (Harrell, 2004:139), meaning that one cannot generalize that stacking is forbidden with Semitic clitics (*pace* Roberts & Shlonsky, 1996; Shlonsky, 1997). Moreover, Walkow (2012a;c; To Appear) shows quite convincingly that double stacking of this kind enjoyed at least limited productivity in Classical Arabic. It is likely that clitic stacking is a property that should be reconstructed for earlier stages of the language family, as it is possible in Berber, Ge'ez, and Akkadian — see Gensler (1998; 2000).

- (9)a. Ma ftaħti = **lhie** = x.
 NEG opened.1.SG = **3.SG.FEM.DAT** = NEG
 “I did not open for her” (Maltese; Borg & Azzopardi-Alexander, 1997:363)
- b. Ma ktəb = **hom** = **li** = ∫.
 NEG wrote.3.SG.MASC = **3.PL.ACC** = **1.SG.DAT** = NEG
 “He didn’t write them to us/for us.” (Moroccan; Harrell, 2004:152)

Given that in Chapter 2 I showed that negation in Maltese, like in Arabic, is syntactically situated higher than Aspect and the verb phrase, these data suggest that the cliticization takes place, not in the morphophonology, but in the *syntax*, since it feeds head movement.²⁰

The Maltese markers satisfy several of the morphophonological diagnostics indicative of clitic-hood. Thus, on morphological grounds we must conclude that the object markers in Maltese are clitics. On the other hand, these markers cannot be mere phonological clitics as this would leave us with little understanding of how they come to be situated inside the suffixal portion of the negative circumfix in (9). If, instead, these clitics are placed syntactically, then we can understand data such as (9) as syntactic placement of the clitic followed by raising of the verb into a position where negation is available as a circumfix.

This point is further reinforced by the fact that the clitics remain attached to the verb despite the latter’s movement around verb-phrase peripheral adjuncts, as in (10):

20. For this argument to go through, it must be the case that head movement is an operation which applies in the narrow syntax and not at PF (*contra, e.g.*, Boeckx & Stjepanovic, 2001). For some support of this characterization of head movement, see Roberts (2010:ch.1) and Hartman (2011). Interestingly, much of the proposed theory in this chapter is unworkable in a framework which takes head movement to apply at PF, as will become clear in §4.3, below.

forms tend to lack agreement morphology.²¹ Bundling agreement with other syntactic heads in this way predicts that agreement markers can be allomorphically sensitive to the specific value of tense (or aspect) seen on the verb to which the marker attaches. Clitics, on the other hand, are not generated with feature sets bundled in this way, and are therefore necessarily tense-invariant in a way which agreement morphology cannot be.

As Nevins (2011:957–8) notes, this test only works in one direction: if one sees tense variance, then one can be sure the marker in question is an affix. Lack of tense variance does not diagnose clitic-hood, however, as nothing in the morphology of a language *forces* exponents to vary according to other features marked on the host. Using this test, one must conclude that the subject markers in Maltese are in fact affixes, not clitics, as they vary allomorphically for tense/aspect. This is shown in Table 4.2 (see also Chapter 2).²² In Maltese, the exponent of a particular set of φ -features changes with the tense/aspect of the verb, which can be either perfect or imperfect.

On the other hand, the markers for direct and indirect objects in Semitic do not vary for tense or aspect at all. This can be seen in Table 4.1, which gave the relevant markers for both tenses and aspects in Maltese; to the best of my knowledge, analogous facts exist in every currently spoken Arabic variety. From this we may not conclude that the object markers are clitics, but instead only note that these facts are consistent with a clitic analysis. However, we *can* conclude that on this dimension subject and object marking pattern differently

21. Though Chapter 3 calls this generalization into question by demonstrating that non-finite semantics does not correlate with lack of agreement in Maltese. Nevertheless, I include this criterion for completeness.

22. The vowels in Maltese subject agreement markers undergo allomorphy wherein the first stem vowel determines the vowel in the prefix. I abstract away from this in Table 4.2 by denoting these vowels as *V*.

φ	PERF	IMPF
1.SG	-t	nV-
2.SG	-t	tV-
3.SG.MASC	-∅	jV-
3.SG.FEM	-et	tV-
1.PL	-na	nV-...-u
2.PL	-tu	tV-...-u
3.PL	-u	jV-...-u

Table 4.2: Agreement Affixes in Maltese (Repeated)

from one another in both Arabic and Maltese. This in turn implies an analysis which does not treat the two markers as identically derived. In what follows, I will treat the object markers as syntactic objects which can saturate argument positions, whereas the subject agreement markers were analyzed in Chapter 2 as exponents of the syntactic heads associated with tense and aspect.

More recently, Preminger (2009) has suggested yet another diagnostic for clitic-hood versus agreement based on a theoretical lemma derived from the definitions of AGREE in the framework of Chomsky (2001b; 2008) and the clitic doubling discussion of Anagnostopoulou (2003) and others. The diagnostic is given in (12):

(12) PREMINGER'S DIAGNOSTIC (Preminger, 2009:623):

Given a scenario where the relation \mathcal{R} between an agreement morpheme \mathcal{M} and the corresponding full noun phrase \mathcal{N} is broken — but the result is still a grammatical utterance — the proposed diagnostic supplies a conclusion about \mathcal{R} as follows:

- a. \mathcal{M} shows up with default φ -features (rather than the features of \mathcal{N})
 $\rightarrow \mathcal{R}$ is AGREE.
- b. \mathcal{M} disappears entirely $\rightarrow \mathcal{R}$ is clitic doubling.

This diagnostic proceeds from the theoretical claim that AGREE is a component operation of syntactic computation which cannot be dispensed with without default morphology signifying that AGREE has failed.²³ Thus to inspect the theoretical status of some relation \mathcal{R} responsible for placing an agreement marker on a verb, one must examine cases where the relation is disrupted to see what morphology results on the verb: if \mathcal{R} is agreement, then default agreement is expected, whereas the absence of any marking is expected if \mathcal{R} is clitic doubling.

Preminger’s Diagnostic itself cannot be applied in Maltese if I am correct in the assertion that there is no clitic doubling in the language distinct from dislocation structures (see §4.2.2). This is because there could be no agreement morpheme \mathcal{M} distinct from the noun phrase \mathcal{N} — they are one and the same. However, the logic inherent in Preminger’s Diagnostic can be used to argue that AGREE with a null pronominal is not the relation responsible for the generation of these clitics in Maltese.

To see this, one can first observe that the verb *irrid*, “want” takes a complement clause which may or may not be preceded by the clausal complementizer *li*, as shown in (13) from Haspelmath & Caruana (2000):

- (13) *Irrid* **(li)** *t-hobb* *l-għalliem* *il-ġdid*.
 want.1.SG **COMP** 2.SG-love DEF-teacher DEF-new
 “(lit.) I want that you love the new teacher.”

(Haspelmath & Caruana, 2000:250)

If the complementizer is absent and the subject of the matrix and embedded clauses are not identical, another alternative becomes available where

23. Indeed, this is exactly the larger conclusion about AGREE which is argued for in Preminger (2011).

the thematic subject of the embedded clause surfaces as an object clitic on the matrix verb *irrid* (see Sutcliffe, 1936:166; Aquilina, 1959:330; Aquilina, 1965/1995:220; and Borg & Azzopardi-Alexander, 1997:32. This example is based upon the discussion in Haspelmath & Caruana, 2000):²⁴

- (14) Irrid =ek (*li) t-ħobb l-ġhalliem il-ġdid.
 want.1.SG = 2.SG COMP 2.SG-love DEF-teacher DEF-new
 “I want you to love the new teacher.”

(based upon Haspelmath & Caruana, 2000:(6b))

There are, in principle, three ways to understand the complementary distribution of the complementizer *li* and object pronominals on the matrix verb corresponding to embedded arguments: (i) it is derived by movement of a pronominal which is null and *in situ* when *li* appears, (ii) it is clitic doubling of a pronominal which fails to obtain in the presence of *li* and (iii) it reflects agreement with a null pronominal in the embedded clause which cannot operate over an overt complementizer. Preminger’s diagnostic cannot help decide between (i) and (ii) in this case, but it can rule out (iii) when one observes that examples such as (15) are ungrammatical:

- (15) *Irrid =u li t-ħobb l-ġhalliem il-ġdid.
 want.1.SG = 3.SG.MASC COMP 2.SG-love DEF-teacher DEF-new
 “(lit.) I want that you love the teacher.”

(based upon Haspelmath & Caruana, 2000:(6b))

(iii) shows that a morphological default is not available for these examples when the locality barrier introduced by *li* is present. Maltese certainly does

24. A similar argument can be constructed using the syntactic causatives with *giegħel* discussed in Chapter 3.

allow for morphological defaults elsewhere, such as the subject experiencer verbs discussed by Haspelmath & Caruana (2000), which surface with third singular masculine subject morphology. However, this rescue strategy is not available in (15). It follows, then, that Maltese object clitics do not conform to the conception of agreement inherent in (12). Here, unfortunately, the evidence does not seem to allow distinguishing (i) from (ii), but note that on either interpretation, the object agreement morphemes in Maltese are clitics.

4.2.2 Doubling Considerations

Within the literature on clitics in generative grammar one can find repeated claims that not all instances where a clitic co-occurs in a clause with a DP bearing the same thematic relation to the verb have the same syntactic structure. In addition to true clitic doubling of the kind found in, e.g., Spanish and Romanian, several authors have identified constructions which have come to be known as CLITIC LEFT DISLOCATION and RIGHT DISLOCATION, where the clitic + double relation different from standard cases of clitic doubling.²⁵

In what follows, I will show that several of the diagnostics which distinguish these dislocation structures from true clitic doubling indicate that the object agreement morphemes in Maltese are in a clitic dislocation relation with their double. In doing so I will not posit a particular analysis, however (for various

25. For an overview and discussion of the differences between clitic doubling and dislocation, see Anagnostopoulou (2005a). Note that not all authors draw a principled distinction between what I am calling dislocation structures here and clitic doubling. For instance, Kayne (1994) and Sportiche (1996) suggest that left dislocation examples involve an underlying clitic-doubling structure where the double fronts. Similarly, Aoun (1981; 1999) and Philippaki-Warbuton (1987), among others, draw parallels between right dislocation and clitic-doubling. I will not attempt to resolve this debate here. Furthermore, I do not draw a distinction here between clitic dislocation, hanging topic/contrastive left dislocation, or broad subjects (Alexopoulou *et al.*, 2004, though see also Landau, 2009; 2011), as the distinction among different kinds of dislocations is not directly relevant to the claim that these markers are not agreement affixes or doubled clitics.

options, see Cinque, 1990; the papers in Anagnostopoulou *et al.*, 1997; and references therein). §4.2.2.1 demonstrates the viability of the dislocation account for instances where the DP double appears to the left of its usual linear position and §4.2.2.2 does the same for instances where the double appears to the right.

4.2.2.1 Left Dislocations

When a clitic appears alongside a lexical DP double which appears on the left edge of the clause in Maltese, there are several reasons to believe that one is looking at what Cinque (1990) calls CLITIC LEFT DISLOCATION (CLLD, henceforth), a construction distinct from clitic doubling. Firstly, Cinque (1990) notes that languages with true clitic doubling such as Romanian (Steriade, 1980; Dobrovie-Sorin, 1987; 1990), Hebrew (Borer, 1984a), and Spanish (Jaeggli, 1982) typically allow for doubling of moved *wh*-elements in constituent questions, but this option is not available for CLLD in Italian; nor is overt doubling of the accusative argument of a simple declarative:

(16) CLLD Cannot Apply to *Wh*-Words:

a. *(A) **chi lo** conoscete?

to who him do you know

“Do you know him?”

(Cinque, 1990:60)

b. ***Lo** conosciamo (a) **Gianni**.

him we.know **to Gianni**

“We know Gianni.”

(Cinque, 1990:60)

We have already seen that doubling of accusatives (and datives) is impossible in (7). This is also true of *wh*-questions — the clitic may not appear, suggesting that clitic doubling is not at play in Maltese, as shown in (17–18).²⁶

(17) No Clitics for Constituent Questions in Maltese, I:

- a. X'_i-xtara (* = h_i) Ġanni l-Ħadd?
 What-bought (* = 3.SG.MASC.ACC) Ġwanni DEF-Sunday
 “What did Gianni buy (on) Sunday?”

(18) No Clitics for Constituent Questions in Maltese, II:

- a. Ġwanni baghat il-ittra lit-tifla.
 Gianni sent DEF-letter to.the-girl
 “Gianni sent the letter to the girl.”
- b. Lil min_i baghat (* = ilh_i) l-ittra?
 To who sent (* = 3.SG.FEM.ACC) DEF-letter
 “To whom did Gianni send the letter?”

These facts make it difficult to treat the Maltese object markers as anything other than clitics in CLLD structures.²⁷ We thus have reason to treat instances where a clitic has a DP co-referent with it on the left edge of the clause as CLLD.

26. Here it is extremely important that no obvious complementizer be present. This is because Shlonsky (2002) shows quite convincingly that root *wh*-structures in spoken Arabic varieties, such as Palestinian, with an overt complementizer are cleft structures. Wahba (1984) gives similar data for Egyptian, though she does not analyze these as clefts. With an overt complementizer, Maltese examples involving *a priori* doubling could be analyzed as clefts, though I will not undertake such an analysis here.

27. I have not discussed here two other salient properties of CLLD in languages known to display the construction: (i) sensitivity to some syntactic islands (Cinque, 1990:59; Anagnostopoulou, 2005a:524) and (ii) the availability of non-DP CLLD'ed material (Cinque, 1990:57–8). Data testing (i) are currently being collected. The status of (ii) in Maltese, however, is much harder to ascertain as there are no clitics available to resume non-DP constituents in the language; thus the examples above underdetermine the analytical choice between CLLD and focus/topic movement to the left periphery leaving a gap. Unfortunately, these matters must be left for future work at present.

4.2.2.2 Right Dislocations

Many languages with clitics allow for a clitic to appear with a right-dislocated doubling phrase, and though they are sometimes analyzed similarly to clitic doubling, differences can be adduced between the two constructions (see the discussion and references in Anagnostopoulou, 2005a:525–30). An example of right dislocation of a direct object with a clitic from French appears in (19):

(19) Je l' = ai vu, l' = assassin.

I him = have seen DEF = murderer

“I saw him, the murderer.”

(Anagnostopoulou, 2005a:525)

Such right dislocation examples often have an audible intonational break or pause between the rest of the clause and the right dislocated material (signified by the comma in (19)), but such a pause is *not* required for a DP doubling a clitic to be demonstrably right-dislocated (Zubizarreta, 1998; Anagnostopoulou, 2005a). However, one can still distinguish between right-dislocated and *in situ* arguments insofar as the former optionally have the intonation and obligatorily have the distribution of adjuncts, whereas the clitic doubling structures display evidence for the DP itself being in argument position (Anagnostopoulou, 2005b:529).

Reasoning along a similar line, one can find evidence that Maltese examples with doubled clitics where the double appears in a position other than one plausibly identified with left-dislocation, above, are in fact instances of right-dislocation. To begin, we can first note that examples like this can be found

with direct object clitics, indirect object clitics, or both. The following is an example of both such clitic uses from the work of Fabri (1993):²⁸

- (20)a. Jien n-ibgħat = **hie** = **lu** l-ittra lil
 I 1.SG-sent = **3.SG.FEM.ACC** = **3.SG.MASC.DAT** DEF-letter to
 Alan.
 Alan.
 “To Alan, the letter, I sent it to him.” (Fabri, 1993:93)

Moreover, as Fabri (1993:140–2) notes, word order in simple declaratives without object cliticization is fairly fixed. Specifically, only the order SVO is possible with neutral prosody, as the examples in (21) show:

(21) Word Order Restrictions in Maltese — No Object Clitic

- a. Norma feth-et il-bieb.
 Norma opened-3.SG.FEM DEF-door
 “Norma opened the door.” (Fabri, 1993:141)
- b. *Fethet Norma l-bieb. *VSO
- c. *Norma l-bieb fethet. *SOV
- d. *Il-bieb fethet Norma. *OVS
- e. *Il-bieb Norma fethet. *OSV
- f. *Fethet il-bieb Norma. *VOS

When the object is a clitic with an overt DP double, however, these word-order restrictions ease somewhat. Specifically, any order but VOS becomes possible. This is shown in (22), below:

28. This translation is Fabri’s (*Dem Alan, den Brief, ich schicke ihn ihm*). I take this to be telling, given that he does not translate simple declaratives with the German equivalents of the English hanging topic left dislocation as he does in (20).

expressing the goal or location of the placement event. In a neutral prosody, only the order $DP_{theme} — PP_{locative}$ is possible, as the following examples show:

- (23)a. Pietru poġġa **l-ktieb** fuq il-meda.
Peter put.3.SG.MASC **DEF-book** on **DEF-table**
“Peter put the book on the table.”
- b. *Pietru poġġa **fuq il-meda** l-ktieb.
Peter put.3.SG.MASC on **DEF-table** **DEF-book**
“Peter put the book on the table.”

However, if the object *l-ktieb* doubles a clitic on *poġġa*, the order $PP_{locative} — DP_{theme}$ becomes possible. Acceptability is most increased, moreover, if a noticeable pause occurs before *l-ktieb*, as in (24b):

- (24)a. Pietru poġġie = **h** fuq il-meda.
Peter put.3.SG.MASC = **3.SG.MASC.ACC** on DEF-table
“Peter put it on the table.”
- b. Pietru poġġie = **h** fuq il-meda, il-ktieb.
Peter put.3.SG.MASC = **3.SG.MASC.ACC** on DEF-table DEF-book
“Peter put it on the table, the book.”

Moreover, consultants are reticent to accept the *in situ* alternative to (24b) with the order $DP_{theme} — PP_{source}$ unless DP is pronounced with prosodic emphasis. This set of facts is nearly exactly parallel to known right-dislocation constructions found in Catalan as discussed by Vallduví (1992) (see also Anagnostopoulou, 2005a): In Catalan, locative phrases cannot appear before non-

dislocated DP internal arguments (25), whereas this order is the only possible option under right dislocation (26):³⁰

(25) Catalan Right Dislocation:

- a. Fiquem el ganivet al calaix.
Put.1PL the knife in.the drawer
“We put the knife in the drawer.” (Vallduví, 1992:96)
- b. *El fiquem al calaix el ganivet.
it put.1PL in.the drawer the knife
“We put the knife in the drawer.” (Vallduví, 1992:96)

- (26)a. *El fiquem el ganivet al calaix.
it put.1.PL the knife in.the drawer
“We put the knife in the drawer.” (Vallduví, 1992:98)
- b. El fiquem AL CALAIX el ganivet.
it put.1PL in-the drawer the knife
“We put the knife in the drawer.” (Vallduví, 1992:98)

The similarities in word order options between Catalan and Maltese suggest that the conclusion for Maltese should be that the clitic doubling DP is in fact an adjunct in examples like (24b), above. Given also that most modern theories of clitic doubling take the DP double to be in the same position as lexical DP arguments (Uriagereka, 1995; Anagnostopoulou, 2003; Nevins, 2011, *et seq.*), we are led to the conclusion that such examples involve right dislocation of the DP with a clitic appearing on the verb. If this is the right approach, then we can

30. The difference between the two languages appears on the locative phrase — Vallduví (1992) notes that the locative must bear main sentential prominence, a fact I have not investigated systematically in Maltese.

also understand the facts given by Fabri in (21–22) as similarly showing that differential word order becomes possible under right dislocation in Maltese.

Although there is much about this word order variation that remains unclear, the many parallels between Maltese and known clitic dislocation structures in other languages suggest that all such examples in Maltese involve dislocation. I will take this to be established in what follows and move on in the following section to examine cliticization possibilities for direct and indirect object clitics in Maltese.

4.3 The Syntax of Clitics

This section deals with the syntax of the Maltese clitics in their non-dislocated uses. Specifically, I propose, following much recent work on the derivation of clitics by Anagnostopoulou (2003), Roberts (2010), Nevins (2011), Kramer (2011; To Appear), and Harizanov (To Appear) that accusative clitics are derived via an AGREE relation between the head introducing the external argument (ν , here) and the clitic. Unlike these proposals, however, I will argue that cliticization in Maltese is not phrasal movement followed by morphological rebracketing, but is in fact simply head movement of a simultaneously minimal and maximal determiner element.

I will also depart from this recent trend in equating cliticization with AGREE with ν in the case of the dative clitic series, given that the structures I will propose for ditransitive verbs do not involve dative goals or sources being case-marked by ν for most verbs.³¹ Before doing so, however, I discuss some important facts from the syntax of ditransitives in Maltese which interact with

31. I hedge here because of the existence of a small class of verbs which behave differently in this regard; see §4.3.2.

cliticization options in nontrivial ways and allow for careful examination of the preconditions on cliticization in the language.

This section is organized as follows: first (§4.3.1), I discuss evidence which supports the idea that linear order directly reflects command relations among internal arguments for the vast majority of verbs in Maltese. The data I discuss there show that ditransitives in the language are not a homogeneous class, but instead bifurcate into two classes: (i) those which only appear in a PP-goal-like construction where the theme appears as the specifier of a small-clause like Applicative phrase containing the two internal arguments and (ii) those which allow the additional option of a English double-object-like construction where the dative is generated in a higher Appl head and surfaces with accusative morphology.³² The conclusion of this section is that Maltese word order in ditransitives directly reflects command relations in the former case but not the latter. Next (§4.3.2), I discuss how data from passivization and case-marking require a nuanced view of the case/passive interactions discussed for causatives in Chapter 3 in order to be integrated into the proposed structures for these two classes of verbs. Finally, I propose a theory of clitic derivations which accounts for both the similarities and differences between the cliticization and passivization facts (§4.3.3) which takes the prepositional goal constructions to be just that, but which treats the applicative-like structures as VP-movement causatives (Burzio, 1986; Baker, 1988a). The outcome of this section is a unified understanding of how passives and clitics are derived.

32. See Marantz, 1993; Pykkänen, 2008; and more recently Walkow, 2012c;a; To Appear for arguments to this effect, the latter in the domain of Classical Arabic.

4.3.1 Argumental Prominence

In this section I consider data from word order, variable binding, anaphoric binding, and crossover effects which help to elucidate the structure of the *vP* for non-causative ditransitive verbs in Maltese. This is an important precondition to understanding the clitics in this language because, as we shall see, there are reasons to think that the syntax of the *vP*, which is not uniform for all verbs in the language, interacts with the available cliticization options in various ways. The proposals in this section all make use of the notion of relative structural prominence among arguments defined in terms of *c*-command, and as such will be mainly concerned with the differences among internal arguments.

The reason that such notions of relative prominence are important for diagnosing the structure of the *vP* in Maltese is that very little information can be gleaned by examining word-order and case-marking of lexical DPs (though see §4.3.2 for pronominal DPs). For instance, case-marking and word order are mostly fixed. This is shown concretely in (27):³³

(27) Word Order and Maltese Ditransitives:

a. Ir-*raġel* ta **l-ballun** lit-*tifla*.

DEF-man gave DEF-ball to.the-girl

“The man gave the ball to the girl.”

33. My consultants are reticent to reject the order DAT – ACC outright for these examples. Examples can be found on the Maltese Language Resource Corpus (Borg *et al.*, 2011) with this order, though in nearly all cases the accusative theme in such examples has a relative clause attached or is otherwise prosodically quite heavy. My consultants all speak English at least as often if not more than they speak Maltese, and it is likely that they possess overt knowledge of the availability of the double object alternation in English. I mark these orders ?? here for caution’s sake, but assume that they are not possible in general. This assumption about Maltese places it, harmoniously, in the western side of the isogloss seen in Arabic double object constructions (Wilmsen, 2010; 2012): dialects west of Egypt tend to show [V DO IO] ordering, whereas dialects to the east tend to show [V IO DO] ordering of the kind found in MSA and Classical Arabic.

b.?? Ir-raġel ta (lit)-tifla l-ballun.

DEF-man gave to.the-girl DEF-ball

“The man gave the ball to the girl.”

Comment: “Sounds like the speaker also knows English.”

c. Fausto baġhat kiteb lill-kmandant.

Fausto sent book to.the-commander

“Fausto sent a book to the commander. ”

d.?? Fausto baġhat (lill)-kmandant kiteb.

Fausto sent to.the-commander book

“Fausto sent a book to the commander. ”

Comment: “Sounds like the speaker also knows English.”

As these examples show, it is impossible for the thematic goal to precede the thematic theme, regardless of the case marking on the goal. In fact, it is generally impossible to get lexical DP goals without the preposition *lil* in Maltese, a fact which I will return to below.³⁴

Unlike the diagnostics from word order, the binding of reciprocals and the binding of pronominal variables by quantified noun phrases show a bifurcation along verb class lines. To see this, we can first note that binding of reciprocal elements in Maltese works much like its counterpart in better-studied languages insofar as c-command is a relevant precondition. Firstly, while it possible for a subject to bind an object reciprocal in transitive verbs (28a), the reverse is not possible (28b):

(28)a. It-tfal raw lil xulxin.

the-children saw DOM each.other

“The children saw each other.”

34. Note that this latter fact about case morphology is not true of *both* classes of verbs which I identify immediately below.

b. *(Ix-)xulxin raw lit tfal.

The-each.other saw DOM children

“The children saw each other.”

Moreover, one can show that linear precedence is not a sufficient condition for binding of a reciprocal by embedding a potential binder inside a subject such that the binder does not c-command the reciprocal (Reinhart, 1976). In these cases, binding is only possible from the subject to the reciprocal, and not from the DP contained within the subject:

(29) Ġenituri_i ta [Pietru u Louis]_j jiħobbu lil xulxin_{i/*j}.

Parents_i of Peter and Louis_j love.3.PL DOM **each.other**_{i/*j}

“Peter and Louis_j’ parents_i love each other_{i/*j}.”

Taken together, (28) and (29) show that c-command can be diagnosed with binding of reciprocals in Maltese.

With this background in mind, we can now ask what binding of reciprocals is possible in ditransitives in Maltese. For a great majority of the verbs, this reveals that binding is possible from the accusative to the dative argument, but not the reverse, as shown in (30):

(30)a. Paċik introduċa lil Louis u lil Marija lil xulxin.

Patrick introduced DOM Louis and DOM Maria to **each.other**

“Patrick introduced Louis and Maria to each other.”

b. *Paċik introduċa (lil) xulxin lil Louis u (lil) Marija.

Patrick introduced (DOM) **each.other** to Louis and (to) Maria

“Patrick introduced each other to Louis and Maria.”

I will call this class of verbs the majority or *bagħat* class in what follows, since one of its more prominent members is the Semitic stratum verb *bagħat*, “he sent.”

For a small class of verbs, however, binding of a dative reciprocal by an accusative does not result in full acceptability, while the reverse is just as bad as the analogous cases in the majority class (*cf.*, 30b); this is shown in (31), below. I will refer to this class as the minority or *wera* class in the discussion which follows.

- (31)a. ?Wrejt lit tfal lil **xulxin**.
 showed.I DOM.the children to **each.other**
 “I showed the children to each other.”
 b. *Wrejt (lil) **xulxin** lit tfal.
 showed.I (DOM) **each.other** to.the children
 “I showed each other the children.”

Variable binding by a quantified nominal expression reveals the same pattern.³⁵ While it is possible, for example, to bind from the quantified nominal *kull student*, “each student” to the pronominal variable in *it-tiċer gdid tiegħu*, “his new teacher” in (32a), below, the reverse is not possible (32b):³⁶ This is shown for two members of the majority class in (32): the native stratum *bagħat* and the Italian stratum *introduċa* where the coindexation is the crucial difference in

35. This test presumes that variable binding requires c-command in a syntactic representation, an assumption often made in studies of prominence relations between internal arguments in ditransitives (Barss & Lasnik, 1986). However, recent work on the semantics of variable binding have questioned this assumption; see Barker (2002) and Shan & Barker (2006) for discussion.

36. The data in this subsection are based on judgments from a larger range of speakers than most of the data in this dissertation. For their help with judgments in this section, thanks are due to Maris Camilleri, Ray Fabri, and Michael Spagnol.

these examples. It is worth noting that *all* foreign stratum verbs appear in this class, as far as I have been able to discern.

- (32)a. *Matthew* *introduċa* [kull student]_i *lit-tiċer* *ġdid*
Matthew introduced each student_i to.the-teacher new
tiegħ = u_i.
of = 3.SG.MASC_i
 “Matthew introduced each student_i to his_i new teacher.”
- b. *Matthew* *introduċa* [kull student]_i *lit-tiċer* *ġdid*
Matthew introduced each student_i to.the-teacher new
tiegħ = u_j.
of = 3.SG.MASC_j
 “Matthew introduced each student_i to his_j new teacher.”
- c. **Matthew* *introduċa* *lil* student *tiegħ* = u_i *lil* [kull *tiċer*
Matthew introduced DOM student *of* = 3.SG.MASC_i to each teacher
ġdid]_i.
*new*_i
 “Matthew introduced his_i student to each new teacher_i.”
- d. *Matthew* *introduċa* *lil* student *tiegħ* = u_j *lil* [kull *tiċer*
Matthew introduced DOM student *of* = 3.SG.MASC_j to each teacher
ġdid]_i.
*new*_i
 “Matthew introduced his_j student to each new teacher_i.”
- e. *Louis* *bagħat* [kull *ittra*]_i *lid-destinazzjoni* *tagħ* = ha_i.
Louis sent each letter_i to.the-destination *of* = 3.SG.FEM_i
 “Louis sent each letter_i to its_i destination.”
- f. *Louis* *bagħat* [kull *ittra*]_i *lid-destinazzjoni* *tagħ* = ha_j.
Louis sent each letter_i to.the-destination *of* = 3.SG.FEM_j
 “Louis sent each letter_i to its_j destination.”

- g. *Louis bagħat ittra tagħ = ha_i lil [kull destinazzjoni]_i.
 Louis sent letter of = 3.SG.FEM_i to each destination_i
 “Louis sent its_i letter to each destination_i.”
- h. Louis bagħat ittra tagħ = ha_j lil [kull destinazzjoni]_i.
 Louis sent letter of = 3.SG.FEM_j to each destination_i
 “Louis sent its_j letter to each destination_i.”

In the *wera*-class, however, attempts at binding of the kind seen in (32a,c) are not fully acceptable, while again the reverse is as bad as (32b,d) as seen in (33):

- (33)a. Pawlu wera [kull ktieb]_i lil awtur tiegħ = u_{?i}.
 Paul showed each book_i to author of = 3.SG.MASC_{?i}
 “Paul showed each book_i to its_{?i} author.”
- b. Pawlu wera [kull ktieb]_i lil awtur tiegħ = u_j.
 Paul showed each book_i to author of = 3.SG.MASC_j
 “Paul showed each book_i to its_j author.”
- c. *Pawlu wera ktieb tiegħ = u_i lil [kull awtur]_i.
 Paul showed book of = 3.SG.MASC_i to each author_i
 “Paul showed his_i book to each new author_i.”
- d. Pawlu wera ktieb tiegħ = u_j lil [kull awtur]_i.
 Paul showed book of = 3.SG.MASC_j to each author_i
 “Paul showed his_j book to each new author_i.”

The patterns in the quantifier-variable binding examples (32–33) parallel exactly the patterns seen with binding of reciprocals in (30–31). Taken together, these facts suggest that the linear order of internal arguments in ditransitives

map directly onto prominence relations for the majority-class verbs, but that something more complex is at work in *wera*-class verbs.³⁷

Over and above these facts, it is somewhat difficult to establish which of the two internal arguments in a ditransitive is structurally highest using other familiar tests (Barss & Lasnik, 1986). Moreover, the quantifier *koll*, “every,” like its Arabic counterpart, does not easily participate in binding relations between internal arguments of the same verb (see Aoun *et al.*, 2010:ch.8). As far as I can tell, negative polarity items in Maltese are only licensed by the clausal negation prefix *ma* and not by constituent negation *mhux* or negative quantifiers.³⁸ Finally, judgments on *wh*-superiority are subtle, as *in situ wh*-words are marginal at best in Maltese. However, the binding facts discussed above are certainly suggestive and in what follows I will assume they are diagnostic of command relations internal to the verb phrase in Maltese.

Despite this bifurcation within A-prominence diagnostics, the two classes of verbs behave identically with respect to another diagnostic of DP-prominence:

37. I will return to what this other factor could be in §4.3.3.1, below. Of course, these tests do not foreclose the possibility that the theme has undergone short A-movement from a structure in which it is c-commanded by the goal in the majority class, perhaps to a μ P projection (Johnson, 1991; Chomsky, 2008). However, it is worth noting that to maintain this analysis one would have to assert that A-movement in Maltese does not reconstruct for binding, as we have already seen that accusative themes may not be A-bound by dative goals.

Evidence for this movement in English is given by the marginal acceptability of examples such as (i):

(i)[?] Gus gave pictures of each other to Shawn and Juliet.

It is worth noting that such examples are wholly ungrammatical in Maltese:

(ii)*Oskar bagħat ritratti ta' **xulxin** lil Marija u Pawlu.
 Oscar sent pictures of **each.other** to Maria and Paul.
 “Oskar sent pictures of each other to Maria and Paul.”

An account which posits short A-movement will, additionally, have to revise the theory of floating quantification and variable binding considerably to account for the facts which appear immediately below and in Chapter 5.

38. I have not systematically investigated other downward-entailing environments, which are also predicted to license negative polarity items (Ladusaw, 1979).

WEAK CROSSOVER (Postal, 1971). Weak crossover patterns give results which are consistent with the linear order of internal reflecting the command relations before A-bar movement applies. If one attempts to form a constituent question which moves an internal argument DP, binding of the remaining internal argument by the *wh*-operator is possible only if the moved element is a theme. Binding of the theme by a *wh*-moved goal is impossible, regardless of verb class. This can be seen in (34) for the majority class and (35) for the *wera* class:

(34) Weak Crossover with Majority-class Verbs:

- a. Liema ktieb_i bġhat-t lil sid = u_i?
 which book_i sent-2.SG to owner = 3.SG_i
 “Which book_i did you send to its_i owner?”
- b. Liema ktieb_i bġhat-t lil sid = u_j?
 which book_i sent-2.SG to owner = 3.SG_j
 “Which book_i did you send to its_j owner?”
- c. *Lil liema sid_i baġht-t il-ktieb tiegħ = u_i?
 to which owner_i sent-2.SG DEF-book of = 3.SG.MASC_i
 “To which owner_i did you send his_i book?”
- d. Lil liema sid_i baġht-t il-ktieb tiegħ = u_j?
 to which owner_i sent-2.SG DEF-book of = 3.SG.MASC_j
 “To which owner_i did you send his_j book?”

(35) Weak Crossover with *wera*-class Verbs:

- a. Liema ktieb_i taj-t lil sid = u_i?
 Which book_i gave-2.SG to owner = 3.SG.MASC.POSS_i
 “Which book_i did you give to its_i owner?”

- b. Liema ktieb_i taj-t lil sid = u_j?
 Which book_i gave-2.SG to owner = 3.SG.MASC.POSS_j
 “Which book_i did you give to its_j owner?”
- c. *Lil liema sid_i taj-t il-ktieb tiegh = u_i?
 to which owner_i gave-2.SG DEF-book of = 3.SG.MASC_i
 “Which owner_i did you give his_i book?”
- d. Lil liema sid_i taj-t il-ktieb tiegh = u_j?
 to which owner_i gave-2.SG DEF-book of = 3.SG.MASC_j
 “Which owner_i did you give his_j book?”

In both classes of verbs, the grammaticality patterns seen in goal extractions is parallel to the Weak Crossover cases in English such as (36):

(36) *To whom_j did you give his_j jersey?

In order to understand the English and Maltese goal extractions in an analogous way, it must be true that the extraction site of the A-bar moved goal be c-commanded by a constituent containing the co-indexed pronoun. Such a configuration is typical of WCO violations more generally. Furthermore, it must *not* be the case that the extraction site c-commands a constituent containing the co-indexed pronoun. In §4.3.3.1, I will explain these results by suggesting that for the majority class, the theme asymmetrically c-commands the goal before extraction.³⁹

It is important to note that the WCO facts show us that the command relations before A-bar movement must be reflective of linear order. This is because if the goal arguments were generated higher than the themes in the cases (34c)

39. The minority class requires a slightly more complicated explanation for the WCO facts; see §4.3.3.1. The basic idea is that the constituent containing the theme and verb must A-move to [Spec,AppIP]. Since this is an A-movement, the base position of this movement is not relevant for determining WCO violations.

and (35c), there would be no WCO configuration and the co-indexed examples should be grammatical, contrary to fact. This conclusion is consistent with the word order facts only if we take them to be indicative of prominence relations among internal arguments.⁴⁰

4.3.2 Clitics, and A Passive Puzzle

In this section I discuss two additional properties of the two classes of verbs identified in the preceding section, namely, the available subjects of passive constructions and the available cliticization options. We shall see that the evidence for bifurcating verbs into majority and minority classes is considerably strengthened when we consider passive and clitic possibilities. This is done by first discussing the passive, followed by the cliticization options.

Maltese has at least three distinct passive constructions which can be used to probe the prominence relations of internal arguments in ditransitive contexts, given a conception of the passive which takes the surface subject to be derived via movement from an VP-internal thematic position. The first two of these, shown in (37a–b), are periphrastic, involving an inflected auxiliary: *kien* for verbs interpreted statively (37a) and *gie* for all other verbs (37b). These constructions are not found, to my knowledge, in any other Semitic language. Additionally, however, Maltese does allow a morphological passive that looks

40. Of course it must be mentioned that this test only goes through if the proper understanding of WCO violations is in terms of argument prominence (defined in terms of c-command) and not leftness, as in Chomsky (1977). Unfortunately, I do not have the space to take up this debate here.

more Semitic in nature, involving a prefix or infix with considerable allomorphy based on the verbal root to which it attaches; this is shown in (37c).^{41,42}

(37) Maltese Passive Formations:

a. It-tabib **kien** **afdat** minn kullhadd.

DEF-doctor **was.3.SG.MASC trusted** from everybody

“The doctor was trusted by everybody.”

(Borg & Azzopardi-Alexander, 1997:214)

b. It-tabib **gie** **afdat** bil-każ

DEF-doctor **came.3.SG.MASC trusted** with.the-case

“The doctor was entrusted with the case”

(Borg & Azzopardi-Alexander, 1997:214)

c. Il-kappillan **in-ghata** l-ittra.

DEF-parish.preist **PASS-gave** DEF-letter

“The parish priest was given the letter.”

(Borg & Azzopardi-Alexander, 1997:215)

41. There are at least four allomorphs of the passive morpheme used in this third kind of passive: (i), a prefixal /t-/, (ii) an infixal /-t-/, (iii) prefixal /n-/ and (iv) the morpheme /nt-/, which can appear as a prefix or a discontinuous infix. These morphemes are often described in traditional Maltese grammars as different verbal templates, following the tradition for other Semitic languages and their diachronic origin in the Semitic root and pattern system. Here I will be somewhat more agnostic, as these morphemes are not terribly productive and their status as synchronic, productive passives for all roots is decidedly unclear (see also Hoberman & Aronoff, 2003 and Spagnol (2011a;b) for some discussion of the loss of Semitic morphological properties in modern Maltese). Accordingly, my consultants find the morphological passives to be somewhat literary in register.

42. In this chapter I will not be concerned with what might be considered a fourth type of passive in Maltese (and indeed is variably described or translated as such), shown in (i):

(i) (’II) Pawlu qatlu = h b’ = daqqa ta’ sikkina.

DOM Paul killed.3.PL = 3.SG.MASC.ACC with = blows of knife

“They killed Paul by knifing him.” (Borg & Azzopardi-Alexander, 1997:215)

This is because, as the translation for Borg & Azzopardi-Alexander (1997) suggests, it is not clear to me that these are not topicalized/CLLD’ed objects. This notion is supported by the fact that differential object marking seen only on accusatives can occur (see (i)); it is notable that such retention of *lil* is not available for the passives in (37), and that the theme/patient can appear post-verbally (see Borg & Azzopardi-Alexander, 1997:146).

The stative passive with *kien* is restricted to verbal roots which express states or are otherwise not necessarily eventive. Given that this severely restricts the number of contexts in which its use is felicitous, I set it aside in what follows.

For the majority-class verbs in Maltese, only one of the two internal arguments may be passivized (see Comrie & Borg, 1985; Borg & Azzopardi-Alexander, 1997:214–5; and Sadler, 2012a:2–3). Specifically, while the accusative-marked theme or patient of an active may appear as the subject of the corresponding passive, it is not typically the case that the goal or source can similarly do so. In what follows, this is shown for the morphological passive (38) and for the passive with *gie* (39):

(38)a. (Huwa) bagħat il-ittra lil Mona.

He sent DEF-letter to Mona

“He sent the letter to Mona.”

b. **Il-ittra** nt-bagħat lil Mona.

the-letter PASS-sent to Mona.

“The letter was sent to Mona.”

c. *(**Lil**) **Mona** nt-bagħat il-ittra.

(**to**) **Mona** PASS-sent the-letter

“To Mona was sent the letter.”

(39)a. Pawlu kiteb l-ittra lil Marija.

Paul wrote DEF-letter to Maria

“Paul wrote the letter to Mary.” (Comrie & Borg, 1985:115)

b. **L-ittra** gie-t miktub-a lil Marija.

DEF-letter came-3.SG.FEM written-FEM to Marija

“The letter was written to Mary” (Comrie & Borg, 1985:115)

c. ***Marija** gie-t miktub-a l-ittra.

Maria came-3.SG.FEM written-FEM DEF-letter

“Mary was written the letter” (Comrie & Borg, 1985:115)

Given the [DP PP] order they show in their verbal complements, I will call this the PREPOSITIONAL DATIVE construction, following the terminology of Soltan (2009) in his discussion of a similar construction in Arabic. However, later I will come back to question the category label P for *lil* in these examples.

Verbs in the majority class contrast with the smaller set of *wera*-class verbs which allow either internal argument of a ditransitive verb to appear as the subject of the corresponding passive verb. Two verbs from this class, *wera*, “he showed” and *ta*, “he gave,” are shown in (40), below:⁴³

(40) A Different Kind of Passive Behavior:

a. Xandru ta / wera l-ittra lil Pawlu.

Xander gave / showed DEF-letter to Paul

“Xander gave/showed the letter to Paul.”

b. **L-ittra** n-ghata-t / nt-werie-t lil Pawlu.

DEF-letter PASS-gave-3.SG.FEM / PASS-showed-3.SG.FEM to Paul

“The letter was given/shown to Paul.” (Comrie & Borg, 1985:118)

c. **Pawlu** n-ghata / nt-wera l-ittra.

Paul PASS-gave / PASS-showed DEF-letter

“Paul was given/shown the letter.” (Comrie & Borg, 1985:118)

43. Both of these verbs are irregular in their subject agreement morphology, with considerable stem allomorphy in almost every paradigm slot. As an example, the verb *ta* surfaces as the base *jagħti* in the imperfect aspect. *Wera* shows realization of the glide /w/ as a vowel (/u/) and is arguably the only Maltese remnant of the Classical Arabic Form IV verbal pattern. The reader is referred to Borg & Azzopardi-Alexander (1997) for paradigms and discussion. Additionally, the agent of these passives can appear as the object of the preposition *minn*, though I omit these agents in what follows for simplicity.

- d. **L-ittra** *gie-t* *mogħtij-a / murij-a* *lil Pawlu.*
DEF-letter came-3.SG.FEM sent-FEM / shown-FEM to Paul
 “The letter was given/shown to Paul” (Comrie & Borg, 1985:118)
- e. **Pawlu** *gie-t* *mogħti / muri* *l-ittra.*
Paul came-3.SG.FEM sent / shown DEF-letter
 “Paul was sent/shown the letter.” (Comrie & Borg, 1985:118)

As the examples in (40) show, the prohibition against A-movement of the goal or source seen in the majority class (*cf.*, (38c) and (39c), above) disappears for these verbs. The existing literature mentions very few verbs in this class, with authors giving between three (Sadler, 2012a) and five (Comrie & Borg, 1985) roots. Clearly, then, these verbs are the exception to an otherwise regular passivization pattern seen in the majority class, above, exactly as they were with respect to binding diagnostics in the preceding section.⁴⁴

These passive differences for verbs also correlate with differences in the availability of cliticization of both internal arguments of an active ditransitive. Both classes of verb allow cliticization of the accusative theme or patient in the active (not given here; see Comrie & Borg, 1985 and Borg & Azzopardi-Alexander, 1997 and examples throughout this chapter). However, the cliticization options are distinct for the majority and *wera* classes when one attempts to cliticize an indirect object. While the majority class only allows this argument to be expressed as a dative clitic ((41a), where ditransitive *kiteb* is in the majority class), the *wera* class strongly prefers the goal or source to be an accusative clitic (41b):

44. The three which all authors agree upon are *ta/jagħti*, ‘give’; *wera/juri*, ‘show’; and *għallem*, ‘teach’ (only the last of which is morphologically regular). I will focus on the first two roots in this chapter.

(41) Cliticization of the Indirect Object, Both Classes:

a. Marija kitb-it = **lu** l-ittra.

Maria wrote-3.SG.FEM = **3.SG.MASC.DAT** DEF-letter

“Maria wrote the letter to him.” (Comrie & Borg, 1985:115)

b. Marija ta-t = **u** / urie-t

Maria gave-3.SG.FEM = **3.SG.MASC.ACC** / showed-3.SG.FEM

= **u** l-ittra.

= **3.SG.MASC/ACC** DEF-letter

“Maria gave/showed him the letter.” (Comrie & Borg, 1985:117)

In both cases, the alternative case-marked clitic is at best highly awkward; most of the time it is judged ungrammatical. Thus, (41a) cannot be *kitbit = u*, and (41b) cannot be *tat = lu* (Comrie & Borg, 1985:117; Camilleri, 2011:142).⁴⁵ In what follows, I will refer to situations where accusative clitics appear *in lieu* of indirect objects as DATIVE-AS-ACCUSATIVE uses. When this option is employed, it is not possible to cliticize the theme as a second accusative. In order for two clitics to appear, the goal must be realized as a dative clitic (see Comrie & Borg, 1985:117–20).

An interesting generalization emerges from examination of which verbs can appear with dative-as-accusative clitics: if a verb prefers dative-as-accusative cliticization for indirect objects, then that verb also allows passivization of the indirect object in addition to the direct object — in the terminology of Bantu linguistics, these verbs all allow *symmetric passivization* insofar as either inter-

45. However, Comrie & Borg (1985) note that *uriet = lu* would be acceptable in this case. In contrast, Sadler (2012a) notes that this dative cliticization option is impossible for Maria Camilleri, her native-speaker co-author; my consultants’ judgments are mixed. I will return to this point in footnotes, but analyze these verbs as though both options were available.

nal argument may become the surface subject.⁴⁶ Moreover, as we saw in the preceding section, this verb will also appear in the minority class with respect to binding diagnostics.

Turning now to the interaction between passives and cliticization, Comrie & Borg (1985:120) note that the interaction of these two phenomena is not free in Maltese. As it turns out, *no* passive verb may appear with any accusative clitic, regardless of what grammatical function or structural position that clitic might have originated in. Thus Comrie & Borg (1985) note that goal passivization does not allow cliticization of the theme as an accusative clitic, as in the following:

(42) *Pawlu n-ghata = **ha**.

Paul PASS-gave = 3.SG.FEM.ACC

“Paul was given it.”

(Comrie & Borg, 1985:120)

Moreover, the same facts appear with goal passives and in majority-class verbs. Thus, (43) is ill-formed, meaning that it is similarly impossible to cliticize a goal as an accusative clitic when the theme has become the surface subject via passivization:

(43) *Il-ktieb n-ghata = **ha**.

DEF-book PASS-gave = 3.SG.FEM.ACC

“The book was given her.”

46. On symmetric versus asymmetric passivization, see the work of Marantz (1984); Baker (1988b;a); Bresnan & Moshi (1990); Marantz (1993); Woolford (1993); and McGinnis (1998; 2001) for discussion and references. I know of only one counterexample to the generalization in Maltese that obligatory dative-as-accusative clitics imply symmetric passives: the verb *ghallem*, “he taught.” Comrie & Borg (1985:121–2) give examples which suggest the goal passive of *ghallem* exists, but is lexicalized to mean “learn.” Sadler (2012a) treats it as unambiguously a member of the *wera* class, and I will do the same here.

Here the only grammatical option is to use a dative clitic — in this case, = *lha*. The resulting generalization is thus that passive constructions do not possess the required morphosyntax to license an accusative clitic — only dative clitics.⁴⁷ In the following section, I will link this observation to the fact that passive verbs do not include a *v* which participates in AGREE, whereas the head that determines voice-marking is not involved in the licensing of dative clitics.

Stepping back from the details a bit, we can conclude that double object constructions of the Germanic type (involving a different word order and/or case-marking that correlates with command diagnostics) do not exist for most verbs in Maltese (the majority class). However, some verbs (the *wera* class) allow cliticization, passivization, and binding to occur in a way which suggest that two different prominence relations are possible between the two internal arguments. The conclusion is therefore that Maltese licenses double object structures in a certain limited sense and then only with verbs of the *wera* class (see Camilleri, 2011; Comrie & Borg, 1985; Comrie (To Appear); and Sadler, 2012a for similar conclusions). However, this cannot be the entire empirical generalization, as the word-order, weak crossover, and case-marking facts from (27) show that lexical DP goals cannot appear immediately post-verbally.

In the following section I develop a theoretical proposal which can account for these seemingly unrelated observations concerning prominence relations and cliticization in ditransitives. The proposed syntax will allow us to treat verbs of the *wera* class as allowing a DAT > ACC prominence relation inside *v*P just in case they have a pronominal indirect object or are passivized.⁴⁸

47. This is confirmed by a corpus study; a search in the MLRS Corpora (Borg *et al.*, 2011; 2012) for passives of the verbs discussed in this chapter yielded zero results.

48. In this chapter, I use the symbol > to mean “is more syntactically prominent than” or, equivalently, “asymmetrically c-commands.”

4.3.3 Deriving Clitic Clusters in Maltese

This section provides an analysis of the facts from passivization and cliticization discussed in the previous section, one which draws on recent work that posits an instance of the relation AGREE as a precondition to cliticization. Moreover, I argue here that cliticization in Maltese should be seen as an instance of head movement of a simultaneously minimal and maximal DP (in the sense of Chomsky, 1995b) from an argument position to the verbal head. The appeal to both agreement and head movement will allow an understanding of the interaction between cliticization and passivization as well as the locality patterns on cliticization seen in Maltese.

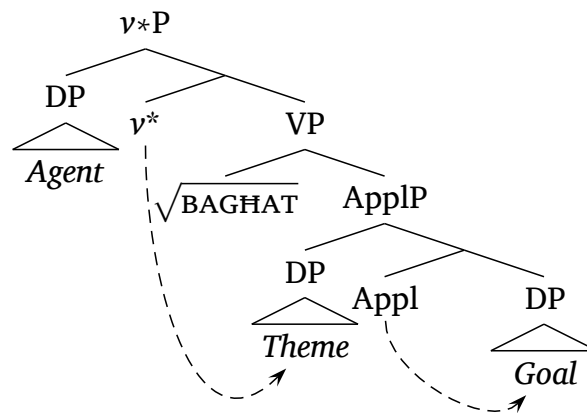
As a precondition to all of this, though, we must first develop an analysis of ditransitive structures, one which will account for the passivization and binding facts discussed above. This is done in §4.3.3.1. I then leverage these structures in §4.3.3.2 to propose an account of the movement of clitics to attach to the verb and motivate the resulting theory with reference to the formation of morphological causatives in the language.

4.3.3.1 Understanding the Passives and the Binding

We saw in the preceding section that passive and cliticization facts in Maltese appear to show a discrepancy: Whereas cliticization is equally possible with both accusatives and datives in the majority class, passivization is possible only of the theme (the accusative argument, in this case). On the other hand, both internal arguments of the *wera* class are passivizable, yet a single cliticized internal argument must be accusative, even if it is a goal. In this section I develop a set of proposals about the argument structure of these two classes which can help make sense of these facts. Before it begins, however, a disclaimer is in

order: Here I will only be concerned with ditransitive structures in which both of the arguments are lexical DPs and not pronominals. The subsequent section will show how the proposals made here must be adapted to account for the pronominal facts.

Recall from the preceding section that verbs in the *bagħat* class, which form the majority of ditransitive verbs in Maltese, allow only the word order *V – Theme – Goal* with binding diagnostics showing that the theme DP is structurally higher than the goal. This is completely analogous to the English prepositional dative construction in examples such as *I sent the letter to the chairman of the party*. The simplest analytical option, then, is that verbs in this majority class appear only in the structure found with prepositional datives in other languages — in other words, they do not have double object variants. I propose exactly this to account for the *bagħat* class verbs in Maltese; this structure is given visually in Tree 8 (abstracting away from raising of the verbal root to v , which I assume happens uniformly in the majority-class derivations which follow).⁴⁹



Tree 8: v P Level For Majority-Class Verbs

49. The dashed lines in Tree 8 represent AGREE relations, to which I will return immediately below.

Here I am assuming ditransitive verbs involve an Appl(icative) projection, following Pylkkänen (2008), though I depart from her implementation in assuming that the accusative theme asymmetrically c-commands the dative goal, and not the reverse.⁵⁰ Of course, such a proposal has requires a rejection of the strictest interpretation of the claim that thematic roles are universally assigned in the same structural positions from language to language (e.g., the UNIFORMITY OF THEMATIC ASSIGNMENT HYPOTHESIS of Baker (1988a) and much subsequent work). However, this analysis does not preclude the possibility of *any* correspondence between structural position and thematic assignment, but simply requires a weaker formulation to allow for the goal to appear as a complement in these structures. One alternative would be to simply claim that thematic roles correlate only with structural height, not actual structural positions. In this approach, agents and experiencers would be generated higher than sources, goals, patients, themes, and the like.⁵¹ Since the Maltese data seem to require admitting structures in which goals can be higher than themes or patients for some verbs alongside the opposite configuration for other verbs, I will assume that something like this is the correct generalization to be made about the relationship between structural positions and thematic role assignments.

With this class, the verb merges first with an ApplP containing the theme and goal to form a constituent that is then selected by an active v^* . This order of MERGE predicts that the DP theme will behave as though it were struc-

50. I think it would be perfectly consistent with the findings in this chapter to say that the verbal root projects a phrase which contains the theme and goal as direct arguments of the root and not of an Applicative head. I adopt the applicative approach to be consistent with the notion that all datives are introduced by an Applicative head (Pylkkänen, 2008), but this is not a necessary move.

51. Thanks are due to Jim McCloskey for making me aware of such a possibility.

turally more prominent than the goal, exactly in line with the binding facts from §4.3.2. In this structure, I assume that structural Case is assigned to the theme via AGREE with v^* and that dative Case is assigned to the goal via AGREE with Appl. Both of these AGREE relationships are represented graphically here and in what follows by dashed lines. I furthermore assume that this dative Case is realized as the preposition *lil*, but remain agnostic as to whether this *lil* is the expression of structural dative Case itself or the realization of Appl — I can see no way at present to decide between these options.⁵²

For passive clauses, this hypothesis allows us to localize the difference in the head that controls voice. Passive clauses are typically held to be different from active clauses in that the head introducing the external argument is either missing or crucially different in featural composition (see Kratzer, 1996; Embick, 1997). Here I will assume that passives are identical to actives but for the v head, which does not introduce an external argument or assign Case to its complement (Burzio, 1986). I will denote this passive head as v as opposed to active v^* . If this head is introduced, then the DP theme will not receive Case within the derivation of the vP , meaning that it must receive Case elsewhere for a convergent derivation to result. I assume that the head responsible for this Case-licensing is T, which also contains an [EPP] feature in Maltese (see Chapter 2) which forces raising of the theme to [Spec,T].⁵³ Given that the goal

52. However, neither of these options takes the marker *lil* to be a true preposition; in that sense we can understand several facts documented by Sadler (2012a) that suggest a difference between nominals marked by *lil* and true prepositions in Maltese. See §5 for more on the analysis of *lil*.

53. In phrasing things in this way, I am implicitly assuming that passive v , unlike active v^* , does not define a phase in the sense of Chomsky (2000; 2001b; 2008). This is a proposal explicitly argued against by Legate (2003). However, whether or not passive v is a phase is actually immaterial to the present discussion — if v is a phase, then all we would need to assume is that an [EPP] feature on passive v forces movement of the structurally highest nominal to the vP phase edge to make it available for subsequent movement to [Spec,TP]. Since annotating all

is asymmetrically c-commanded by the theme, we do not expect that the goal should be an available subject in passive derivations. In the proposed account, this can be seen to result from both the theory of A-movement locality and from Case. Locality constraints on A-movement predict that movement of the goal should be impossible given the availability of the higher theme for movement. Moreover, even if movement of the goal were possible, this movement would result in a derivation where the theme is not Case-licensed: since passive *v* does not assign Case, Case-licensing by T and movement to [Spec,TP] is the only available option.

The binding patterns seen with verbs in the *wera*-class are, notably, identical to the binding patterns seen with morphological causatives in Chapter 3. In that chapter, morphological causatives were analyzed in terms of phrasal movement of a constituent containing the verbal root and the theme argument around a higher dative (following, in essence, Burzio, 1986 and Baker, 1988a). What I would like to propose in this chapter for the *wera*-class verbs is a similar analysis: with these verbs, movement of a phrasal constituent containing the verb and theme will provide for a linear order in which the accusative argument precedes the dative argument but does not c-command it.⁵⁴ This lack of c-command will then provide for the degraded nature of binding from accusative

the trees in this chapter with such movements would complicate the discussion considerably, I will abstract away from the phase-hood of passive *v* in what follows.

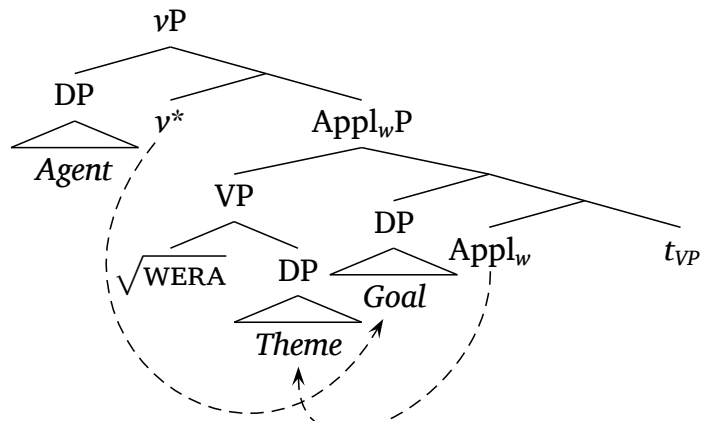
54. Such an analysis predicts that binding from the accusative to the dative argument should be uniformly impossible for these verbs, instead of simply degraded, as the judgments in (32–33) indicate. I do not have a satisfactory explanation for this discrepancy at present, but it is worth noting that judgments on these examples have varied over time for my speakers, suggesting that their acceptability may be the result of linear order effects in binding. One might also entertain an account in terms of the mechanism of CASCADES discussed by Pesetsky (1995), but I leave this for future work.

to dative as seen with the *wera* class. Concretely, I propose the structure seen in Tree 9 for active uses of these verbs.⁵⁵

In this structure, the theme is first merged with a verbal root, creating a VP projection which is in turn selected by a functional head which itself introduces the goal in its specifier. Here I call this head Appl_w to distinguish it from the Appl seen in causatives in Chapter 3 and the Appl head seen in majority-class verbs, which I will henceforth notate as Appl_b . After introduction of the goal argument, I assume that the VP consisting of the verb and the theme undergoes phrasal movement to a second specifier of ApplP . This movement can help explain why neither pattern of binding from one internal argument to another is fully well-formed for these verbs: in the case of themes binding goals, this analysis does not ever involve a stage in which the theme c-commands the goal, and what weak acceptability there is can be attributed to a linear precedence effect. As for the reverse, goal to theme binding, we can note that this also would require binding without c-command (after the movement has occurred), but here there is no linear precedence, either. Such examples are then expected to be fully ungrammatical.

One aspect of this analysis which needs further investigation is the nature of the trigger for VP-movement in these causatives. I can see, at present, no independent reason to posit VP-movement beyond accounting for the word-order and binding facts in this class of verbs. However, it is worth noting

55. Incidentally, a causative analysis of these verbs is in line with morphological facts: of the five verbs documented with this behavior (*wera*, “give,” *wera*, “show,” *ghallem*, “teach,” *sellef*, “lend,” and *seraq*, “steal”), two are patently morphologically causative (*ghallem* and *sellef*) and two more are historically related to causatives in Modern Arabic (*wera* and *ta*). *Seraq*, however, remains an exception to this generalization. Note that the structure in Tree 9 calls the head dominating VP $\text{Appl}(\text{icative})$, though it could also be labeled v_{caus} . I use the former to avoid confusion with the heads discussed in Chapter 3. It is clear that the two classes (the *wera* class and the morphological causatives) must be kept separate because morphological causatives never allow non-themes to be the subject of the corresponding passives.



Tree 9: vP Level for *wera*-Class Verbs, Actives

that previous studies which have identified VP-movement as relevant for the formation of other ditransitives such as Burzio (1986) also require such an assumption. The one exception to this general lack of consensus on the trigger for VP-movement is Baker (1988a), where the difference is attributed to cross-linguistic differences in the nature of Case-assignment which require movement of the VP to license Case on the complement of VP. However, understanding the proper nature of Case-assignment variation requires a broader empirical scope than is possible in this chapter, given its focus on ditransitives in a single language.

As for Case-licensing, I assume that the internal arguments in *wera*-class derivations are licensed by the functional head which immediately c-commands them. For the goal, this is v^* and for the theme this is Appl. Moreover, given the assumptions about the spell-out of morphological case in Chapter 4, we must further specify that how morphological case is read off the structural relations in order to provide for the morphophonological realization of the abstract Case assigned syntactically. Here, again, we can draw a parallel to the morphological causatives and say that dative case is acting like a second dependent case: because the goal co-exists in a vP with two other arguments, it

in Tree 9. The starting point for this discussion will be the nature of a passive in a theory which allows structural and morphological case to be distinct in nature. In such a framework, a passive clause differs from an active insofar as it allows one fewer structural Case than its active counterparts. Following Chomsky (2008), I assume that Case-assignment properties on functional heads originate with the head of the phase which contains them. For the heads inside ν P, this phase head is ν . What I wish to propose is that the passive ν does not provide a second structural case for Appl_w to inherit, meaning that the difference between active and passive clauses is in the availability of structural Case assignment under AGREE with Appl_w .⁵⁷

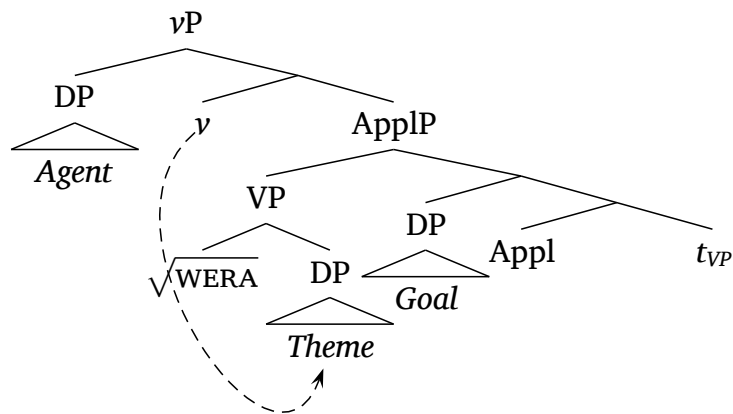
What happens to a derivation if we remove one instance of structural Case from the lower of the two heads in Tree 9? The AGREE relation is typically understood to hold between an active probe and the *closest* possible goal with matching features, where “closest” is defined with special reference to asymmetric c-command.⁵⁸ If we take the structure in Tree 9 as given, then there are, in principle, two available goals for AGREE from ν in passive ν Ps: (i) the theme argument in the raised VP and (ii) the goal argument in $[\text{Spec}, \text{Appl}_w \text{P}]$. The theory actually predicts that both should be available goals, since neither argument would intervene on an AGREE relation between ν and the other internal argument. It is this theoretical indeterminacy which I want to suggest drives the symmetric passivization options for verbs of this class.

If we take option (i), then we are left with a ν P which looks like the one given in Tree 10. In this structure ν has agreed with the goal in $[\text{Spec}, \text{Appl}_w \text{P}]$

57. The relationship between ν^* and Appl_w is thus analogous to the relationship which Chomsky (2008); Ouali (2008; 2011); and Legate (2011) hypothesize exists between C and T in all clauses.

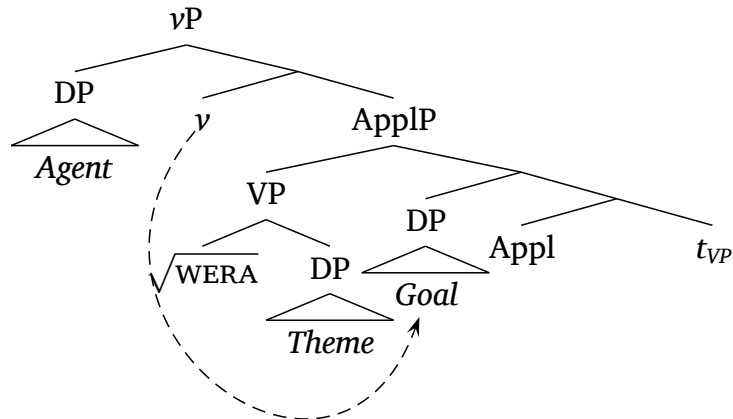
58. Concretely, α is *closest* to β iff there is no γ such that β c-commands γ , γ c-commands α , and α does not c-command β .

and not the theme inside VP. This leaves the latter of those two arguments without structural Case and, given this, we expect that it should have to raise to TP to satisfy [EPP] after receiving structural Case from T. We thus derive a goal passive if we assume that it is possible for ν to agree with the theme. This is shown schematically in Tree 10. This configuration results when Appl_w fails to inherit the ability to assign structural Case from ν and ν agrees with the theme argument.



Tree 10: ν P Level for *wera*-Class Verbs, Goal Passives

However, this is not the only derivational option when Appl_w does not assign structural Case. Because neither internal argument asymmetrically c-commands the other after VP-movement has applied, we also expect that the thematic goal argument should be an available target for AGREE from ν . This is because the theme does not asymmetrically c-command the goal from its position inside VP. If ν agrees with the goal, then the result is a derivation in which the theme remains without structural Case at the ν P level. Again, the only available head for the theme to get structural Case from remains T, meaning that if ν agrees with the goal, the theme must be the argument which participates in AGREE with T, leading to a derivation schematized in Tree 11.



Tree 11: *vP* Level for *wera*-Class Verbs, Theme Passives

The problem is that now we have analyzed ourselves into a corner, as the careful reader will have noticed. If the availability of a goal passive implies the Case-licensing pattern seen in Tree 10, why does Maltese not have productive [V DP DP] orders with two accusatives in ditransitives? To put the question another way, what stops the structure in Tree 10 from appearing in actives, or with roots of the majority class? We currently have no way of understanding why only verbs of the *wera* class appear with *Appl_w*. This problem can be overcome if we take a closer look at the means by which applicative heads are introduced into the extended projection of the verb. We have already seen considerable evidence that the applicative structure in Tree 9 is possible only with particular verbal roots in Maltese — combing the available literature, there are just five: *ta*, “give,” *wera*, “show,” *għallem*, “teach,” *sellef*, “lend,” and *seraq*, “steal” (see Comrie & Borg, 1985, Sadler, 2012a). Given this, we must have an analysis that ensures that this particular Case pattern can only appear in a configuration which includes these verbal roots.

We are thus faced with a question of how to deal with a root-specific argument structure alternation, given that so few verbs have these options for cliticization and passivization. The analytical choice concerns the proper theo-

retical apparatus for dealing with lexical idiosyncrasy. The mechanism I would like to propose for the solution to this problem and the problem of the absence of ditransitives in Maltese more generally is the same: categorial selection.

Categorial selection is usually taken to underlie particular idiosyncratic restrictions which a head places on items in its complement. Thus, verbs which require their internal arguments to be PPs headed by particular prepositions are said to select for their complement (or the head of their complement). We can account for the restriction of goal passives to the *wera* class by positing that Appl_w selects VPs headed by roots of the *wera* class only, thereby restricting the appearance of Appl_w to structures headed by *wera* class verbs.⁵⁹ Similarly, we can restrict the appearance of Appl_b to the complement of roots containing majority-class verbs with a categorial selection requirement.

This is only part of the puzzle, however — we still need a way to restrict the inability of Appl_w to assign Case to either internal argument such that it only occurs in *passive* vPs, or we would expect to find two accusative internal arguments in all actives, contrary to fact. This is where the notion of inheritance of a Case-assigning ability is crucial. Without this mechanism, we would be forced to posit an additional layer of categorial selection which restricts the appearance of this Appl_w to passive clauses. Instead, we can assume a unified understanding of Appl_w by positing that its Case-assigning properties are part

59. In what has preceded, I have represented the verbal root as though it were a unitary syntactic object of category V. However, if we take seriously the idea that monomorphemic words are in fact made up of category-neutral roots plus a categorizing head (as in Distributed Morphology; see Marantz, 1993; Embick & Noyer, 2001), we must admit two different categorizing *vs.* This will be the case even if we adopt the notion that roots are not selected for, but licensed (Acquaviva, 2008; Kramer, 2011). The difference between these two notions is largely one of directionality: whereas selection looks “downward,” licensing looks “upwards.” In either case, the output must be such that the syntactic component can differentiate between phrasal vPs built from roots in the two different classes. Since representing this graphically would introduce a large amount of complexity into the discussion, I will abstract away from this issue here.

of its inheritance from its phase head, ν . Moreover, it allows for the preservation of a unified notion of passives in Maltese: in either case, ν has the same voice properties, differing only in whether or not they allow the head of their complement to inherit the ability to assign Case.

This analysis is quite stipulative. Under the account just developed, it is a selectional accident of the *wera* class verbs that they appear with Appl_w and allow for either internal argument to receive structural Case from ν in passive clauses. However, it is worth stepping back for a minute to consider how the empirical situation forced us into such an analysis. It is simply an lexical fact about the verbs in the *wera* class that they can form goal passives while the remainder of the verbs in Maltese cannot. While the structures proposed for these verbs share many similarities with morphological causatives, there is no way to predict a verb's appearance in the *wera* class. Moreover, the only way to reconcile the fact that these verbs can appear in goal passives with the language-wide absence of the double object construction in actives is to provide a way of idiosyncratically restricting this structure to passive clauses. Asserting that these restrictions are a matter of selection and inheritance simply places these stipulations in the lexical properties of syntactic heads, the proper domain for root-specific idiosyncrasies. Additionally, while there is considerable selection at play in the analysis, all the lexical variation is located in one functional head: Appl_w .

It is worth pointing out that Maltese is not the only language to contain such “passive-only” derivational options — English displays similar restrictions in the domain of Exceptional Case Marking (ECM) or raising-to-object. As first observed by Lakoff (1970a;b), English has several verbs which appear to only

allow ECM constructions when the *matrix* clause is passive. The clearest of these is $\sqrt{\text{SAY}}$, as in the following examples:⁶⁰

(45)a. *Gus said Shawn to be a communist.

b. Shawn is said to be a communist.

While I will not offer an account of this contrast here, it is worth pointing out that the problem is theoretically similar to the issue Maltese double object constructions present: the argument structural properties of *say* (selection of a TP complement) are influenced by the voice of the matrix clause. In a theory which takes the presence or absence of passive syntax to be dependent upon a different head than the one controlling selectional properties of internal arguments, facts like these are largely a mystery and require some independent stipulation, anyway. The correct idea here appears to be that $\sqrt{\text{SAY}}$ selects TP only if *v* appears, whereas it selects CP in the presence of *v** (owing to the grammaticality of *Gus said that Shawn is a communist.*). Again, here, this is a fact about $\sqrt{\text{SAY}}$ *per se*, and not a fact about ECM/raising-to-object or passive in English more generally (for arguments to this effect, see Baker & Brame, 1972 and Postal, 1974).⁶¹

60. For more on this contrast, see Baker & Brame (1972); Postal (1974); and for a very different perspective, Pesetsky (1991).

61. One might wish to claim that these examples involve adjectival passives as opposed to true verbal passives, and that *said* in these contexts is instead a subject-to-subject raising adjective such as *likely*. This is assumed, for instance, in Hartman (2012). This works for a great majority of the examples discussed by Postal (1974), such as the oft-mentioned quasi-verbal use of *rumor* (as in *Matt is rumored to be a communist*). However, as Wasow (1977) notes, adjectival passives are well-formed when the matrix copula is replaced with *seem*, whereas verbal passives are not:

(i) a. Xander is likely to squander all his money.

b. Xander seems/appears likely to squander all his money.

Stepping back even further, it is possible to understand how such a confusing state of affairs resulted in Maltese, as the *wera*-class verbs have a known historical source in Semitic: the Classical Arabic double accusative construction discussed in the generative literature by Salih (1985); Ouhalla (1994); and Walkow (2012a;c; To Appear); among others. In this construction, which exists in limited form in Modern Standard Arabic, a single verb productively took two DP accusative objects, with the first displaying characteristics of being more prominent than the second:

- (46)a. $\text{ʔaʕtay-tu l-ʕaalib-a kitaab-a = hu.}$
 gave-1.SG DEF-student-ACC book-ACC = his
 “I gave the student his book.” (Ouhalla, 1994:57)
- b. $*\text{ʔaʕtay-tu ʕaahib-a = hu l-kitaab-a.}$
 gave-1.SG owner-ACC = its DEF-book-ACC
 “I gave the owner its book.” (Ouhalla, 1994:57)

Such structures are analyzed in detail by Walkow (2012a;c; To Appear), who convincingly shows that they derive from a causative-like structure where a *vP* is a complement to a light verb functional head, exactly as I have proposed for the Maltese goal passives, above. However, Maltese lacks any counterpart of the double accusative construction for two lexical DPs, as do many of the modern Arabic dialects of the Maghreb and North Africa — each of these dialects has replaced the double accusative construction with a prepositional dative

-
- (ii) a. Grace was thought to be a genius.
 b.*Grace seemed thought to be a genius.

Along these same lines, we can notice that *say* patterns like a verbal passive in this regard:

- (iii)*Shawn seems said to be a communist.

construction involving the Arabic counterpart to *lil*.⁶² In the present analysis we can locate this parametric difference in the lexical properties of one head: the lower head selected by the external argument introducing ν^* . In Classical Arabic, all verbs appeared with a head that assigned accusative case downward, making the higher causee structurally-licensed by ν^* . In Maltese, however, this head was lost for the majority of verbs in favor of the Appl_w which inherits its case-assigning properties from ν .

To sum up the discussion thus far, I have proposed that Maltese ditransitives, in the unmarked case, are prepositional dative constructions similar to prepositional datives in English. To account for the fact that some verbs behave differently from this prepositional dative construction, I proposed that they were generated by VP movement to a specifier of Appl_w , which comes in two flavors: one which assigns structural Case and another which does not, with the difference between these two being mediated by inheritance. *In toto*, I proposed that the following selectional options are available for syntactic heads in Maltese:

(47) Maltese Selectional Restrictions (first pass)

- a. ν^* — allows either VP or Appl_w with inheritance of Case by Appl_w .
- b. ν — selects either VP or any Appl_w with no inheritance.
- c. Appl_w — always selects a VP headed by a *wera*-class verb.
- d. Roots of the majority class select Appl_b uniformly.

However, I still have not provided an analysis of the cliticization facts in Maltese, which appear to diverge from the passive facts in important and in-

62. For documentation of this fact, see Wilmsen (2010; 2012) on lexical DPs and Retsö (1987) for the clitic series.

formative ways. In the following section, I will do just that, arguing that the availability of accusative pronouns for thematic goals with the *wera* class is another reflection of the structure in Tree 9 which requires refinement of the selectional restrictions listed in (47).

4.3.3.2 Understanding the Clitics

To begin the discussion of the derivation of the clitics, recall from §4.2.2 that there is no evidence for clitic doubling in Maltese. Kayne (1975) initially pointed out that the lack of doubling in clitic constructions (for Kayne, in French) is easily derived by assuming that the clitic itself is generated in argument position and moves to its final position. This approach to cliticization has been employed to account for the lack of doubling in Arabic, as well, by Broselow (1976) for Egyptian Arabic and Fassi Fehri (1993ch.3) for Modern Standard Arabic. It thus makes sense to treat the Maltese clitics similarly — they are generated as arguments in the standard argument positions but then move to a position which results in their attachment to the verb. This accounts for their complementary distribution with lexical DPs straightforwardly, as generating more arguments than Case-assigners in a clause will uniformly lead to unchecked Case features and a derivational crash.

As for the representation of the clitic itself, many options are available. Several studies of Romance cliticization, following Uriagereka (1995), assume that the clitics in these languages are determiner heads because of their overt phonological similarity to (and diachronic development from) determiners in these same languages. While there is no diachronic source for Semitic clitics involving the determiner or phonological similarities between the two (Shlonsky, 1997) it is clear that they have the external syntax of determiner phrases:

they are selected for by verbs and saturate an argument position normally filled by an overt phrasal DP. Clearly, the theory must account for the complementarity of phrasal and pronominal arguments in Maltese. Following the original conception of bare phrase structure (Chomsky, 1995a), I will assume that the determiners in Semitic are simultaneously minimal and maximal determiners.⁶³ The clitics are thus DPs from the point of view of syntactic computation, yet also head-like insofar as they do not appear in a branching structure.

If we accept the above postulates, then we must also posit an instance of syntactic movement to position the clitics on the verb. There are at least two reasons why this movement must be syntactic, one of which was seen in §4.2.1, above: negation, which is higher than $v(^*)P$ in Maltese, appears *outside* the object clitics when they appear in negative contexts. An account which takes clitic placement to be post-syntactic in these cases will have to posit additional operations to account for their placement inside negation, given that negation attaches to the verb via head raising of the latter to the Σ position (see Chapter 2).

A more serious issue not remediable by post-syntactic operations is the fact that these clitics would, in a post-syntactic account, be expected to attach to whatever material immediately preceded them. A post-syntactic account must necessarily treat enclitics as prosodically deficient elements which lean to their left in order to account for the fact that they appear word-finally in the absence of negation. However, if this is the case it is hard to see how the clitics would not be expected to attach to *anything* which is immediately to their left. This

63. Alternatively, we might take them to be φ Ps, following Déchaine & Wiltschko (2002) and Roberts (2010). However, it is not immediately clear to me that Maltese clitics have the properties Déchaine & Wiltschko (2002) identify for φ Ps. For other proposals that take clitics to be simultaneously head-like and phrasal structurally, see Bošković (1997; 2002); and Roberts (2010).

makes the unwelcome prediction that these clitics could attach to *vP* adjuncts appearing sentence-internally. This, however, never occurs in Maltese or, to my knowledge, in any Semitic language. For these two reasons, a syntactic account of their placement on *verbal* elements is necessary.

Positing that clitics in Maltese are simultaneously minimal and maximal provides us with a way to understand the nature of their movement to attach to the verb. As noted by Shlonsky (1997), clitics in the Semitic languages always attach to the head which immediately c-commands them. This is true of Maltese clitics, as well, as evidenced by their behavior in syntactic causative formation. As discussed in Chapter 3, causatives in Maltese can be formed in two distinct ways: morphologically and syntactically (Borg & Azzopardi-Alexander, 1997:218–20). Morphological causatives are formed by morphological alteration of the prosodic pattern of the verb, either by gemination of the medial consonant of the root or lengthening of the initial vowel. The syntactic causatives, however, are formed by use of the causative verb *giegħel*. This verb takes a *vP* complement containing the material which would be present in the non-causative transitive counterpart (48a). In this construction both the causee and the theme can appear as accusative clitics on the verb which immediately c-commands their base position (48b–c). However, as (48d) shows, it is impossible for the theme to appear as an accusative (or dative) clitic on the verb *giegħel*:

(48) Periphrastic Causatives in Maltese:

- a. (Hu(wa)) kiel il-kapunata.
He ate the-caponata
“He ate the caponata.”

- b. Louis ġiegħl = **u** jiekol il-kapunata.
Louis make = **3.SG.MASC.ACC** eat(.IMPF) the-caponata
“Louis made him eat the caponata.”
- c. Louis ġiegħl = **u** jiekol = **ha**.
Louis made = **3.SG.MASC.ACC** eat = **3.SG.FEM.ACC**
“Louis made him eat it.”
- d. *Louis ġiegħ = **lu** = **(l)ha** jiekol.
Louis made = **3.SG.MASC.ACC** = **3.SG.FEM** eat
Intended: “Louis made her eat it.”

One might attribute the ungrammaticality of (48d) to a prohibition on multiple accusative clitics in the language, as no such clusters are otherwise attested in Maltese. However, this explanation of the ill-formedness of (48d) can be ruled out by observing that the ungrammaticality is not remedied by use of a strong form pronominal for the causee, as in (49):

- (49) *Louis ġiegħel = **ha** lilu jiekol.
Louis made = **3.FEM.ACC** him eat
Intended: “Louis made HIM eat it.”

A straightforward way to interpret this pattern is to say that the movement of a clitic in Maltese to attach to its host verb is nothing more than an instance of head movement. Head movement is known to conform to a locality constraint known as the HEAD MOVEMENT CONSTRAINT (Travis, 1984), which, informally, requires that head movement must terminate in the head which immediately c-commands the base position. How this constraint, originally formulated in terms of Government, is to be updated into the present theoretical context will not be the focus here, but it suffices to note that this constraint

will require that clitics in Maltese, if they undergo head movement, must attach to the head which immediately c-commands them.⁶⁴

This head-movement cliticization is necessarily dependent on an AGREE relation if we are to explain the correlation between accusative Case assignment by v^* and the availability of accusative clitics. As we saw in §4.3.2, accusative cliticization of *any* argument with *any* verb class is impossible when the verb is passive; these facts are repeated as (50), below:

(50) No Accusative Clitics in Passives:

a. *Pawlu n-ghata = **ha**.

Paul PASS-gave = **3.SG.FEM.ACC**

“Paul was given it.”

(Comrie & Borg, 1985:120)

b. *Il-ktieb n-ghata = **ha**.

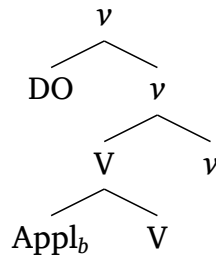
DEF-book PASS-gave = **3.SG.FEM.ACC**

“The book was given her.”

The proposal that accusative clitics are derived in part via an AGREE relation directly accounts for the absence of accusative clitics in passive contexts in Maltese. It is precisely these passive contexts in which the head v fails to assign accusative Case, as it does not participate in AGREE. For derivations involving majority-class verbs with single accusative clitics, this will have the result that cliticization does not occur immediately, but only after V has raised to v^* , resulting in the head adjunction structure depicted in Table 12.

However, this AGREE relation is not the only required addition to the theory to account for accusative clitic placement. Recall that accusative clitics in Maltese (and in fact, all clitics) are enclitics only, never proclitics. If we

64. This is also an argument which can be made via the verbal auxiliary *kien* used in periphrastic tense/aspectual constructions; see the data in (1).



Tree 12: Syntactic Output of Cliticization — Single Accusative Clitic

were to follow the proposal that head movement universally creates suffixation (Kayne, 1994), we would predict that the linear order of the components of the Maltese verb would be as depicted in Tree 12. This would not only lead to the prediction that all clitics are proclitics in Maltese, it would also predict that the exponence of v should appear *after* the verbal root. However, in the passive voice, all exponence of v appears to the left of the verbal stem (*modulo* stem allomorphy; see Borg & Azzopardi-Alexander, 1997:212–14). Therefore, for the head movement account to work, it must be the case that head movement does not create ordered structures, but instead creates head bracketing which is subject to linearization based upon the lexical properties of the exponents involved. In Maltese, this will mean that v is linearized preceding V and the clitic linearized following v . Note that the bracketing implied by Tree 12 allows for this linearization without disturbing the bracketing created in the syntactic component.

The proposal that head movement underlies cliticization in Maltese also avoids a technical problem which would arise if one attempted to derive clitics in the language with phrasal movement.⁶⁵ In Maltese, it is perfectly licit to

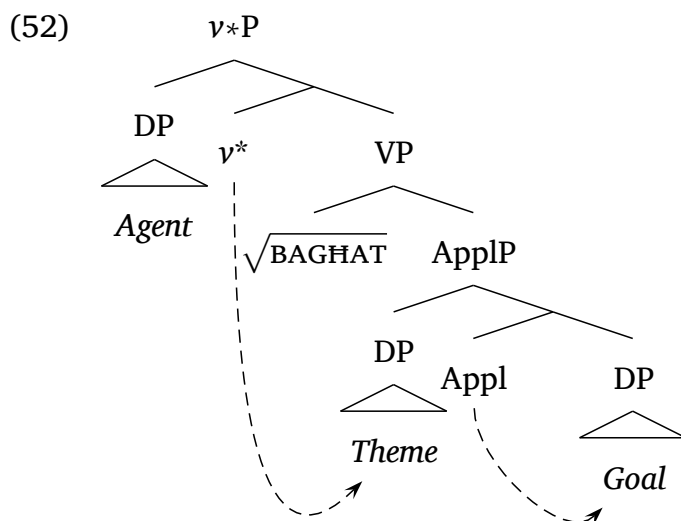
65. For theories of cliticization of this kind, see Marantz (1988); Anagnostopoulou (2003); Roberts (2010); Nevins (2011); Kramer (2011; To Appear); and Harizanov (To Appear); none of which are concerned with cliticization of the kind seen in Maltese.

cliticize a single dative clitic in the presence of a lexical DP accusative theme. An example of this commonly seen cliticization appears in (51):

- (51) *Ktibt = lek ittra.*
Wrote.I = 2.SG.DAT letter
“I wrote you a letter.” (Borg & Azzopardi-Alexander, 1997:254)

Given the structure for majority-class verbs (of which *kiteb* is one) proposed in the preceding section, the accusative nominal *ittra* appears in a position which asymmetrically c-commands the base position of the dative clitic *lek*. If cliticization involved a step of phrasal movement, this movement would violate the well-established intervention condition on A-movement, namely that it cannot take place over an intervening element which is also eligible for this movement. On the other hand, if cliticization in Maltese is truly head movement, then no such intervention is expected and the grammaticality of examples such as (51) can be understood without redefinition of the minimality constraints on A-movement, since the movement of the minimal DP clitic would obey the Head Movement Constraint.

The dative clitic series in Maltese is found with majority-class verbs whenever an applicative head’s complement is cliticized. Given the proposals for ditransitive syntax advanced in §4.3.3.1, above, we expect to find cliticization of a goal to appear in the dative series just in case the underlying structure is as in Tree 8, whose *vP* is repeated for convenience in (52). Furthermore, in the structure in Tree 8, the clitics themselves are not entering into an AGREE relation with the verb — instead, they agree with the *Appl_b* head with which it first merges.



It is therefore quite important to recall that *dative clitics can appear with passive verbs* in Maltese, as the following examples reiterate for verbs in both the relevant classes:⁶⁶

(53) Dative Clitics with Passives in Maltese:

- a. ...l-applikant ma rrispondie-x għal kwestjonarju li
 ...DEF-applicant NEG responded-NEG for questionnaire COMP
nt-bagħat = lu.

PASS-send = **3.SG.MASC.DAT**

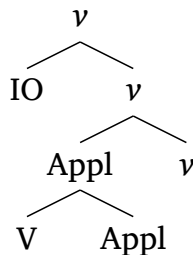
“...the applicant did not respond to the questionnaire which was sent
 to him.”

(Borg *et al.*, 2011:parl9982)

66. This fact is first noticed by Comrie & Borg (1985:120), though only for *ngħata*. In order to understand (53b), it is useful to know that Enemalta is an energy company in Malta of considerable size.

- b. ...imma lanqas din l-istima ma n-ghatat = ilha
 ...but even this DEF-estimate NEG PASS-give = 3.SG.FEM.DAT
 mill-Enemalta.
 by/from-Enemalta
 “...but even this estimate was not provided to them [*lit.*, a family
 –MT] by Enemalta.” (Borg *et al.*, 2011:par110128)

These facts show us that cliticization as a dative clitic is not dependent upon AGREE with v^* , as passive v does not enter into such an agreement relationship with any elements in vP , by hypothesis. Concretely, I will assume that the dative clitics are formed when a Case-underspecified clitic enters into an AGREE relation with Appl, but that cliticization to the verb itself is not preceded by AGREE with v for the dative series. This accounts for the fact that dative clitics can appear even when the head of v^* P cannot participate in this relation over an intervening theme DP or clitic. Putting the pieces together, single dative clitics are formed by attaching to a verb created by successive head movement of Appl_b to V and V to v . After this movement of the verb, the dative clitic head moves to v , resulting in the head adjunction structure in Tree 13.



Tree 13: Syntactic Output of Cliticization — Single Dative Clitic

After linearization of this structure, the resulting morpheme order imposed at morphological structure is $v\sim V\sim Appl\sim IO$, given the lexical linearization re-

quirements of ν and IO.⁶⁷ This structure accounts for the observed morphological properties of Maltese clitic clusters discussed above in §4.2.1 insofar as it brackets the clitics outside the verbal root and ν .

At this point, we are naturally faced with the question of the relation between AGREE and head movement of the clitics in this approach. The account I have outlined requires that head movement of the clitics *follows* head movement of the verb through its extended projection to ν^* , as the clitics appear outside the morphology which lexicalizes the functional heads in this extended projection, such as the passive prefix which appears in ν . At present, I have no way of independently deriving the relation between AGREE and head movement, though such accounts have been explored in the literature.⁶⁸ The basic requirements of this account are such that we need the clitics to move to the verbal complex in ν after the normal syntactic head movement of the verb has applied. Concretely, I will assume that AGREE relations between the clitics and the functional heads ν and Appl are interpreted at Spell-Out by head-moving the clitic to the probe with which it participated in AGREE. Delaying the movement of the clitics until Spell-Out will give us the necessary relative timing of verbal and clitic head movement. However, at present I must leave the reasons for this relationship between AGREE and head movement unspecified.⁶⁹

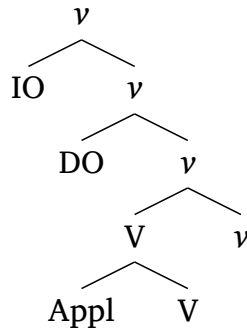
Turning now to derivations involving two clitics, the analytical options become more complex. The structure in Tree 8 is one in which the root will have raised to ν by the time cliticization occurs, leaving a phrasal complement of

67. Here and in what follows, I use the symbol \sim to mean “precedes” after linearization has applied.

68. See especially the discussion in Roberts (2010); Nevins (2011); and references therein.

69. One potentially promising option would be to interpret the cliticization operation as an instance of MORPHOLOGICAL MERGER in the sense of Marantz (1988; 1989).

ν with two clitics contained therein. The needed output is shown in Tree 14, where the dative clitic has attached outside of a head-adjunction complex containing the verb and the accusative clitic.



Tree 14: Syntactic Output of Cliticization — Two Clitics

Taking the structure in Tree 14 first, notice that this structure requires counter-cyclic movement of the clitics to ν in order to derive the correct linear order of the clitics. As I have been assuming that linearization must respect syntactic bracketing of the head adjunction structure, the only way to ensure that the dative IO clitic is linearized outside the accusative DO clitic is to assume that the accusative clitic moves first to ν , followed by movement of the dative clitic to ν .⁷⁰ One approach to this problem would be to assert that head movement cliticization proceeds by moving any clitics that ν has agreed with first (in this case, the accusative DO), followed by movement of any clitics which do not enter into an AGREE relation with ν . (in this case, the dative IO, which agrees only with Appl). In order to avoid positing that cliticization is counter-cyclic in general, I will adopt this idea.⁷¹

70. Note that since we are dealing with head movement and not phrasal movement, nothing like the PRINCIPLE OF MINIMAL COMPLIANCE Richards (1998) could be at play here.

71. We might try to account for the ordering of the clitics with a different set of syntactic movements by appealing to the operation of LOCAL DISLOCATION in the framework of Embick & Noyer (2001). However, this operation is assumed to apply under string adjacency (respect-

The preceding discussion has accounted for the cliticization options available to majority-class verbs, but what of the cliticization options for the less well-behaved *wera*-class? The structures in Trees 9–10 on pages 202–205 do not match the structures for the majority-class, and we therefore must understand how cliticization works in these cases. Recall from the preceding sections that the *wera*-class verbs allow three options for cliticization: (1) a single accusative clitic which is a theme; (2) two clitics, where the accusative is a theme and the dative a goal or source; and (3) a single accusative clitic which is a goal or source.

The first two options (1-2) are already derivable on the present approach, once we understand the way in which morphological case tracks abstract syntactic Case in Maltese. Recall from §4.3.3.1 and Tree 10 that there are two structural Cases assigned: one by v^* to the goal and another by Appl_w to the theme. In order to derive option (2), we do not need to say anything else over and above the morphological case realization proposed for morphological causatives in Chapter 3. In that chapter I proposed that morphological case is a reflection of structural Case in the syntax along the lines proposed by Marantz (1991). After a phase is sent to Spell-Out, the morphology interprets the two internal arguments as qualifying for dependent morphological case because of the presence of the external argument. For morphological causatives we assumed that the second of these two dependent cases is realized as dative, whereas the first is realized as accusative. This is precisely what is required to account for morphological case in *wera*-class verbs with two clitics. Similarly, the dependent conception of morphological case predicts the correct result for

ing bracketing), and so we would still need some way to place the clitics on the verbal cluster in the first place. Therefore, I will not explore this option here.

single theme clitics in the *wera*-class. Because the sole clitic is a theme argument which qualifies for dependent case and precedes the dative, it is realized as an accusative.

The last option, (3), is the option which is unique to the *wera*-class verbs and has been called dative-as-accusative cliticizations here. An example of this kind of cliticization is shown in (54):

- (54) Marija ta-t=**u** / urie-t
 Maria gave-3.SG.FEM=**3.SG.MASC.ACC** / showed-3.SG.FEM
 =u l-ittra.
 =**3.SG.MASC/ACC** DEF-letter
 “Maria gave/showed him the letter.” (Comrie & Borg, 1985:117)

This cliticization possibility requires an additional assumption about the nature of the case assignment to the theme (*l-ittra*) in examples such as (54). In the framework we have been assuming since Chapter 3, when an active verb contains two internal arguments, both are assigned dependent case with one of the two arguments receiving dative and the other accusative. With two dependent-case-eligible internal arguments in (54), we currently predict that one of the two arguments should be dative, contrary to fact.

The solution to this problem has to involve removing one of the internal arguments from the computation of dependent case values for the goal. If we do this, then there is only one available dependent case, accusative, for the goal clitic. However, in the disjunctive case hierarchy of Marantz (1991), there is only one way to remove an argument from a case domain: assign it inherent case. What is required, then, is a derivation in which the theme argument *l-ittra* in (54) is assigned inherent accusative case by some element inside *vP*. If this occurs, then there is only one argument distinct from the agent which

does not receive inherent case, namely the clitic, and we predict that it should receive morphological accusative as the interpretation of its structural Case feature. But what element inside vP could be assigning this inherent case? I will assume that it is the verbal root itself, since this option is demonstrably limited to roots of the *wera*-class only. This will ensure that only these verbs are capable of appearing with dative-as-accusative clitics.

But this, still, is not sufficient, as we predict that it should be possible to merge a second clitic in $[Spec, Appl_wP]$, replacing *l-ittra* in (54). If we did this, we would predict that two clitics should surface on the verb, *both of which bear morphological accusative case*. This is because the lower clitic theme would be assigned inherent accusative, making morphological accusative possible on the higher goal, as well. The empirical generalization here is that only a single clitic may appear on the verb if a dative-as-accusative clitic is employed. The way around this problem also must be lexically grounded, as this is still only an option for *wera*-class verbs.

The solution must therefore be another addition to the inventory of categorial selection requirements inside vPs of the structure in Tree 10. Specifically, we must restrict verbal roots of the *wera*-class to only allow the assignment of inherent accusative when their complement is non-pronominal. When the complement of the verbal root is pronominal, then the regular case-realization mechanisms will force the theme to be realized as accusative and the goal as dative, since the absence of inherent case on the theme means that both internal arguments qualify for dependent case. Here, again, we are faced with a somewhat messy idiosyncratic fact — whereas a great majority of the verbs in the language do not permit any semblance of a double accusative construction in the active voice, the *wera* class seems to do so when the goal is a pronoun.

Again, I would like to suggest that this is a fact that is simply memorized and encoded synchronically and encoded as a lexical restriction on the assignment of inherent case.

Here again there appears to be evidence suggesting that Maltese has synchronically frozen in place the syntax associated with the earlier Classical Arabic forms. As first discussed in the generative tradition by Fassi Fehri (1993), Classical Arabic, like Maltese, allowed more than one clitic to appear on the verb. However, unlike Maltese, these clitics were both morphologically accusative and appeared in the order *Goal — Theme*:⁷²

(55) Yakfiy = **ka** = **hum**.
 suffice.3.SG.MASC = 2.SG.MASC.ACC = 3.PL.MASC.ACC

“He will be sufficient to protect you from them.” (Wright, 1889a::103)

This construction is not found in Modern Standard Arabic (Gensler, 1998; Ryding, 2005:308; Wilmsen, 2010; 2012) or any of the modern dialects with the exception of Cairene Egyptian (Woidich, 2006:258), where it is quite rare. However, all of these dialects, as far as I can tell, have preserved an accusative clitic use for at least some of the verbs which appeared with these clusters in Classical Arabic, as the following example from Modern Standard Arabic shows:

(56) ?aʔtii = nii ?iyyaa = hu.
 give.IMPER = 1.SG ?IYYA = 3.SG.MASC

“Give me it!” (Ryding, 2005:308)

72. For more on these clitic clusters in Classical Arabic, see Fassi Fehri (1993:ch.3); Lecomte (1968); and Walkow (2012a;c). Shlonsky (1997:262ff) claims that the status of clitic clusters like the one in the text is dubious, a claim I take to be disproven by the work of Walkow (2012a;c). The confusion here stems from differential interpretations of Classical data involving double clitics in the *Al-Kitaab* of Siibawayhi (1881) which were untranslated in the original; see Gensler (1998) and Wilmsen (2012) for discussion of this text and its interpretation, where it is shown that various scholars have translated the clitic clusters in this ancient text in contradictory ways.

As with the verbs in the *wera* class in Maltese, there is no common property shared by all the verbs which preserve this double accusative use in Modern Arabic, suggesting that they must be memorized in the languages which preserve this option.

4.4 Conclusions

In this chapter I examined the behavior of internal argument clitics in one Semitic language, Maltese, showing that it has clitics which appear for both direct and indirect objects. Based on data from putative doubling structures, I posited that instances where a clitic co-occurs with a lexical DP are plausibly analyzed as dislocation structures in which the DP is not doubling the clitic but instead is an adjunct. This result is interesting given that several of the Arabic dialects of the Levant such as Palestinian (Shlonsky, 1997) and Lebanese (Aoun, 1981; 1999) *do* have clitic doubling. In this way Maltese patterns like Italian and dialects of North Africa and the Maghreb in disallowing information-structurally neutral doubling.

Furthermore, I discussed results sprinkled throughout the literature on Maltese passivization and discussed how the passive facts must be integrated into a theoretical understanding of the clitics themselves, as the passive facts interact with the cliticization options. The passive and clitic data, I have shown, are idiosyncratic and likely a historical preservation of a now-defunct Classical Arabic double object construction. This allowed us to intuitively understand the proposal by various Maltese linguists that the language has double object constructions only with pronominals, as well as the interaction of these argument structures with binding facts. However, I also argued that the goal

passives can be understood, given limited VP-movement structures where the dative argument is generated in a position which asymmetrically c-commands the accusative argument, a structure which is obscured by movement of the VP. Specifically, the limitation of goal prominence to pronouns and passives implicates a similar structure and can be accounted for by assuming that categorial selection between heads in an extended projection is at play.

At first blush, such a move might seem like a brute force stipulation. In a limited sense, it is. However, I showed in this chapter that such lexical idiosyncrasy can be traced historically to the loss of a more productive double object construction in Maltese that was attested in Classical Arabic and survives to this day in Modern Standard. The selectional restrictions proposed here, then, constitute a theoretical claim about the proper account of root-based constructional irregularity such as the kind exhibited by the *wera*-class verbs in Maltese. One could attempt to derive these facts from some deeper principle of grammar, but this would be, I hope to have shown, missing the point, as this construction is *not* productive in the synchronic grammar. Moreover, lexical peculiarities of this kind are found throughout Semitic and in more familiar languages such as English. Any attempt to derive these facts from something other than root-specific selection will predict a productivity that these formations simply do not have. Selection, I have argued, affords a direct and simple way to account for the reality of these forms in a non-lexical account of argument structure.

One question which comes immediately to mind after this examination of Maltese is the extent to which other languages in the Semitic group (or the Afroasiatic family more generally) behave the same or differently from Maltese. As I have noted occasionally in the chapter, Maltese looks very much like other dialects of North Africa and the Maghreb insofar as they have developed a

dative clitic series distinct from the accusative. Moroccan Arabic, in particular, has an identical clitic system, according to Harrell (2004). Moreover, historical linguists such as Gensler (1998) have made use of similar systems in Ge'ez to aid reconstruction of the clitic series in Afroasiatic. It is thus an important future goal to understand how these languages behave with respect to passivization of ditransitives. I have argued here that Maltese cliticization should be viewed as an instance of head movement, and this claim is familiar from other studies of Arabic (notably Fassi Fehri, 1993:ch.3). The question now is whether or not this account can or should be extended to the dialects of Arabic which pattern like Maltese with respect to their clitic inventories.

Finally, I showed that the Maltese facts have nontrivial implications for a theory of clitic-hood. While many modern proposals take *all* clitics to be licensed by AGREE between the clitic and a head to which it then moves, Maltese shows no evidence of an AGREE relation between dative clitics and the verbal head v^* . This means that it cannot be the case that all clitics are derived in the same fashion. An interesting question to take up in future research would be to what extent this differential behavior of clitics can be made to follow from general principles about the syntactic computation of bound elements. Here I have suggested that the answer lies in the fact that head movement, like agreement, is a local relationship between the two elements involved, but it remains to be seen if this account can generalize to other theories of cliticization.

In the following chapter, I will take up a different aspect of the clitics in Maltese and their broader cousins in dialects of the Maghreb. Here I will extend the discussion in this chapter to show that the structures proposed above have nontrivial implications for theories attempting to explain person-case-based restrictions on bound elements such as clitics and agreement. We will see that

these clitics are once again informative in Maltese, insofar as they help situate the dividing line in the grammar between the components of syntax and morphology.

Chapter 5

Person-Case Interactions in Maltese

The preceding chapters of this dissertation have examined the argument structure and case system of Maltese in causatives and ditransitive structures, as well as the cliticization options which arise from these structures. In this chapter, I turn to a slightly different problem related to the syntax of ditransitive predicates: prohibitions on logically permissible combinations of clitics. Maltese has such a restriction, which we will see boils down to the generalization in (1):

- (1) Clusters of more than one clitic always involve a third person accusative.

This kind of generalization over possible clitic clusters is not a novel one in studies of language, by any means. Similar effects have been documented in a wide variety of languages (for an overview, see Bonet, 1991 and Haspelmath, 2004; 2008). However, it has not been discussed in detail for Maltese, and its wider Arabic analogues have only recently come to the forefront of discussions of clitic restrictions (in Nevins, 2007 and Walkow, 2012a;c; To Appear). Within

the context of the current dissertation, such clitic restrictions are an important empirical and theoretical piece of the core question at hand: how are verbs in Maltese syntactically constructed and morphophonologically realized? As it stands thus far, none of the proposals in the previous chapters place restrictions on combinations of available clitics — to the extent that such restrictions exist, the present analysis is incomplete without an understanding of these facts.

From the theoretical side, questions as to the proper analytical understanding of clitic restrictions provide an important window into the division of labor between syntax and morphology. When one finds a clitic restriction at play in a language, two theoretical avenues of attack present themselves: (i) the effect is derivative of deeper restrictions on argument structural configurations of certain kinds which the clitics themselves happen to be one instance of or (ii) the effect is a result of something intrinsic to the clitics themselves — either a restriction on their realization or their combination. Both kinds of approaches have been advanced in the theoretical literature, and while recent literature has tended toward explanations like (i), I take the matter to be unsettled at present.¹

The main claim of this chapter is that the Maltese clitic cluster data, when combined with the argument structures for ditransitives proposed in Chapter 3 and Chapter 4, provide a means to discriminate between different proposed approaches to treating clitic restrictions analytically. Specifically, I will show that the character of the clitic cluster restrictions in Maltese argues strongly against syntactic approaches to the constraint based upon the mechanic of intervention

1. For morphological approaches focusing on the realization of the clitics themselves, see Perlmutter (1971) and Bonet (1995; 1994; 1991), among others. For more recent approaches relating such effects to more general constraints on argument structure and Case licensing, see Anagnostopoulou (2003; 2005b); Béjar & Rezac (2003); Richards (2005); Adger & Harbour (2007); and Walkow (2012a;b;c; To Appear); among others.

in the Minimalist operation AGREE. These accounts will be shown, without exception, to predict incorrect permutations of statement of the restriction when the command relations among internal arguments are varied. Because these proposals have universally assumed that goals appear in a different structural position than they are found in Maltese, these accounts predict that the character of the constraint in Maltese should be different from that found in other languages with similar restrictions. This prediction will be shown to be false. In place of these syntactic accounts, I will offer a return to the morphological characterization of the gaps as described in Bonet (1991), but updated into modern theoretical terms.

This chapter is organized as follows: in §5.1, I discuss the clitic restrictions which exist in Maltese and identify them as another instance of what the literature has come to term the PERSON CASE CONSTRAINT (PCC, henceforth). Along the way, I will also discuss data from two varieties of Arabic — Moroccan Spoken Arabic and the Classical language of the Qur'an and poetry — which display similar restrictions, showing that the restrictions found in Maltese are not a unique feature of that language but likely an areal or genetic property of the languages involved. In §5.2 I then discuss several important existing proposals for deriving the PCC and argue for the idea that dative intervention should not be the desired account of the PCC cross-linguistically. After this, I present a self-contained analysis of the PCC in Maltese in §5.3 which is based upon the original conception of the PCC in Bonet (1991). Finally, §5.4 concludes the chapter and discusses important lingering questions.

5.1 The Empirical Landscape

This section has two main purposes: the first is to empirically motivate the generalization in (1), above, that Maltese clitic clusters always contain a third person clitic in the accusative position. The second goal is comparative but still empirical in nature, namely, to compare the clitic restrictions seen in Maltese with similar restrictions found in varieties of Arabic and the Romance languages. This section is organized by language. The bulk of the section, §5.1.1 is devoted to motivating the existence of (1) for Maltese and to discussing its place in a larger typology of clitic restrictions which have been amply documented for other languages. The second portion (§5.1.2) discusses two other Semitic languages, Moroccan and Classical Arabic, and briefly shows that they have similar clitic restrictions, when the empirical situation is properly understood. Taken together, these two sections paint a picture of a subset of Arabic varieties which places them in close company with better-documented effects in other genetically unrelated languages.

5.1.1 PCC Effects in Maltese

To begin, we can note that many descriptive observations about Maltese make reference to restrictions on clitic combinations when more than one object clitic attaches to the verb.² We can flesh out a paradigm for these effects for each of the classes of verbs identified in Chapter 3 and Chapter 4. First, it can be shown from data like (2) that clitic combinations of local persons (1 > 2 and 2 > 1) are

2. See, in particular, the discussions by Sutcliffe (1936:179–80), Aquilina (1965/1995:214–8), Comrie & Borg (1985:115–6), Fabri (1993:104–5), and Borg & Azzopardi-Alexander (1997:360–3). To my knowledge, none of these authors attempt to relate this asymmetry in possible person/number combinations to the PCC in European languages or Classical Arabic.

(3)a. PCC — *Wera*-Class Verbs, I:

*Pietru wera = **ni** = **lu**.

Peter show.PERF = **1.SG.ACC** = **3.SG.MASC.DAT**

“Peter showed/revealed me to him.” (1 > 3)

b. Pietru wera = **ni** **lil** = **u**.

Peter show.PERF = **1.SG.ACC to** = **3.SG.MASC**

“Peter showed/revealed me to him.” (1 > 3)

c. *Ġorġ ta = **k** = **lhom**.

George give.PERF = **2.SG.ACC** = **3.PL.DAT**

“George gave you to them.” (2 > 3)

d. Ġorġ ta = **k** **lil** = **hom**.

George give.PERF = **2.SG.ACC to** = **3.PL.DAT**

“George gave you to them.” (2 > 3)

(4)a. PCC — *Bagħat*-Class Verbs:

*Xandru bagħat = **kom** = **lha**.

Xander sent = **2.PL.ACC** = **3.SG.FEM.DAT**

“Xander sent y’all to her.” (2 > 3)

b. Xandru bagħat = **kom** **lil** = **ha**.

Xander sent = **2.PL.ACC to** = **3.FEM.SG**

“Xander sent y’all to her.” (2 > 3)

c. *Xandru bagħat = **ni** = **lu**.

Xander sent = **1.SG.ACC** = **3.SG.MASC.DAT**

“Xander sent me to him.” (1 > 3)

d. Xandru bagħat = **ni** **lil** = **u**.

Xander sent = **1.SG.ACC to** = **3.SG.MASC**

“Xander sent me to him.” (1 > 3)

for several languages (including Classical Arabic) by Walkow (2012a;b;c; To Appear). Examples of these combinations appear in (6), and they are by no means rare:

- (6)a. Jekk iva, min ta = **hu** = **lu**?
 If yes, who give = **3.SG.MASC.ACC** = **3.SG.MASC.DAT**
 “If so, who gave it to him?” (Borg *et al.*, 2012:parl6018)
- b. ...dak li ta = ha dik id-doža ta’ eroina,
 ...that COMP gave = **3.SG.FEM.ACC** that the-dose of heroin,
 li ta = ha l-pakkett, li amministra
 COMP gave = **3.SG.FEM.ACC** the-packet, COMP administered
 = **hie** = **lha** ...
 = **3.SG.FEM.ACC** = **3.SG.FEM.DAT** ...
 “...who gave her that dose of heroin, who gave her the packet, who administered it to her...” (Borg *et al.*, 2012:parl1349)

This pattern of clitic restrictions holds not only of the ditransitive verbs discussed in Chapter 4, but also the morphological causatives discussed in Chapter 3. These verbs allow cliticization of the thematic object argument as an accusative clitic and the causee argument as a dative clitic. Despite the fact that morphologically causative verbs can be found whose lexical semantics allow a local person accusative argument, cliticization of both arguments is impossible with these verbs, as shown in for *semma*’ in (7), below:⁵

5. The citation form of this verb has a orthographic apostrophe in *semma*’ which represents word-final underlying *gh*. This is pronounced ? in these cases. When a clitic attaches, this final ? does not appear, a situation which is represented orthographically by *gh*.

(7) The PCC in Maltese Morphological Causatives:

- a. *Louis semmagħ = **ek** = **lu**.
Louis listen = **2.SG.ACC** = **3.SG.MASC.DAT**
“Louis made him listen to you.” (2 > 3)
- b. *Louis semmagħ = **ni** = **lha**.
Louis listen.CAUS = **1.SG.ACC** = **3.SG.FEM.DAT**
“Louis made her listen to me.” (1 > 3)
- c. Louis semmagħ = **lu** **lil = ek**.
Louis listen.CAUS = **3.SG.MASC.DAT to = 2.SG**
“Louis made him listen to you.” (2 > 3)
- d. Louis semmagħ = **lha** **lil = i**.
Louis listen.CAUS = **3.SG.FEM.DAT to = 1.SG**
“Louis made her listen to me.” (1 > 3)

Furthermore, clusters of two third person clitics are also possible for causatives, as in (i):

- (8) Pawlu semmagħ = **hie** = **lu**, **l-ghanja**.
Paul heard.CAUS = **3.SG.FEM.ACC** = **3.SG.MASC.DAT** the-song
“Paul made him hear it, the song.” (3 > 3)

As these examples also show, the alternative expression of illicit clusters for morphological causatives is identical to that for other ditransitives.

In addition to the examples given above, we can examine the occurrences of logically possible clitic combinations on representative verbs from each class in the Maltese Language Resource Server Corpus (Borg *et al.*, 2011). The forms found for singular pronominals with a masculine accusative object appear in Table 5.1, where the asterisk is intended to mean that no such examples were

found. The facts are the same for both plurals and combinations involving a feminine accusative object.⁶

DO	IO		
	1	2	3
1	*	*	*
2	*	*	*
3	= hu = li	= hu = lek	= hu = lha

Table 5.1: PCC Effects Schema — Maltese

The fact that the person restrictions seen in the examples (2–7) are confirmed by fieldwork judgments and corpus findings leads to the conclusion that they are robust judgments. Indeed, I have never seen even a single example of clitic combinations represented by asterisks in Table 5.1. If we take this empirical generalization as given, then we must conclude that Maltese displays (in the terminology of Bonet, 1991) a STRONG PCC — the accusative argument *must* be third person if a clitic cluster is to be employed. If not, a periphrastic expression with a freestanding pronoun must be employed instead. We can additionally be sure that we are dealing with a Strong PCC and not one of the finer-grained versions discussed by Nevins (2007) by noting the impossibility of local person combinations such as $2 > 1$ or $1 > 2$.

This pattern of restrictions in clitic clusters — where the accusative must be third person — is not unique to Maltese. Perhaps the most widely discussed version of an identical restriction comes from French, as first investigated by Kayne (1975) and which later came to be known as the ME LUI CONSTRAINT

6. The main reason for the restriction to masculines is clarity: the /a/ of the feminine direct object marker /=ha/ in Maltese undergoes lengthening to /=hie/ when a second clitic or negative marker follows it. Since it is simply easier to parse examples without orthographically represented vowel lengthening, I restrict myself to the clitic /=h~u~hu/ as the accusative clitic wherever possible in this section.

when further discussed by Bonet (1991) in a wider Romance context.⁷ Examples of this effect in French are shown in (9):

(9) PCC Effects in French (from Kayne, 1975):

- a. *Paul **me** = **lui** = présentera.
 Paul **1.ACC** = **3.DAT** = introduce.FUT
 “Paul will introduce me to him.” (Kayne, 1975:173–4)
- b. Paul **me** = présentera à lui.
 Paul **1.ACC** = introduce.FUT to **3.ACC**
 “Paul will introduce me to him.” (Kayne, 1975:173–4)
- c. *Paul **vous** = **leur** = recommandera.
 Paul **2.ACC** = **3.DAT** = recommend.
 “Paul will recommend you to them.” (Kayne, 1975:173–4)
- d. Paul **vous** = recommandera à eux.
 Paul **2.ACC** = recommend.FUT to **3.ACC**
 “Paul will recommend you to them.” (Kayne, 1975:173–4)

In (9a,c), a logically possible combination of an indirect and direct object clitics (*me lui*) yields an ungrammatical sentence, contrary, perhaps, to *a priori* expectations. It can be shown that semantic plausibility or particular syntactic restrictions on combinations of particular person values in the argument structure of a single predicate are not to blame for the ungrammaticality of (9a,c) — (9b,d) show that the effable alternatives involve realization of the indirect object as a prepositional phrase, exactly as in Maltese.

Moreover, the parallel between French and Maltese continues beyond the data in (9). The prohibition on clitic clusters involving local accusative clitics

7. Since the later literature after Bonet (1991) shifted the name of the constraint to the current name, the PCC, I will continue to use that term here.

extends beyond simple ditransitives to clusters created by causativizing light verbs, as well. Thus in (10a), the cluster *nous lui* created by cliticization of both the causee and the theme argument of *téléphoner* is subject to the same constraint. With the dative expressed as a PP, (10b) is perfectly grammatical. The facts are the same for other person combinations, though these are omitted here brevity's sake.

- (10)a. *Cette nouvelle **nous** = **lui** = a fait téléphoner.
 this news **3.PL.DAT** = **3.SG.ACC** = has made telephone
 “This news has made us phone him/her.” (Kayne, 1975:297)
- b. Cette nouvelle **lui** = a fait téléphoner à **nous**.
 this news **3.PL.DAT** = has made telephone to **3.PL.ACC**
 “This news has made us phone him/her.”

Thus in French causatives, too, can give rise to PCC violations, as in Maltese.

However, the two languages pull apart in the way in which causatives interact with the PCC. French has only periphrastic causatives involving the light verb *faire*. Maltese, on the other hand, has two different kinds of causatives, as outlined at some length in Chapter 3: (i) morphological causatives of the kind seen in the PCC configurations in (7) and (ii) periphrastic causatives with the verb *giegħel*. While the former give rise to PCC violating clitic clusters which are ungrammatical (7), the latter does not (11):

- (11)a. Pawlu giegħel = **ha** bghatet = **li** ittra.
 Paul made = **3.SG.FEM.ACC** send(.3.SG.FEM) = **1.SG.DAT** letter
 “Paul made her send me a letter.”
- b. Pawlu giegħel = **i** bghatt = **lha** ittra.
 Paul made = **1.SG.ACC** send(.1.SG) = **3.SG.FEM.DAT** letter
 “Paul made me send her a letter.”

- c. Pawlu ġieghel = **ha** bġhatet = **ni** lill-omm
 Paul made = **3.SG.FEM** send = **1.SG.ACC** to.the-mother
 = **i**.
 = 1.SG.POSS
 “Paul made her send me to my mother.”
- d. Pawlu ġieghel = **i** bġhatt = **ha** lill-omm
 Paul made = **1.SG.ACC** send = **3.SG.FEM** to.the-mother
 = **i**.
 = 1.SG.POSS
 “Paul made me send it to my mother.”

No matter how we examine the interaction between the cliticized causee on *ġieghel* and an argument cliticized on the complement verb *bġhat*, the combination is licit. Of course, the causative complement *vP*, since it is ditransitive, can trigger a PCC violation of both of its internal arguments, as in (12):

- (12)a. *Pawlu ġieghel Louis bġhat = **ni** = **lek**.
 Paul made Louis send = **1.SG.ACC** = **2.SG.DAT**
 “Paul made Louis send me to you.”
- b. Pawlu ġieghel Louis bġhat = **ni** **lil = ek**.
 Paul made Louis send = **1.SG.ACC** **to = 2.SG.ACC**
 “Paul made Louis send me to you.”

Intuitively, these kinds of contrasts are easy to understand: the PCC only arises in Maltese when two clitics appear *on the same verb as a cluster*. Similar effects have been documented for other languages with a PCC (see, e.g., Bonet, 1991; 1994 and Anagnostopoulou, 2003; 2005b).

5.1.2 PCC Effects in Other Arabic Varieties

While PCC effects in Classical Arabic are relatively well-established in the theoretical literature (see below), what is noticeably lacking from discussions of person-case interactions in Semitic clitics is data from spoken varieties of Arabic. While §5.1.1 has shown that such interactions do occur in Maltese, a major theme of this dissertation has been the observation that there are several important syntactic contrasts between Maltese and other Arabic dialects. It is therefore important to compare the behavior of both Maltese and CA to that of other Arabic dialects which display PCC effects.

The goal of this section is to provide evidence of PCC effects previously unreported in the theoretical literature for spoken vernacular Arabic. I do this by discussing Moroccan first in §5.1.2.1. After this, §5.1.2.2 includes some discussion of how the findings of this section should bear on expectations of finding PCC effects in other Arabic dialects. Finally, §5.1.2.3 provides some comparison between Maltese and Moroccan on the one hand and Classical Arabic, which has long been known to have a PCC effect in its clitic clusters, on the other.

5.1.2.1 Moroccan Arabic

Moroccan Arabic, specifically the dialect spoken by educated speakers in the urban parts of northwest Morocco, is a relatively well-studied regional variety of Arabic.⁸ Like Maltese and dialects of North Africa, Moroccan has two distinct series for internal argument clitics: an accusative and dative series (Har-

8. For instance, it is the subject of Harrell's 2004 reference grammar and several articles and books by linguists Aoun *et al.* (1994); Aoun & Benmamoun (1998); Aoun *et al.* (2010); and Benmamoun (1996; 1997; 1998; 1999b; 2000; 2006); among others.

rell, 2004:134–8). Also like Maltese, the dative series is distinguished from the accusative series by two criteria: (i) a clitic-initial *l-* related to the dative preposition *li* which is not seen in the accusative clitics and (ii) a reduced inventory of phonologically conditioned allomorphs compared to the accusative series (the conditioning environments of which are not discussed here). Both of these differences are shown along with the full object clitic inventory in Table 5.2.

φ	DO	IO
1	i/ya/y/ni	li
2	ek/k	lek
3.m	u/h/eh	lu
3.f	ha	lha
1.pl	na	lna
2.pl	kom	lkom
3.pl	hom	lhom

Table 5.2: Clitics in Moroccan Arabic

Given that the clitic inventory in Maltese and Moroccan are so similar, it is perhaps unsurprising that identical person-based clitic restrictions hold in both these languages.⁹ Specifically, Moroccan allows two clitics to appear on a verb if and only if the accusative clitic is third person (*cf.*, the discussion in Harrell, 2004:136–9 and Haspelmath, 2008:8–9). In such cases, the clitic order is ACC > DAT and the repair for PCC-violating clusters is the realization of the dative clitic as a freestanding strong form pronoun preceded by *li(l)*. All of these properties are shown in the examples which follow:

(13) Moroccan Arabic Clitics: 1 > 2:

9. This section owes a great debt to Kevin Schluter and his Moroccan consultants for judgments on the ungrammatical examples.

a. *qeddem = **ni** = **lek**
introduced.3.SG = **me** = **you**
“He introduced me to you.” (Harrell, 2004:140)

b. qeddem = **ni** **lil** = **ek**
introduced.3.SG = **me** **to** = **you**
“He introduced me to you.”

(14) Moroccan Arabic Clitics: 1 > 3:

a. *qeddem = **na** = **lhom**
introduced.3.SG = **us** = **them**
“He introduced us to them.”

b. qeddem = **na** **li** = **hom**
introduced.3.SG = **us** **to** = **them**
“He introduced us to them.” (Harrell, 2004:140)

(15) Moroccan Arabic Clitics: 2 > 1:

a. *qeddm = **ek** = **li**
introduced.3.SG = **you** = **me**
“He introduced you to me.”

b. qeddm = **ek** **lil** = **i**
introduced.3.SG = **you** **to** = **me**
“He introduced you to me.” (Harrell, 2004:140)

(16) Moroccan Arabic Clitics: 2 > 3:

a. *qeddemt = **kom** = **lha**
introduced.1.SG = **y'all** = **her**
“I introduced y'all to her.” (Harrell, 2004:140)

- b. qeddemt = **kom li = ha**
 introduced.1.SG = **y'all to = her**
 "I introduced y'all to her."

(17) Moroccan Arabic Clitics: 3 > 1:

- a. werriti = **h** = **li**
 showed.2.SG = **it/him** = **me**
 "You showed it/him to me." (Harrell, 2004:139)
- b. werriti = **h** **lil = i**
 showed.2.SG = **it/him to = me**
 "You showed it/him to me."

(18) Moroccan Arabic Clitics: 3 > 2:

- a. ʔtit = **u** = **lek**
 gave.1.SG = **him/it** = **you**
 "I gave him/it to you." (Harrell, 2004:139)
- b. ʔtit = **u** **lil = ek**
 gave.1.SG = **him/it to = you**
 "I gave him/it to you."

(19) Moroccan Arabic Clitics: 3 > 3:

- a. werriti = **h** = **lha**
 saw.2.SG = **it** = **her**
 "You showed it/him to her." (Harrell, 2004:139)
- b. werriti = **h li = ha**
 saw.2.SG = **it to = her**
 "You showed it/him to her."

Given that the grammatical examples of person combinations which violate the PCC involve realization of the dative clitic as a freestanding pronoun, one can safely conclude that the restriction on particular person combinations is a function of the clitic *cluster*, and not simply the clitics themselves. This is a defining property of PCC effects crosslinguistically, as we saw above. Moreover, the similarity between Maltese and Moroccan confirm that the clitic restriction patterns found in one of these languages is not an idiosyncratic fact about the dialect in question, but rather is an important generalization which merits theoretical attention.

5.1.2.2 Dialectal Speculations

Both Classical Arabic and Moroccan vernacular Arabic are arguably not representative of the grammar of all or most of the other spoken regional varieties. For Classical Arabic, this is a matter of temporal depth: CA and the modern languages are separated by too much time. In the case of Moroccan Arabic, the matter is somewhat more impressionistic, but the influence of French and Berber can be seen in the language. With this in mind, it is therefore an open question whether or not the activity of PCC effects can be seen in any other regional dialects of Arabic.

For a great majority of the regional dialects, especially those west of Egypt, independent facts about their grammars make direct examination of PCC effects impossible, however. As briefly mentioned in Chapter 4, the syntax of ditransitive verbs when both their internal arguments are pronominal plays out in different ways depending on the region: dialects east of Egypt tend to have the unmarked word order IO — DO and limit clitics to one per verb (unlike CA), whereas dialects to the west and in the Maghreb (of which Moroccan is a mem-

ber) tend to have the unmarked order DO — IO and allow both pronominals to appear encliticized in that order.¹⁰ Because of this independent difference in the syntax of ditransitive verbs, dialects in the eastern part of the Arab world will never show PCC effects, as they do not permit *any* clusters of the relevant kind.¹¹

In the western portion of the Arab world, however, one expects to find the PCC appearing wherever the dialect under examination allows more than one clitic on the verb. This has been demonstrated to be true for Moroccan Arabic in the previous section. It is less clear to me at present whether dialects in the north of Africa conform to this generalization, though perhaps tellingly, Woidich (2006:41) gives a similar generalization for the variety of Egyptian Arabic spoken in Cairo.¹² Similar restrictions are noted cross-dialectally by Retsö (1987) and Haspelmath (2008). While a comprehensive cross-dialectal study is beyond the scope of this chapter, one expects to find similar person-

10. For discussion of this distinction in Arabic dialectology, see Wilmsen (2010; 2012) and references therein. It is important to mention that this distinction is not a categorical one, especially in the writing of educated speakers who have exposure to the Classical Arabic pattern which is largely preserved in the eastern dialects. It is likely that the CA IO — DO pattern with more than one clitic possible was found in a historical ancestor of both Semitic and other branches of the Afroasiatic family; see Gensler (1998; 2000). Moreover, I leave aside here dialects like those discussed by Retsö (1987) where the second of two pronominals is realized as a freestanding nominative pronoun.

11. An interesting project would attempt to relate the availability of more than one clitic to the availability of dative case assignment to one of the internal arguments in ditransitives. Previous work on ditransitives have often attempted to relate the case pattern seen in ditransitives to independent differences in the syntax of those constructions — a particularly detailed account is given by Baker (1988a). I will not attempt to do such a comparative study here, for two reasons: (1) the necessary descriptive work for the regional varieties of Arabic simply does not exist for dialects west of Egypt and (2) the account would require an understanding of why Maltese seems to behave as though it were in both dialect groups as far as case-marking goes: some verbs in Maltese (the *wera*-class ditransitives) mark both internal arguments accusative, whereas others (the *bagħat*-class ditransitives) mark both internal arguments differently. Normally, such comparative work has taken as its starting point better-behaved languages in which only one case pattern is found; as such, I will reserve this line of inquiry for future work.

12. According to Woidich (2006:41): “Ein indirektes Objektsuffix kann an ein bereits vorhandenes direktes Objektsuffix der 3. Personen treten[.]”

based restrictions in the dialects of Algeria, Libya, Tunisia, and countries to the south.

5.1.2.3 PCC Effects in Classical Arabic

Classical Arabic (CA, henceforth; for an introduction, see, among others, Thackston, 2000), the language of Qur'an and classical-era Arabic poetry (approximately the seventh to ninth centuries C.E.), also arguably shows person-case interactions in clitic clusters. These facts have been picked up by mainstream generative grammar (see Bonet, 1991; Fassi Fehri, 1993; Nevins, 2007; and Walkow, 2012a;c; To Appear, among many others), despite the fact that Classical Arabic is not spoken today anywhere in the Arab world. Furthermore, while it has been famously claimed that the modern dialects trace their genetic history through a stage which included a spoken variety of Classical Arabic (Ferguson, 1959), this claim is hard to justify given that no modern spoken varieties preserve key features of CA, such as a robust system of morphological case-marking on DPs (Owens, 2006). It is therefore not necessarily the case that Classical Arabic was a language of everyday oral communication during the time it was in use. Holding these worries temporarily in abeyance, in this section I will review these authors' empirical characterizations of the facts in CA, as these facts surface in discussion of the PCC with some regularity.¹³

The initial observation that the Arabic spoken during the Umayyad and Abbasid caliphates had person-based restrictions on clitic combinations comes from the Persian-born eighth century linguist Siibawayhi (Abuu Bishr ʿamr ibn ʿuthmaan ibn Qanbar Al-Biṣrii). In his book *Al-Kitaab* (*lit.*, “the book”),

13. Though see below and the Appendix in this chapter for more consideration of how the nebulous status of attested work on CA could have influenced modern generalizations about the language.

Sibawayh includes an appendix discussing ordering restrictions among clitics for verbs with more than one clitic which he characterizes a preference for first before second and second before third: $1 > 2 > 3$ (Siibawayhi, 1881§211). This is the interpretation of the restriction given in Wright (1889a;b); Bonet (1991:183–4); Fassi Fehri (1993); Nevins (2007:298); and Walkow (2012a;c; To Appear). For combinations involving a third singular masculine and second person masculine clitic, this leads to a slightly different picture from Maltese, shown schematically in Table 5.3.

DO	IO		
	1	2	3
1	*	*	*
2	= nii = ka	*	*
3	= nii = hii	= ka = hii	= haa = hii

Table 5.3: PCC Effects Schema — Classical Arabic

However, the situation is not as clear-cut as Table 5.3 makes it seem, particularly with respect to the combination $3 > 3$ where the empirical situation is not so undisputed. Siibawayhi (1881); and Wright (1889a;b) both attest examples with $3 > 3$, but note that the combination is quite rare. Fassi Fehri (1993) does not mention the combination $3 > 3$ and Nevins (2007), following Fassi-Fehri, implicitly takes $3 > 3$ to be grammatical. The situation is examined more thoroughly by Walkow (2012a;b;c) who corroborates the intuition of Siibawayhi, finding that while two third person restrictions are very rare, they do exist in the data available on CA.¹⁴

14. Walkow (2012b;c; To Appear) is explicitly concerned with deriving the *ungrammaticality* of $3 > 3$ forms, and posits a system which accounts for these facts which I will take up in §5.2. I will take the opposite approach here and assume that $3 > 3$ is grammatical in CA, as tokens do exist such as (i):

Moving beyond the licit person combinations, when a PCC-violating combination results from attempted cliticization, there are two possible options: (i) the dative argument is expressed as a PP, exactly as in (1), above and (ii) the accusative clitic appears suffixed to the dummy prosodic host *?iyya-*. While the second option could occur in Maltese, note that it would be difficult to tell given the fact that Maltese marks accusative objects with a case-marker phonetically identical to *lil-*. These repair facts in CA are shown in the examples in (20), below:

(20) PCC Effects in Classical Arabic:

a. **ʔaʔtay-ta* = **huu** = **nii**.
 give.PERF-2.SG = **3.SG.DAT** = **1.SG.ACC**
 “You gave me to him.” (Nevins, 2007:298)

b. *ʔaʔtay-ta* = **nii** **lil** = **huu**.
 give.PERF-2.SG = **1.SG.ACC to-** = **3.SG**
 “You gave me to him.” (Nevins, 2007:298)

c. *ʔaʔtay-ta* = **huu** **?iyya** = **nii**.
 give.PERF-2.SG = **3.SG.DAT ?IYYA** = **1.SG.ACC**
 “You gave him to me.” (Nevins, 2007:298)

(i) *?asmiʔ* = **humuu** = **hu**.
 hear.JUSS = **3.MASC.PL** = **3.MASC.SG**
 “Let them hear it.” (Gensler, 1998:241)

Note also that Maltese, as well as all the modern dialects discussed here, concretely allow two instances of third person, as shown below:

(ii) *Louis bagħat* = **hu** = **lha**.
 Louis sent = **3.SG.MASC.ACC** = **3.SG.FEM.DAT**
 “Louis sent it to her.”

Furthermore, the variability here is perhaps due to a different source: a ban on two identical suffixes which is found in clusters of this kind in CA (Reckendorf, 1895:393). The data simply underdetermine this point, as far as I can tell. Confusion of this kind should underscore the point that discussions of subtle or gradient constraint-based effects such as the PCC should be evaluated with respect to an active speech community. Since none exists for CA, I will leave this matter for now.

Notice, too, that in examples such as (20), the order of the clitics is always DAT > ACC, exactly the opposite of the order seen in Maltese.¹⁵

Unfortunately, it is impossible to test whether the restrictions exemplified in Table 5.3 and (20) show *all* the hallmarks of the PCC, as speakers of Classical Arabic are not forthcoming due to its extinction. However, several of the properties from crosslinguistic work on PCC effects are easy to see in the CA data already presented. The effect targets verbs with clusters of clitics (only), as (20b) is available as the effable alternative. Given that: (i) CA has been described as having a PCC effect since at least Bonet (1991) and (ii) the contrasts between Maltese and Arabic in this regard are instructive when coupled with the conclusions about argument structure from Chapter 4, I will assume that the effect seen in (20) is a true PCC effect.

Given that the configurations 1 > 3, 2 > 3, and 3 > 3 are all attested in the appendix from textual examples, it seems clear that CA has at least a strong PCC effect insofar as clitic combinations of local persons are never found. However, the questionable nature of the data supporting the 1 > 2 configuration make it difficult to conclude much about the exact nature of the PCC in CA; given the discussion in Appendix 5.A, I conclude here that CA in fact displays only the strong PCC.¹⁶

15. In the sections which follow, I will take this as related to the fact that Arabic has the double accusative construction discussed by Ouhalla (1994) and in Chapter 4.

16. This is not meant to be a challenge to the cross-linguistic validity of the notion “ultrastrong” PCC from Nevins (2007) — as Bonet (1991) and Nevins (2007) both note, some speakers of Spanish allow for the configuration 1 > 2, making their idiolectal Spanish attested examples of ultrastrong PCCs. Thus, it may be the case that so-called ultrastrong clitic restrictions do exist, but it is not the case that CA is a prime example of such an effect.

5.2 Previous Accounts of the PCC

In the previous sections we saw that Maltese, Moroccan, and Classical Arabic all have a restriction in clitic clusters forcing the accusative member of the cluster to be third person. This section takes that observation as its starting point, along with the proposed argument structures for causatives and other ditransitives from Chapters 3 and 4 and examines recently proposed syntactic approaches to the Person Case Constraint. As we shall see, the argument structures which were independently motivated for Maltese in the previous chapters call into question a series of assumptions which each implementation has previously included. When these assumptions are not made, it will be shown, these syntactic models either make no predictions at all or make predictions which are false. The conclusion will be that an approach free of these assumptions is required to account for the facts of Maltese, and by extension the facts of Moroccan Arabic, as well. The big-picture result is that one should view the PCC as a morphological restriction, a proposal which is then taken up in the following section.

Here I will discuss the implications of the Maltese ditransitive clitic syntax for syntactic approaches to the PCC in a somewhat abstract way. This is in part out of necessity: the literature on syntactic accounts of the PCC is vast, to say the least.¹⁷ It is simply impossible to demonstrate the problematic nature of the Maltese and Moroccan data for each specific implementation within the bounds of this chapter. The abstractions I will make in the following sections will include claims which are common to each approach, most centrally among

17. See Ormazabal & Romero (1998); Anagnostopoulou (2003; 2005b); Béjar & Rezac (2003); Rivero (2004); Richards (2005); Adger & Harbour (2007); Rezac (2008; 2011); Nevins (2007); Béjar & Rezac (2009); Bhatt & Šimík (2009); Kalin & McPherson (2012); and Walkow (2012a;c; To Appear); among others.

them the assertion that the PCC arises only in contexts where a dative argument asymmetrically c-commands an accusative argument.

Despite these abstractions, however, I will still linger on three different implementations of a syntactic approach to the PCC. This is done in order to show that the three most popular accounts of the PCC in syntactic terms share the common abstractions which I will discuss. These three accounts vary quite a bit in their theoretical particulars, and I discuss each of them in turn in order to show that the common core of these accounts, the assumption that the PCC results from the intervention of a dative argument on AGREE with the lower accusative, leads to incorrect predictions in the case of Maltese, where this assumption cannot be met. It might normally suffice to discuss just one of these proposals, but given that syntactic approaches to the PCC are quite popular, I take it to be necessary to show that this problematic assumption leads to incorrect predictions regardless of the details involved.

This section is organized as follows: The set of core assumptions shared by all models is discussed first in §5.2.1. There I detail the core insights of the syntactic approach to the PCC, following the discussion in Anagnostopoulou (2003; 2005b) and Béjar & Rezac (2003) most closely. It will be shown that the Maltese data challenge two core assumptions of this model, namely that the PCC seen in Maltese and Moroccan can only arise: (1) in configurations where a dative argument is more prominent syntactically than an accusative argument and (2) in configurations where the two arguments implicated in the PCC both participate in AGREE with one syntactic head. After this, I turn to two other variants of the syntactic approach to the PCC in §5.2.2, namely those in Nevins (2007) and Walkow (2012a;c; To Appear), and show that they also make similar predictions, despite having different theoretical implementations.

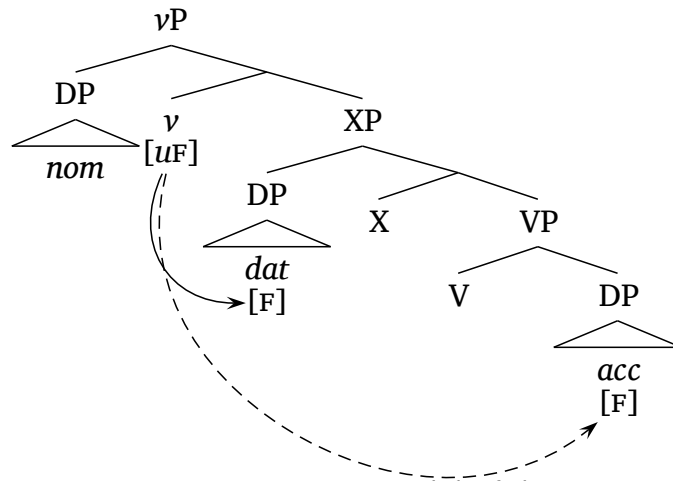
5.2.1 Common Features

The syntactic approaches to the Person Case Constraint recently proposed all share a common theoretical framework — the same version of minimalist syntax assumed throughout this dissertation. The core assumption which each implementation makes involves the treatment of the PCC as a kind of intervention effect on the operation AGREE. This operation is assumed to underlie the empirical phenomenon of agreement, but, as we saw in Chapter 4, it is also assumed to underlie some, if not all, instances of cliticization. The logical structure of the account is that when the PCC applies, the output is a failure of cliticization driven by the failure of AGREE.

The way that a failure of cliticization is derived in PCC-violating configurations is illustrated in Tree 15. On these accounts, a key assumption is that the dative goal or causee is base-generated in a position which asymmetrically c-commands the accusative theme or patient (labeled in Tree 15 as [Spec,XP]).¹⁸ The PCC arises in these models as a result of the requirement that ν participate in AGREE with both internal arguments in a ditransitive argument structure. Because the dative argument asymmetrically c-commands the accusative argument, AGREE with the dative will always succeed, denoted by the solid line in Tree 15. However, if the accusative argument bears a feature, [F] in Tree 15, which requires checking against ν via AGREE, then the presence of [F] on the dative argument will make this second AGREE relation impossible to realize. This occurs because one of the core conditions on AGREE is minimality relativized by feature: if a potential goal for AGREE is asymmetrically

18. This assumption is made explicitly by many of the proponents of the models discussed in this section. See Béjar & Rezac (2003:23), Anagnostopoulou (2005b:211); Nevins (2007:293); and Béjar & Rezac (2009:46ff); among others, for discussion.

c-commanded by another potential goal with the same feature which is also in the c-command domain of the probe, AGREE is impossible (cf., Chomsky, 2000; Chomsky, 2001b). This blocking of AGREE is denoted by the dashed line in Tree 15.¹⁹



Tree 15: Intervention Model of the PCC

In these models, the PCC is a restriction on accusative arguments which reflects the need for the accusative to participate in AGREE. Despite being lower than the dative, the accusative may still be licensed in one of two ways: (i) the accusative does not bear [F] (and therefore doesn't need to AGREE) or (ii) the *dative* doesn't bear [F] (and therefore voids the intervention on AGREE). One of the major places of variation in the models to be discussed is the nature and distribution of [F], but the logic of Tree 15 and the preceding discussion will hold so long as [F] suffices to distinguish first and second persons, on the one hand, from third, on the other.

For every implementation of this account that I am aware of, a key argument will be that the approaches make incorrect predictions when the c-command

19. For now, I leave the nature of the feature involved unspecified and notate it as [F]. We shall see immediately below that a plausible candidate for [F] in this kind of account is the [PARTICIPANT] feature discussed in Chapter 2.

relations between internal arguments are reversed from the configuration in Tree 15. We have seen several arguments that this is not the case for the *bagħat*-class of verbs discussed in Chapter 4, but many of these arguments focused on lexical DPs, not clitics. Given that clitic doubling is not generally possible in Maltese, we might assume a derivation like that in Tree 15 for *all* examples with a dative clitic, avoiding this problem. This is, in fact, the approach taken for the majority of the languages discussed so far in the literature with PCC effects. Taking French as a continuing example, arguments were introduced as early as Kayne (1975) that French dative clitics are generated in a position higher than corresponding lexical DP datives, *even prior to clitic movement*. Casting this idea in the terms of this chapter, we might say that all dative clitics are generated in an APPL(ICATIVE) projection which is located in the position of XP in Tree 15. Lexical DP datives, on the other hand, would be generated in some other position, either to the right of or lower than the accusative argument.

There is evidence that such an approach is on the right track for at least French. Kayne (1975) notes (see also Rezac, 2011:ch.4) that a quantifier floated from an accusative argument must *follow*, not precede the position of the dative argument. In examples like (21), the dative-associated floated quantifier *tous* must precede the accusative argument *tout*; the reverse is not possible (21b):²⁰

(21)a. ? Je leur ai **tous** tout montré.

I 3.PL.DAT have **all** everything showed.

“I showed them all everything.” (Kayne, 1975:156)

b. * Je leur ai tout tous montré.

20. See Chapter 2 for some discussion of the theoretical interpretation of floating quantifiers and the validity of using these patterns to diagnose argument positions.

Kayne and Rezac both interpret the fact that floated quantifiers display the linear order seen with clitics (DAT > ACC) and not that seen with lexical DPs to mean that there is a position higher than the accusative argument position where dative clitics (and their associated floated quantifiers) are licit.

We might wonder, then, what the analogous facts show us in Maltese, where the issue of the base-generation site of dative pronominals is a pressing one. Maltese allows the floating of *it-tnejn*, “both” (literally, “the two”) from clitic arguments, making it a viable candidate for examining the behavior of floating quantification in ways analogous to the French examples above.²¹ Interestingly, when *it-tnejn* is floated off various clitics in Maltese, the grammaticality of the results is modulated by verb class. Recall that we saw in Chapter 4 that evidence from internal argument binding shows that Maltese has at least two distinct classes of ditransitives: those in which the accusative argument may bind the dative (the *bagħat* class), and those in which neither internal argument may bind the other (the *wera* class, which were analyzed on par with the morphological causatives discussed in Chapter 3). For the *bagħat*-class, a quantifier associated with an accusative pronoun must precede any dative material, while a quantifier associated with a dative pronoun must follow any accusative material. These facts are demonstrated in (22):

21. Sadler (2012a) also identifies another plausible floating quantifier, *kull wieħed*, which is literally “each one.” My consultants report judgments for this quantifier identical to those for *it-tnejn*. However, I am reticent to use these examples as I cannot be sure, at present, that *kull wieħed* is not the Maltese equivalent of binominal “each” in English (in the sense of Safir & Stowell, 1988) or a reduced partitive PP.

- (22)a. Marju introdućie = **hom** **it-tnejn** lil Pietru.
 Mario introduced = **3.PL.ACC the-two** to Peter.
 “Mario introduced them both to Peter.”
- b. *Marju introdućie = **hom** lil Pietru **it-tnejn**.
 Mario introduced = **3.PL.ACC** to Peter **the-two**
 “Mario introduced them to Peter both.”
- (23)a. *Marju introdućie = **lhom** **(l)it-tnejn** lil Marija.
 Mario introduced = **3.PL.DAT to.the-both** DOM Maria.
 “Mario introduced them both (to) Maria.”
- b. Marju introdućie = **lhom** lil Marija **lit-tnejn**.
 Mario introduced = **3.PL.DAT** DOM Maria **to.the-two**
 “Mario introduced to them both Maria.”

For *wera*-class verbs, these judgments reverse exactly. Thus (24b) is now ungrammatical (compare (22b)) and (24c) is now grammatical (compare (22c)):

- (24)a. Paćik wera = **lhom** l-ktieb **lit-tnejn**.
 Patrick showed = **3.PL.DAT the-book to.the-two**
 “Patrick showed to them both the book.”
- b. *Paćik **wera** = **lhom** lit-tnejn l-ktieb.
 Patrick showed = **3.PL.DAT to.the-two the-book**
 “Patrick showed them both the book.”
- c. Paćik **wera** = **hom** **it-tnejn** l-ktieb.
 Patrick showed = **3.PL.ACC the-two** the-book
 “Patrick showed them both the book”
- d. *Paćik wera = **hom** l-ktieb **(l)it-tnejn**.
 Patrick showed = **3.PL.ACC DEF-book to.the-two**
 “Patrick showed them the book both.”

If we interpret these facts in the same way that Kayne does for the analogous French examples with *tous*, then (22) shows that the position for the accusative argument precedes the position of the dative argument in *bagħat*-class verbs, whereas the reverse is true in *wera*-class verbs. While these facts are only consistent with (as opposed to directly supportive of) the structures proposed for these verbs in Chapter 4, they are sufficient to rule out an applicative-like analysis of dative clitics in Maltese. If this analysis were available, we would expect (22c–d) to have reversed their grammaticality, as is the case in French.

Given this argument and the arguments in the preceding chapter, I will take it as demonstrated that Maltese has at least some verbs (the *bagħat*-class) which instantiate the reverse prominence relations relative to the configuration in Tree 15. This will be crucial in the sections which follow, where this structure is shown to create non-trivial problems for each implementation of the structural account of the PCC.

To make this preceding discussion analytically precise, let us consider a simple version of a syntactic account to the PCC which I will model following Anagnostopoulou (2003; 2005b) and Béjar & Rezac (2003) and call the BASIC INTERVENTION account. Its central intuition is the aforementioned idea that the PCC was derivative on a failed AGREE relation between person features on the accusative argument and v , which itself was taken to have a set of uninterpretable φ -features that act as probes.²² Agreement between all the internal arguments of the verb and v is enforced by positing that local persons

22. The approaches in Anagnostopoulou (2003; 2005b) and Béjar & Rezac (2003) differ somewhat in technical details but derive the PCC in ways which seem equivalent to me in terms of predicted patterns of grammaticality. They both, however, differ from the two approaches discussed in the following subsection. Wherever they differ, I opt for the simpler version for expository ease.

are subject to a special licensing condition which non-local persons are not. The version of this posited by Béjar & Rezac (2003) appears in (25):

(25) PERSON LICENSING CONDITION:

Interpretable 1st and 2nd person features must be licensed by entering into an AGREE relation with an appropriate functional category.

(Béjar & Rezac, 2003:53)

This condition ensures that any derivation which does not involve an AGREE relation between a local person (in either dative or accusative position) with some functional head (in this case, ν), will not converge. The PCC will be enforced when ν 's φ -features probe and find the dative argument first. This AGREE relation, by assumption, values the [*uPERS*] feature on the dative and licenses any interpretable local person features found there.²³ However, this AGREE relation renders [*uPERS*] on ν inactive, leading to the configuration in Tree 15 with respect to person features. If a local person appears in the accusative position, (25) will not be satisfied as no person features are left on ν to AGREE with the accusative. All that is needed to ensure the PCC's restriction to local persons is to assume, following, in a sense Benveniste (1971), that third person arguments lack an interpretable person feature. This ensures their exemption from (25) and entails that a lower accusative is restricted to third person when appearing with an asymmetrically c-commanding local dative.

All of this is illustrated in what follows. For a PCC-violating configuration in Classical Arabic we have the derivation in (26):

23. Where convenient, I use the notation *uF* to mean an uninterpretable and unvalued instance of a feature *F*. Its interpretable and valued version is notated *iF*.

(26)a. *ʔaʔtaa = ka = nii.

gave.3.MASC.SG = 2.MASC.SG = 1.SG

“He gave you me.”

(Siibawayhi, 1881:§211)

b. $[_{VP} pro [v [_{AppIP} [_{dat} [iPERS]] [Appl [_{VP} V [[_{acc} [iPERS]]]]]]]]$

In this derivation, the [iPERS] on *nii* is not properly licensed by (25), and the clitic cluster is ruled out. However, if a head distinct from *v* were merged to agree with one of the arguments then this intervention would not occur. This is precisely what one could say for *ʔiyya*, which could be assumed to AGREE with the clitic it is attached to. This would allow for the alternative version of (26) which is grammatical.

A licit CA clitic cluster and its derivation under this account is shown in (27):

(27)a. Yasʔal = kumuu = haa.

ask.3.MASC.SG = 2.MASC.PL = 3.FEM.SG

“He should ask it of you.”

(47 : 37)

b. $[_{VP} pro [v [_{AppIP} [_{dat} [iPERS]] [Appl [_{VP} V [_{acc}]]]]]]$

Here, as in (26), the higher dative argument checks the [uPERS] feature on the *v* head, rendering that higher feature inactive. However, in (27) no second AGREE relation is needed for the lower accusative, as by hypothesis it does not have a feature which is subject to (25). We thus derive the PCC in Classical Arabic.

However, turning to Maltese the analytical result is not as well-suited to the facts. As we have seen, the asymmetric c-command relationship between the accusative and dative for *bagħat*-class verbs is the reverse of what is found in Classical Arabic or Romance languages with active PCC effects. The problem

for the Basic Intervention account is that the person values which are allowed on each of the two internal arguments should *also* reverse, in a sense “inverting” the PCC effect to be a restriction on *dative*, not accusative, person realization. This has the effect of predicting the well-formedness of any cluster in which the higher accusative is a local person and the lower dative a third person clitic. Additionally, because third person features do not intervene (as they do not exist in this account), the three clusters with third person accusatives allowed in CA remain available for Maltese, as well. While the latter prediction is welcome, the former is not — there are no clusters involving local accusative clitics, period. This situation is shown in Table 5.4 with the problematic cases in bold.

DO	IO		
	1	2	3
1	*	*	= nii = lha
2	*	*	= (e)k = lha
3	= hu = li	= hu = lek	= hu = lha

Table 5.4: Predicted Clitic Clusters — Basic Intervention

Both of these problematic configurations and their associated structural analyses under this account are shown in (28). Here we can see that (28) is structurally identical to the well-formed (27), above. The account therefore predicts that it should be grammatical, contrary to fact.

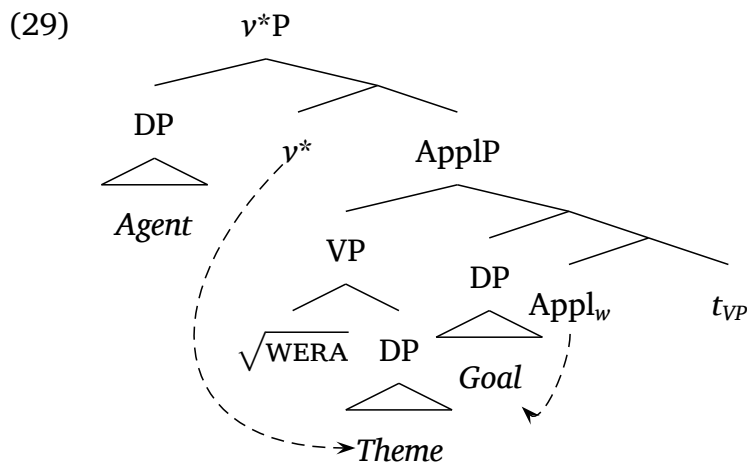
(28)a. *Xandru bagħat = **kom** = **lha**.

Xander sent = **2.PL.ACC** = **3.SG.FEM.DAT**

“Xander sent y’all to her.”

b. $[_{VP} EA [\nu [_{VP} [[_{acc} [iPERS]] [V [[_{dat}]]]]]]$

Finally, the morphological causative and *wera*-class ditransitives provide another challenge for this approach. As we saw in Chapter 3 and Chapter 4, these verbs involve a configuration where the accusative argument does not asymmetrically c-command the dative, as the former has raised as part of a VP out of which it does not c-command. This was depicted in Tree 9 on page 202, and is repeated here as (29):²⁴



This structure in (29) has two features which are problematic for the Basic Intervention account: (1) the lack of an asymmetric c-command relationship between the accusative theme and the dative goal and (2) the lack of a single head with which both internal arguments AGREE. (2) can be solved with a technical amendment, as we could say that in just the case that both internal arguments are clitics, they both participate in AGREE with v . However, (1) is a more fundamental problem, given that intervention on AGREE is only predicted when one argument asymmetrically c-commands the other. Without this fundamental configurational relationship among internal arguments, the account

24. We might try to salvage the account by positing that AGREE occurs *before* the VP-movement which destroys the configuration required by the intervention approach. This is certainly a possible move, but note that the VP-movement would still be required for word-order purposes, and VP-movement would then be counter-cyclic in the result.

cannot get started. To the extent that those structures are correct for morphological causatives and *wera*-class verbs, these, too, will pose an empirical problem for the Basic Intervention account. But, as we saw in Chapters 3– 4, positing a lack of c-command in these cases provides a clear understanding of the binding patterns found with those verbs. We are therefore in a position where either the Basic Intervention account or the standard theory of binding must be incorrect. Since changing the account of the PCC involves a less radical rethinking of the architecture of syntax, I will assume that the intervention account should be rethought in light of this argument.

5.2.2 Other Syntactic Implementations

While the Basic Intervention account struggles to accommodate languages in which there is no demonstrable asymmetric c-command of the accusative argument by the dative, this basic account is not the only implementation of a syntactic approach to the PCC which is available. Here I will briefly review two others which differ from the Basic Intervention account in important ways. The first of these is an account first explored by Béjar & Rezac (2009) and then applied to Classical Arabic by Walkow (2012a;c; To Appear). This account is much like the Basic Intervention account, but attempts to derive many of the assumptions of that account from independently proposed minimalist technologies. I review this account in §5.2.2.1. The other account is a more radical departure from the Basic Intervention account proposed in Nevins (2007) utilizing the mechanism of MULTIPLE AGREE. I discuss this approach in §5.2.2.2. Both of these accounts have the feature of being applied to Classical Arabic by one of their proponents, and so the following subsections will focus

on demonstrating that, despite their differences from the Basic Intervention account, these accounts, too, flounder on the Maltese and Moroccan data.

5.2.2.1 Cyclic Agree

One of the criticisms occasionally leveled at Basic Intervention approaches to the PCC is that these accounts must stipulate the PERSON LICENSING RESTRICTION in (25). This, however, is not a necessary assumption for syntactic accounts, as demonstrated by the CYCLIC AGREE account proposed in Béjar & Rezac (2009) and developed in Walkow (2012a;c; To Appear). This framework retains the idea from the Basic Intervention account that person agreement in the syntax is responsible for deriving the PCC, but departs from that account by decomposing person's featural representation into privative features indexing discourse participants. The implementation in the previously cited works is that of Harley & Ritter (2002), shown in (30):

(30) Features Decomposing [PERS] in Harley & Ritter (2002):

- a. $[\pi]$, the generic feature present for all persons
- b. [PARTICIPANT], the feature present for all persons who participate in the discourse
- c. [SPEAKER], the feature present for persons representing the speaker
- d. [ADDRESSEE], the feature for persons representing the hearer or the speaker's interlocutors

The basic assumption in the Cyclic Agree account is that probes in PCC-obeying languages have lexical specifications which include uninterpretable versions of the features in (30) which must match against interpretable coun-

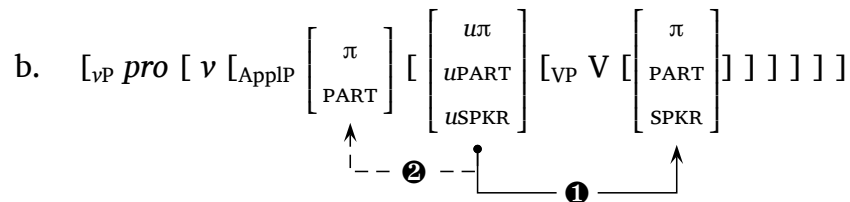
terparts via AGREE. PCC restrictions arise in this account when a single head attempts to agree with two arguments, but the first argument deactivates all the available features on the probe. By hypothesis, when a probe does not agree with both internal arguments, both may not cliticize, yielding a periphrastic construction. For example, in Classical Arabic PCC-illicit combinations, agreement with the accusative theme exhausts the features on the probe, leaving nothing to agree with the dative goal.²⁵ All of this is shown in (31):

(31)a. *ʔaʕʕaa = ka = nii.

gave.3.MASC.SG = 2.MASC.SG = 1.SG

“He gave you me.”

(Siibawayhi, 1881:§211)



While the initial agreement with the theme (solid line) succeeds, this exhausts all the person features of the probe, leaving no available features to establish a second agreement relation with the goal (dashed line). This state of affairs is then interpreted morphologically as a single dative clitic.²⁶

However, when turning to Maltese, we again see that a reversal of command relations predicts grammaticality where it is not found in the *baġħat* class verbs. Specifically, the Cyclic Agree account predicts that any cluster should be gram-

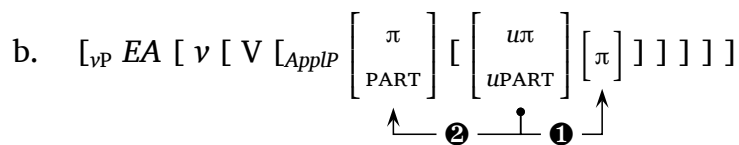
25. In this framework, a probe may search upwards to positions that c-command it after it has attempted to agree downward, a phenomenon which Béjar & Rezac (2009) call CYCLIC EXPANSION OF THE SEARCH DOMAIN. See that paper for discussion of this notion. Because a probe may search upwards after attempting AGREE downwards, the assumption in this literature is that it is the Appl head, and not ν , which is the probe. If we assumed ν to be a probe, this account would reduce to the Basic Intervention account.

26. It is not made explicit in any of the aforementioned references how the lower *accusative* argument comes to be a freestanding pronoun and not the dative, which might be expected given that the second agreement relation fails. However, I will not take up this point here, assuming instead that such a spell-out could be ensured by some other means.

matical where the person features of the lower argument are a subset of the person features of the higher argument, as this subset relation among the internal arguments ensures that there will be active features left after the first checking relation is established. However, this is too weak for Maltese: it rules in combinations where the accusative (which is higher in Maltese) is local but the dative third person.

To see why this is, first note that Maltese disallows combinations of local clitics, meaning that in this framework any local argument must be sufficient to exhaust a probe. Given the featural subset relations among person values in Harley & Ritter (2002), this means the probe must be specified [$u\pi$, $uPART$]. With this in mind, consider (32), which shows that a second person accusative and third person dative is predicted to be grammatical for this probe.

- (32)a. *Louis bagħat =ek = lu.
 Louis sent = 2.SG.ACC = 3.SG.MASC
 “Louis sent you to me.”



Despite the fact that the cluster =ek = lu is ungrammatical in Maltese, the Cyclic Agree account will generate it, since the first agreement relation in (32b) checks only the $u\pi$ feature of the probe, leaving the [$uPART$] feature available to agree with the accusative argument. Similar conclusions apply in the case of first person accusatives.

If we turn to the structure argued to underlie causatives and *wera*-class verbs, the situation is less clear. Like the other accounts discussed here, the Cyclic Agree approach only derives PCC restrictions in configurations where a

single head agrees with two internal arguments. In the structures I have proposed for these verbs in Maltese, this configuration is not realized. Therefore, all cliticization possibilities should be possible, according to Cyclic Agree.

5.2.2.2 Multiple Agree and Markedness

In a series of papers, Nevins (2007; 2011) proposes a theory of both PCC effects and clitic derivations that is based on the syntactic relation of MULTIPLE AGREE (Hiraiwa, 2001; 2004). This operation is like AGREE, but allows for the possibility that a single probe matches against more than one goal simultaneously. The intuition that is formalized in this framework is that, for Multiple Agree to take place, the feature sets on the various goals must be consistent or matching in the relevant way, on analogy to contiguity-based effects in phonology. The goal is to reduce PCC effects to general constraints on the matching of person features during instances of Multiple Agree from a head (in our case, *v*) to both internal arguments. Since on this account the PCC emerges because Multiple Agree demands that all goals be sufficiently similar, I will call it the CONTIGUOUS AGREE syntactic analysis. This account is the most distinct of the implementations of syntactic approaches to the PCC, as it models the effect as something other than pure intervention, though as we will see it still crucially relies on a perturbation of the canonical AGREE relation in ditransitives triggered by the presence of a higher dative goal with the relevant features.

In order to derive person-based restrictions on clitic combinations as a featural contiguity failure, the contiguity approach requires the assumption that the features underlying person-hood are not privative, as in the Cyclic Agree account, but binary. The particular implementation is from Halle (1997) and shown in (33). The two relevant features are [\pm AUTHOR], which indicates that

the speaker is involved and [\pm PARTICIPANT], which indicates that one of the discourse participants (any one, in fact) is involved.

(33) Person Representation Features (Halle, 1997; Nevins, 2007):

- a. [+AUTH(OR), +PART(ICIPANT)] = 1st Person
- b. [-AUTH, +PART] = 2nd Person
- c. [-AUTH, -PART] = 3rd Person
- d. [+AUTH, -PART] = Logically impossible

The features in (33) do not represent technology for the sake of technology — this system of definitions makes possible the claim that PCC effects in natural languages reflect the enforcement of a kind of markedness consistency across spans of person features, where markedness is defined in terms of \pm values of the features in (33). For an instance of Multiple Agree to take place, it is not enough to have featural consistency among the goals — they must also be consistent with respect to markedness, requiring the use of binary features.²⁷

The primary empirical concern of Nevins (2007) is to account for a wide range of cross-linguistic differences in the expression of the PCC (see §5.3.2.2 for more on this). The proposal which is introduced to account for these differences involves the idea that probes in the syntax may be RELATIVIZED to particular featural properties, where relativized is defined as in (34), from Nevins (2007:290):

27. One might productively attempt to recast the core intuitions of this proposal in a system of private features for person-hood, but this would require some careful rethinking of the analysis of a great many subtle variations in the PCC cross-linguistically, as discussed by Nevins (2007). It is not clear to me, at any rate, that a private feature system could express the intuitions which the system in Nevins (2007) captures directly by use of binary features.

- (34) For a feature F , a search may be relativized to a domain which includes all values of F , only the CONTRASTIVE values of F , or only the MARKED values of F .

When the probe operates under a particular relativization, it simply cannot enter into AGREE relationships with elements that do not also fall into that relativization. As (34) states, the two operative relativizations for deriving the PCC are twofold. Probes may be relativized to search for only *marked* values of a feature, where markedness is defined by assumption as the specification of + for a given feature. Probes may also, however, be relativized to search for *contrastive* versions of a particular feature, where contrastiveness is defined as in (35) from Nevins (2007:289):

- (35) A pronoun S with specification αF is *contrastive* for F if there is another pronoun S' in the inventory that is featurally identical to S , except that it is $-\alpha F$.

The informal idea behind contrastiveness is that two feature bundles only contrast for a feature if another bundle in use in the language contains all the same features, except for the \pm value of that same feature. The upshot of this definition is that certain sets of features are not contrastive for all features. For instance, given the feature inventory in (33), first person pronouns are *not* contrastive for $[\pm\text{PARTICIPANT}]$, as there is no possible pronoun which shares all other features (in this case, $[\text{+AUTH}]$) but which is $[\text{-PARTICIPANT}]$. This is because there is no possible feature bundle corresponding to (33d), as one cannot simultaneously be a speaker but not a participant in the discourse.

With these preliminaries in place, Nevins (2007) is then able to demonstrate that PCC effects can be derived successfully for a great many of the different versions of the PCC, given the conditions on Multiple Agree in (36):

(36) Conditions on MULTIPLE AGREE:

a. CONTIGUOUS AGREE (CA; Nevins, 2007:291):

For a relativization R of a feature F on a probe P and $x \in \text{Domain}(R(F))$:
 $\neg \exists y$, such that $y > x$ and $P > y$ and $y \notin \text{Domain}(R(F))$.

“There can be no interveners between P and x that are not in the domain of relativization that includes x .”

b. MATCHED VALUES (MV; Nevins, 2007:291):

For a relativization R of a feature $F : \exists \alpha, \alpha \in \{+, -\}$
 $\forall x, x \in \text{Domain}(R(F)), \text{val}(x, F) = \alpha$.

“All elements within the domain of relativization must contain the same value for the feature F being agreed with.”

Informally, (36a), CONTIGUOUS AGREE (CA), requires that, once a particular feature relativization on a probe is selected, there can be no objects intervening between the probe and its goals which is not *also* within that same relativization. This condition does not have an overt analogue in other formulations of AGREE. For instance, a probe specified for contrastive [PARTICIPANT] must find only goals which differ in their PART features, not their AUTH features. Given that [+AUTH, -PART] does not exist in this framework, this limits the probe to only agreeing with second and third person arguments, given (33). The reason this results is that first person arguments would violate Contiguous Agree and

intervene on AGREE relations with any lower arguments, as there is no possible pronoun which is like first person except for its value of [\pm PARTICIPANT].

The second criterion on Multiple Agree in (36b), MATCHED VALUES (MV), requires that all goals involved in an agreement relation with ν contain matched values for the relativized feature. This is much more like the standard implementation of intervention found in, for instance, the definition of AGREE advanced by Chomsky (1995b; 2000; 2001a;b; 2008). In the case of *contrastive* probes, however, MV is somewhat more restrictive: it is not sufficient to simply ensure that all the goals contain feature sets which are contrastive for the feature relativized on the probe — these features must *actually* match.

Turning now to Maltese, we can begin by recalling that the previous section established the PCC in Maltese as being a STRONG PCC. To that end, we can first consider the solution in (Nevins, 2007:296) for Strong PCC effects, where the contention is that such strong effects appear as a result of a probe specified as searching for *contrastive* [AUTH].²⁸ The outcomes of evaluating (36) in this context are shown in Table 5.5, where the asterisks denote violations of the relevant constraints.

Recall that the Strong PCC rules out any clusters in which the accusative argument is not third person. This is done formally in the system of Nevins (2007; 2011) in two different ways. The combinations $1 > 2$ and $2 > 1$ both violate MV despite the fact that neither argument contains features outside of the domain of relativization because the features in question are not identical for the values of [\pm AUTH]. First person and second person differ on exactly their

28. Actually, Nevins (2007:304) observes that a probe specified as searching for contrastive [AUTH] *and* marked [PART] will also yield a PCC effect identical to the effect yielded by a probe without this additional relativization. Since these two probes are equivalent, they make no differential predictions for the Maltese data under consideration here. To keep things manageable, I limit myself to the featurally simpler probe.

IO	DO	CA	MV
1	3	✓	✓
1	2	✓	*
2	1	✓	*
2	3	✓	✓
3	1	*	✓
3	2	*	✓

Table 5.5: Nevins (2007) PCC Analysis — Strong PCC

values for [AUTH]: first person is [+AUTH] and second person is [-AUTH]. Any AGREE relation which includes these two persons will result in an MV violation, as their values do not match. On the other hand, combinations such as $3 > 1$ and $3 > 2$ constitute violations of CA since the third person indirect object is outside the domain of relativization in which the feature [AUTH] is contrastive. This is because only first and second person are contrastive for [AUTH]; third person is not because there is no pronoun like third person but specified [+AUTH], the only candidate being the logically impossible bundle in (33d). Therefore, if a third person pronoun appears in a structure where it is c-commanded by a first or second person pronoun, AGREE will not be able to target this lower accusative, as the resulting AGREE span would involve a third person which is not in the relativization of the probe for contrastive [AUTH].

We are now in a position to ask the crucial question of the Multiple Agree approach as it concerns Maltese and regional varieties of Arabic. We saw in Chapter 4 that Maltese ditransitives of the *baġħat* class show no evidence for any c-command relationship among their internal arguments other than ACC > DAT. Despite not appearing in an applicative syntactic context, these verbs nevertheless place PCC restrictions on combinations of clitics. The question is then: what happens to the Multiple Agree approach if we hold everything

constant *except* the prominence relations among the goals in the Multiple Agree span? The predictions made by the conditions in (36) for this syntactic context are shown in Table 5.6.

DO	IO	CA	MV
1	3	✓	*
1	2	✓	*
2	1	✓	*
2	3	✓	✓
3	1	*	*
3	2	*	✓

Table 5.6: Nevins (2007) PCC Analysis — Maltese Predictions

As Table 5.6 shows, this account faces issues with both over- and under-generation if one reverses the prominence relations among the internal arguments. In the case of $3 > 1$ and $3 > 2$, the presence of the structurally higher third person accusative constitutes an intervention by a feature not in the domain of contrastive [AUTH]. These two conditions, then, are predicted to be ungrammatical, contrary to fact. On the flip side, $2 > 3$ is ungrammatical in Maltese, but the analysis in terms of Multiple Agree predicts that the derivation should converge, as there are no intervening features outside the domain of contrastive [AUTH], satisfying CA. On the other hand, both arguments in this case have [-AUTH] specifications, meaning that MV is satisfied, as well. Thus, without revision, the Multiple Agree approach to PCC effects will be empirically untenable in languages such as Maltese and Moroccan Arabic.²⁹

29. It is not clear to me what predictions this account makes in the domain of VP-movement causatives and the *wera*-class. This is because there is no definition of the symbol $>$ in Nevins (2007), and the definition of this symbol becomes crucial in cases where c-command and linear order come apart. If it is interpreted to mean linear precedence, then the issues raised for the *bagħat*-class will surface there, as well. If, however, it is interpreted as requiring asymmetric c-command, then only MATCHED VALUES should be relevant, banning only clusters containing

5.3 An Analysis of the Maltese PCC

The preceding sections have demonstrated that the clitic restrictions seen in Maltese and Moroccan Arabic pose considerable issues for syntactic approaches to the Person Case Constraint. This section takes up the question of how these clitic restrictions are to be understood if an intervention account is not possible. The proposal I will put forth involves a resurrection of the original account of the PCC in morphological rather than syntactic terms. This was the conception of the PCC put forth by Perlmutter (1971) and Bonet (1991) and more recently by Chung (2012). The informal idea is as follows: the PCC emerges when the normal syntactic routines deliver to the morphophonology a complex verbal head which cannot be given a phonological interpretation. In such circumstances, the outcome is one in which one of the pronouns is realized in its argument position.

This section is organized as follows: in §5.3.1 I discuss some of the arguments for a syntactic understanding of the PCC and suggest that they are merely consistent with a syntactic account and do not in fact distinguish between syntactic and morphological accounts. This paves the way for a resurrection of the morphophonological accounts. These are then discussed in §5.3.2, where I also propose that the Maltese PCC is a morphological failure of cliticization. Here I also provide an analysis of the repair strategy seen in Maltese involving the strong form pronominals as a late PF-insertion of case morphology allowing the clitic to be realized in its argument position. Finally, I also discuss the range of variation seen in Person-Case Constraint effects and suggest that they are better understood in the context of morphological accounts.

local persons and erroneously predicting clusters with third person datives and local accusatives to be grammatical.

5.3.1 Further Syntactic Considerations

This section discusses some arguments which have been developed against morphological accounts of the PCC. Specifically, I discuss two: (1) attested parallels between PCC effects and other person-based restrictions (§5.3.1.1) and (2) the absence of PCC effects with ethical or non-argumental datives (§5.3.1.2). I present some basic arguments which show that they are merely consistent with, but do not argue for, a syntactic approach to the PCC.

5.3.1.1 Dative-Nominative Parallels

One of the stronger arguments for a syntactic account of the PCC was first discussed by Boeckx (2000) and Anagnostopoulou (2003; 2005b) and comes from observed parallels between PCC effects and other person-based co-argument restrictions. Specifically, it has been known since at least Sigurðsson (1990–1991) that verbs in Icelandic which take their subjects in a quirky dative case and their objects in a structural nominative case do not allow local persons in the nominative object position. For instance, in (37a), third person *þeir* is allowed as a nominative object, but the local *við* is not (37b):³⁰

- (37)a. Henni leiddust **þeir**.
She.DAT was.bored.by.3.PL **them.NOM**
“She was bored by them.” (Anagnostopoulou, 2005b:205)
- b. *Henni leiddumst **við**.
She.DAT was.bored.by.1.PL **us.NOM**
“She was bored by us.” (Anagnostopoulou, 2005b:205)

30. For arguments that the nominative argument is not a subject in some sense of that term, but is better described as an object, see Zaenen *et al.* (1985) and much subsequent work.

Following the analysis of these case and agreement patterns which is proposed by Chomsky (2001b), Anagnostopoulou (2003; 2005b) reasons about examples like (37) as follows: in these examples, T is responsible for the assignment of nominative case to the object, as demonstrated by the fact that the finite verb agreement tracks the nominative object and not the quirky dative subject. However, unlike the analysis in Chomsky (2001b), Anagnostopoulou (2003; 2005b) argues that the dative argument *does* participate in AGREE with T, but only for person features. After this agreement between T and the quirky dative, no person features remain on T, and the restriction of nominative objects to non-local third person falls out in exactly the same way that the PCC falls out on the Basic Intervention account: there are no available person features on T after the first instance of AGREE with the quirky dative to license local person features on the nominative object. Accounts which take the PCC to be derived by the intervention of person features on a higher dative can understand these restrictions in a unified way.

However, it is worth stepping back a bit to question whether a unified account of these effects is desirable at all. Specifically, on accounts which attribute the PCC to intervention of a dative argument, then a language which demonstrably has person-case restrictions on clitics might be expected to show similar effects in dative-nominative frames of the Icelandic type. However, this prediction is not borne out. Italian has a Person-Case Constraint of the kind under discussion here (Bonet, 1995:182–3), yet dative experiencer predicates of the kind seen in (37) do not show analogous person restrictions on the nominative object.³¹ This can be seen in (38):

31. Again, here, it is possible to show with binding that the postverbal argument is an object insofar as it can be bound by the preverbal dative; see Belletti & Rizzi (1988).

(38) A loro piaccio io.
they.DAT please.1.PL I.NOM

“They like me.”

(Deal, 2010:28)

If the appearance of a PCC effect with ditransitive clitics implies that local persons require special licensing via AGREE, and if dative-marked DPs universally check person features on probes, then a contradiction results when a language has a PCC but no person restrictions on dative-nominative constructions. If, however, one takes the PCC to be a different effect, no such contradiction arises, as the two phenomena can be treated separately by the grammar.³²

5.3.1.2 Nonargumental Datives

Another argument commonly advanced to support syntactic accounts of the PCC instead of morphological ones comes from the behavior of so-called ethical or non-argumental datives (Jouitteau & Rezac, 2007; Michelioudakis, 2009; Rezac, 2011; 2012). These datives appear in some languages with properties distinct from argumental datives and are commonly held to not obey the PCC.³³ Thus in (39), the ethical dative *me* may appear on either side of the second person accusative *vous*, despite the fact that the accusative clitic is not third person.

32. Of course, we might try to rescue this account by saying that (38) does not give rise to an intervention effect because of the raising of the experiencer argument to a position above T (and therefore a position from which it is not expected to intervene on AGREE relations originating from T). However, this is presumably also true of (37), and so provides no way to account for the contrast between these two languages.

33. For discussion of the differential properties of non-argumental datives of this kind, see Borer & Grodzinsky (1987) and Jouitteau & Rezac (2007), among others. For discussion of the idea that clitics of these datives are not subject to the PCC, see Perlmutter (1971); Morin (1981); Postal (1990); Albizu (1997); and Jouitteau & Rezac (2007).

(39) Demain je (me) vous (me) emmène en vacances.
 Tomorrow I (1.SG.) 2.PL.ACC (1.SG) take in vacations
 “Tomorrow, I will take you on vacation.” (Jouitteau & Rezac, 2007:101)

The argument that the lack of restrictions seen in examples like (39) goes as follows: a purely morphological account cannot distinguish different kinds of dative clitics when the differences have to do with argument structure, a purely syntactic concern. Since a morphological account could not distinguish the dative in (39) from a dative that *does* obey the PCC, (39) stands as a counterexample to a morphological approach.

Again, however, we might probe the empirical domain a bit deeper before concluding that a morphological account is doomed in light of (39). In fact, ethical datives are a key point of variation in PCC behavior, sometimes obeying the constraint and sometimes not, as evidenced by the examples from Michelioudakis (2009) in (40):

- (40)a. Il te lui/*m’ envoie une dépêche.
 He 2.SG.DAT 3.SG.MASC.DAT/*1.SG send a telegram
 “So he goes and sends me a telegram, if you please.”
 (Michelioudakis, 2009:(9))
- b. Na mi mu tis/*su agorazun pagota.
 COMP NEG 1.SG.DAT 3.SG.DAT/*1.SG.DAT buy.3.PL ice.cream
 “...that they do not buy her ice cream, for my sake.”
 (Michelioudakis, 2009:(10))

Because only the third person clitics are grammatical in (40), the conclusion is that the local pronominals in (40) are subject to the PCC despite being ethical datives. In both French and Modern Greek, languages which have PCC

effects, it is therefore possible to find examples of ethical datives obeying and not obeying the PCC.³⁴ Therefore, it is simply not the case that ethical datives are universally exempt from the PCC. It follows from this that their behavior is not at issue for a morphological account, provided that the account makes available a way to distinguish speakers which subject ethical datives to the PCC from those who do not.

5.3.2 A Morphological Approach

Given that §5.2 has shown that syntactic accounts of the PCC cannot account for the range of observations in Maltese and the previous section has demonstrated that common arguments against a morphological account of the restriction do not go through, this section develops a proposal for a morphological account of the Person-Case Constraint. Specifically, I propose here that PCC effects arise when the morphological component contains no way to realize the configuration delivered by the syntax. This restriction is argued to be an output filter on the morphophonological realization of particular head-adjunction structures delivered by the syntactic component which itself makes no reference to the PCC. In these cases, the morphological component is left with no option but to interpret one of its clitics in its argument position.

This section has two parts. The explication of this morphological account itself appears in §5.3.2.1. After this in §5.3.2.2, I discuss how a morphological approach might be better-suited to analyzing the attested variation in person-based clitic restrictions than syntactic mechanisms.

34. The contrast for French is provided by (39) and (40a) in the text. Michelioudakis (2009) marks (40) as %.

5.3.2.1 The Account: Morphological Ill-Formedness

The original conception of the Person Case Constraint in Perlmutter (1971) and Bonet (1991) took the restriction to be morphological in nature. Specifically, the PCC was argued to be the result of the syntax generating a clitic cluster for which the morphological component had no available realization. Informally, the syntax will be allowed to generate all logically possible clitic combinations, including those which violate the PCC. When the syntax delivers a PCC-violating configuration, however, the morphological component will not provide a successful Spell-Out of the clitic cluster so generated. In just these cases, the morphological component will select one clitic to be spelled out in its argument position, in essence undoing cliticization. This differential morphological realization will thus derive the “repair” mechanisms seen with the PCC where one of the clitics is realized as a freestanding strong form pronoun.

This notion of a PCC repair strategy is an important component of any understanding of the theoretical underpinnings of this constraint. The PCC is usually discussed as associated with a particular “repair” strategy because, in a great many languages with a PCC, the observed output in PCC contexts is not independently grammatical in the language in non-PCC contexts. This is true of Maltese, where one can observe that cliticization is required when it is possible, as in (41):³⁵

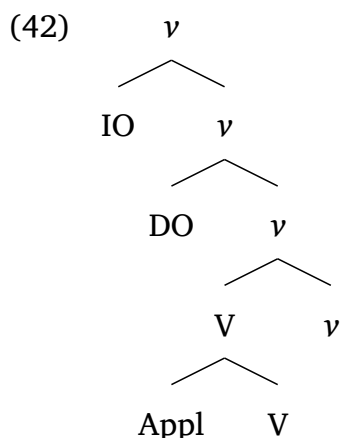
35. (41) is grammatical with a focus reading of the clitic, as Chapter 4 showed. I assume this to be a wholly different derivational option, with one analytical option being that the presence of verum focus on a clitic makes it impossible to realize that clitic as a phonologically weak element, given that bearers of verum focus require prosodic emphasis. However, I will not develop this idea further here.

- (41) *Pawlu urie =h lilek.
Paul showed = 3.SG.MASC to.you
“Paul showed it to you.”

If we took the PCC to be a syntactic failure, then the fact that the independent ungrammaticality is called off in PCC-violating contexts would require independent explanation. This is an issue taken up in some length in Rezac (2011), where it is concluded that transderivational comparison is required to account for the fact that (41) is independently bad, despite its well-formedness in PCC contexts. In the account to be developed here, however, this will emerge as the telos of any PCC derivation. This will result from a theory of head movement which provides for the possibility to realize the moved head in its base position. When combined with the theory of cliticization espoused in the previous chapter, the result will be a theory in which the syntax universally moves clitics to their verbal hosts, a movement which is not realized phonologically in PCC contexts.

To begin the concrete discussion of the proposed account of the PCC in Maltese, it is worthwhile to recall the structure which is created by the syntax in derivations which involve double cliticization in the language. Tree 14 on page 222 in Chapter 4 gave this structure, and it is repeated here as (42):³⁶

36. In this section I frame the discussion in terms of the *bagħat*-class verbs, as these are the problematic class for most accounts of the PCC. However, everything that is said here should carry over to the *wera* and morphological causative classes, as well.



The head adjunction structure in (42) is the result of several syntactic head movements according to the theory proposed in the previous chapter. The idea to be made precise here is that structures like (42) are not well-formed at the morphological level, despite being perfectly well-formed at the syntactic level.

Why would (42) be uninterpretable in PCC contexts? As we saw in §5.1.1, above, in Maltese any clitic cluster is ungrammatical if the accusative argument is a local person. Therefore, the intuition is that cliticization of the dative argument should fail if the accusative argument is local — in the feature set of Harley & Ritter (2002), when the accusative argument contains a [PART] feature. However, such cliticization cannot be forbidden in principle, as we know that languages exist where two local person clitics are allowed (see Nevins, 2007 and §5.3.2.2, below, for more on this).

The proposal, then, should be one in which a dative clitic is forced to be realized as a freestanding strong form pronominal just in case the accusative clitic contains [PART]. We can enforce such a result by stating that the grammar of Maltese contains a constraint like that in (43):

(43) Phonological insertion of prosodically dependent material may not occur if output would contain more than one [PART] feature in the morphological word hosting the dependent material.

The constraint in (43) will be triggered just in case the accusative clitic contains a [PART] feature — in other words, in just the cases when the accusative is first or second person, as these are the only persons which contain [PART].

How does this constraint enforce the observed repair strategy in Maltese? Here we must take up the question of how it is that a clitic cluster like (42) is morphologically realized. As argued for in the previous chapter, (43) is created via head movement in the syntactic component. However, in that chapter the proposal was not that the clitics in Maltese are uniformly heads, but was instead that the clitics are simultaneously minimal and maximal determiners. The upshot of this assumption at the time was that the clitics move to ν like heads when they cliticize, owing to their minimal status. However, these clitics are also maximal insofar as they are a complete DP for the saturation of argument positions of verbs. What I would like to propose here is that while they cliticize as a head, the clitics leave in their base position a phonetically unrealized copy of themselves, exactly as phrases do in the COPY THEORY OF MOVEMENT revived by Chomsky (1993). In this theory, moved phrasal elements do not leave a trace (as they would have in the Government and Binding framework), but instead leave an identical copy of themselves which is not phonetically unrealized. It is this property I would like to propose is responsible for the realization of the clitic as a freestanding pronoun in PCC-violating contexts: when these PCC violations occur, the morphology interprets the movement dependency created by cliticization by requiring pronunciation of the clitic in its argument position.

In previous frameworks such as Government and Binding (Chomsky, 1981, *et seq.*), such a movement would be illicit, as it would create a non-uniform CHAIN where the head and tail differ in respect to their X^0 status (a violation of CHAIN UNIFORMITY). However, I want to be clear that the proposal here is not that some notion of Chain Uniformity, or a derivational analogue thereof, does not hold in general. Instead, I mean by this proposal that syntax can variously interpret simultaneously minimal and maximal elements as head-like and phrase-like, depending on context. Since these clitics saturate argument positions when merged, it is from that position which they are treated like phrases, up to and including leaving a copy under movement, exactly like phrases. However, in a theory which assumes BARE PHRASE STRUCTURE (Chomsky, 1995a), phrases are simply sets containing their members, meaning that the clitics are singleton sets. If we assume that singleton sets have the possibility of moving like a head, then we can understand why these clitic elements move like heads after leaving their base position. If we grant these assumptions, then we can say that the constraint in (43) forces the IO clitic to be pronounced in its base position when the output of pronouncing the moved copy would lead to a violation of the PCC. The proposal is therefore a systematic exception to Chain Uniformity which applies only to simultaneously minimal and maximal elements.

To see how this works in detail, consider first a PCC-respecting example like that in (44):

the fact that the “repair” for PCC violations in Maltese involves differential realization of the *dative* clitic.

Why is it that we predict that the *dative* clitic is the clitic which is realized in its base position and not the accusative? On the assumptions thus far, this falls out from the timing proposed for cliticization in Chapter 4. In that chapter, I proposed that clitics attach to the verb in the order in which they AGREE with that same verb. Since AGREE operates in a top-down fashion, this means that the clitics will cliticize in a top-down fashion, as well. This makes a prediction about cross-constructional and cross-linguistic cliticization: the lower of two available clitics which should fail to cliticize in PCC-violating contexts. This is exactly what we find. As the data in (46) show, in Maltese causatives (46a) and Classical Arabic ditransitives (46b), it is the *accusative* argument which fails to cliticize.

(46)a. Louis semmagħ = **lu** **lil = ek.**
 Louis listen.CAUS = **3.SG.MASC.DAT to = 2.SG**

“Louis made him listen to you.”

b. ʔaʔtay-ta = **huu** ʔiyya = **nii.**
 give.PERF-2.SG = **3.SG.DAT ʔIYYA = 1.SG.ACC**

“You gave him to me.” (Nevins, 2007:298)

But in these examples, unlike the examples from the Maltese *bagħat*-class discussed thus far, the underlying command relations are different insofar as they involve the accusative being c-commanded by the dative. For the Maltese causatives this is because the causee appears in [Spec,vP] and the theme as a complement to the root. For the Classical Arabic ditransitives, this is because this language allowed a productive double object syntax which generated goals

and sources higher than themes.³⁷ The fact that the repair is different in these languages precisely when the underlying syntax is distinct can be seen as further support of the timing of cliticization proposed in Chapter 4.3.

What happens to the clitic when the morphological component requires that it be pronounced in its base position? Here we seem to be stuck, as the morphological component requires the realization of a clitic in a position where it cannot cliticize to any material — the only elements to its left are those contained in the verbal head adjunction complex. Here I would like to suggest that the answer lies in consideration of the nature of the strong form pronominal series. In Maltese, strong form pronominals are morphologically composed of a clitic and the base *lil*. This marker *lil* is exactly the marker one would expect to find with a lexical DP argument in the same position, and it is reasonable to assume that this marker is inserted in the morphological component to provide a suitable host for the clitic, which is itself phonologically dependent. This is not a new proposal, as it is often argued that dative morphology on argument nominals is not a preposition but a dissociated case morpheme (see Borer, 1984b for one such argument with respect to Hebrew).

The idea behind the repair operation is that it is a fallback to a general form of pronominals in the language when cliticization is blocked from applying, analogous to the phenomenon of DO-SUPPORT in English where T is given its general form (*do*) when the process of head raising cannot bring another element to T. It is possible to draw this analogy between Do-Support and Maltese PCC repairs because the strong form pronominal found in PCC contexts is the *general* form of internal argument pronominals when they are prevented from

37. For discussion of this point, see Chapter 4 and the papers by Ouhalla (1994) and Walkow (2012c; To Appear).

cliticizing to the verb for other reasons, as we saw in Chapter 4. The relevant data is repeated here as (47):³⁸

(47)a. Raj-t **LIL = HA.**

saw-1.SG DOM = **3.SG.FEM.ACC**

“I saw [her]_{FOC} (and not anybody else).”

b. “Detentur ta’ liċenża” t-fisser persuna li **lil = ha**

Holder of license 3.SG.FEM-means person COMP **to = her**
toħorg = ilha liċenża.

issued = 3.SG.FEM license

“‘Licensee’ [in this context] means a person who, to her, a license was issued.”

(Borg *et al.*, 2011:law914)

c. Jien taj-t il-ktieb **lil = ha** u ’l Marija.

I gave-1.SG DEF-book **to = her** and DAT Mary

“I gave the book to her and Mary.”

(Sadler, 2012a:1)

(47a) shows a focus context where the need for prosodic emphasis requires the calling of cliticization. (47b) shows an instance of embedded topicalization, where the clitic has been fronted into a preverbal position. (47c) shows an instance of a clitic appearing in a coordinate structure, cliticization out of which would result in a Coordinate Structure Constraint violation. In each of these instances, the realization of the clitic is the strong form pronominal. We can therefore conclude that the strong form pronominal truly is a default realization for the clitics, as there is no natural class inherent in the operations which have generated (47) beyond that they disrupted the availability of cliticization.

38. The same is true of Classical Arabic and, to my knowledge, all of the regional varieties (see the discussion in Gensler, 1998) *mutatis mutandis*. However, I will not belabor the point by discussing those data here.

It is worth backing up a bit at this point and considering the nature of the proposed account of the PCC. The proposal here takes the PCC to be a purely morphological fact which results when the syntax delivers a representation which cannot meet morphological well-formedness requirement. In this respect, this is exactly the approach suggested by Bonet (1991) in her initial treatment of the PCC, updated into modern theoretical terms. For Bonet (1991), the PCC resulted when the algorithm which maps syntax into morphology spelled out a moved clitic in its base position. We thus see that the Maltese PCC facts force a return to the initial conception of the PCC as a morphological phenomenon. Furthermore, because the failure of cliticization leads to the use of a more general means of expressing the clitics in Maltese, the proposal avoids the notion of transderivationality inherent in other accounts of the PCC.

5.3.2.2 Additional Support for a Morphological Account

One might object to the account offered in the previous section on the grounds that it is stipulative insofar as it posits an arbitrary filter on the output of head movement. Such a filter implies that morphological filtering of this kind is epistemically possible, leading to the question of what restricts its application to the limited domain in which we see it, namely, the PCC. There are two ideas which I believe are relevant in this regard: (1) the fact that clitic restrictions of other kinds are plausibly morphologically derived in a similar way and (2) that such filters might actually be the best reflection of the empirical facts.

As to the first point, it is worth considering that PCC effects are not the only clitic restrictions known to exist in the world's languages, and not all of these other restrictions find their best treatments in terms of the syntax. For some discussion of these kinds of phenomena, see Nevins (2007) and Rezac

(2011; 2012), most recently. Here I illustrate this idea with the SPURIOUS SE phenomenon known from the discussion of Spanish in Perlmutter (1971). There it was observed that combinations of third person clitics in Spanish are not grammatical, and instead are realized with the dative clitic converted into the “spurious” reflexive *se*, as shown in (48).

- (48)a. *A Pedro, el premio, **le lo** dieron ayer.
to Pedro the prize **3.DAT 3.ACC** gave-PL yesterday
“They gave Pedro the prize yesterday” (Nevins, 2007:275)
- b. A Pedro, el premio, **se lo** dieron ayer.
to Pedro the prize **SE 3.ACC** gave-PL yesterday
“They gave Pedro the prize yesterday.” (Nevins, 2007:275)

As Nevins (2007) observes, following Perlmutter (1971), these facts require a morphological approach which treats them as morphological dissimilation at a late stage in the derivation, where combinations of third person clitics are rewritten into combinations of *se* and a third person clitic. Similar arguments are given by others for accounts of gaps in clitic clusters involving two third person arguments.³⁹

It is not relevant for our immediate purposes what the treatment of effects like that seen in (48) actually is — all that is relevant is the fact that the structural description inherent in the generalization requires a level of evaluation where a distinct morphological requirement disrupts a syntactically licit combination of clitics. This is the account of the PCC offered in the previous section, which takes it to trigger a differential Spell-Out from the usual case. This is

39. A different tack is taken by Walkow (2012a;b;c; To Appear), who treats 3-3 clusters as uniformly ungrammatical unless the language provides a morphological conversion such as spurious *se*. However, as was shown above, Maltese would provide a strong counterexample to this empirical claim, so I do not treat 3-3 clusters in a way which rules them out at a universal level.

not far from conceptions of 3-3 interactions which take them to be a triggered dissimilation or impoverishment rule; instead of delinking a set of features differentiating reflexive from third person clitics, we might view the PCC as delinking the movement relation established in the syntax under pressure from the morphology.

However, the question still remains of how a device as powerful as morphologically triggered readjustment could be restricted to just the observed cases. Why not a filter that disallows, say, second person accusative clitics with unaccusative verbs that start with a labio-dental only? The observed gaps in clitic clusters do not attest the wide variety of effects that might be expected if Spell-Out could be modulated in such a particular way.

Here again, however, I think it is worth stepping back from particular languages to look at whether a universal characterization of the PCC is in fact possible or desirable. It has been observed since the very first discussions of the PCC that variation exists from speaker to speaker, even in languages which demonstrably attest the PCC. For instance, it was shown above in §5.3.1.2 that different judgments have been offered for ethical datives in PCC contexts, but this is not the only speaker variability that has been reported in this empirical domain.

To take one example in some detail, Spanish speakers have been known to vary in their judgments on combinations of local person clitics. While some do not allow such combinations, as all speakers of Maltese do, others accept such examples without hesitation. Thus Perlmutter (1971) notes that some accept examples such as (49):

(49) **Te me** recomendaron.

2.SG 1.SG reommended.3.PL

“They recommended you to me.”

“They recommended me to you.”

In (49), the interpretation of the two clitics is not fixed, but either interpretation constitutes a violation of the PCC as described by (1), which bans any combination of clitics where the accusative is not third person. Bonet (1991) notes similar effects for Catalan, describing the state of affairs as one in which there are in fact two versions of the PCC, one which she calls “strong” and is identical to the characterization given thus far here. The other version, called the “weak” PCC, simply states that “if there is a third person, it has to be the direct object” (Bonet, 1991:180).

The logic of treating variation in PCC judgments as different versions of the PCC is taken to its natural extreme by Nevins (2007), who proposes that there are at least four distinct versions of the constraint, characterized in (50):⁴⁰

- (50)a. **STRONG**: The accusative must be third person.
- b. **WEAK**: If there is a third person, it must be accusative.
- c. **ME-FIRST**: If the dative is second or third person, the accusative cannot be first person.
- d. **ULTRASTRONG PCC**: Me-First PCC plus no third person dative-second person accusative clusters.

40. The languages which Nevins (2007) discusses only allow clusters of internal argument clitics; therefore, these generalizations are framed in terms of the assumed presence of an accusative clitic. They could be generalized to cover clusters of other clitics, but I will not attempt such a reformulation here.

Nevins (2007) discusses ample evidence supporting the existence of these characterizations, making it clear that the proper characterization of the PCC in universal terms cannot be in terms of a simple formulation like the Strong PCC.

What does this range of variation tell us about universalist formulations of the PCC? I want to suggest here that this range of variation is expected if the PCC is a learned morphological restriction, as discussed in the previous section. On this account, this variation is expected from speaker to speaker or from language to language because it is a function of variation in the input data. Speakers of languages which universally prohibit, *e.g.*, combinations of local persons (the “weak PCC”) might not generalize fully from the gaps which exist in the input data, whereas speakers who prohibit these sequences do. Instead of attempting to reformulate the supposedly universal mechanisms of AGREE in ways which derive this typology, a morphological account localizes the variation, as Chung (2012) puts it “where it belongs — in the morphology.”

5.4 Conclusions about Clitic Restrictions

In this chapter I have shown that Maltese (and closely related Moroccan Arabic) have a set of clitic restrictions which forbids clusters of clitics when the accusative argument is a local person. Moreover, I have shown that careful consideration of the Classical Arabic data suggests that an identical constraint is at play in this language, as well. Taken together, the facts paint a picture in which the presence of a Person Case Constraint is relatively uniform across different languages of the same family and deserving of some grammatical explanation.

At the same time, however, I showed that this explanation should not be situated wholly in the syntax, as doing so makes incorrect predictions about the observed clusters of clitics in Maltese. Specifically, syntactic approaches which take the effect to be derivative on the workings of AGREE make clear predictions about what should happen in languages where a dative argument is generated lower than an accusative yet still displays the hallmarks of the PCC. In a sense, the syntactic accounts are stuck with the locality which is constitutive of AGREE, and therefore wrongly predict that the PCC should vacillate in descriptive form when the prominence relations among internal arguments are reversed.

In place of a syntactic account based on intervention or case-checking, I provided a morphological account of the PCC which takes it to be a failure of cliticization in contexts involving local person accusative arguments. These contexts were argued to violate a morphological surface filter which then forces realization of the clitic argument in its base position. However, this does not remove the clitic's dependent status, requiring PF-insertion of material to host the clitic. In this way, I derived the "last resort" nature of the grammaticality of PCC repairs without recourse to transderivational comparison or derivation cancellation.

Moreover, I suggested that the kind of arbitrary morphological restriction seen in morphological accounts of the PCC might not be so arbitrary after all. Specifically, such an inductive account of the PCC was argued to be a better explanation of the range of variation seen in person-case interactions in clitic clusters than one which posits radical changes to the architecture of syntax, a component which is usually assumed to universal in its major characteristics.

Appendix 5.A Double Accusative Pronouns in Classical Arabic: The Facts

5.A.1 Qur'anic Examples

As part of a diachronic study of multiple cliticization across the Afroasiatic language family, Gensler (1998:240–1) provides an exhaustive list of verbs appearing in the Qur'an with multiple enclitics, of which there are only five. All are shown below:⁴¹

- (51)a. *Yurii* = **kumuu** = **hum** ...*qaliilan*.
CAUS.see.3.MASC.SG = 2.MASC.PL = 3.MASC.PL ...few.ACC
“He made you see them ...as few.” (8 : 44)
- b. *ʔa-nulzimu* = **kumuu** = **haaʔ**?
Q-CAUS.must.1.PL = 2.MASC.PL = 3.FEM.SG
“Can we impose it on you?” (11 : 28)
- c. *Fa-ʔasqanaa* = **ka** = **haa**.
and-CAUS.drink.1.PL = 2.MASC.PL = 3.MASC.SG
“We had you drink it (water).” (15 : 22)
- d. *Zawwajnaa* = **ka** = **haa**.
CAUS.marry.1.PL = 2.MASC.SG = 3.FEM.SG
“We married her to you (*lit., we had you marry her*).” (33 : 37)
- e. *Yasʔal* = **kumuu** = **haa**.
ask.3.MASC.SG = 2.MASC.PL = 3.FEM.SG
“He should ask it of you.” (47 : 37)

41. References to portions of the Qur'an follow the traditional western numbering system where $x : y$ denotes *surah* (chapter) x , *ayah* (verse) y . I have kept Gensler's transliteration and translation with the exception of long vowels, which are represented with a digraph, and the phonemes ʔ and ʕ, which I represent in the IPA.

Several comments are in order concerning this data. As can be seen from the examples in (51), all of the examples which appear in the Qur'an are of the configuration 2 > 3 and, as Walkow (2012c) has also observed, all are morphologically or notionally causative. As Gensler (1998) observes, however, neither of these criteria are absolute: six examples from Reckendorf (1895) and Brockelmann (1908/1913/1966) show that neither causativity nor the particular person values 2 > 3 are necessary for double enclisis. These examples are given below:⁴²

- (52)a. Fa-ʔafri = **nii** = **hi**.
and-expose.IMPER = **1.SG** = **3.MASC.SG**
“*And expose/uncover it to me!*” (Gensler, 1998:241)
- b. ʔasmiʔ = **humuu** = **hu**.
hear.JUSS = **3.MASC.PL** = **3.MASC.SG**
“*Let them hear it.*” (Gensler, 1998:241)
- c. ʔanʃada = **nii** = **hi**.
recite.3.MASC.SG = **1.SG** = **3.MASC.SG**
“*He had recited it to me.*” (Gensler, 1998:241)
- d. ...tuḥadditu = **naa** = **hu**.
...tell.2.MASC.PL = **1.PL** = **3.MASC.SG**
“*...what you can tell us (it)*” (Gensler, 1998:241)
- e. Kafaynaa = **ka** = **hum**.
suffice.1.PL = **2.MASC.SG** = **3.MASC.PL**
“*We will be sufficient for you against them (lit., we will suffice you them).*” (Gensler, 1998:241)

42. Again, I preserve Gensler's (1998) transliteration, but here the translations from the German, which Gensler preserves, are mine.

- f. ...li-ʔuqaṭṭifa = **ka** = **hu**.
 ...therefore-give.as.fiefom = **2.MASC.PL** = **3.MASC.SG**
 “...therefore I give it to you as a fiefdom/gift.” (Gensler, 1998:241)

Both Reckendorf (1895) and Brockelmann (1908/1913/1966) included in their grammars prose and poetry of the classical era, and so these examples constitute as natural data as one can find for Classical Arabic. As examination of (52) shows, it is possible to find examples attesting both the 1 > 3 and 2 > 3, but not 1 > 2, a point to which I will return below.

This completes the exegesis of naturalistic Classical Arabic examples containing more than one object enclitic. In total, there are exactly eleven such examples. However, the majority of ditransitive verb uses in Classical Arabic prose and the Qur’an do not contain two enclitics, but instead conform to the eastern modern dialectal pattern: the verb is followed by a encliticized argument pronoun which can be *either* the direct or indirect object. The remaining pronominal argument follows the verb but is cliticized to the dummy host *ʔiyya-* (the so-called “strong form” object pronoun).⁴³ These examples are too numerous to catalog, so I provide only two here; for more discussion, see Ryding (2005:308–9) for discussion of this construction in Modern Standard Arabic and references.

43. It is the preponderance of these examples which I believe convinces Shlonsky (1997) to claim that two enclitics on a verb in CA are of dubious status. I will not make such a far-reaching claim here, especially in light of the examples given above. However, the point is well taken: it is hard to understand exactly what the pattern is in Classical Arabic.

- (53)a. Nuḥṭii = **him** ḥiyyaa = **hu**.
 give.1.PL = **3.MASC.PL** ḥiyya = **3.MASC.SG**
 “We give him/it to them.” (Gensler, 1998:254)
- b. fa-saḥala = **hu** ḥiyyaa = **haa**.
 and-asked.3.MASC.SG = **3.MASC.SG** ḥiyya = **3.FEM.SG**
 “He requested it of her.” (Gensler, 1998:254)

5.A.2 Siibawayhi’s Examples

Beyond the examples in the previous section, there is only one other source of double enclisis data in the Classical Arabic literature, Siibawayhi’s treatise *Al-Kitaab* (Siibawayhi, 1881). Before giving this data, a bit of historical commentary: Siibawayhi was not a native speaker of Arabic. Little is known about his life beyond the fact that he was born in Iran (Persia) and died in what is now Shiraz, Iran. It is therefore unclear exactly what grammatical status should be assigned to examples in his text. While Siibawayhi is explicitly concerned only with data from spoken Arabic and not data constructed by grammarians, Siibawayhi himself includes numerous constructed examples. Moreover, as the original text is in Arabic, no translations are provided for example sentences.⁴⁴

The relevant portion of his *Al-Kitaab* is §211, an appendix titled “On the pronominalization of two objects governed by the verb,” where Siibawayhi discussed multiple enclisis. All of his examples involve more than one clitic on the verb ḥaḥṭaa, “he gave,” a verb which still takes two accusative arguments in Modern Standard Arabic. However, as Ryding (2005:308) observes, none

44. This has led to some historical confusion as to proper translation of these examples; see Retsö (1987), Gensler (1998:242–3), and Wilmsen (2010:220–2) for discussion. Here I follow the translation that is more common in the historical literature where the first enclitic is interpreted as dative and the second accusative.

of these double enclitic examples are licit in MSA — all of them would appear with *ʔiyya-* in modern writing. The examples which Siibawayhi gives, both positive and negative, follow:

(54) Siibawayhi’s Double Enclisis Examples

- a. ʔaʔṭaa = **nii** = **hi**.
gave.3.MASC.SG = **1.SG** = **3.MASC.SG**
“He gave me it/him.” (Siibawayhi, 1881:§211)
- b. ʔaʔṭaa = **nii** = **ka**.
gave.3.MASC.SG = **1.SG** = **2.MASC.SG**
“He gave me you.” (Siibawayhi, 1881:§211)
- c. ʔaʔṭaytu = **ka** = **hu**.
gave.1.SG = **2.SG.MASC** = **3.MASC.SG**
“I gave you it/him” (Siibawayhi, 1881:§211)
- d. ʔaʔṭaa = **ka** = **hu**.
gave.3.MASC.SG = **2.SG.MASC** = **3.MASC.SG**
“He gave you it/him” (Siibawayhi, 1881:§211)
- e. *ʔaʔṭaa = **ka** = **nii**.
gave.3.MASC.SG = **2.MASC.SG** = **1.SG**
“He gave you me.” (Siibawayhi, 1881:§211)
- f. *ʔaʔṭaa = **huu** = **nii**.
gave.3.MASC.SG = **3.MASC.SG** = **1.SG**
“He gave him/it me.” (Siibawayhi, 1881:§211)
- g. *ʔaʔṭaa = **huu** = **ka**.
gave.3.MASC.SG = **3.MASC.SG** = **2.MASC.SG**
“He gave him/it me.” (Siibawayhi, 1881:§211)

(55) Siibawayhi's *ʔiyya*- Examples

- a. ʔaʕʕaa = **ka** ʔiyyaa = **yaa**.
gave.3.MASC.SG = **2.MASC.SG** ʔIYYA = **1.SG**
“He gave you me.” (Siibawayhi, 1881:§211)
- b. ʔaʕʕaa = **hu** ʔiyyaa = **yaa**.
gave.3.MASC.SG = **3.MASC.SG** ʔIYYA = **1.SG**
“He gave him/it me.” (Siibawayhi, 1881:§211)
- c. ʔaʕʕaa = **hu** ʔiyyaa = **ka**.
gave.3.MASC.SG = **3.MASC.SG** ʔIYYA = **2.MASC.SG**
“He gave him/it me.” (Siibawayhi, 1881:§211)

The examples in (54) amount to asserting that the configurations 1 > 2, 2 > 3, and 1 > 3 are grammatical, whereas the configurations 2 > 1, 3 > 2, and 3 > 1 are ungrammatical.⁴⁵ As for the configuration 3 > 3, Siibawayhi gives two licit examples:

- (56)a. ʔaʕʕaa = **huu** = **haa**
gave.3.MASC.SG = **3.MASC.SG** = **3.FEM.SG**
“He gave him/it her/it.” (Siibawayhi, 1881:§211)
- b. ʔaʕʕaa = **haa** = **hu**
gave.3.MASC.SG = **3.FEM.SG** = **3.MASC.SG**
“He gave her/it him/it.” (Siibawayhi, 1881:§211)

But he also notes that these examples are not common, and one is more likely to find examples such as:

45. Siibawayhi uses the Arabic word *qabiih*, “ugly,” and asserts that this is “not the way the Arabs speak.”

grammaticality of 1 > 2 in CA use his example.⁴⁸ Finally, the grammaticality of these examples in the putative descendant of CA, Modern Standard Arabic, is not relevant, as this variety allows only one pronominal object suffix per verb. This controversy over the validity of the 1 > 2 configuration is not a new one in the Arabist literature, either: Gensler (1998:242) notes that Siibawayhi's 1 > 2 example “smacks of a concocted ‘grammarians’ example”, and Retsö (1987:228) claims that the pronominal host *?iyya-* is required for 1 > 2, though he gives no data to support this claim.

48. See, for instance: Bonet (1991:206–7); (Fassi Fehri, 1993:104); Nevins (2007:298); and Walkow (2012c;a; To Appear:2)

Chapter 6

Conclusions

The studies of Maltese morphosyntax in this dissertation support several conclusions, and in this chapter I discuss the broader implications of these studies. I have divided these conclusions into four parts: §6.1 discusses the implications for clausal constituency and embedding, whereas §6.2 discusses the specific implications of these studies for theories of causatives more generally. After this, §6.3 discusses the conclusions which can be drawn about case and agreement interactions. Finally, §6.4 outlines the ramifications of this dissertation for the syntax-morphology interface more generally.

6.1 Conclusions about Clause Structure

The studies in Chapter 2 and 3 show that Maltese clauses often make use of direct selection of functional projections which are in some sense smaller than a clause. One can see the auxiliary elements in the inflectional domain in Chapter 2 and the causative predicate *giegħel* as selecting similarly sized constituents (*vP* with or without an optional polarity projection). These findings

thus support a view of selection in which functional heads may select for any projection in the extended projection of the verb, and are not limited to selecting constituents of certain sizes. We therefore arrive at a view of periphrastic causative formation, for instance, where the embedded constituent is not a full CP, but reduced to the bare minimum required to meet *giegħel*'s need. More broadly, we can see these findings in line with the conceptual notion that empty categories are to be kept to a minimum, even at the expense of universal formulations of notions such as “embedded clause.” This the tack taken to analyze Germanic and Romance infinitives in Wurmbrand (2001), for instance.

We can also see the conclusions about thematic assignment in ditransitives in Chapter 4 as similarly suggesting that language-particular selectional influences mitigate against universal formulations of notions of structural thematic role assignment. The two classes of ditransitives discussed there necessitate abandoning a strict correspondence between structural position and thematic role, but a one that is supported by the behavior of internal arguments in Maltese. This is not to say that the Maltese studies suggest that no universal formulation of syntax is possible: the accounts developed here in terms of selection of *vP* and ApplP-sized constituents is framed in terms of a functional inventory which varies only in its selectional and inflectional features from language to language. The core of the proposal which is known as the CHOMSKY-BORER CONJECTURE is thus preserved insofar as variation is located solely in the content of this functional vocabulary.¹

1. For more on this proposal, which was given its name, to my knowledge, by Baker (2008), see Borer (1984a; 2005a;b) and Chomsky (1995b; 2000; 2001b).

6.2 Conclusions about Causation

The account of causatives offered in Chapter 3 allows us to understand the morphosyntactic expression of causation without recourse to causative-specific operations or principles. The special properties of causatives in Maltese emerge from the availability of selection of a reduced clausal structure. That possibility in turn is made possible by the assumption of finely-layered clausal architecture. The account, furthermore, aligns well with approaches that treat causatives and causation as expressing a relation between two events where one of the events is temporally and causally dependent upon the other (in line with philosophical discussions such as those of Parsons, 1990). At the same time, the examination of morphological causatives has shown that there are cases where notions of causation are expressed by the introduction of datives which behave like normal datives in many respects.

Here the structural approach can be profitably enriched with a theory of morphosyntax that takes agreement relations to relate formal syntactic features in ways which are later interpreted by a morphology that is only concerned with language-specific interpretation of syntactic structure. Combining the two approaches results in the view that morphological structure is itself derivative of syntactic structure and not a determining factor in syntactic computation. While morphological concerns such as case and agreement are read off properties represented syntactically, these concerns do not determine syntactic variation or constituent structure. This is all a long way from earlier treatments which attribute a full clausal structure (S or CP) to causative complements and must appeal to VP movements or specially-defined clause reduction operations

to induce the kind of transparency which follows in a fairly natural way on the account offered here.

6.3 Conclusions about Case and Agreement

The account of case and agreement offered in the preceding chapters involves a tight, but not one-to-one, correspondence between structural Case and the expression of morphological case on nominals. What it means to be a structural accusative or dative, in this view, is to be a nominal which appears over and above the sole argument seen with intransitive predicates or the two arguments seen with transitives, nothing more. Structural Case thus corresponds to morphological case only when the morphology provides for a one-to-one correspondence in the vocabulary of a language and not because the two notions are intimately connected syntactically.² We might now ask how cross-linguistic variation is to be accounted for in this system, especially in the case of languages which provide two identical cases for internal arguments of ditransitives; the simplest approach would treat both nominals as bearing the same dependent morphological case. However, the devil is in the details, and such an extension would require systematic investigation of the syntax of languages which have this morphological property, of which Maltese is not one.

Agreement, on the other hand, has been shown to be much more lexically driven in Maltese insofar as functional heads in Maltese (Σ , T, Asp, M, *etc.*) simply require that they appear with agreement features as part of their lexical specification for φ -features. We have seen that this requires a view of agreement which does not link the expression of agreement morphology directly to

2. This account therefore shares much in common conceptually with the account of absolutive morphology as default vocabulary insertion in Legate (2008).

the assignment of structural Case, but rather to the ability of a given functional head to bear uninterpretable φ -features. Agreement can be seen as a syntactically mediated requirement of particular heads to bear agreement morphology, a conception which has arguably been at the heart of minimalist theorizing since Chomsky (1995b). The upshot of this account is that we derive without further stipulation the empirical conclusion that languages like Maltese simply lack morphological infinitives without proposing that tense or finiteness somehow works radically different in these languages. The question which now remains is to what extent case and agreement dissociate cross-linguistically, and to what extent that dissociation can be modeled in similar terms in other languages.

6.4 Conclusions about Interfaces

The analysis of the movement underlying cliticization in Chapter 4 and the conception of the Person Case Constraint given in Chapter 5 both suggest a conception of the syntax-morphology interface where the morphology is only realizational up to a point. We have seen that cliticization provides a pressure to insert clitics as dependent elements in a verbal complex, but that this pressure may be outweighed by language-particular morphological constraints such as the PCC. We thus arrive at a view of morphology as providing its own requirements *qua* module of grammar, such as the PCC, the *le lo* constraint in Spanish, and the like. One view of cliticization which is similar in spirit is the approach by Harizanov (2010) to Bulgarian clitics which views their placement to be derivative of a morphosyntactic non-initiality requirement. We might also see this account in line with the emerging study of “morphotactics” by

Nevins (2007) and Arregi & Nevins (2012). The question which remains to be explored is whether or not such constraints on clitic placement take the same shape, cross-linguistically. In any case, however, morphology can be seen as a module of grammar with its own requirements and operations and not simply a realization algorithm for syntactic computation.

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