The Syntax of Ditransitives

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The Syntax of Ditransitives

Evidence from Clitics

by

Elena Anagnostopoulou

To the precious memory of
Christakis

Preface

This book represents the results of a research that started in 1994. The investigation was conducted at the Grammatical Models group, University of Tilburg, the department of Linguistics and Philosophy, MIT, and the department of Philology, University of Crete. My original plan was to investigate the syntax of Greek ditransitives. It soon became evident that indirect object clitics are essential to the understanding of ditransitive constructions in Greek, and that the distribution of indirect object clitics is sensitive to (in)transitivity. I decided to focus on the interaction between NP-movement and cliticization in double object environments. The discovery of intriguing patterns of crosslinguistc variation in this domain led me to furthermore adopt a cross-linguistic perspective on the topic. As a result of this shift in perspective, important parts of my research specifically on Greek are not included in this book, and are reported independently in Anagnostopoulou (2001) and Anagnostopoulou (to appear).

Winfried Lechner discussed with me every single idea presented in this book and was a great source of inspiration. He read several versions of the manuscript and made very important comments. It is hard to imagine how this book would look like without his constructive criticism. My warmest thanks for all the time and energy he devoted to this book.

My long-standing collaboration with Artemis Alexiadou has deeply influenced the way I look at things. This is obvious in this book which incorporates many of the results of previous and ongoing research with her.

I have discussed various parts of this work with many people over the years and many of them have provided me with helpful suggestions and comments. I would like to especially thank Martin Everaert, Sabine Iatridou, Alec Marantz, David Pesetsky and Henk van Riemsdijk for discussions on crucial aspects of the problems and the

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I would like to thank my friends and family for their constant love and support. Very many thanks to Winnie for his companionship, love and devotion.

This book is dedicated to the memory of my dearest Christakis who will always be in my heart, young and smiling.

<div align="right">Elena Anagnostopoulou
September 2002</div>

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Chapter 1
Introduction

1. Main claims

This book presents a detailed investigation of ditransitives and the complex syntactic interaction between NP-movement and cliticization in double object constructions. It pursues two main objectives. The first goal, which runs as a central theme throughout this work, consists in establishing that NP-movement can be used as an analytic tool for probing into properties of ditransitives. In particular, it is claimed that a class of well-formedness conditions on NP-movement, which are reflected in co-occurrence restrictions between themes and goals / experiencers, opens a window into the syntax of double object constructions. The diagnostic to be employed is based on the observation that certain double object constructions which involve externalization of the one object by NP-movement are well-formed only if the other object is realized as a clitic or as a DP associated with a doubling clitic.

The range of NP-movement environments where obligatory cliticization of this kind is found is subject to cross-linguistic variation. The search for the principles responsible for this diversity constitutes the second major goal of this study. In particular, it is argued that cross-linguistic variation results from the interplay between the morpho-syntactic properties of double object constructions and the syntax of clitics. The analysis also entails important consequences for determining the proper theoretical status of clitics.

The research is conducted on the basis of evidence from Greek, which is compared and contrasted to data from a number of languages, among them English, Sesotho, French, Dutch, Japanese, Icelandic, Norwegian, Swedish, Danish, German and Spanish. Particular

emphasis falls on the similarities and differences between languages with a designated morphological case for indirect objects and languages in which both objects surface with the same case morphology. This issue constitutes a recurrent theme in the discussion. The overall analysis leads to a taxonomy of ditransitives crucially relying on a decomposition approach according to which double object constructions consist of a main verbal root and a light applicative head (henceforth *vAPPL*; Marantz 1993). The main taxa of the emerging typology can be summarized as follows:

(i) The light head vAPPL may or may not assign a special morphological dative or genitive case to the indirect object. This property distinguishes English from Greek. vAPPL assign morphological case only in the latter language.

(ii) Not all constructions in which the indirect object bears morphological case qualify as genuine double object constructions. Objects with special case morphology can in principle be realized high (Japanese, Icelandic, Greek) or low (Japanese, Icelandic, German). While high datives signal the presence of a double object construction, low datives often show characteristics of prepositional datives. Furthermore, Romance datives appear to uniformly lack vAPPL, regardless of whether they originate high or low. In Romance, only clitic constructions qualify as double object constructions (in the sense of including vAPPL).

(iii) Morphological dative case potentially marks different functions cross-linguistically as well as across constructions within one and the same language. In some contexts, dative case is purely structural (Japanese double object constructions), while in others it qualifies as prepositional (Japanese and Icelandic low dative constructions), quirky (Icelandic double object constructions) or as a syntactically active inherent case (Greek double object constructions).

2. Overview

As is well known, in languages with a dative alternation, DP arguments bearing the indirect object role (henceforth *dative DP arguments*) have a relatively free distribution in active sentences (as in [1a]), but are subject to several restrictions in passives (see [1b]) and unaccusatives (see [1c]):

(1) a.   *John passed Mary the ring*
     b. ?* *The ring was passed Mary*
     c.   * *The ring passed Mary*

This difference has been explained in the literature in terms of either Case or a subcomponent of the theory dealing with locality. I argue that a careful scrutiny of a considerable amount of data drawn from Greek and other languages demonstrates the need to distinguish between several types of constructions, with distinct structural and featural properties. Once this more refined typology is recognized, it becomes clear that the ungrammaticality of examples like (1b) and (1c) can be attributed to a variety of factors.

   A first distinction that needs to be made is between passives and unaccusatives. In certain languages, the double object construction is found in passives but not attested in unaccusatives (Everaert 1990; Baker 1993). In other languages, the double object construction is in principle possible in passives as well as in unaccusatives. English belongs to the former group, while Greek belongs to the latter. The factor that differentiates the two language types is the (un)availability of inherent / morphological dative Case for the indirect object. In English the two objects are not distinguished morphologically while in Greek they are. The comparison between the two groups shows that in English-type languages, the ungrammaticality of (1b) and (1c) has a different source while in Greek-type languages the ungrammaticality of the counterparts of (1b) and (1c) reduces to a common underlying factor.

As for the specific nature of this factor, I argue that in a wide range of constructions – including passives in English-type languages and passives and unaccusatives in Greek-type languages – dative arguments block NP-movement of the internal argument to the subject position. More precisely, it is proposed that datives block movement whenever they are (i) higher than the base position of the nominative and (ii) not contained in the same domain as the nominative, as schematized in (2).

(2)   [NOM [$_{Domain\ \alpha}$ DAT[$_{Domain\ \beta}$t$_{NOM}$]]]

The analysis builds on the hypothesis that double object constructions instantiate morphologically complex applicative constructions which consist of a verbal root and a vAPPL head (Marantz 1993). In this representation, the theme and the goal are members of two distinct domains, and dative goals therefore interfere with NP-movement of the theme.

In addition, the well-formedness of the output structures is also a function of the case theoretic properties of vAPPL. In particular, languages differ in whether vAPPL assigns inherent / morphological case to the indirect object, which in turn determines whether the double object construction is also attested with unaccusatives or limited to passives.

I further point out that dative PPs are systematically ruled out with raising verbs, a fact which suggests that dative PPs, just like dative DPs, block NP-movement to T (see also Chomsky 1995; McGinnis 1998). However, unlike DPs, PPs belong to the same domain as nominatives. For this reason, the locality effects triggered by PPs can only be detected in bi-clausal (raising) environments.

Interestingly, the locality effects associated with datives are not absolute, and languages can be observed to employ various strategies for avoiding locality violations. In Greek, cliticization and clitic doubling of datives provide such an 'escape hatch'. To account for this

empirical generalization, I argue that in clitic-constructions the inter-
vening features of the dative move out of the way of the lower
nominative, as schematized in (3), and thus the higher dative
argument does not count anymore for locality.

(3)   [NOM [DAT-Clitic [$_{Domain\ \alpha}$t$_{DAT\text{-}Clitic}$ [$_{Domain\ \beta}$t$_{NOM}$]]]]
       $\llcorner$— STEP II —$\llcorner$—$\underline{\qquad STEP\ I \qquad}$—$\lrcorner$

A similar strategy is found in Dutch, where scrambling obviates
comparable locality violations (den Dikken 1995; Broekhuis 2000).
In my proposal, clitic doubling is a manifestation of local movement
which, similarly to scrambling, licenses an otherwise impossible
movement operation.

The analysis of the locality-obviation effects developed in this
book lends further support to proposals maintaining that apparent
counter-cyclic derivations, in which higher arguments move before
lower ones, are legitimate, as long as the two arguments target the
same functional head (Chomsky 1995, 2001b; Richards 1997; Peset-
sky 2000). I argue that the assumption of derivations of this kind also
naturally accounts for a range of agreement restrictions found in a
number of typologically unrelated languages.

The book is organized as follows. Chapter 2 introduces the basic
facts, which serve as the backbone of the discussion, and establishes
the generalization that in Greek, NP-movement in the presence of an
indirect object is possible only if the indirect object is a clitic or un-
dergoes clitic doubling. The Greek patterns are linked to phenomena
found in a number of other languages including English, Sesotho,
French, Italian and Dutch. A contrastive study reveals that the prop-
erties of NP-movement as well as the effects of cliticization are uni-
form in passives and unaccusatives only in languages with inherent /
morphological Case for indirect objects. In languages with structural
Case for indirect objects, the properties of passives and unaccusa-
tives diverge. Chapter 3 contains an extensive, cross-linguistic dis-
cussion of the restrictions on NP-movement in the presence of dative

arguments and assesses the descriptive adequacy of two competing approaches, one in terms of Case and the other in terms of locality. It is demonstrated that data from languages including Greek, Japanese and Icelandic corroborates the locality-based account, but is not compatible with the Case based solution. The specific implementation of the locality analysis to be developed rests on the idea that nominatives may not cross over higher dative DPs and PPs when the latter are located in a different minimal domain (Chomsky 1995, 2000). Chapter 4 turns to the effects of clitics. I argue that under cliticization and clitic doubling, the formal features of (high) dative arguments move before (low) nominatives do, resulting in a derivation which – unlike the non-clitic construction – respects locality. Chapter 5 provides further support for the existence of derivations in which movement of higher arguments precedes movement of lower ones. I establish a link between two seemingly unrelated phenomena found in dative constructions (see also Boeckx 2000a): the prohibition against person agreement with nominative objects in Icelandic quirky subject constructions (Taraldsen 1994, 1995; Sigurðsson 1990-1991, 1996, 2000) and the *me / lui* constraint found in active ditransitive constructions with clitics (Perlmutter 1971; Kayne 1975; Bonet 1991). I propose that in these configurations, high datives move to a functional head first, checking person features, followed by movement of low nominative or accusative arguments, which can only check the remaining number features. The analysis also has implications for the treatment of inherent case. It is proposed that syntactically active inherent case qualifies as *quirky Case* in the sense of Zaenen, Maling and Thráinsson (1985) only in languages like Icelandic where dative arguments enter a person-checking relation with T and not in languages like Greek where datives enter a person-checking relation only with causative v.

Chapter 2
Dative clitics license NP-movement

1. Introduction

This chapter establishes the generalization in (4) which regulates the distribution of DP dative arguments in Greek (see also Anagnostopoulou 1997b, 1998, 1999c):

(4) A nominative DP may move across a dative DP only if the dative is realized as a clitic or is part of a clitic doubling chain.

To begin with, I identify two types of ditransitive constructions in Greek, one in which the indirect object is a DP with morphological genitive case and one in which it has the categorial status of a PP. I provide some evidence that the DP / PP alternation in Greek corresponds to the dative alternation in English. Then I turn to a variant of the genitive construction in which the DP goal is doubled by a pronominal clitic. This construction is known in the literature by the term "clitic doubling". Indirect object clitic doubling as well as simple cliticization are optional in transitive sentences. Next I demonstrate that some of the dative phrases found in transitive sentences are systematically excluded in various kinds of NP-movement constructions. Undoubled genitive DPs are never possible. They are ruled out in passives, unaccusatives and raising constructions alike. Cliticized / clitic doubled genitive DPs are always licit. They are allowed in all three environments. Finally, PPs are sometimes possible. They are licit in passives and unaccusatives but not in raising contexts. This distribution is summarized in table 1:

Table 1. Dative Phrases in Greek

	Genitive DPs	Doubled DPs / Clitics	PPs
Transitives	Ok	Ok	Ok
Passives / Unaccusatives	*	Ok	Ok
Raising	*	Ok	*

In the last part of this chapter, I point to a number of correlations between the facts found in Greek and related restrictions in languages that have been discussed in the literature.

Before turning to a presentation of the facts, two notes on the terminology and its theoretical implications are in order. First, calling "*dative alternations*" the PP / DP alternations in Greek, where the DP actually bears morphological *genitive* or *accusative* case, might be confusing at first sight. Nevertheless, I adhere to this terminology, following a trend in the literature to generalize the term 'dative alternation' to all alternations in the categorial status (PP vs. DP) of indirect objects.

Second, the present approach diverges from an influential tradition according to which double object constructions are defined as contexts in which the indirect object is 'promoted' to the direct object position, while the theme is 'demoted' to some kind of adjunct (Perlmutter and Rosen 1984; Larson 1988). On this view, only goals with structural Case support the double object construction. However, research on e.g. Albanian and Icelandic has shown that many of the constructions in which the indirect object DP bears morphological *dative* case also qualify as double object constructions, in that they do not substantially differ from classical double object constructions in English. Similar results will be seen to apply in Greek and other languages. Thus, this study can also be interpreted as an attempt to refute the 'promotion' approach towards double object constructions by means of a detailed, cross-linguistic investigation.

2. Types of ditransitives

2.1. Realizations of goals

Greek possesses a variety of ditransitive constructions, in which indirect objects are realized as PPs, as DPs with morphological genitive case or as DPs with morphological accusative case (see Tzartzanos 1945 / 1989; Philippaki-Warburton 1977; Mackridge 1985 /1987; Holton, Mackridge and Philippaki-Warburton 1997 among others). The first construction consists of an accusative DP denoting a theme and a goal PP introduced by the preposition *s(e)* 'to'. The DP is assigned morphological accusative case by the preposition, as shown in (5). Similarly to English *to,* Greek *s(e)* is also used as a locative preposition, as in (6):[1]

(5) $ACC_{Theme} - PP_{Goal}$
    O   Gianis   estile   to grama   s-tin   Maria
    The Gianis-NOM   sent-3sg the letter-ACC to-the Maria-ACC
    'John sent the letter to Mary'
(6) *O   Gianis   pighe s-tin   Olandia*
    The Gianis-NOM   went   to-the   Holland-ACC
    'John went to Holland'

    The second construction combines two non-prepositional DPs, a goal and a theme. The goal bears morphological genitive case, while the theme surfaces with morphological accusative:

(7) $GEN_{Goal} - ACC_{Theme}$
    O   Gianis   estile   tis Marias   to grama
    The Gianis-NOM   sent-3sg the Maria-GEN the letter-ACC
    'John sent Mary the letter'

Greek has lost the morphological distinction between genitive and dative case and has generalized the use of genitive.[2]

Finally, with a limited set of verbs, the goal can either be introduced by a PP headed by *s(e)*, as in (8), or it can be projected into a structure in which both the indirect object and the direct object surface with morphological accusative case, as in (9):

(8) $ACC_{Theme} - PP_{Goal}$
       Dhidhaksa ghramatiki   s-ta   pedhia
       Taught-1sg grammar-ACC   to-the   children-ACC
       'I taught grammar to the children'
(9) $ACC_{Goal} - ACC_{Theme}$
       Dhidhaksa ta   pedhia   ghramatiki
       Taught-1sg the children-ACC grammar-ACC
       'I taught the children grammar'

The construction in (9) will be referred to as the *double accusative construction*, in order to distinguish it from the *genitive construction* exemplified by (7). (See Anagnostopoulou 2001 for an analysis of the double accusative construction which is not discussed in this book. In Anagnostopoulou 2001, I argue that the double accusative construction does not include a light head vAPPL, unlike the genitive construction; see chapter 3 for the latter.)

At first sight, the alternation between PPs and DPs illustrated by the pairs in (5) / (7) and (8) / (9) is reminiscent of the dative alternation found in a number of languages. However, recall that for some researchers the term "dative alternation" is reserved for contexts in which an oblique indirect object PP is promoted to a DP bearing structural Case, as e.g. in English, Swedish and Norwegian (Perlmutter and Rosen 1984; Larson 1988; Baker 1988). On this view, ditransitives in which the indirect object is marked by morphological genitive or dative cannot be analyzed as double object constructions, since the indirect object neither displays the morphological (accusative case) nor the structural (passivizability) properties of a promoted DP. Indeed, genitive goals in Greek cannot be passivized (10a),

whereas accusative goals can be promoted to the subject position (10b):

(10) a.*I   Maria   stalthike   to grama
        The Maria-NOM   sent-Non active-3sg   the letter-ACC
        'Mary was sent the letter'
     b. *Ta   pedhia   dhidhachthikan   ghramatiki
         The   children-NOM taught-Non active-3pl grammar-ACC
         'The children were taught grammar'

Nevertheless, the Greek alternation between a PP and a genitive DP shares many characteristics typical of the dative shift alternation in English (cf. Markantonatou 1994). For one, the genitive construction in Greek is only tolerated with animate goals, just like the double object construction in English (see Stowell 1981 among many others):[3]

(11) a. *I   Ilektra   estile   ena dhema   s-tin   Ghalia
         The Ilektra-NOM sent-3sg a   parcel-ACC to-the France
         'Ilektra sent a parcel to France'
     b.*I   Ilektra   estile   tis Ghalias   ena dhema
         The Ilektra-NOM sent-3sg the France-GEN a   parcel-ACC
         *'Ilektra sent France a parcel'

Moreover, in English, there are verb classes that allow the genitive construction and others which don't (Oehrle 1976; Pesetsky 1995; Pinker 1989; Gropen et al. 1989). The same observation holds for Greek. In (12) and (13), I provide two lists of verbs that I have found to permit and not permit the alternation, respectively:

(12)   *Verbs that allow the PP – genitive DP alternation*

   a. "give" verbs (verbs that inherently signify acts of giving): *dhino* 'give', *dhanizo* 'lend / loan', *pernao* 'pass', *plirono* 'pay', *kseplirono* 'repay', *nikiazo* 'rent', *pulao* 'sell', *serviro* 'serve', *charizo* 'give as a present, award', *epistrefo* 'return', *sistino* 'recommend, introduce'.

   b. verbs of future having (commitments that a person will have something at some later point): *afino* 'leave', *prosfero* 'offer', *iposchome* 'promise', *klironomo'* 'will', *'epitrepo'* 'allow', *anatheto* 'assign'.

   c. "bring" and "take" (verbs of continuous causation of accompanied motion in a deictically specified direction): *ferno* 'bring', *perno* 'take', *pao* 'take'.

   d. "send"-verbs (verbs of sending): *tachidhromo* 'mail', *stelno* 'send'.

   e. verbs of throwing (instantaneously causing ballistic motion): *petao* 'throw, pass', *richno* 'throw', *varao* 'throw in an abrupt manner'.

   f. verbs of transfer of message (verbs of communicated message): *zitao* 'ask', *dhichno* 'show', *leo* 'tell', *grafo* 'write', *dhidhasko* 'teach', *metafero* 'transfer' (a message), *protino* 'suggest, propose', *epanalamvano* 'repeat', *omologo* 'confess', *dhilono* 'declare', *dhiighume* 'narrate', *ipaghorevo* 'dictate', *dhiavazo* 'read'.

   g. verbs of instrument of communication: *tilegrafo* 'telegraph', *?tilefono* 'phone'.

   h. verbs of fulfilling (X gives something to Y that Y deserves, needs, or is worthy of): *embistevome* 'trust, entrust', *parusiazo* 'present'.

(13)   *Verbs that do not allow the PP – genitive DP alternation*
   a. "say"-verbs (verbs of communication of propositions and propositional attitudes): *paradhechome* 'admit', *dhiatipono tin apopsi, tin aporia, tin ipothesi* 'express the opinion, the question, the hypothesis', *ipostirizo* 'state, argue', *ischirizome* 'claim', *kiriso* 'preach', *anakiriso, dhiakiriso* 'declare', *parapembo* 'refer'.
   b. verbs of manner of speaking: [4] *ghrilizo* 'growl', *urliazo* 'scream', *ksestomizo* 'say something that is difficult to say'.
   c. other verbs (from various classes): *ekdhidho* 'issue', *perno tilefono* 'call', *odhigo* 'lead'.

A few remarks are in order regarding the classification of Greek verbs in (12) and (13):

The clearest cases of verbs not permitting the alternation are verbs expressing "communication of propositions", such as *admit, claim* and *argue*. There are also certain verbs corresponding to English verbs of "communicated message", such as *quote, cite* and *preach*, which support the double object construction in English, but not in Greek. Apparently Greek lumps these verbs together with verbs expressing "communication of propositions" (compare the Greek verbs in [12f] and [13a] to their English counterparts included in Levin's 1993 list).[5] Other verbs that resist the genitive construction are "manner of speaking verbs", such as *murmur* and *scream*. (However, there are complications with those; see the discussion in fn 4.) Furthermore, verbs of motion are less clear-cut. As intuitions concerning "verbs of continuous causation of accompanied motion in some manner" are unstable, I do not include this class in the presentation.[6] In addition, these verbs in Greek do not select for the preposition *se*, but require *pros* 'towards' or *mechri* 'up to' instead, which are – unlike *se* – specified as directional (see fn 1):[7]

(14)   *Traviksa   tin polithrona   (?*s-tin) / mechri   tin Maria*
       Pulled-1sg the armchair-ACC to / up to   the Maria
       'I pulled the armchair to Mary'

(15)   *Chamilosa   to fos   (*s-tin) / pros tin Maria*
       Lowered-1sg the light-ACC   to / towards   the Maria
       'I lowered the light to / towards Mary'

Another point that deserves to be mentioned is that most verbs yielding the double accusative construction (with the exception of *dhidhasko* 'teach') belong to the class of "verbs of giving", namely *dhanizo* 'lend', 'loan', *plirono* 'pay', *kseplirono* 'repay', *serviro* 'serve'. The verbs *taizo* 'feed', *potizo* 'give water to animals', and *kernao* 'offer a treat', which belong to this verb class as well, are non-alternating double object verbs, they only take part in the double accusative construction. All other verbs also form the genitive and the prepositional construction.

Furthermore, it is a robust fact about Greek that genitive DPs also alternate with PPs introduced by the preposition *apo* 'from' denoting the source (see e.g. Holton, Mackridge and Philippaki-Warburton 1997: 191):

(16)   a. *Eklepsa   ena vivlio   apo / (*s-)   tin Maria*
          Stole-1sg a   book-ACC   from / (to)   the Maria
          'I stole a book from Mary'
       b. *Eklepsa   tis Marias   ena   vivlio*
          Stole-1sg   the Maria-GEN a   book-ACC
          'I stole a book from Mary'

(17)   a. *Pira   ena vivlio   apo / (s-)   tin Maria*
          Took-1sg a   book-ACC   from / (to)   the Maria
          'I took a book from Mary' / 'I bought a book for Mary'
       b. *Pira   tis Marias   ena   vivlio*
          Took-1sg   the Maria-GEN   a   book-ACC
          'I took a book from Mary' / 'I bought a book for Mary'

Other verbs behaving this way are *apospo* 'detach', *travao* 'take in an abrupt manner', *afero* 'subtract'. Even though such verbs do not license the double object construction in English, they do so in a number of other languages (e.g. Finnish and Hebrew [Pylkkänen 2001]; Warlpiri [Legate 2001]).

Finally, I did not include in this discussion the benefactive alternation because benefactive constructions in Greek present additional complications, discussed in detail in Anagnostopoulou (to appear). For this reason, I ignore Greek benefactive constructions in this book.

To summarize, ditransitive predicates in Greek can be found in three different syntactic environments: the prepositional construction, the genitive construction and the double accusative construction. This section presented two initial pieces of evidence that the genitive construction in Greek shares relevant properties of the double object construction in English: (i) sensitivity to animacy, and (ii) sensitivity to the semantic properties of the selecting predicates. Further support for the claim that the genitive construction is a double object construction will be added in later chapters as the discussion proceeds.

2.2. Clitic doubling of genitives

The current section presents a comprehensive survey of clitic constructions in Greek, which will prepare the ground for the discussion of the central empirical topic of this chapter – NP-movement in ditransitives – in section 3.

In Greek, an indirect object DP bearing genitive case can be (optionally) doubled by a pronominal clitic:

(18) *Tu   edhosa   tu Giani   to vivlio*
     Cl-GEN gave-1sg   the Gianis-GEN the book-ACC
     'I gave John the book'

This construction, which is generally referred to as "clitic doubling", is found in Romance, Bulgarian and Albanian (Rivas 1977; Jaeggli 1982, 1986; Borer 1984; Suñer 1988; Dobrovie-Sorin 1990; Sportiche 1992, 1998; Anagnostopoulou 1994, 2002 and many others). Clitic doubling displays intriguing cross-linguistic variation which has been widely discussed in the literature. In particular, while some languages (Spanish and Romanian) have clitic doubling of (indirect or indirect and direct)[8] objects, others (French and Italian) lack this type of construction (data from Jaeggli 1982: 12-13):

(19) *Miguelito (le)   regaló un caramelo   a Mafalda*
      Miguelito Cl-DAT gave   a   candy   *a* Mafalda
      'Miguelito gave Mafalda a piece of candy'
(20) *Jean (*lui)   a   donné des bonbons   à Marie*
      Jean Cl-DAT   has given the candies   *a* Marie
      'Jean gave candies to Marie'

Moreover, clitic doubling in Romance is possible only with DPs that are preceded by special prepositions (*a* in Spanish and *pe* in Romanian), a fact known in the literature as *Kayne's Generalization* (see Anagnostopoulou 1994, 2002 for extensive discussion). Example (21) attests to the availability of clitic doubling with direct objects in Rio Platese Spanish (data from Suñer 1988: 396):

(21) *La   oían   a la   niña*
      Cl-ACC   listened-3pl   *a* the girl-ACC
      'They listened to the girl'

Interestingly, Greek instantiates a third pattern apart from Spanish / Romanian, which possess clitic doubling and observe Kayne's Generalization, and Italian / French, which lack clitic doubling all together. More precisely, clitic doubling in Greek is blocked if the indirect object is a PP (see Dimitriadis 1999 for discussion): [9]

(22) * *Tu   edhosa   to   vivlio   s-ton   Giani*
       Cl-GEN   gave-1sg   the   book-ACC   to-the   Gianis
       'I gave the book to John'

(23) * *Tu   pira   to   vivlio   apo   ton Giani*
       Cl-GEN   took-1sg   the   book-ACC   from   the Gianis
       'I took the book from John'

As shown by the contrast between (21) and (22) / (23), Greek looks like the reverse of Spanish and Romanian in that clitic doubling is not subject to Kayne's Generalization. The same observation can be made for clitic doubling of direct objects (see Anagnostopoulou 1994 for detailed discussion).

    This cross-linguistic difference between Romance and Greek raises the question whether Greek indeed possesses genuine clitic doubling of DPs. Alternatively, one might argue that what superficially resembles clitic doubling in fact manifests a case of right dislocation, a construction found in all clitic languages, regardless of whether they have doubling or not.[10] Right dislocation is not subject to *Kayne's Generalization*, as illustrated by the French example below (from Jaeggli 1986: 33):

(24) *Je l'   ai   vu,   l'   assassin*
      I   Cl-ACC have   seen, the murderer
      'I saw him, the murderer'

    However, in previous work (Anagnostopoulou 1994, 1999d), I have extensively argued that Greek productively employs clitic doubling. Here I will limit myself to presenting one set of data in support of this claim.[11]

    In Greek, objects can be doubled in environments in which the object precedes the subject, as in (25b) and (26b).

(25) a. *Pjos   tin   efaghe   tin turta?*
        Who-NOM   Cl-ACC   ate-3sg the cake-ACC?
        'Who ate the cake?'
     b. *Tin   efaghe tin turta   o Gianis*
        Cl-ACC   ate-3sg the cake-ACC   the Gianis-NOM
        'John ate the cake'
(26) a. *O   Petros   aghorase   ena   vivlio.*
        The Petros-NOM   bought-3sg a   book-ACC.
        'Peter bought a book'
     b. *Ke   tin ali   mera,*
        And the other   day
        to   katestrepse to   vivlio   enas mathitis   tu
        Cl-ACC destroyed   the book-ACC a   student-NOM his
        'And the next day, a student of his destroyed this book'

In both cases, the object is de-accented and the subject bears main
sentence stress. The context provided by (25a) and (26a) furthermore
ensures that the subjects in (25b) and (26b) are not presupposed.
Moreover, it can be shown that subjects in strings like (25b) / (26b)
with the order Cl-VOS reside *in situ*. From this it follows that the
object associated with the clitic cannot be right-dislocated. Hence, it
can be concluded that Greek possesses genuine clitic doubling.

Evidence for the assumption that the subjects in (25b) and (26b)
remain *in situ* comes from the observation made by Zubizarreta
(1994) for Romance and Alexiadou (1999) for Greek that in VOS
strings, the subject necessarily bears main sentence accent. Follow-
ing Cinque (1993), Zubizarreta and Alexiadou take this to indicate
that the subject is the most deeply embedded argument which re-
mains in its VP-internal base-position. Furthermore, they point out
that objects may bind subjects to their right, as schematized in (27a)
and illustrated in (27c) (example [27b] provides the context for
[27c]):

(27) a. [OBJ$_i$ …[[$_{SUB}$ pron$_i$] [t$_i$ …]]

    b. *Pjos   sinodhepse   to   kathe pedhi?*
       Who-NOM accompanied the every child?
       'Who accompanied every child?'

    c. *Sinodhepse   to   kathe pedhi$_i$ i   mitera tu$_i$*
       Accompanied the every child the mother his
       'His mother accompanied every child'

Thus, the object in (27) must have reached its surface location by overt leftward A-movement to a position above the subject. Versions of this analysis for VOS orders are widely adopted in the literature (see Zubizarreta 1994, 1998 for Spanish; Ordoñez 1994, 1997 for Spanish and Catalan; Cardinaletti 1999 for Italian; Alexiadou 1999 for Greek). Crucially for present purposes, the subject also bears main stress when the object is doubled as in (25b), (26b). This entails that objects in Cl-VOS configurations are not right-dislocated. But from this it also follows that Greek qualifies as a genuine clitic doubling language.

The preceding discussion leads us to expect the unavailability of certain cl-VOS orders in languages which allow clitic doubling only in a limited set of environments such as Peninsular Spanish and Catalan. In these languages, doubling of objects preceding post-verbal subjects carrying main sentence stress is permitted with indirect objects (Ordoñez 1997),[12] and with pronominal direct objects (Zubizarreta 1998: 185 fn 16), as illustrated in (28):[13]

(28) a. *Se   lo   dio   a Juan Maria, el   libro*
       Cl-DAT Cl-ACC gave to Juan Maria, the book
       'Maria gave to Juan the book'

    b. *Lo   castigo   a el   Maria*
       Cl-ACC punished *a* him Mary
       'Mary punished him'

Peninsular Spanish and Catalan lack clitic doubling of direct object DPs. Recall now (example [24]) that right dislocation is attested across Romance and is not subject to Kayne's Generalization. That is, a direct object of any kind can co-occur with a clitic if the object is right dislocated. Thus, one is led to expect that Peninsular Spanish and Catalan display direct object "doubling" in VSO but not in VOS orders. This is indeed correct as shown by the contrast between (28a), where *el libro* in a position following the subject is doubled, and (29), where doubling of *a Maria* in a position preceding the subject is ruled out:

(29) * *La   saludo   a Maria Juan*
       Cl-ACC   greeted *a* Maria Juan
       'Juan greeted Maria'

To sum up, VOS configurations in which the subject bears main stress provide diagnostic environments for clitic doubling as opposed to right dislocation. On the basis of this test, it was concluded that Greek employs clitic doubling.

3. Dative phrases in NP-movement constructions

So far, it has been shown that when the general preconditions are met, i.e. the goal is animate and the predicate is of an appropriate semantic type, dative arguments can be realized in a variety of forms. A different picture emerges once we turn to NP-movement constructions. In what follows, I will start with a discussion of the restrictions on genitive DPs and the effects of cliticization in passives, unaccusatives and raising constructions, respectively, turning from there to the distribution of PPs in these contexts.

3.1. The distribution of genitive DPs

There are three environments which do not license (undoubled) genitives in Greek: (i) Passive ditransitives, (ii) sentences involving an unaccusative verb selecting for a goal or an experiencer argument and (iii) constructions involving the verb *fenete* 'seems / appears', which takes an optional experiencer argument. Arguably, in all of these constructions, the nominative argument is a direct object or a lower subject undergoing NP-movement to T.[14]

3.1.1. Passives

Greek has synthetic passives which surface with non-active (glossed, from now on, as *Nact*) morphology. The same morphology marks reflexives, a subclass of middles, and a subclass of unaccusatives.[15] *By*-phrases are expressed by PPs headed by the preposition *apo* which selects for a DP denoting an agent (Alexiadou and Anagnostopoulou 1999b). The passive in (30a) is compatible with an *apo*-PP, while the unaccusative in (30b) is not:

(30) a. *To   vivlio   dhiavastike apo   ton Giani*
     The book-NOM   read-Nact   from   the Gianis
    'The book was read by John'
   b.**I   supa   kaike   apo   ton Giani*
     The soup-NOM burned-Nact from   the Gianis
    *'The soup burned by John'

As was first pointed out by Markantonatou (1994), passivization is subject to a curious restriction: It is prohibited from operating on ditransitive predicates which overtly project a genitive goal:

(31) a. ?* *To vivlio   charistike   tis   Marias*
                 The book-NOM award-Nact the Maria-GEN
                 apo   ton Petro
                 from the Petros
            ?* 'The book was awarded Mary by Peter'
       b. ?* *To grama   tachidhromithike   tu   Petru*
                 The report-NOM   mailed-Nact-3sg   the Petros-GEN
                 apo   tin Ilektra
                 from the Ilektra
            ?*'The letter was mailed Peter by Ilektra'

As shown by (32), sentences in which the goal is not expressed overtly are impeccable, indicating that it is the presence of the goal DP which leads to ill-formedness in (31):[16]

(32) *To   grama   tachidhromithike   apo   tin   Ilektra*
        The report-NOM   mailed-Nact-3sg   from   the Ilektra
        'The letter was mailed by Ilektra'

The class of verbs that behaves this way includes *charizo* 'award', *dhanizo* 'lend / loan', *kseplirono* 'repay', *nikiazo* 'rent', *pulao* 'sell', *epistrefo* 'return', *prosfero* 'offer', *anatheto* 'assign', *epitrepo* 'allow', *stelno* 'send', *zitao* 'ask', *protino* 'suggest', *ipaghorevo* 'dictate', *tilegrafo* 'telegraph'.

   Interestingly, the co-occurrence restriction on passives and genitive goals can be canceled when the goal is realized as a clitic or is related to a doubling clitic (see Markantonatou 1994):

(33) *To   vivlio   tis   charistike   (tis Marias)*
        The book-NOM Cl-GEN   award-Nact the Maria-GEN
        'The book was awarded to Mary'

The contrast exemplified by (31) vs. (33) will become central to the discussion of chapter 4.

3.1.2. Unaccusatives

Some ditransitive verbs cannot form a passive,[17] yet have intransitive variants that are, arguably, unaccusative. Similarly to passives, these unaccusatives do not permit genitive goals, unless these goals are realized as clitics. In what follows, I will discuss some individual cases focusing on the criteria one can use to characterize the verbs under discussion as unaccusatives, as Greek lacks "standard" tests for unaccusativity such as auxiliary selection or resultatives (Alexiadou and Anagnostopoulou 1999a). A verb not permitting a genitive goal in its intransitive use is *parusiazo* 'present / appear':

(34) a. *I   thea   parusiastike   (?*tu Pari)*
       The goddess-NOM presented-Nact-3sg the   Paris-GEN
       ston   ipno   tu
       in-the sleep his
       'The goddess appeared to Paris in his dream'
     b. *I   lisi   parusiastike   (?*tu Jorgu)*
       The solution-NOM presented-Nact-3sg the   Jorgos-GEN
       'The solution presented itself to John'

Intransitive *parusiazo* is interpreted as a verb of appearance or as a reflexive and carries non-active morphology. As argued by Embick (1997, 1998) and Alexiadou and Anagnostopoulou (1999b, to appear), alternating verbs bearing non-active morphology lack an external argument and display NP-movement, just like passives.

Unaccusatives resemble passives also in another respect: Goals may be projected, once they surface as clitics or are clitic doubled:

(35) *I   thea   tu   parusiastike*
     The   goddess-NOM Cl-GEN   presented-Nact-3sg
     (tu Pari)   ston   ipno   tu
     the Paris-GEN   in-the sleep his
     'The goddess appeared to Paris in his dream'

Two other verbs that display similar behavior are *ferome* 'behave' and *richnome* 'throw myself, flirt' which have the same stem as the active forms *ferno* 'bring' and *richno* 'throw':

(36) a. *I   Maria   efere   tu Petru   to grama*
          The Maria-NOM brought the Petros-GEN the letter-ACC
          'Mary brought Peter the letter'
      b. *I   Maria   ferthike   (?*tu Petru)   kala*
          The Maria-NOM   brought-Nact   the   Petros-GEN well
          'Mary behaved well towards Peter'

(37) a. *I   Maria   erikse   tu Petru   tin bala*
          The Maria-NOM threw-3sg the Petros-GEN   the ball-ACC
          'Mary threw Peter the ball'
      b. *I   Maria   richtike   (?*tu Petru)*
          The Maria-NOM   threw-Nact   the   Petros-GEN
          'Mary threw herself on Peter'

As above, the presence of non-active morphology can be taken as evidence for NP-movement. (It is not clear, though, whether the transitive and intransitive forms in [36] and [37] belong to the same lexical entry, given the non-systematic differences in meaning.)

Alternating ditransitive verbs may also surface with active morphology, as in the case of *pao / pigheno*. Transitive *pao / pigheno* means 'take' (38) while intransitive *pao* means 'go' or 'get' (39):

(38) *I   Maria   pighe   tu Petru   ligho faghito*
       The Maria-NOM took-3sg the Petros-GEN some   food-ACC
       'Mary took Peter some food'

(39) a. *O Gianis   pighe stin   Ameriki*
          The Gianis-NOM   went   to-the America
          'John went to the USA'
      b. *To vivlio   pighe stin   Maria*
          The book-NOM   went   to-the Maria
          'The book got to Mary'

Similarly to passives, the goal argument cannot be realized as a genitive in the intransitive construction:

(40) ?* *To vivlio   pighe tis Marias   me kathisterisi*
        The book-NOM went the Maria-GEN with delay
        'The book got to Mary with a delay'

In its intransitive use the verb *pao* is almost certainly an unaccusative, not only because it participates in the causative alternation (see Levin and Rappaport 1995 for arguments that causativization is a diagnostic of unaccusativity) but also because it is a telic verb of "inherently directed" motion. Such verbs are consistently classified as unaccusative in languages with unaccusativity diagnostics such as auxiliary selection or resultative formation.[18]

There are also non-alternating intransitive verbs which can be classified as unaccusatives on the basis of a number of tests that – if used with caution – distinguish between unergatives and unaccusatives (Markantonatou 1992; Alexiadou and Anagnostopoulou 1999a). Again, such unaccusatives must not co-occur with a genitive:

(41) *To   grama   irthe (?* tis Marias)*
       The letter-NOM came   the Maria-GEN
       'The letter came (to Mary)'
(42) *To   provlima   proekipse (?*tis Marias)*
       The problem-NOM emerged   the   Maria-GEN
       'The problem emerged (to Mary)'
(43) *O   kafes   dhen eftase   (?*tu   Petru)*
       The coffee-NOM not reached-3sg the   Petros-GEN
       'The coffee was not enough for Peter'

Moreover, sentences projecting an overt goal can be rescued by cliticization, as demonstrated by the contrast between (41) and (44):

(44)   *To grama   tis   irthe (tis Marias)   grigora*
       The letter-NOM Cl-GEN came the Maria-GEN fast
       'The letter came fast to Mary'

Finally, experiencer object predicates that belong to Belletti and Rizzi's (1988) *piacere* class are equally incompatible with a genitive experiencer (45a), unless this experiencer is part of a clitic chain (45b), and fall in this respect in the same group as passives and alternating and non-alternating unaccusatives (see Anagnostopoulou 1999a):[19]

(45)   a. ?*Afta   ta vivlia   aresun   tu Petru   poli
          These the books-NOM please-3pl the Petros-GEN much
          'Peter likes these books a lot'
       b. *Ta vivlia   tu   aresun   (tu Petru)*
          The books-NOM Cl-GEN   please-3pl the Petros-GEN
          'Peter likes books'

In the literature, these experiencer predicates are uncontroversially considered to be unaccusative. In Italian, they take auxiliary *be* and they cannot be passivized (see Belletti and Rizzi 1988 and the discussion in Pesetsky 1995: 11-53). For Greek, there is another test showing that these verbs do not have a thematic subject position. Iatridou and Embick (1997) have demonstrated that featureless, default pro referring back to CPs / IPs is never licensed in thematic positions, while expletive pro can be used in environments following a CP / IP. As a result, we find the contrast in (46):

(46)   a. *An arghisoume poles fores *pro/afto tha   pisi*
          if   we-are-late many times *pro/this Future convince
          tin Maria   na   mas aghorasi aftokinito
          the Maria-ACC Subjunctive us   buy-3sg car-ACC
          'If we are often late it will convince Mary to buy us a car'

  b. *An arghisi o Kostas pro tha ine dropi*
   If is-late the Kostas-NOM pro Future is shame
  'If Kostas is late, it will be a shame'

Applying this test to experiencer object predicates of the *piacere* class shows that they lack a thematic subject position, and therefore should be analyzed as unaccusatives:

(47) *An arghisi o Gianis pro dhen tha mu*
    If is-late the Gianis-NOM, pro not Future me-GEN
    aresi
    please-3sg
    'If John is late I will not like it'

3.1.3. The verb *fenete*

A further group of verbs which displays restrictions on the projection of DP arguments is instantiated by the verb *fenete* 'seems / appears'. As shown below, the experiencer role of *fenete* cannot be assigned to a full genitive DP (see [48a]), although the same function may be taken up by a clitic, as in (48b):

(48) a. **O Gianis fenete tis Marias eksipnos*
    The Gianis-NOM seems the Maria-GEN intelligent
    'John seems to Mary to be intelligent'
  b. *O Gianis tis fenete (tis Marias)*
    The Gianis-NOM Cl-GEN seem-3sg the Maria-GEN
    eksipnos
    intelligent
    'John seems to her / Mary to be intelligent'

Assuming that *fenete* takes a small clause complement whose subject raises to Spec,TP, the ill-formedness of the genitive DP construction

can be linked to fact that the nominative undergoes NP-movement. Evidence that *fenete* indeed lacks a thematic subject comes once again from the application of Iatridou and Embick's test presented in the previous section:

(49)   *An arghisi o   Gianis   pro tha   mu   fani*
          If is-late the Gianis-NOM, pro Future me-GEN seem-3sg
          periergho
          strange
          'If John is late it will seem strange to me'

As shown by (49), an expletive pro may follow a CP / IP. The contrast between full genitive DPs and clitics observed with the small clause complement in (48) carries over to contexts in which *fenete* takes a clausal complement. In (50), the experiencer can be projected as a clitic (50b) but not as a full DP (50a):

(50) a. * *Ta   pedhia   dhen fenonte   tis Marias*
          The   children-NOM not   seem-3pl   the Maria-GEN
          na   meletun
          Subjunctive study-3pl
          'The children do not seem to Mary to study'
      b.   *Ta   pedhia   dhen tis   fenonte*
          The   children-NOM not   Cl-GEN   seem-3pl
          na   meletun
          Subjunctive study-3pl
          'The children do not seem to her to study'

But a potential complication materializes at this point. As is well known, Greek lacks infinitives and makes use of subjunctive clauses instead.[20] In (50), the predicate inside the lower clause agrees with the matrix subject. Given that agreement is interpreted as a reflex of structural Case (Chomsky 2000; 2001a; 2001b following ideas of George and Kornfilt 1981), it is therefore not clear at first sight

whether (50) can be analyzed as a raising construction. There are however strong arguments for the view that Greek has raising (see Alexiadou and Anagnostopoulou 1999c). Since the evidence for raising would involve a rather lengthy digression, I will postpone discussion of this issue to a later point (chapter 3, section 8.3.1).

3.2. The distribution of PPs

Turning to the distribution of PPs, recall that cliticization provided a way to circumvent the restriction on full genitive DPs in constructions involving NP-movement. But cliticization is not the only 'escape hatch' strategy available in these contexts. In all but one of the NP-movement environments identified in the last section, the experiencer / goal role may also be projected if it is assigned to a PP headed by *s(e)*. More precisely, *se*-PPs can be employed to salvage passives (51), alternating unaccusatives (52a), non-alternating unaccusatives (52b) and experiencer object constructions (52c).

(51)   *To   vivlio   dhothike   stin   Maria apo ton Petro*
        The book-NOM   gave-Nact to-the Maria from the Petros
        'The book was given to Mary by Peter'

(52)   a. *I   thea   parusiastike   ston   Pari*
          The goddess-NOM   presented-Nact-3sg to-the Paris
          ston   ipno tu
          in-the sleep his
          'The goddess appeared to Paris in his dream'

       b. *To grama   irthe   stin   Maria me   kathisterisi*
          The letter-NOM came   to-the Maria with delay
          'The letter came to Mary with a delay'

       c. *Afta   ta   vivlia   aresun   ston   Petro poli*
          These the books-NOM   please-3pl to-the Petros much
          'Peter likes these books a lot'

Curiously, experiencer PPs with *fenete* 'seem' still give rise to deviant results:

(53) a. *?*O   Gianis   fenete   stin   Maria eksipnos*
          The   Gianis-NOM   seem-3sg   to-the Maria intelligent
          'John seems to Mary to be intelligent'
      b. **? Ta   pedhia   dhen fenonte   s-tin   Maria*
          The   children-NOM   not   seem-3pl to the   Maria
          na   meletun
          Subjunctive study-3pl
          'The children do not seem to Mary to study'

To summarize, the generalization emerging from the observations in (51) to (53) above can be formulated as in (54):

(54) In Greek, PPs bearing the experiencer / goal role are tolerated in mono-clausal NP-movement constructions, but lead to ill-formedness in bi-clausal environments.

The overall distribution of experiencer / goal roles in contexts of NP-movement is thus adequately described by the two generalizations in (54) and (4), repeated from above:

(4)   A nominative DP may move across a dative DP only if the dative is realized as a clitic or is part of a clitic doubling chain.

4. Crosslinguistic correlations

The Greek facts presented so far are reminiscent of a number of facts found in other languages. In English and "asymmetric / partial" double object languages more generally, NP-movement of themes in passives and unaccusatives is not permitted in the presence of DPs while it is permitted with PPs. In French and Italian, dative argu-

ments are ungrammatical in raising constructions while they are grammatical in passives and unaccusatives. An otherwise banned dative is licensed under pronominalization or cliticization in passives (English), raising constructions (French, Italian), and unaccusatives (Sesotho). In this section, I will compare the various phenomena, and I will argue that a subclass of them must be accounted for in similar terms as the Greek data. In another set of cases the similarity to Greek is apparent; the phenomena in question do not have a common explanation. At the end, I will turn to Dutch, which shows a number of complex restrictions on dative arguments in NP-movement constructions. I will point out that scrambling licenses datives in passives and certain unaccusatives, similarly to cliticization in Greek.

4.1. DPs vs. PPs

4.1.1. English

In all dialects of English so-called *indirect passives*, which involve passivization of the indirect object, are well formed:

(55)   a.   *John sent Mary a letter*
        b.   *Mary was sent a letter*

Indirect passives contrast with *direct passives* in (56), which display passivization of a direct object in the presence of a "dative shifted" indirect object DP. These are judged as "quite marginal" by Larson (1988) and others (in British English such sentences are grammatical; see the discussion in section 4.1.2):

(56) ?* *A letter was sent Mary*

When the theme undergoes passivization in the presence of a PP-goal the resulting sentence is grammatical for all speakers:

(57)   *A letter was sent to Mary*

Greek lacks indirect passives corresponding to English (55b), as was
shown in (10a). This is due to the fact that indirect objects bear geni-
tive case. Generally, only DPs with accusative case may alternate
with nominative under passivization (though we will see in the next
chapter that Japanese and, for some, also Dutch and German are ex-
ceptions to this generalization). It is well-known that *lexical* dative or
genitive is retained throughout the derivation while *structural* accu-
sative may be alternate with nominative (Chomsky 1986; Yip, Ma-
ling and Jackendoff 1987; Freidin and Sprouse 1991; Marantz 1991;
Woolford 1993; 1997). Even though Greek differs from English with
respect to indirect passives, it behaves exactly like English with re-
spect to direct passives. It allows theme passivization in the presence
of a PP goal but not in the presence of a DP goal.

   Note moreover that in English unaccusatives, goals and experi-
encers cannot surface as DPs (see [58]-[60]). The same restriction
holds for raising constructions (61):

(58)   *The book appeals to Mary / *Mary*
(59)   *The candidate appeared to Mary / *Mary*
(60)   *The ring passed to Mary / *Mary*
(61)   *John seems to Mary / *Mary to be intelligent*

It might therefore be tempting to go one step further and suggest that
the contexts which fail to license an undoubled genitive in Greek and
which fail to license the double object construction in English are
identical, resulting in a common explanation for the restrictions
found in English and Greek. However, such a move would be prema-
ture, as English passives and unaccusatives should not be treated on a
par. There is a sharp contrast in grammaticality between the direct
passive in (56) and the ungrammatical variants of (58)-(61) in that
DPs are much more acceptable in the former than in the latter group
of contexts. No such asymmetry is found in Greek, where the pres-

ence of a genitive uniformly gives rise to a relatively mild ungrammaticality. The observations are summarized in table 2:

Table 2. Datives in English and Greek

	PP-Datives	DP-Datives-Degree of ungrammaticality
English transitives	√	√
Greek transitives	√	√
English passives	√	?*-mild ungrammaticality
Greek passives	√	?*-mild ungrammaticality
English unaccusatives	√	*-strong ungrammaticality
Greek unaccusatives	√	?*-mild ungrammaticality
English raising	√	*-strong ungrammaticality
Greek raising	√	?*-mild ungrammaticality

A related point is that in English strings like *Mary was given the book* are fine while, for example, **Mary appeals the book* or **Mary passed a ring* (where *Mary* is the goal) are absolutely ungrammatical (see Woolford 1993 for discussion). This suggests that English unaccusatives cannot license the double object construction at all, contrary to passives (Baker 1993; Levin 1993). Everaert (1990) and Baker (1993, 1996) discuss a number of other languages that permit the double object construction in passives but not in unaccusatives, like English and unlike Greek. Romero and Ormazabal (1999) suggest that this asymmetry between passives and unaccusatives systematically holds in languages in which indirect and direct objects have the same case or agreement morphology (*two-way case / agreement system*). In languages with dative Case / special agreement for dative arguments (*three-way case / agreement system*), unaccusatives may, in principle, license the double object construction, similarly to passives:

(62)   *Romero and Ormazabal's Generalization*
In languages with a two-way case / agreement system, the double object construction is not licensed with unaccusatives. In languages with a three-way case / agreement system the double object construction is licensed with unaccusatives.

(62) correctly captures the difference between Greek and English. English is a language with a two-way case / agreement system, and unaccusatives do not permit the double object construction. Greek is a language with a three-way case / agreement system, and the double object construction is attested with unaccusatives. In this book, I will treat (62) as a descriptive generalization without trying to reduce it to independent principles.

I conclude that English resembles Greek in that it licenses PP-datives but not DP-datives in passives. The same asymmetry is found in unaccusatives, but there are good reasons to believe that the PP / DP contrast in this case has a different source.

4.1.2. "True" and "partial" double object languages

So far, I have been discussing languages like Greek and English, which have an alternation between PP and DP datives, the latter known as *double object constructions*. A related construction, traditionally referred to as the *applicative construction,* is found in Bantu, Austronesian and other language families (Chung 1976; Kimenyi 1980; Comrie 1982; Marantz 1984; Baker 1988; Bresnan and Moshi 1990; Woolford 1993; Mchombo 1993; and many others). The applicative construction is like the double object construction in that it involves an oblique argument (goal, benefactor) surfacing as a DP along with the direct object. However, unlike the double object construction, the verb of the applicative construction is morphologically complex. More specifically, the verb stem combines with an *affix*, traditionally called the *applied* or *applicative* affix. (63) illustrates the alternation between a prepositional

and an applicative construction with an example from Chicheŵa (from Baker 1988: 229):

(63) a.   *Mbidzi   zi-na-perek-a   msampha   kwa   nkhandwe*
       Zebras   SP-PAST-*hand*-ASP   trap   *to*   fox
       'The zebras handed the trap to the fox'
   b.   *Mbidzi   zi-na-perek-er-a   nkhandwe   msampha*
       Zebras   SP-PAST-*hand*-APPL-ASP   fox   trap
       'The zebras handed the fox the trap'

In (63a), the indirect object is realized as a PP, while in (63b), it is a DP. The DP is licensed through the presence of an affix attached to the verbal root. Thus, in Chicheŵa, there are two ways to select for an indirect object argument: either through a preposition or through an affixal head attached to the verb. Baker (1988) and Marantz (1993), among others, have argued that the double object construction and the applicative construction derive from the same underlying structure and that an applicative morpheme must be postulated for double object constructions as well. The difference between applicatives and double object constructions reduces to the fact that the applicative morpheme is *overt* in the former but *covert* in the latter. Most of current literature assumes that this line is correct because the range of properties attested in these two construction-types are strikingly similar.

It is often assumed (Baker 1988; Bresnan and Moshi 1990; Marantz 1993; and others) that languages with double object and applicative constructions should be divided into two classes: (i) true or symmetric double object languages (see e.g. Baker 1988: 174-180) and (ii) partial or asymmetric double object languages (see e.g. Baker 1988: 180-186). True double object languages are taken to have the characteristic property that both the indirect object and the direct object display nearly identical object-like behavior. On the other hand, partial double object languages are languages in which some verbs appear with two unmarked object NPs, but the syntactic behavior of these NPs does not match. (Only the indirect object behaves

like a primary object.) One crucial diagnostic for classifying a language as belonging to one or the other category is often considered to be the theme passivization test (though see Woolford 1993: 719-721 for critical discussion). For instance, Kinyarwanda, a Bantu language spoken in Rwanda, is classified as a true double accusative language because either post-verbal NP can surface as the subject (Kimenyi 1980; Gary and Keenan 1977; Dryer 1983; Marantz 1984; data from Baker 1988: 175):

(64) a. *Igitabo   cy-a-haa-w-e   umugore   (n'umugabo)*
          Book   SP-PAST-give-PASS-ASP   woman   (by-man)
          'The book was given to the woman by the man'
      b. *Umugore   y-a-haa-w-e   igitabo   (n'umugabo)*
          Woman   SP-PAST-give-PASS-ASP   book   (by-man)
          'The woman was given the book by the man'

Kinyarwanda differs from e.g. Greek and English in licensing theme passivization. Thus, sentences like (64a) demonstrate that the ban on DP-goals in passive NP movement constructions is subject to parametric variation. Further languages that appear to pattern along with Kinyarwanda include British English (Baker 1993; Jespersen 1927: 279 cited in Woolford 1993: 684, fn. 8), Norwegian (Åfarli 1987; Hestvik 1986; Holmberg and Platzack 1995) and Swedish (Falk 1990; Holmberg and Platzack 1995). Chimwiini, another Bantu language, is on the other hand classified as a partial double object language, as it only permits goals to surface as subjects in passive clauses (data from Baker 1988: 181, who credits Kisseberth and Abashiekh 1977):

(65) a. *Ja:ma   ∅-pel-a: kuja   na: mi*
          Jama   SP-gave-PASS   food   by me
          'Jama was given food by me'

b. **Kuja   i-pel-a   Ja:ma na: mi*
    food   SP-gave-PASS Jama by me
    'Food was given Jama by me'

Chimwiini patterns in this respect along with (American) English, Fula, and Chicheŵa. (See Gary and Keenan 1997; Marantz 1984; 1993; Baker 1988; Bresnan and Moshi 1990; Hoffman 1991; Woolford 1993; Ura 1996; McGinnis 1998 among others for discussion of symmetric and asymmetric passives across languages. Wollford 1993 argues that there are, in fact, at least two different types of asymmetric passives). Even though Greek shares the resistance towards theme passivization with e.g. (American) English and Chimwiini, it cannot be categorized as a partial double object language proper in the sense described above. The reason is that Greek does not permit goal passivization either; the Greek version of (65a) is ungrammatical. Hence, Greek does not fit the above typology, which is intended to apply only to languages where goals and themes surface with the same Case.

To summarize, there are at least three types of double object languages cross-linguistically, according to the criterion of passivization of the two arguments: (i) both arguments may undergo passivization (Kinyarwanda, Norwegian, Swedish); (ii) only the indirect object may undergo passivization (Chimwiini, Fula, Chicheŵa, American English); (iii) the indirect object may not passivize, but passivization of the direct object is possible when the indirect object undergoes doubling / cliticization (Greek):

Table 3. Three Types of Double Object Languages

	IO-Passive	DO-Passive	DO-Passives with doubled / cliticized IO
Kinyarwanda, Norwegian	√	√	-
Chimwiini, English	√	*	-
Greek	*	*	√

In fact, we will see in section 4.3. that goal pronominalization not only licenses theme passivization in Greek, but also in English-type languages.

4.2. PPs in monoclausal and biclausal constructions

Section 4.1 addressed the distribution of DPs inside double object constructions from a cross-linguistic perspective. But there are also interesting correlations between Greek and other languages regarding the behavior of PPs in this set of contexts.

As discussed in McGinnis (1998) and Boeckx (2000b), raising of an embedded subject in the presence of an experiencer is blocked in French (Chomsky 1995: 305 fn 79, citing Viviane Déprez personal communication) and Italian (Rizzi 1986: 75 fn 9):

(66) a.   *Jean   semble   [t avoir   du talent]*
           Jean   seems   to have of talent
           'Jean seems to have talent'
     b. ?* *Jean semble à   Marie [t avoir   du talent]*
           Jean seems to Marie   to have of talent
           'Jean seems to Marie to have talent'
(67) a.   *Gianni sembra [t fare   il   suo dovere]*
           Gianni seems   to do the his duty
           'Gianni seems to do his duty'
     b. ?* *Gianni sembra a   Piero [t fare   il   suo dovere]*
           Gianni seems   to Piero   to do the his duty
           'Gianni seems to Piero to do his duty'

Dative *a*-phrases in French and Italian are ruled out only in raising constructions. In passives and unaccusatives, they lead to well-formed results:

(68) a. *Un cadeau a   été   offert à Marie*
            A gift   has been given to Marie
            'A gift has been given to Marie'
     b. *Gianni è stato affidato   a Maria*
            Gianni   is been entrusted to Maria
            'Gianni was entrusted to Maria'

Hence, *a*-datives display the same patterning in raising and passives / unaccusatives which was seen to be typical of PPs in Greek (see [51] – [53] above).

4.3. Weak pronouns and clitics

Oehrle (1976) and Larson (1988) among others note that passive sentences such as (69) are often judged more acceptable than their counterparts with a full DP in indirect object position. Furthermore, the construction improves drastically if the pronoun is de-accented, as in (70):

(69) ??*A letter was given me by Mary*
(70)   *A letter was given'im / *HIM by Mary*

Indirect object weak pronouns in English have an effect comparable to that of clitics in Greek. Note however that the effect of weak pronouns is limited to passives in English. Ungrammatical unaccusatives cannot be rescued by pronominalizing the object:

(71) a. **The candidate appealed John*
     b. **The candidate appealed'im*

This is so because the double object construction cannot be licensed at all in English unaccusatives, as discussed above.

A similar obviation effect is found with clitics in French and Italian raising constructions. As was seen in (66b) and (67b), experiencers are prohibited from showing up in these contexts if they are full phrases. The construction all of a sudden becomes grammatical, though, if the experiencer is expressed as a clitic (Rizzi 1986; McGinnis 1998; Boeckx 2000b):

(72) a. *Jean lui   semble [t avoir   du talent]*
         Jean to her seems   to have of talent
         'Jean seems to her to have talent'
     b. *Gianni non gli   sembra [t fare il   suo dovere]*
         Gianni not to him seem   to do the his duty
         'Gianni doesn't seem to him to do his duty'

Finally, some Bantu languages disallow the applicative construction with unaccusatives, unless the dative surfaces as a clitic (Machobane 1989 cited in Baker 1993: 36; Baker 1996: 220). In Sesotho, goals / benefactors can be added to unergative verbs (73a) but not to unaccusative verbs (73b) (data from Baker 1993, 1996, op. cited; glosses from Baker 1996). Similar facts are reported for Chicheŵa (Baker 1993, 1996 citing Alsina and Mchombo 1988):

(73) a. *Bashanyana   ba-hobel-l-a   morena*
          boys   SM-dance-APPL-IND   chief
          'The boys are dancing for the chief'
     b. * *Baeti   ba-fihl-ets-e   morena*
          visitors SM-arrive-APPL-IND   chief
          'The visitors have arrived for the chief'

Once the dative argument is expressed as an object clitic, ungrammatical sentences like (73b) become grammatical. Thus, one finds minimal contrasts like the following (Baker 1993: 38-39 citing Machobane 1989; the glosses from Baker's 1996: 221 example [76]):

(74) a. **Letebele   leo   le-hol-el-e   rona*
         Letelbele that SM-grow-APPL-SUBJ us
         'May that Letebele (clan name) grow up for us!'
     b. *Letebele   leo   le-re-hol-el-e*!
         Letelbele that SM-1PO-grow-APPL-SUBJ
         'May that Letebele (clan name) grow up for us!'

At first sight, this appears to be similar to the contrasts we find in Greek unaccusatives. On closer inspection, however, it turns out that the two phenomena are distinct. Unlike in Greek, passives and unaccusatives do not behave alike in Sesotho. While unaccusative-applicatives are not permitted in Sesotho unless cliticization is employed, passive-applicatives are fully acceptable (Baker 1993: 45):

(75)   *Nama   e-pheh-ets-o-e   `me*
         meat   SM-cook-APPL-PASS   mother
         'The meat has been cooked for my mother'

The well-formedness of (75) indicates that Sesotho qualifies as a true or *symmetric* double object language, that is, a language where NP-movement of a direct object in the presence of an indirect object is, in principle, possible. This in turn suggests that the requirement for a clitic in Sesotho unaccusatives cannot be assimilated to the requirement for a clitic in Greek passives and unaccusatives. I would like to suggest that Sesotho should be analyzed as a "two-way case / agreement system" language, in the sense of Romero and Ormazabal's (1999) terminology, which nevertheless has the option of adding a special agreement marker, in the form of a clitic, for indirect objects. Once this marker is added, Sesotho is coerced to a language with a "three-way agreement system", i.e. indirect object clitics signify dative Case in this language. The double object construction becomes then possible with unaccusatives, in accordance with the generalization in (62). Since the language generally permits NP movement of themes in the presence of DP-goals and benefactors as shown by

(75), examples like (74b) are entirely well-formed. In chapter 4, I will address the implications of this treatment for the theory of cliticization.

4.4. The role of scrambling in Dutch

Dutch[21], as discussed in Everaert (1990), has a number of similarities with Greek and English. However, the Dutch facts are considerably more complicated than the facts presented so far because not all NP movement constructions behave alike.

To begin with, Dutch lacks "indirect passives" (den Besten 1985; though see chapter 3, section 2.3.3, examples [108], [109] for further discussion; data from Everaert 1990: 127):

(76) a. *Ik   bezorgde   hem   het   eten*
          I   delivered   him   the   food
      b. **Hij   werd het eten   bezorgd   (door   mij)*
          He   was the food   delivered (by   me)
          'He was delivered the food by me'

Even though Dutch superficially looks like English in not overtly discriminating the morphological case of indirect and direct objects, syntactically it patterns with Greek in that it does not tolerate indirect passives. This can be seen as evidence that Dutch is a language with a three-way case / agreement system: there are two Cases for objects, a lexical / inherent dative Case for indirect objects and a structural Case for direct objects. Dutch does not express this distinction morphologically, though. Even in pronouns the distinction is not clear synchronically (Henk van Riemsdijk, personal communication). If Dutch is taken to be a language with a three-way case / agreement system, then this makes the prediction that indirect object DPs should be licensed in Dutch unaccusatives, just like in Greek and unlike English. As I will show, this prediction is – partially – borne

out. This result will lead to the speculation that in Dutch sometimes lexical dative is assigned to indirect objects and sometimes it isn't.

According to Everaert (1990: 127-128), Dutch permits NP-movement of direct objects in the presence of DP indirect objects in passives (77) and non-alternating unaccusatives (78):

(77)　　*Het　eten　werd　hem　bezorgd　(door　mij)*
　　　　　The　food　was　him　delivered　(by　　me)
　　　　　'The food was delivered to him by me'

(78) a.　*De　teugels　onglipten　hem*
　　　　　The　reins　　slipped　　him
　　　　　'The reins slipped out of his hands'

　　 b.　*Het　boek　bevalt　hem*
　　　　　The　book　pleases　him
　　　　　'The book appeals to him'

However, certain facts discussed by den Dikken (1995: 207-208) suggest that DP goals are, despite appearance, actually not permitted *in situ*. Consider the following contrast:

(79) a. ?**dat　het boek　　　waarschijnlijk　Marie*
　　　　　that　the book-NOM　probably　　　　Mary-DAT
　　　　　gegeven　wordt
　　　　　given　　is

　　 b.　*dat het boek　　　Marie　　　waarschijnlijk*
　　　　　that the book-NOM　Mary-DAT　probably
　　　　　gegeven　wordt
　　　　　given　　is
　　　　　'that the book is probably given to Mary'

In (79), theme movement leads to deviance if the DP goal occurs to the right of the adverb *waarschijnlijk*, as in (79a), and results in a well-formed output when it occurs to its left, as in (79b). If argument placement to the left of VP-external adverbs signifies *scrambling*,

then these facts suggest that in Dutch, passivization in the presence of a DP goal is licit only when the goal undergoes scrambling. Furthermore, I take this to indicate that the well-formed cases of passivization such as (77) actually involve string-vacuous application of scrambling of the DP-goal. On this view, *DP scrambling* in Dutch, very much like *cliticization / doubling* in Greek, is a licensing mechanism for DP datives which would otherwise be banned (see also Broekhuis 2000).

Interestingly, exactly the same contrast which was noted by den Dikken for passives is also found with non-alternating unaccusatives:[22]

(80) a. ?* *dat het boek   waarschijnlijk Marie*
         that the book-NOM probably   Mary-DAT
         bevallen zal
         please   will

     b.   *dat het boek   Marie   waarschijnlijk*
           that the book-NOM Mary-DAT   probably
           bevallen zal
           please   will
           'that the book will probably appeal to Mary'

(81) a. ?? *dat de teugels   waarschijnlijk de jongen*
          that the reins-NOM probably   the boys-DAT
          ontglipten
          slipped

     b.   dat de teugels   de jongen   *waarschijnlijk*
           that the reins-NOM the boys-DAT probably
           ontglipten
           slipped
           'that the reins probably slipped out of the boys' hands'

Once again, NP-movement of the theme is possible only when the dative undergoes scrambling, similarly to Greek cliticization and doubling. Finally, there is a curious difference between Dutch and

Greek passives and unaccusatives to which I will return in chapter 4. If Dutch passives and unaccusatives are construed with an *in situ* subject, as in (82), the dative DP may also remain in an unscrambled position (den Dikken 1995: 208, fn 26):

(82) a. *dat waarschijnlijk Marie   het boek*
          that probably   Mary-DAT the book-NOM
          gegeven wordt
          given   is
      b. *dat waarschijnlijk Marie   het boek*
          that probably   Mary-DAT the book-NOM
          bevallen zal
          please   will
      c. *dat waarschijnlijk de jongen   de teugels*
          that probably   the boys-DAT the reins-NOM
          ontglipten
          slipped

Here the parallelism between Greek and Dutch breaks down. Examples with *in situ* subjects still require clitic doubling or cliticization in Greek:

(83) a. *?*(tu)   dhothike   tu Petru   to vivlio*
          Cl-GEN gave-Nact-3sg the Petros-GEN the book-NOM
          'The book was given to Peter'
      b. *?*(tis)   irthe tis Marias   to grama*
          Cl-GEN came the Maria-GEN   the letter-NOM
          'The letter came to Mary'
      c. *?*(tu)   aresun   tu Petru   ta vivlia*
          Cl-GEN please-3pl the Petros-GEN the books-NOM
          'Peter likes books'

Anticipating somewhat, in chapter 4, I will link the obligatoriness of clitic doubling in examples like (83) to the fact that Greek freely

allows VS and VSO orders (Alexiadou and Anagnostopoulou 1998, 2001).

So far I have discussed two NP-movement contexts in Dutch – passives and non-alternating unaccusatives – which license the double object construction. There are however other environments which never permit object-subject alternations in the presence of DP dative arguments. Alternating unaccusatives are a case in point (Everaert 1990: 128):[23]

(84) a. *De croupier betaalt (hen)   de   winnende*
          The croupier pays   (them) the winning
          combinatie   uit
          combination out
      b. *De juiste combinatie   betaalt (*hen) uit*
          The right   combination pays   (them) out

Moreover, constructions with the reflexive marker *zich,* which have been argued to involve NP-movement (see e.g. Hoekstra 1984 and Everaert 1986) never permit a DP-goal, even when they are based on non-alternating unaccusatives (Everaert 1990: 128):

(85) a. *Jan brandde zich   aan de kachel*
          Jan burned   himself on   the fire
          'Jan burned his hands on the fire'
      b. *(no attested examples of NP V zich NP$_{IO}$)

Such contexts only combine with PP-datives (Everaert 1990: 130-131):[24]

(86) a. *_Hij gaf zich   haar volkomen_
          He   gave himself her   completely
      b. *Hij gaf zich   volkomen aan haar*
          He gave himself completely to   her
          'He fully deferred to her'

(87) a. ** De   gedachte drong zich mij op*
         The   thought   forced itself me up

     b. *De   gedachte drong zich aan mij op*
         The   thought   forced itself on me up
        'The thought forced itself on me'

To summarize, NP-movement constructions in Dutch divide into two groups which differ with respect to the potential availability of a dative DP. On the one hand, dative DPs may surface in passives and non-alternating unaccusatives, provided that they undergo scrambling. Dutch looks in this respect much like Greek, where dative DPs are licensed by cliticization, a process which shares various properties with scrambling (see Anagnostopoulou 1994; Alexiadou and Anagnostopoulou 1997). On the other hand, dative DPs are generally excluded from occurring in alternating unaccusatives and *zich*-constructions, which only tolerate PPs. Thus, there are also some aspects of Dutch which make it resemble English and Sesotho, i.e. languages which only license PPs in unaccusatives.

One obvious question arising at this point is what accounts for the ungrammaticality of DPs in the latter type of contexts. Speculatively, this might suggest that in Dutch, predicates lacking an external argument can form a double object construction only in certain designated environments. More precisely, suppose that alternating unaccusatives and *zich*-constructions cannot assign a special dative Case to indirect objects, in line with Romero and Ormazabal's Generalization (62). On this view, in some constructions (non-alternating unaccusatives), Dutch operates like a three-way case system (Greek) which has a lexical dative case, while in other environments (alternating unaccusatives, *zich*-constructions), it displays properties of a two-way case system which lacks special Case for indirect objects. This bifurcation in Dutch could furthermore be linked to case syncretism between structural and inherent Case.

5. Summary

In this chapter, I have demonstrated that the form of dative phrases in Greek is sensitive to the transitivity of the selecting predicate. In transitive constructions, dative arguments can be genitive DPs, PPs and clitic doubled / cliticized genitives. In passives, unaccusatives and with the verb *fenete* genitive DPs are not allowed. PPs are well-formed in passives and unaccusatives but not in constructions with the verb *fenete*. Moreover, clitics and clitic doubled DPs are never subject to any restrictions. Similar facts were shown to exist in a number of other languages, for example, English, French, Italian, Sesotho, Chicheŵa and Dutch. In many languages, there is a prohibition against dative DPs in passives and unaccusatives (English, "partial double object languages" more generally, Dutch passives and unaccusatives). No such problem arises with PPs in languages that have an alternation between PP-datives and DP datives (English, Dutch). Moreover, there are also languages which permit PPs in passives and unaccusatives but not in raising constructions (French, Italian). Finally, there are languages employing weak pronominalization (English passives), cliticization (Sesotho, Chicheŵa unaccusatives, French, Italian raising) or scrambling (Dutch passives, non-alternating unaccusatives) to license an otherwise banned dative.

In certain constructions, the prohibition against DP datives is less absolute than in others. This is reflected by the judgments (in some constructions, the DP is judged as deviant, in others as sharply ungrammatical), as well as by the fact that there are strategies to overcome the violation in some − but not all − cases. Thus, Greek passives, Greek unaccusatives and English passives related to the double object construction are judged as marginal, and they improve under cliticization / clitic doubling (Greek) or pronominalization (English). In contrast to this, English unaccusatives related to the double object construction are invariantly ill-formed, and the presence of a pronominal dative does not lead to improvement. Adopting a suggestion by Romero and Ormazabal (1999), I have speculated that in lan-

guages with a three-way case / agreement system (like Greek) unaccusatives and passives have identical properties. In both, the double object construction is, in principle, possible while the presence of a dative DP leads to a violation – yet to be identified in later chapters – which can be obviated by cliticization / weak pronominalization or scrambling of the dative DP. Finally, in languages with a two-way case / agreement system, the double object construction is exclusively licensed in passives, whereas unaccusatives necessarily employ the PP-construction.

Chapter 3
Dative constructions: Case, EPP and locality

1. Introduction

It has been observed in the literature on Germanic, Bantu and other language families that double object and applicative constructions are rarely found in environments which involve NP-Movement. These environments are special in two respects: (i) the objects cannot be assigned structural Case and (ii) the surface subject undergoes NP movement from an internal argument position. It does therefore not come as a surprise that most of the analyses relate this restriction either to Case theory or to locality conditions on (NP-) movement. In a nutshell, Case-theoretic accounts maintain that the incompatibility of NP-movement with double object and applicative constructions derives from the assumption that one of the two objects lacks Case. For locality-based analyses, such configurations are excluded because the dative blocks NP-movement of the nominative.

The goal of this chapter is twofold. First, I argue that accounts based on Case cannot be extended to languages like Greek with genitive / dative indirect and accusative direct objects. Second, I defend a specific version of locality. In particular, I develop an analysis for the intervention effects of datives based on featural locality and minimal domains.[25]

The discussion in this chapter is organized as follows. In section 2 I review and dismiss a number of representative Case-theoretic accounts that have been advocated in the literature. Section 3 introduces locality-based theories, which will be shown to be general enough to accommodate the facts from English- as well as from Greek-type languages. I then proceed to outline relevant background assumptions in section 4, and present the essentials of my own pro-

posal in section 5. The remaining sections address in detail the various aspects of the proposed analysis. Specifically, section 6 provides evidence from a variety of languages that dative PPs and DPs enter Case-checking or EPP-checking relations with T, and accordingly bear features that block attraction of nominatives by T. In section 7, I argue that there is a significant correlation between the relative height of dative arguments and the availability of passivization of themes. Constructions featuring morphological dative case will be seen to split into two groups cross-linguistically which differ with respect to the relative hierarchical order of the indirect and the direct object. As will turn out, theme passivization in the languages to be discussed is licit only if the direct object is merged above the indirect object. Finally, section 8 defends the hypothesis that dative arguments block movement of lower nominatives only when the dative and the nominative are located in different minimal domains.

2. Case theoretic accounts

Case-theoretic accounts of the restrictions on NP-movement in double object and applicative constructions capitalize on the Case of either the *goal* or the *theme* argument (Larson 1988; Baker 1988; 1996; Pesetsky 1995 among others). As a point of departure, they share the assumption that in active double object and applicative constructions, the indirect object DP bears structural Case while the direct object DP is assigned inherent, oblique or no Case. Proponents of this view have implicitly or explicitly defended the position that genuine double object constructions are limited to languages in which indirect object DPs behave like direct objects, and accordingly have concentrated on languages such as English, which does not distinctly mark the case of internal arguments.

Depending on whether they blame the ill-formedness of direct passives on properties of the goal or the theme, Case-theoretic analy-

ses fall into one of two groups, which will be referred to as *goal-centered* and *theme-centered*.

2.1. Goal-centered approaches

Larson (1988) accounts for the ungrammaticality of direct passives in terms of the interaction of passive morphology with structural Case. He assumes that structural Case is assigned by V in the configuration $[_{INFL}$ INFL $[_{VP}$ V...]]. In addition, the verb is capable of assigning inherent Case to its highest internal argument. In transitive constructions with a single object, the object receives both Cases. In double object constructions, the goal is assigned structural Case, while the theme receives inherent Case. Following the analysis of the dative alternation as 3→2 advancement in Relational Grammar (Perlmutter 1983; Perlmutter and Rosen 1984), Larson proposes that the double object construction is transformationally related to the PP-dative construction by *dative shift*, a passivization operation resulting in *goal promotion* and *theme demotion*. The application of dative shift to (88a) yields (88b):

(88) a.

```
              VP
             /  \
         NP       V'
       theme     /  \
               V      PP
                     goal
```

b.

```
              VP
             /  \
         NPᵢ      V'
        goal     /  \
               V'     NP
              /  \   theme
             V    tᵢ
```
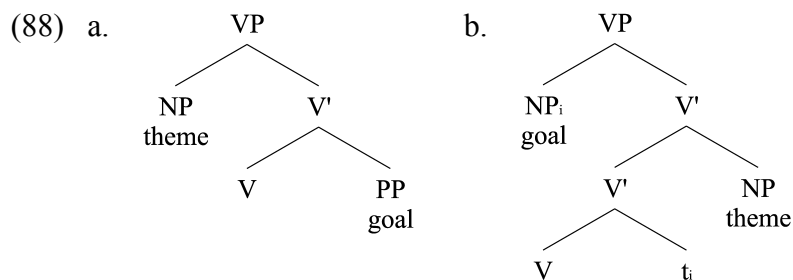
In (88b), the θ-role assigned to the theme has been demoted, with the result that the inner [Spec,VP] position looses its thematic status. Larson adopts a principle according to which a θ-role assigned by a head X may also be assigned to an adjunct of X. This principle dictates that the theme is realized as a V'-adjunct subsequent to θ-role

demotion. Furthermore, the preposition *to*, which is analyzed as a Case marker, is absorbed and the verb moves into a higher verbal head. Since the indirect object goal in (88) is now Case-less, it has to raise to the non-thematic [Spec,VP] position, where it can be assigned Case by the verb (under government by INFL). Case on the NP theme is finally licensed by an optional rule of V'-reanalysis which allows any verb with exactly one unsaturated θ-role to be syntactically construed as a Case-assigning complex predicate.

Indirect passives (*Mary was sent a letter)* are similar to dative shift constructions in that the preposition *to* is absorbed. But instead of the θ-role of the direct object theme, as in the dative shift configuration, it is the θ-role assigned to the subject which is demoted. The goal can therefore move directly to the subject position, where it is assigned nominative, while the direct object, which remains in its original inner [Spec,VP] position, receives the inherent objective Case of the verb.

The Case marker *to* is also suppressed in direct passives (**A letter was sent Mary*), in which the theme raises to the surface subject position, leaving behind the goal. Since passive morphology leads to the absorption of structural Case, the goal in [Spec,VP] now winds up without Case, resulting in a violation of the Case Filter. On these assumptions, what distinguishes indirect passives from direct ones is the Case-theoretic status of the post-verbal object. Whereas the theme in indirect passives receives inherent Case, the goal of direct passives cannot be assigned structural Case.

Even though Larson (1988) only discusses passives, his analysis can be naturally extended to unaccusatives if one adopts the assumption that unaccusatives do not assign structural Case (Burzio 1981; 1986). In fact, Baker (1996: 221) accounts for Sesotho examples in (73), repeated from chapter 2, essentially along these lines:

(73) a.   *Bashanyana ba-hobel-l-a   morena*
          boys   SM-dance-APPL-IND chief
          'The boys are dancing for the chief'

b. *Baeti   *ba-fihl-ets-e*   *morena*
     visitors   SM-arrive-APPL-IND chief
     'The visitors have arrived for the chief'

According to Baker, the applicative construction in Sesotho is compatible with unergatives (73a), but not with unaccusatives (73b), because unergative verbs are Case assigners, while unaccusative verbs are not. More specifically, unergative verbs can assign structural Case to the goal argument, as in (73a), whereas unaccusatives cannot do so, resulting in ungrammaticality for (73b).

Baker accounts for the observation illustrated by (74b), repeated from chapter 2, that Sesotho sentences with unaccusatives become grammatical under cliticization of the indirect object in terms of the hypothesis that pronominal clitics do not need to receive Case.

(74) b.   *Letebele   leo   le-re-hol-el-e*!
            Letelbele   that   SM-1PO-grow-APPL-SUBJ
            'May that Letebele (clan name) grow up for us!'

He furthermore assumes that pronominal clitics are licensed by incorporation and that nouns are visible for θ-role assignment either by Case or by incorporating into the theta-assigning head (see Baker 1993: 39 for the Sesotho example discussed here; Baker 1996 argues for noun incorporation as a generalized licensing mechanism in polysynthetic languages). Larson (1988: 364), building on Oehrle (1976), offers a similar explanation for the well-formedness of English examples such as (69) and (70), repeated from chapter 2, which demonstrate that theme passivization improves if the goal is pronominalized:

(69)   ??*A letter was given me by Mary*
(70)   *A letter was given 'im / *HIM by Mary*

Larson suggests that English has the marginal option of pronoun cliticization onto an adjacent verb, and that clitics differ from DPs in not being subject to the Case Filter because they are in an A' position.

2.2. Theme-centered approaches

In Pesetsky (1995: 124), the asymmetry in the behavior of goals and themes in English passives is not attributed to the lack of Case on the goal, but is linked to properties of the theme instead. In particular, Pesetsky proposes to reduce the prohibition on direct passives to the same factor which is governing the adjacency condition in (89):

(89)   a. * *Sue gave yesterday Bill a book*
         b. ? *Sue gave Bill yesterday a book*

(89) demonstrates that the goal has to be adjacent to V. Moreover, the goal may be passivized. Both properties are canonically associated with structural objects in English. On the other hand, the theme does not have to be adjacent to the verb (89b) and cannot be passivized. Pesetsky concludes that in the double object construction, only the goal, which is Case-marked by V, behaves like a regular DP, whereas the theme is introduced by a null Case-assigning category similar to the overt Case assigner *to* accompanying the second object of the *to*-construction: [26]

(90)   Bill gave Sue [G a book]

Pesetsky maintains that the same strategy underlies the formation of unaccusatives. He points to the fact that there is at least one unaccusative verb in English that shows the dative alternation, namely *get*, which behaves just like a passive in disallowing theme-promotion:[27]

(91) a. *The book got to Sue*
       b. *Sue got the book*
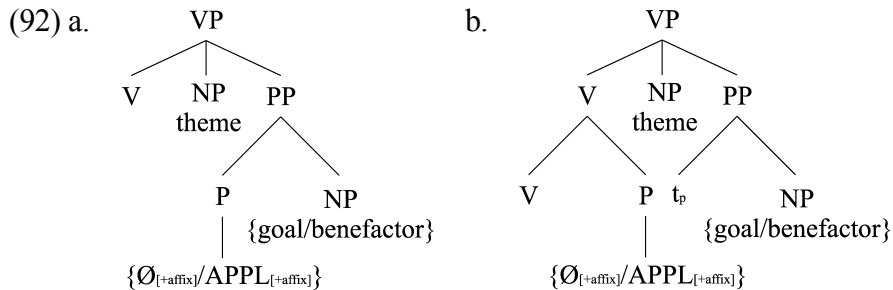   c. * *The book got Sue*

Thus, there is an alternative or, perhaps, additional way of excluding direct passives and unaccusatives. Not only does the goal lack structural Case, as suggested by Larson, but the theme can also not become a subject since it is not a true underlying object, as suggested by Pesetsky (see also Marantz 1993: 127-132 for a proposal along similar lines for partial double object and applicative languages, as opposed to symmetric ones).

Note on the side that the *goal*-centered approach and the *theme*-centered approach appear to make identical predictions for all domains except one: clitics. Within the *goal*-centered approach, it is possible to argue that direct passives involving cliticized goals escape Case-filter violations, as has been done by Baker for Sesotho and Larson for English. If the ungrammaticality of direct passives is on the other hand attributed to the Case properties of the theme, not much can be said about the obviation effects by goal cliticization.

Turning to a second theme-centered approach towards the prohibition on direct passivization, recall from chapter 2 (section 4.1.2) that Baker (1988) mainly focuses on the theoretical interpretation of cross-linguistic differences between true and partial double object languages. Baker argues that the source for this contrast can be located in the Case theoretic status of the theme. The specific account he develops is embedded in the tradition defended by Relational Grammar, which initiated the 'promotion' view of double object constructions.

According to Baker, double object constructions as well as applicatives derive from the process of *preposition incorporation*, the only difference being that the incorporated preposition (i.e. the applicative affix) is overt in the latter, but covert in the former group of environments. As illustrated by the underlying representation in (92a), these prepositions are analyzed as affixes and therefore need

to incorporate into the verb, as in (92b), in order to avoid a violation of the *Stray Affix Filter*:

(92) a.

```
              VP
           /  |  \
         V   NP   PP
            theme  / \
                  P   NP
                  |   {goal/benefactor}
         {Ø[+affix]/APPL[+affix]}
```

b.

```
              VP
           /  |  \
         V   NP   PP
            theme  / \
          / \     /  \
         V   P  t_p   NP
             |        {goal/benefactor}
         {Ø[+affix]/APPL[+affix]}
```

Baker assumes that an NP can only be assigned Case under government by an adjacent, overt head. For the post-incorporation representation (92b) this has the effect that both the non-adjacent verbal head as well as the trace of the preposition are excluded from the group of potential Case-assigners to the goal / benefactor. Thus, the goal / benefactor has to leave its base and move to a position next to the complex verb. On this conception, *dative shift* is motivated by the adjacency requirement on structural Case assignment.

Unlike the goal / benefactor DP, which is Case-licensed in all languages, the Case theoretic status of the theme in (92) is subject to parametric variation. More specifically, Baker suggests that in partial double object languages as e.g. English, the verb can only assign a single structural Case. In conjunction with the Case Frame Preservation Principle (93), which posits that complex head formation does not alter the Case assigning properties of underived heads, this ensures that the complex head V-P in (92b) can only assign one structural Case, which is taken by the goal subsequent to dative shift (Baker 1988: 122):

(93)   *The Case Frame Preservation Principle (CFPP)*
       "A complex X^0 of category A in a given language can have at most the maximal Case assigning properties allowed to a morphological simple item of category A in that language"

Thus, the theme argument must be licensed by *noun incorporation* (or covert *noun reanalysis*), an operation which renders NPs visible for θ-role assignment without the mediation of Case (Baker 1988, 1996). Crucially, the theme lacks now Case, and therefore does not take part in processes typical of structural objects such as passivization.

Finally, true double object languages differ from partial double object languages in that they include verbs which assign more than one structural Case. In double object constructions such as (92b), the complex verb V-P may accordingly also Case-mark the theme. Bearing structural Case, the theme can therefore also be passivized, creating the effects of a "symmetric passive" in true double object languages.

2.3. Goals with dative and themes with accusative

In the preceding sections, I reviewed a number of Case-theoretic analyses of direct passives, which were designed specifically for languages in which the two objects in ditransitives bear the same case morphology. The question that arises at this point is whether these accounts can be extended to languages like Greek, where the goal bears genitive / dative and the theme is assigned accusative. I argue that the answer to this question is negative. In particular, I present evidence that in languages with a three-way case / agreement system, the theme receives structural Case, in contradiction to the assumptions of theme-centered analyses. Moreover, genitive or dative goals bear inherent Case, which shares certain properties with structural Case but, crucially, is not suppressed in passives and unaccusatives. Thus, goal-centered accounts will also be seen to be untenable.

2.3.1. Morphological and structural Case

To begin with, the case morphology of Greek objects strongly indicates that whenever in Greek-type languages one structural and one inherent

Case are available for the two objects, the former is assigned to the theme, and the latter to the goal. In Greek (as in many other languages) objects with structural Case bear morphological accusative, and, in the double object construction, accusative surfaces on the theme. This generalization stands in sharp contrast to the assumption inherent in all Case-based accounts that the goal is marked by structural Case (see also Czepluch 1982; Hellan 1990; Holmberg and Platzack 1995 who make the same point).

Morphology, however, does not provide conclusive evidence for structural Case yet, as there are also datives qualifying as structural and accusatives qualifying as non-structural. To take an example illustrating the first point, in Japanese both accusatives and datives alternate with nominative under passivization, as shown by (94b) and (94c), respectively (Hoffman 1991: 173; see also Larson 1988: 365):[28]

(94) a. *Yoshida-syusyoo   ga   Tanaka-tuusandaizin ni*
        Yoshida-prime minister NOM   Tanaka-minister   DAT
        kunsyoo o   atae-ta
        medal ACC   award-Past
        'Prime Minister Yoshida awarded a medal to Minister Ta-
        naka'
    b. *Kunsyoo ga   Yoshida-syusyoo   ni*
        Medal-   NOM   Yoshida-prime minister   by
        Tanaka-tuusandaizin ni   atae-rare-ta
        Tanaka-minister   DAT   award-Passive-Past
        'The medal was awarded to Minister Tanaka by Prime
        Minister Yoshida'
    c. *Tanaka-tuusandaizin ga   Yoshida-syusyoo   ni*
        Tanaka-minister   NOM   Yoshida-prime minister   by
        kunsyoo   o   atae-rare-ta
        medal   ACC   award-Passive-Past
        'Minister Tanaka was awarded a medal by Prime Minister
        Yoshida'

An important remark is in order here, which is intended to guard against the influence of an additional factor related to an idiosyncratic property of Japanese passives. As explicitly stated in Hoffman (1991: 169; fn 7), the passives in (94b) and (94c) are instances of what has been called "direct passives" in the literature on Japanese. This term should not be confused with the term "direct passive" used in the present work, which is taken to refer to theme passivization in the double object construction.[29] In the literature on Japanese, "direct passives" subsume all passives that are transformationally related to the corresponding active forms, such as (95b). They contrast with so-called "indirect" or "adversity passives", illustrated in (95c), in which the object keeps its original Case and the external argument receives dative. Moreover, adversity passives include an additional experiencer argument which bears nominative (Watanabe 1993: 309-310):

(95) a. *ACTIVE*
          John   ga   sono   tegami   o   yon-da
          John   NOM   that   letter   ACC   read-Past
          'John read that letter'
      b. *DIRECT PASSIVE*
          Sono tegami   ga   John   niyotte   yom-are-ta
          That letter   NOM   John   by   read-Passive-Past
          'That letter was read by John'
      c. *INDIRECT PASSIVE / ADVERSITY PASSIVE*
          Mary   ga   John ni   sono tegami   o
          Mary   NOM   John DAT   that letter   ACC
          yom-are-ta
          read-Passive-Past
          'Mary was adversely affected by John's reading of that letter'

There is a consensus in the literature, that the nominative subject of direct passives is an underlying object which reaches its surface position by NP-movement, whereas the experiencer subject of adversity passives functions as an external argument which is directly merged

into its surface position (Kubo 1990; Watanabe 1993).[30] Crucially for present purposes, (94c) qualifies as a "direct passive". Thus, (94c) can indeed be taken to demonstrate that datives alternate with nominatives, and that dative is a structural Case in Japanese.

Greek prepositions exemplify the second point. In the literature, it has been claimed that prepositions assign either structural or oblique Case. It has further been argued that preposition-stranding and formation of pseudo-passives are processes taking place only in languages with prepositions that assign structural Case (van Riemsdijk 1978; Hornstein and Weinberg 1981; Kayne 1984; Baker 1988 among others). Even though most prepositions in Greek assign accusative Case (see [96]), Greek lacks both processes, as shown in (97):

(96)   *Milisa   me / jia   ton Petro*
          Talked-1sg   with / about the Petros-ACC
          'I talked with / about Peter'

(97) a. * *Pjon   milises   me*?
          Whom-ACC   talked-2sg   with
          'Who did you talk with?'

      b. * *O   Petros   milithike   jia*
          The Petros-NOM   talked-Nact-3sg   about
          'Peter was talked about'

This entails that prepositions in Greek cannot assign structural accusative.

Given mismatches of the kind illustrated above, it is not sufficient to look at morphological case realizations in order to draw conclusions about the nature of abstract Case. We need to search for syntactic evidence, an issue to which I will turn next. The following section begins with a discussion of the Case assigned to the theme, proceeding from there to the Case of the goal.

2.3.2. The theme is not assigned inherent Case

There is solid evidence from Greek that the theme is not licensed by any of the exceptional mechanisms suggested by Case-theoretic accounts of section 2.1 and 2.2. In particular, (i) the theme does not undergo covert incorporation (contra Baker 1988), (ii) it is not introduced by an empty preposition (contra Pesetsky 1995), and (iii) it does not bear inherent Case (contra Larson 1988).

First, observe that when *overt* theme incorporation takes place in Greek ditransitives, the goal must bear accusative Case. Crucially, it cannot be assigned genitive (Rivero 1992):

(98)   *Trof-o-dhoto   ton ftocho / *tu ftochu*
          Food-give-1sg   the poor-ACC / *the poor-GEN
          'I give food to the poor'

This strongly undermines the plausibility of a *covert* theme incorporation analysis along the lines of Baker (1988, 1996) for the Greek double object construction, because goals invariantly surface with genitive case in the latter type of construction.

Next, the theme cannot be introduced by a covert preposition. In chapter 2 (section 2.2), we saw that clitic doubling in Greek is not permitted with prepositional arguments (i.e. Greek is not subject to *Kayne's Generalization*). The theme in the double object construction may however be optionally doubled by a clitic:

(99) *(Tu)   (to)   edhose   tu Petru   to vivlio*
      Cl-GEN Cl-ACC gave-3sg the Petros-GEN the book-ACC
      i   Maria
      the Maria-NOM
      'Mary gave Peter the book'

This argues against the postulation of a covert preposition introducing the theme, as in Pesetsky (1995).

Turning finally to the inherent Case analysis (Larson 1988), a comparison between objects with inherent accusative and accusative themes in the double object construction reveals that the two exhibit strikingly different properties. Inherent accusative is e.g. found on the second object of *spray-load* verbs, as in (100a), which alternate with *with*-complements ([100b]; Catsimali 1990 and others):

(100) a. *Alipsa   tin brizola   ladhi*
           Smeared-I the steak-ACC oil-ACC
       b. *Alipsa   tin brizola   me   ladhi*
           Smeared-1sg   the steak-ACC with oil
           'I smeared the steak with oil'

Both of the objects in (100a) bear morphological accusative. The second accusative DP furthermore qualifies as a non-structurally marked accusative by two criteria: (i) an indefiniteness restriction and (ii) its behavior under passivization.

To begin with, the second accusative of *spray-load* verbs must be realized as a bare NP or as an indefinite, as illustrated in (101):[31]

(101) *Alipsa   tin brizola   (*to) ladhi*
       Smeared-1sg   the steak-ACC   the   oil-ACC
       'I smeared the steak with the oil'

The definiteness restriction in (101) can be accounted for by theories of partitive case (Belletti 1988; Lasnik 1995), according to which inherent accusative is actually an instance of partitive case, which in turn correlates with indefiniteness. Crucially, now, accusative themes in the double object construction are not subject to this type of definiteness restriction. They can be quantificational or definite, as e.g. in (99). It follows that accusatives in these contexts do not bear inherent Case.

Prima facie evidence that the second accusative object of *spray-load* verbs is marked by inherent Case comes from passivization. As

can be seen in (102), the second argument cannot be passivized, even if the first accusative surfaces as a clitic or as a doubled DP:

(102) a.*To ladhi   aliftike   tin brizola
         The oil-NOM smeared-Nact-3sg the steak-ACC
      b.*To ladhi   tin   aliftike   (tin brizola)
         The oil-NOM Cl-ACC   smeared-Nact-3sg the steak-ACC
       * 'The oil was smeared the steak by the Peter'

In contrast to that, accusative themes in the double object construction alternate with nominatives under the condition discussed in chapter 2 that the goal / experiencer is part of a clitic (doubling) chain. Compare (102b) to example (33), repeated from above:

(33)   To vivlio   tis   charistike   (tis Marias)
        The book-NOM Cl-GEN award-Nact the Maria-GEN
        'The book was awarded to Mary'

   Finally, an independent observation about clitic doubling further substantiates the assumption that the theme in the double object construction is assigned structural Case. In Greek, clitic doubling is never permitted with non-structural accusatives. For example, temporal adjuncts, which bear morphological accusative, cannot be doubled:

(103)   (*Tin)   milisa   tu Petru   tin Tetarti
        Cl-ACC   talked-1sg the Petros-GEN the Wednesday-ACC
        'I talked to Peter on Wednesday'

As was shown above (see [99]), though, themes in the double object construction may undergo clitic doubling, in support of the claim that these themes are licensed by structural Case.

   To recapitulate, the evidence presented so far strongly suggests that accusative themes in the genitive construction are neither licensed by incorporation, nor introduced by an empty preposition, nor inherently

case marked, but share all of the properties typically associated with structural objects. This conclusion casts serious doubt on theme-centered analyses (Baker 1988; Pesetsky 1995), which contend that the theme does not behave like a true object. But it also presents a serious challenge for goal-centered approaches (Larson 1988), according to which the theme is assigned inherent Case.

2.3.3. The Case of the goal is not absorbed

Turning to the Case theoretic properties of the goal and how they can be related to the ungrammaticality of direct passives, recall that goal-centered approaches rely on the hypothesis that in the double object construction the goal is assigned structural Case. Direct passives are claimed to be ungrammatical because in passives and unaccusatives structural Case is absorbed, and the goal cannot be assigned Case in the "dative shifted" position. The question once again arises whether this account generalizes to languages with dative / genitive goals. I argue that it does not. In three-way case languages like Greek, goals have an intermediate status. According to some criteria, they bear inherent Case; according to others, they behave as if they have structural Case. Crucially, however, the Case of the goal is not suppressed in passives and unaccusatives, contrary to what is assumed by the proponents of goal-centered accounts.

Greek genitive qualifies as a non-structural Case according to two criteria:

(i) First, recall from chapter 2 that, unlike structural accusatives, genitives do not alternate with nominatives in passives, as illustrated by (10a), repeated below:

(10) a. ***I   Maria   stalthike   to grama**
          The Maria-NOM sent-Non active-3sg the letter-ACC
          'Mary was sent the letter'

Greek genitives differ from Japanese datives, which have been shown to enter into such an alternation (see [94]). Furthermore, alternating unaccusatives pattern along with passives in that goals and experiencers cannot surface with nominative, as shown by (104):[32]

(104)   a.   *I   Maria   pighe   to   grama*
             The Maria-NOM   came   the   letter-ACC
             Possible interpretation: 'Mary took the letter (to someone)'
             Impossible interpretation: 'The letter got to Mary'
     b.   **I   Maria   parusiastike   to   provlima*
             The Maria-NOM   emerged   the   problem-ACC
     c.   *I   Maria   perase   to   kimeno   me   fax*
             The Maria-NOM   passed   the   text-ACC with   fax
             Possible interpretation: 'Mary passed the text by fax'
             Impossible interpretation: 'The text passed to Mary by fax'

On the standard view that inherent Case, unlike structural Case, is linked to a particular theta role (see e.g. Chomsky 1986: 193-195), the absence of case alternations in (10) and (104) signals that genitive is an inherent Case associated with the goal and experiencer role.

   (ii) The second piece of evidence comes from *Exceptional Case Marking* (ECM). Greek lacks verbs or prepositions that assign genitive in ECM configurations. This gap also suggests that genitive is not a structural Case, because ECM verbs / prepositions prototypically assign (structural) Case to DPs which are not theta-related to the higher predicate.

   Notice at this point that there is a curious difference between inherent genitive goals and the inherently Case marked accusatives discussed in the preceding section. Recall to begin with that only bare or indefinite DPs may bear inherent accusative (see [100] and [101]). Interestingly, inherent accusatives contrast in this respect with inherent genitives, which can also surface as definites or as quantificational expressions. In fact, inherent genitive even has to be realized by a definite or quantificational DP, as illustrated by (105):

(105) *Edhosa   *(ton)   pedhion   gramata*
      Gave-1sg   the   children-GEN   letters-ACC
      'I gave children letters'

The obvious question arising in this context is whether this difference challenges the view that genitives bear inherent Case. In what follows, I will discuss a set of data that provides a negative answer to this particular question but, at the same time, reveals a further property of genitive goals / experiencers that groups them together with structurally marked arguments. This will lead to the conclusion that genitive is hybrid, it possesses properties of both the inherent and the structural Case system.

Holton, Mackridge and Philippaki-Warburton (1997; see also fn 2) point out that a very restricted class of single-complement, formal-style verbs in Greek subcategorizes for a genitive DP. As documented by (106b) and (106c), the complement of these verbs can neither undergo passivization nor clitic doubling, indicating that it is assigned inherent genitive. Moreover, (106a) shows that these verbs tolerate definite complements:

(106) a. *I   Maria   iperischise   tu   Petru*
        The   Maria-NOM   prevailed   the   Petros-GEN
        'Mary prevailed over Peter'
     b. * *O   Petros   iperischithike   apo   tin   Maria*
        The   Peter-NOM   prevailed-Nact   by   the   Maria
        'Peter was prevailed over by Maria'
     c. * *Tu   iperischisa   tu   Petru*
        Cl-GEN   prevailed-1sg   the   Peter-GEN
        'I prevailed over Peter'

The paradigm in (106) attests now to two points: First, (106a) demonstrates that indefiniteness is not necessarily a diagnostic of inherent case. (Indefiniteness is diagnostic of inherent accusative, but not of inherent genitive.) It follows that the observation that the genitive

in the double object construction can (in fact has to, see [105]) be realized by a definite or a quantifier does not contradict the assumption that this genitive is inherent. This answers the question raised in the discussion surrounding (105). Second, (106) also elicits evidence against the view that the genitive in the double object construction is inherent. More specifically, while clitic-doubling of inherent genitives in (106c) results in strict ungrammaticality, genitive goals in double object constructions may be freely doubled (see e.g. [99]). This in turn implies that genitive goals in double object contexts share relevant properties of structural Case.

In sum, I conclude that genitive goals / experiencers in Greek have an underdetermined Case-theoretic status. According to the criterion of passivizability, they bear inherent Case (unlike Japanese datives in [94]). According to the criterion of clitic doubling, they are assigned structural Case (unlike the inherent genitives in [106]).

The intermediate status of genitives in Greek is reminiscent of the status of quirky arguments in Icelandic. As is well known, objects with inherent (dative, genitive or accusative) Case never become nominative in this language. However, they undergo NP-movement as in (107a) (from Andrews 1990: 179), qualifying as subjects according to criteria such as binding of subject-oriented anaphors, illustrated in (107b), and subject ellipsis, illustrated in (107c) (from Zaenen, Maling and Thráinsson 1985: 456-457):

(107) a. *Honum   voru sýndir drengirnir*
           Him-DAT   was   shown   the boys-NOM
           'The boys were shown to him'
       b. *Honum   var oft   hjálpað af   foreldrum*
           Him-DAT   was often helped   by   parents
           *sinum   /*hans*
           his[+REFL] / his[-REFL]
           'He was often helped by his parents'

    c. *Hann   segist   vera   saklaus   en ___*
        He-NOM says-self to-be innocent but ___(DAT)
        hefur víst   verið hjálpað í   prófinu
        has   apparently been helped on the-exam
        'He claims that he is innocent but, apparently, he has been
        helped during the exam'

German and Dutch present an altogether different pattern, further testifying to the puzzling Case-theoretic status of dative arguments across and within languages. While indirect objects cannot be 'promoted' to subjects in passives formed with the auxiliary *"werden / worden"*, they can do so in passives formed with the auxiliary *"bekommen / krijgen"*, as illustrated in (108) and (109) respectively (Dutch data from Everaert 1990: 127 and Broekhuis and Cornips 1994: 176):

(108) a. * *Er   wurde die Blumen   geschenkt*
          He-NOM was   the flowers-ACC given
          'He was given the flowers'
      b. * *Hij   wird het eten bezorgd (door mij)*
          He   was   the food delivered (by   me)
          'He was delivered the food by me'
(109) a. *Er   bekam die Blumen   geschenkt*
          He-NOM got   the flowers-ACC given
          'He was given the flowers'
      b. *Hij kreeg de   boeken op zijn kantoor bezorgd*
          He got   the books   at   his office   given
          'He got the books delivered at his office'

It is sometimes claimed that the *bekommen / krijgen*-passive is not transformationally derived, which entails that the subject in (109a), (109b) is not an underlying object (see Haider 1984, 1985 that the goal / benefactor / possessor does not actually passivize in these examples; see also Sternefeld, to appear for arguments that in this con-

struction, *bekommen* assigns a theta-role to the subject). However, this is not generally agreed upon. Others argue that the *bekommen / krijgen*-construction has all the properties conventionally associated with passive (see Wegener 1985; Reis 1985; Webelhuth and Ackerman 1994 for German; Broekhuis and Cornips 1994 for Dutch), and that the surface subject in (109) is an externalized indirect object. If the latter view is correct, then dative in German and Dutch is either inherent or structural, depending on the environment (cf. Webelhuth 1995: 59). In *werden*-passives, it qualifies as inherent Case. In *bekommen*-passives, as structural.

In conclusion, Japanese, Icelandic, Greek, Dutch and German show that the Case-theoretic status of indirect objects with dative / genitive is unclear. Moreover, the comparison of the properties of indirect objects in these languages shows that datives / genitives do not form a uniform class cross-linguistically. In Japanese they appear to be fully structural, in Greek and Icelandic they fuse properties of inherent and structural Case, in German and Dutch "structural" and "inherent" dative is relativized to the type of auxiliary.

Turning now to direct passivization, three-way case languages appear to show a split similar to the one found with symmetric vs. partial double object languages of the kind e.g. discussed in Baker (1988). On the one hand, Japanese (Miyagawa 1997: 6), Icelandic (Holmberg and Platzack 1995: 217) and German permit direct passives, as illustrated in (110):

(110) a. *John-ga   Mary-ni (yotte) Hanako-ni*
           John-NOM   Mary-by   Hanako-DAT
           syookais-are-ta
           introduce-PASS-PAST
           'John was introduced to Hanako by Mary'
       b. *Hún   var sögð einhverjum börnum*
           It-NOM   was told some   children-DAT
           'It was told some children'

    c. *Die   Blumen   wurden Maria   geschenkt*
        The   flowers-NOM were   Mary-DAT given
        'The flowers were given to Mary'

On the other hand, Greek (see [31a], repeated below) and Dutch (see [79a], repeated below) resist them. Crucially, in Greek and Dutch the ungrammaticality of direct passives cannot be attributed to Case absorption. When the indirect object undergoes clitic doubling (see [33] repeated below) or scrambling (see [79b], repeated below), the output is well-formed:

(31) a. ?**To   vivlio   charistike   tis Marias*
          The book-NOM award-Nact the Maria-GEN
          apo   ton Petro
          from the Petros
      ?* 'The book was awarded Mary by Peter'
(33)   *To   vivlio   tis   charistike   (tis Marias)*
         The book-NOM Cl-GEN award-Nact the Maria-GEN
         'The book was awarded to Mary'
(79) a. ?**dat   het boek   waarschijnlijk Marie*
          that   the book-NOM probably   Mary-DAT
          gegeven wordt
          given   is
     b. *dat het boek   Marie   waarschijnlijk*
          that the book-NOM Mary-DAT   probably
          gegeven wordt
          given   is
         'that the book is probably given to Mary'

The fact that direct passives are attested in contexts of clitic doubling and scrambling entails that indirect objects can in principle be assigned Case in passives. Thus, the ungrammaticality of (31a) and (79a) cannot be blamed on the lack of Case on the goal, contrary to what is claimed by proponents of the goal-centered approaches.

To recapitulate, in this section (section 2.3) I have argued that Case-theoretic approaches towards restrictions on direct passivization are untenable for Greek-type languages for two reasons: first, as was seen above (section 2.3.2), the theme has structural Case, and second, as was shown in section 2.3.3, the Case of the goal is not suppressed in passives and unaccusatives. In what follows, I will therefore turn to a discussion of another, alternative line of attack, which reduces the prohibition on direct passives to locality conditions on NP-movement.
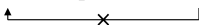
3. Introducing locality

Since Larson (1988), it has been widely assumed that in the double object construction the goal asymmetrically c-commands the theme. First hand evidence for this claim comes from a battery of diagnostics first discussed in Barss and Lasnik (1986):

(111)   Anaphoric binding
    a.   *I showed Mary herself*
    b. * *I showed herself Mary*

(112)   Pronominal variable binding
    a.   *I gave every worker$_i$ his$_i$ paycheck*
    b. * *I gave its$_i$ owner every paycheck$_i$*

(113)   Weak Crossover with wh-phrases
    a.   *Which man$_i$ did you send his$_i$ paycheck?*
    b. * *Whose$_i$ pay did you send his$_i$ mother?*

(114)   Superiority
    a.   *Who did you give which paycheck?*
    b. * *Which paycheck did you give who?*

(115)   The 'Each...the Other' construction
    a.   *I showed each man the other's socks*
    b. * *I showed the other's friend each man*

(116)   Negative polarity items
     a.   *I showed noone anything*
     b. * *I showed anyone nothing*

Barss and Lasnik point out that the contrasts illustrated above can neither be captured under a ternary branching structure (Oehrle 1976) nor under a binary branching structure in which the theme is located higher than the goal (Chomsky 1981). Larson (1988) takes this to indicate that double object constructions are parsed into a binary tree in which the goal asymmetrically c-commands the theme (see section 2.1 above, tree [88]).

Crucially for present purposes, the Larsonian approach makes it possible to account for the ungrammaticality of direct passives by a constraint on movement. In direct passives, the theme must raise to T across the intervening goal, resulting – on plausible assumptions – in a violation of general constraint on syntactic dependency formation:

(117)   [Theme   [Goal   t$_{Theme}$]]

Analyses of direct passives along these lines have been advocated, among others, by Vikner (1990), Holmberg and Platzack (1995), Ura (1996), McGinnis (1998), Anagnostopoulou (1997b, 1998, 1999c) and Broekhuis (2000). These accounts have two important empirical advantages:

First, they provide a common explanation for English-type languages and Greek-type languages, which cannot be achieved by Case-based solutions, as we saw.

Second, they naturally deal with exceptions such as direct passives in "true double object languages". It is not surprising that direct objects may sometimes move across indirect objects, as it is well-known that there are several strategies to evade intervention effects. For instance, Ura (1996) and McGinnis (1998) suggest that in "symmetric double object languages", which license direct passives, the

direct object moves to T via a second specifier of a head hosting the indirect object, as illustrated in (118) (and see section 8.2 below for extensive discussion of such derivations):

(118)   [Theme Z" [$_{KP}$ t$_{Theme}$ [$_{KP}$ Goal K"   [t$_{Theme}$]]]]
                └─ STEP II ─└──── STEP I ────┘

Note incidentally that the hypothesis that the parametric availability of derivations such as (118) leads to obviation of locality violations has a precursor in Reinhart's (1981) analysis of island effects in structures involving A'-movement (e.g. in *wh-islands*). Clearly, the idea that the same parameter also affects NP-movement is not only plausible but also entails the desirable result that certain properties of A' – and A-movement can be subsumed under a common explanation.

    In chapter 4, I argue that clitics and scrambling provide another 'escape hatch' strategy to the kind of locality violations schematized in (117). But in order to be able to expand on the effects of clitics and scrambling, it is necessary to explicate the theoretical background, and to clarify the nature of intervention effects caused by dative arguments first. The remaining sections of this chapter are devoted to these two objectives.

4. Theoretical background

Following Kratzer (1994a, 1994b), von Stechow (1995), Chomsky (1995, 2000, 2001a, 2001b) and others I assume that the external argument is introduced by a functional Voice / causative / v head, as illustrated in (119):

(119)

```
              vP
           /      \
         DP        v'
                 /    \
                v      VP
```
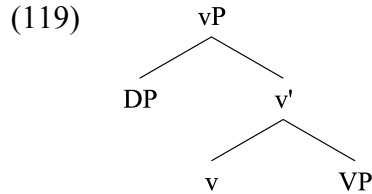
The following properties (among others) have been associated with the functional head v (Kratzer 1994a, 1994b; Harley 1995; Marantz 1997; Collins 1997; Embick 1998; Arad 1999; Travis 2000; Alexiadou 2001; and others):

(120) a. v is the locus of agentivity, i.e. of features relevant to the licensing and interpretation of external arguments.

b. v bears Case features for the object (Burzio's Generalization results from a and b).

c. v comes in two types: one that introduces an external argument (transitive v), and one that does not (intransitive v).

Following this literature, I assume that differences between transitives, on the one hand, and passives, unaccusatives, on the other hand, are linked to the presence or absence of an external argument and the presence or absence of Case on v. Differences between passives and unaccusatives result moreover from variation in the feature specification of v. In particular, v in passives is specified [+agentive], [-transitive], while in unaccusatives it bears the features [-agentive], [-transitive]. (The feature [-transitive] is to be understood as [-Case], [-external argument / specifier].)

Adopting Chomsky (1995, 2000, 2001a, 2001b), I assume that a set of universal features is manipulated by the computational system by certain operations to generate expressions. I comment on the structural conditions under which these operations are licensed first, turning from there to a brief discussion of the content of these features.

In Chomsky (1995), it is proposed that the computational operations implementing displacement are *Feature Attraction* and *Move*. Attraction affects the phrase that has appropriate features and is closest to the target, as stated in (121) (Chomsky 1995: 297):

(121)   K attracts F if F is the closest feature that can enter into a checking relation with a sublabel of K
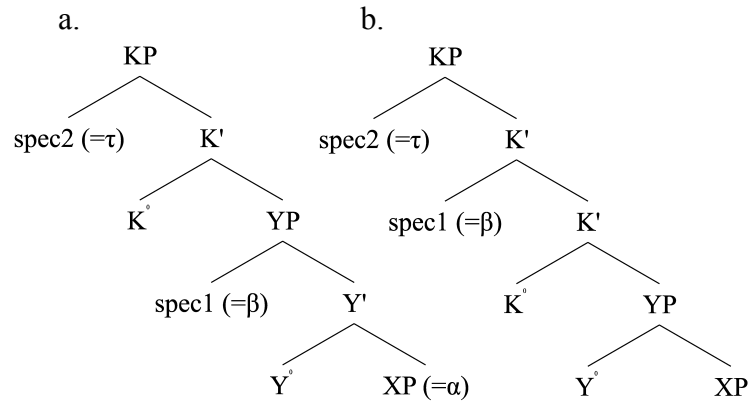
Attraction followed by Move results in feature checking. Move raises phrases when it takes place overtly, and sets of features (Move FF) when it takes place covertly. Chomsky (2000, 2001a, 2001b) proposes to replace feature attraction by a general operation *Agree,* which establishes a relation between features on functional heads and matching features on DPs in some restricted domain. Agree can be satisfied by movement but can also be established at a distance. Long-distance Agree is – just like Move – blocked by intervening features. Regardless of whether one adopts Move FF or Agree, what is relevant for present purposes is that locality conditions are relativized to features rather than to positions (unlike Rizzi 1990).

A further proposal that will be of importance is that "closeness" depends on minimal domains (Chomsky 1995, 2000; Collins 1997):

(122)   If β c-commands α, and τ is the target of movement, then β is closer to τ than α unless β is in the same minimal domain as (i) τ or (ii) α.

According to (122), α can move across a c-commanding β to τ if either (i) α and β (instantiated by XP and spec1 in [123a]), belong to the minimal domain of the same head or (ii) β and the target (spec1 and spec2 in [123b]) belong to the minimal domain of the same head:

(123)

a.   b.

```
          KP                                      KP
        /    \                                  /    \
  spec2 (=τ)  K'                         spec2 (=τ)   K'
             /  \                                    /  \
           K°    YP                           spec1 (=β)  K'
                /  \                                     /  \
          spec1 (=β)  Y'                              K°    YP
                     /  \                                  /  \
                   Y°   XP (=α)                          Y°    XP
```

Turning to a closer specification of the features involved, the discussion below will in particular make use of Case and EPP. In the Minimalist framework, there are two prominent lines of thought as to the interpretation of these features, which can best characterized on the basis of the analysis of expletive constructions, as in (124):

(124)   *There are three books on the shelf*

According to one view, advocated by Chomsky (1995), Collins (1997) and others, Case and EPP encode two distinct requirements which have to be satisfied separately in course of the derivation. Chomsky (1995) formulates EPP in terms of categorial D-feature checking in T. This checking operation can take place in two ways: either by merging an expletive or by moving a subject. The expletive *there* only contains a categorial D-feature, which satisfies the EPP. The Case feature of T in (124) is checked by raising of the formal features of the associate *three books* to T.

On the alternative view, initiated in Chomsky (2000, 2001a), the EPP is interpreted as a generalized requirement of v, T and C to Merge with a specifier, which in (124) is satisfied by (pure) Merge of an expletive. In addition, EPP is responsible for triggering the complex operation Move, which combines Agree and Merge. Structural

Case checking results from complete subject-verb and object-verb agreement (George and Kornfilt 1981). Moreover, Case can also be checked long-distance (pure Agree), for example by long-distance Agree between *three books* and T in (124). Finally, the combination of the assumptions that (i) possible Agree relations between T and DPs exclusively involve φ-features / Case and that (ii) Agree is part of Move entails that only categories with active φ-features, i.e. φ-features that can enter a checking relation with T, can satisfy the EPP requirement of T. (Chomsky 2001a, 2001b argues that an EPP-feature of v is checked by a wider range of elements, namely those undergoing A'-movement triggered by features of the peripheral system [topic], [wh], etc.).

The crucial difference between the two frameworks is now that for Chomsky (2000, 2001a), only elements with active φ-features can undergo EPP-driven movement to T, since EPP combines Agree with Merge, whereas in Chomsky (1995), EPP can, in principle, also be satisfied by categories which lack Case or φ-features, provided that they have categorial features of the appropriate type. In what follows, I will adopt the latter position, which dissociates Case / φ-driven movement from EPP-driven movement to T, allowing the latter to affect a wider range of elements than the ones affected by Case / φ-driven movement (Ura 1996; Collins 1997; Alexiadou and Anagnostopoulou 1998, 2001, building on Marantz 1991; see also Woolford 1997; Holmberg 2000). Since the argumentation in defense of this position would require a rather lengthy digression, I will postpone the discussion of this issue to section 6.1.

As for the mapping from syntax to morphology, I finally assume that nominative and accusative Case features are formally identical for the computational system (Schütze 1997; Alexiadou and Anagnostopoulou 2001; Chomsky 2000, 2001a, 2001b), but that they are spelled-out differently by the morphological component. The specific result of Case spell-out is determined by the disjunctive morphological case realization hierarchy of Marantz (1991), which ensures that

more specific case requirements win out over more general ones (see Marantz 1991 for details; see also Yip, Maling and Jackendoff 1987).

5. An overview of the analysis

The present section offers a concise summary of the mechanics which underlies the analysis of NP-movement in double object constructions I would like to advocate. The individual ingredients of the account will be further substantiated by empirical evidence in sections 6 to 8.

The main objective of this section consists in (i) explaining the absence of direct passives in languages such as English, Greek and Dutch (for Icelandic and Japanese, see below) and in (ii) accounting for contrasts between PP and DP interveners.

More specifically, I propose that the ill-formedness of direct passives follows from locality conditions on movement and the assumption that in double object constructions, indirect objects are introduced by an applicative v head, as shown in (125):
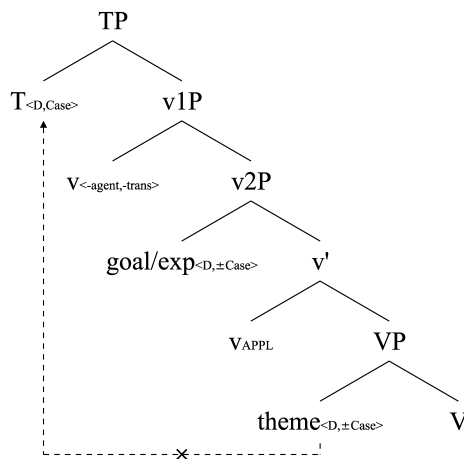
(125)   PASSIVES
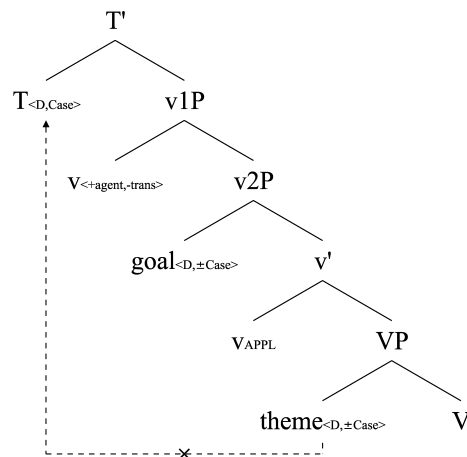
Given the definition of "closeness" based on minimal domains in (122), goals block NP movement of themes to T. In English-type languages, where goals bear structural Case, the intervening features inducing the locality violation are Case and categorial D-features. In languages such as Greek, where goals are marked by inherent Case, the categorial D-feature on the dative goal blocks movement of the theme, which bears both a categorial D-feature and Case features. Moreover, the cross-linguistic contrast in the feature specification of goals accounts for a further factor: In English-type languages, goals bear an active Case feature and may therefore undergo passivization. Since goals lack such an active Case feature in Greek-type languages, the latter group lacks indirect passives.

Even though I do not discuss unaccusatives in this chapter, observe that the analysis in (125) straightforwardly extends to them. As mentioned in section 4, the only difference between passives and unaccusatives is that the highest v bears agentive features in passives, but not in unaccusatives. Except from this difference in the feature specification of v, unaccusatives and passives are structurally identical, and datives therefore cause exactly the same kind of intervention effect:

(126)   UNACCUSATIVES

Recall though from chapter 2 that unaccusatives pattern along with passives only in languages with a three-way case / agreement system (see Romero and Ormazabal's generalization in [62] and the discussion of English, Sesotho and part of Dutch in chapter 2). For languages with a two-way case / agreement system I assume that structures such as (126), in which an unaccusative v is merged with a vP containing vAPPL, cannot be formed in the first place. This accounts for the absolute ungrammaticality of theme (and goal) externalization in unaccusatives in this group of languages. Possibly, this restriction reduces to theta-theoretic considerations (see Machobane 1989; Anagnostopoulou 2001).

Next, it was pointed out in chapter 2 that in raising constructions, intervention effects can be triggered by dative DPs as well as by PPs. I suggest that this generalization follows from the assumption that not only DPs, but also PPs bearing a goal or experiencer role possess formal features that can match T. That is, both DPs and PPs are syntactically active, and therefore block movement of lower arguments to T:

(127)   RAISING: INTERVENING PP
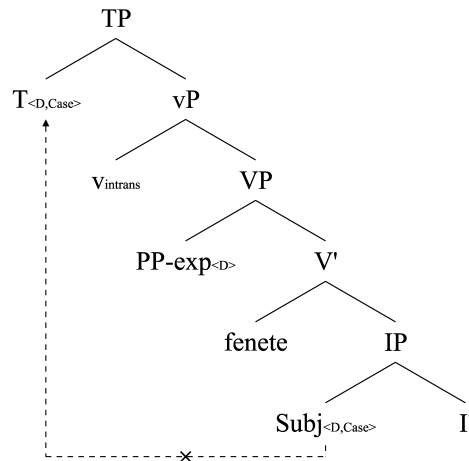
Note on the side that nothing hinges on the question whether the experiencer PP in (127) originates within VP, or is generated as an argument of a vAPPL head. It is irrelevant whether the IP containing the subject and the experiencer argument are in the same or in a different minimal domain. All that matters is the subject belongs to the domain of the embedded I.

Finally, whereas goal / experiencer DPs block movement in all contexts, PPs were seen to induce locality violations with raising (127), but not in unaccusatives and passives. Within the locality approach defended here, this asymmetry naturally follows from the hierarchical position of DPs and PPs, respectively. While goal / experiencer DPs are located in a minimal domain which excludes the nominative in all NP-movement constructions, PPs reside in a separate minimal domain in contexts of raising (see [127]), but not in passives and unaccusatives. Unaccusatives and passives lack a vAPPL head, as illustrated by (128), and PPs are therefore in the same minimal domain as themes:

(128)   UNACCUSATIVES AND PASSIVES: INTERVENING PP
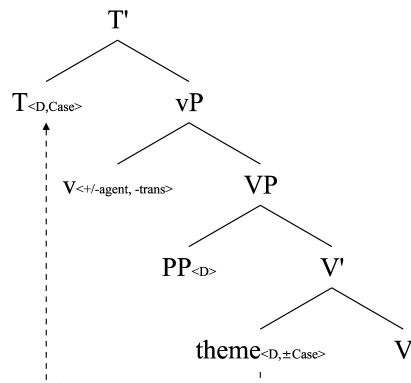
The theme can now move to T even though it is c-commanded by the PP. (Notice incidentally that the order of the theme and the PP in [128] could also be reversed, with no effect.)

In the remaining sections of this chapter, I motivate and discuss the various components of the analysis outlined above. I start with a discussion of the features of dative arguments (section 6), and then comment on the details of their structural representation, proceeding from c-command (section 7) to minimal domains (section 8).

6. First ingredient: Case and EPP

In this section, I use data from a variety of languages to motivate two claims: First, objects with non-structural Case (Greek-type genitive and dative DPs and PPs) have categorial features that can be checked against v or T. Second, objects with structural Case (accusative DPs, Japanese-type dative DPs) have categorial and Case features that can be checked against v or T.

6.1. Dative DPs: against "quirky" Case

As has already been pointed out various times, double object constructions cross-linguistically differ with respect to the Case-properties of the goal argument. Descriptively speaking, there are five types of languages which vary according to two criteria: (a) whether a language has a morphological distinction between dative and accusative Case and (b) whether a goal argument can be assigned nominative under passivization:

(i) English, Chicheŵa, Norwegian, Kinyarwanda do not distinctively mark morphological dative and accusative case. In these languages, the goal may (symmetric passives) or must (asymmetric passives) become nominative in passives.

(ii) Japanese has a morphological distinction between a dative and an accusative case ([94a], repeated from above), and the dative goal may become nominative in passives ([94c], repeated from above):

(94) a. *Yoshida-syusyoo*   *ga*   *Tanaka-tuusandaizin*   *ni*
Yoshida-prime minister NOM   Tanaka-minister   DAT
kunsyoo o   *atae-ta*
medal ACC   award-Past
'Prime Minister Yoshida awarded a medal to Minister Ta-naka'

     c. *Tanaka-tuusandaizin*   *ga*   *Yoshida-syusyoo*   *ni*
Tanaka-minister   NOM   Yoshida-prime minister   by
kunsyoo   *o*   *atae-rare-ta*
medal   ACC   award-Passive-Past
'Minister Tanaka was awarded a medal by Prime Minister Yoshida'

(iii) Greek, Albanian (Massey 1992; McGinnis 1998) and Ice-landic have a morphological distinction between genitive / dative and accusative case. In these languages, the goal must retain its morpho-logical case in passives, as illustrated by the Icelandic examples be-low (from Holmberg and Platzack 1995: 188-189):

(129) *Ég*   *gaf Jóni*   *bók*
I-NOM   gave Jon-DAT   the book-ACC
'I gave John the book'
(130) *Jóni*   *var*   *gefin*   *bókin*
Jon-DAT   was   given   the book-NOM
'John was given the book'

(iv) German has a morphological distinction between a dative and an accusative case. In German, the dative does not alternate with nomina-tive in *werden*-passives, but must be nominative in *bekommen*-passives (see [108a] and [109a], repeated below):

(108) a. * *Er*   *wurde die Blumen*   *geschenkt*
He-NOM   was   the flowers-ACC   given
'He was given the flowers'

   b. * *Hij   wird het eten bezorgd (door mij)*
         He   was the food delivered (by   me)
         'He was delivered the food by me'
(109) a. *Er   bekam die Blumen   geschenkt*
         He-NOM got   the flowers-ACC given
         'He was given the flowers'
   b. *Hij kreeg de boeken op zijn kantoor bezorgd*
         He got   the books   at his office   given
         'He got the books delivered at his office'

   (v) Finally, in Dutch there is no morphological distinction between
dative and accusative. Dutch behaves exactly like German in showing a
split between two types of passives which correlates with the choice of
the auxiliary (see [108b] and [109b], repeated above).
   The analysis of the languages that belong to the first group is
straightforward. The indirect object is not marked by special case mor-
phology and alternates with nominative under passivization. In terms of
the Case and EPP relations discussed in section 4, this means that the
goal argument may both satisfy EPP and check Case on T.
   The account of the indirect object DPs in groups (ii) to (v) is more
complex. As was shown in section 2, indirect objects in double ob-
ject constructions of the dative>accusative type bear a special
morphological dative case in most cases (the exception being Dutch)
and are "syntactically active" to various extents. The latter property
indicates that they enter checking relations with functional heads. In
the system outlined in section 4, there are two ways of interpreting
these relations. They can be taken to suggest that dative arguments
either take part in Case-checking of a particular type, or satisfy EPP
without checking Case. Variants of the first approach have been
defended by McGinnis (1998) and Chomsky (2000, 2001a, 2001b)
who assume, for the reasons outlined in section 4, that only elements
with active Case / φ-features undergo movement to T (Cowper 1988,
Freidin and Sprouse 1991, Harbert and Toribio 1991 are pre-
minimalist works that attempt to maintain the idea that NP-

movement is exclusively Case-driven, by proposing that quirky arguments are NPs with lexical Case which also need structural Case). Variants of the second option have been advocated by Ura (1996), Woolford (1997) and Anagnostopoulou (1997b, 1998, 1999c), who assume that A-movement to v or T can not only be triggered by Case-checking. In what follows, I examine how these two competing proposals fare with respect to the languages in group (ii) to (v). I argue that Case-based proposals should be limited to alternating datives of the type found in Japanese. As for non-alternating datives, it will be shown that EPP-based proposals can handle a wider range of facts.

To account for the hybrid status of dative DPs in Icelandic illustrated in examples (107) and (130), McGinnis (1998: 46-47) introduces a three-way distinction: Case is (i) structural, (ii) inherent or (iii) "quirky", the latter arising in constructions showing a dissociation of morphological case (m-case) and abstract Case. McGinnis proposes that structural Case is checked by attraction to a functional head, while inherent Case is checked when a DP merges with its theta assigner. Quirky DPs display hybrid properties, as they check Case by attraction to a functional head (just like arguments with structural Case), but bear m-case which is determined inherently by their theta assigner (similarly to arguments with inherent Case).

This proposal fails to account for the difference between Icelandic and Japanese, though. Datives in both languages qualify as quirky arguments by McGinnis' definition, since both have m-case determined by their theta assigner and both undergo movement to T in passives, as illustrated by (94c) for Japanese and (130) for Icelandic. But there is a crucial difference between Japanese and Icelandic datives: the former surface with nominative under passivization while the latter retain their m-case. It is not clear how this difference is derived in McGinnis' proposal, which capitalizes on m-case as a defining property of quirky Case.

Chomsky (2000, 2001a, 2001b) also adopts the view that there is a third kind of Case which characterizes quirky arguments in Ice-

landic. However, he defines quirky Case as theta-related inherent Case with an additional structural Case feature. Given this definition, Japanese datives do not qualify as quirky as they alternate with nominatives, a fact suggesting that they do not have theta-related Case. Hence, the problem of Japanese does not arise. However, as a comparison between Greek and Icelandic reveals, there is good evidence that Case, agreement and EPP / Move cannot be collapsed into a single property "quirky Case".

According to Chomsky, quirky arguments enter Agree relations with v and T due to the fact that they bear a structural Case feature. Whenever v and T have an EPP-requirement, the quirky dative undergoes Move, which combines Agree and Merge; otherwise, a long distance Agree relation between the quirky argument and v or T is established. Given the assumptions in Chomsky (2000, 2001a) outlined in section 4, it is necessary to claim that quirky arguments have structural Case in order to explain why they raise to the subject position in e.g. Icelandic. Turning to Greek, we saw in chapter 2 and section 2 of this chapter that genitive indirect objects in Greek freely undergo clitic doubling, unlike inherent genitive complements of single object verbs (example [106c]). Suppose we interpret clitic doubling of genitives as a reflex of Agree, suggesting that genitive DPs that can be doubled have the capacity to enter Agree with v and / or T. Since Agree is furthermore linked to a structural Case feature, this entails that genitive indirect objects have quirky Case. The problem with this line of reasoning is that Greek genitives do not qualify as quirky subjects in the Icelandic sense. More generally, the system will be seen to be not fine-grained enough in order to accommodate the full range of properties associated with quirky subjects on the one hand and Greek genitives on the other hand (and see chapter 5 for more discussion of this issue).

As a first indication that Greek genitives are not quirky subjects, consider the fact that they cannot be deleted under identity with a preceding nominative (131), unlike quirky subjects in Icelandic (107c), repeated from above:[33]

(131) **Aftos ischirizete oti ine athoos*
       He-NOM claims-3sg that is-3sg innocent-3sg-NOM
       ala malon __ dhothike voithia
       but probably __(GEN) give-Nact-3sg help-NOM
       stis eksetasis
       in-the exams
       'He claims that he is innocent but has probably been given help during the exams'

(107) c. *Hann segist vera saklaus en ___*
          He-NOM says-self to-be innocent but ___(DAT)
          hefur víst verið hjálpað í prófinu
          has   apparently been   helped on the-exam
          'He claims that he is innocent but, apparently, he has been helped during the exam'

Moreover, in Icelandic, nominative first and second person pronouns are ruled out in the presence of quirky dative subjects, as documented by the passive example (132) (see Taraldsen 1994, 1995; Sigurðsson 1996; Schütze 1997; see chapter 5 for detailed discussion):

(132) **honum var / varst gefinn þú*
        Him-DAT was-3sg / 2sg given   you-NOM
        'You were given to him'

Following Taraldsen (1994, 1995) and Sigurðsson (1996), I will argue in chapter 5 that this restriction derives from the fact that quirky datives check the person feature of T. Therefore, T can only agree in number with lower nominatives. As shown by (133), no such constraint is found in Greek, signaling that genitives do not enter person agreement with T:

(133)   *tu   anatethikes   esi   (gia na*
        Cl-GEN   assigned-Nact-2sg   you-NOM to   Subjunctive
        se   ksenaghisi)
        CL-ACC   show-around-3sg
        'You were assigned to him (in order for him to show you
        around)'

The facts in (131)-(133) can be viewed as support for the view that
Greek genitives cannot be promoted to the subject position, which in
turn entails that they do not bear quirky Case. However, there is also
some indication from binding that genitives display at least certain
properties of subjects. This evidence is manifest in *"piacere"*-type
psych constructions with fronted experiencers (Anagnostopoulou
1999a).[34] Consider the following paradigm:

(134)   a.   *I   Maria$_i$ aghapuse ton Petro prin   *afti$_i$ / pro$_i$*
             The Maria   loved-3sg the Peter before she / pro
             erotevti   ton Kosta
             fall in love-3sg the Kostas
             'Mary loved Peter before she fell in love with Kostas'
        b.   *Ton Petro$_i$ ton   aghapuse i   Maria*
             The Peter-ACC   Cl-ACC   loved-3sg the Mary-NOM
             prin   aftos$_i$ / pro$_i$ erotevti   tin Katerina
             before he / pro   fall in love-3sg the Katerina
             'Mary loved Peter before he fell in love with Katerina'
        c.   *Tu   Petru$_i$ tu   arese   i   Maria*
             The Peter-GEN   Cl-GEN   please-3sg the Mary-NOM
             *prin   *aftos$_i$ / pro$_i$ erotevti   tin Katerina*
             before he / pro   fall in love-3sg the Katerina
             'Mary appealed to Peter before he fell in love with
             Katerina'

As shown by the contrast between (134a) and (134b), a full pronoun
(*afti*) inside an adjunct clause cannot corefer with the matrix subject

(134a), but may be construed as coreferential with a fronted (Clitic Left Dislocated) object (134b). Fronted experiencers as in (134c) pattern along with subjects and not with fronted objects, as illustrated by (134c). In Anagnostopoulou (1999a), I argue that these facts should be interpreted as follows. There is independent evidence that the pronoun *aftos / i* falls under Principle C. (134a), under coreference, is accordingly ruled out as a Principle C violation, as *afti* would be A-bound by the subject. On the other hand, in (134b) *aftos* is A'-bound by the fronted object, and a coreferential interpretation is therefore permitted. Given this reasoning, the fact that *afti* is excluded in (134c) argues that the experiencer occupies an A-position. Note that the genitive experiencer can neither be elided, nor does it block person agreement of T with the nominative, as illustrated by (135). In this respect, genitive experiencers behave just like genitive goals in passives (see [131] and [133]), and differ from Icelandic quirky datives (see [107c] and [132]):

(135)   a. * *O   Petros   latrevi   tin   musiki*
           The Peter-NOM adores   the   music-ACC
           ala dhen ___   aresun   ta   mathimatika
           but not   ___(GEN) please-3pl the mathematics-NOM
           'Peter adores music but doesn't like math'
       b. *Tu   Petru   tu   aresis   esi*
           The Peter-GEN Cl-GEN   please-2sg   you-NOM
           'You appeal to Peter'

   Interestingly, Greek genitives influence agreement of v with accusatives (as in all languages showing the so-called **me-lui constraint*; see chapter 5 for extensive discussion). In the presence of a genitive clitic, accusative first and second person clitics are ruled out:

(136)   * *tu   se   anethesan*
           Cl-GEN   you-ACC   assigned-3pl
           'They assigned you to him'

The ban against first and second person in (136) is reminiscent of the person constraint in the Icelandic example (132), except that in Greek the restriction applies to accusative arguments. No such restriction is attested with Icelandic accusatives, as shown by (137), indicating that Icelandic datives do not interact in the same way with v as Greek genitives (see also chapter 5):

(137)   *Ég   gaf   honum   þig   í   jólagjöf*
       I-NOM   gave   him-DAT   you-ACC   as Christmas-gift
       'I gave him you as a Christmas present'

Table 4 summarizes the similarities and differences between Icelandic quirky DPs and Greek genitive DPs discussed above:

Table 4. Icelandic quirky DPs and Greek genitive DPs

	Icelandic	Greek
a. No Case alternations	+	+
b. A-binding	+	+ (experiencers)
c. No 1st / 2nd person nominatives	+	-
d. No 1st / 2nd person accusatives	-	+
e. Deletion under identity with nominatives	+	-

In what follows, I argue that the complex properties of Icelandic and Greek in table 4 can be expressed only in a system that does not collapse structural Case, EPP / Move and agreement, in contradiction to Chomsky (2000, 2001a, 2001b).

More specifically, the cross-linguistic parallels follow straightforwardly from the assumptions that Case features of DPs are either structural or inherent, and that movement is dissociated from structural Case. On this view, quirky subjects as well as genitive goals bear inherent Case (property a in table 4). Similarly to quirky subjects in Icelandic, experiencers in Greek undergo A-movement to T and therefore qualify as subjects for binding (see [134]; property b).

A plausible trigger for A-movement to T is a categorial feature causing arguments to enter EPP-checking relations with functional heads (T or v). Syntactically inactive inherent arguments do not have the capacity to enter EPP-checking relations. In Greek, the difference between syntactically active and inactive inherent Case is reflected by clitics in that clitic doubling signifies an EPP rather than an Agree relation between an active inherent argument and a functional head (see the discussion of [106]).

In order to account for the differences between Greek and Icelandic, a further decomposition of the feature bundles on DPs is necessary, which leads to a separation of EPP from agreement. Greek and Icelandic differ with respect to agreement relations between functional heads and arguments checking their categorial features. As will be argued in chapter 5, quirky arguments in Icelandic agree in person with T, while in Greek, they agree in person with v. This explains the difference between (132) and (133) / (135b) on the one hand (property c) and the difference between (136) and (137), on the other hand (property d). It also explains why quirky arguments undergoing movement to T in Icelandic test positive for more diagnostics for subjecthood than genitives moving to T in Greek (among them property e).

Note in this context also that, as argued for by Woolford (1997: 194-196), the distribution of dative and ergative, as opposed to accusative and nominative, in languages with complex Case-systems (e.g. in Nez Perce, a language with a four-way Case system) can be correctly accounted for if (at least some instances of) dative and ergative are treated as lexical Cases associated with goals / experiencers and agents respectively, in opposition to structural nominative and accusative. Ergative and dative arguments may nevertheless enter EPP and / or agreement relationships with functional heads. These options are exploited to various extents by the world's languages, giving rise to parametric differences in the degree of 'subjecthood' of ergative and dative arguments.

Note, finally, that there is a large class of non-subjects which qualify as sentential subjects in the sense that they may satisfy the EPP (as e.g. discussed in Bresnan and Kanerva 1989; Branigan 1993; Déprez 1990; Collins and Branigan 1997; Collins 1997; Alexiadou and Anagnostopoulou 1998, 2001 and Holmberg 2000). Predicates in *predicate inversion constructions* (see, e.g. den Dikken 1995 and Moro 1997), wh-phrases in *French stylistic inversion*, (Kayne and Pollock 1978; Déprez 1990; see chapter 4, section 5 for some discussion), operators associated with sentential quotes in English *quotative inversion* (Collins and Branigan 1997), adverbs, negation, PPs, participles and particles in Icelandic *stylistic fronting* (Holmberg 2000) belong to this class. For all these constructions, it is plausible to suggest that the element that undergoes movement to the subject position bears a feature satisfying the EPP requirement of T. (Even though the precise property permitting certain syntactic objects to check EPP is not yet understood; Holmberg 2000 argues that in stylistic fronting any element may check EPP provided that it has phonological-features and it is closest to T.) It would be hard to accommodate these constructions in a system that links EPP-driven movement to structural Case like the one put forth in Chomsky (2000, 2001a; 2001b). The featural component of such a system simply appears to be not fine-grained enough.

Having clarified my views on the relation between syntactically active inherent Case, structural Case, EPP and agreement, I am now in a position to discuss Case and EPP properties of dative arguments, which I take to regulate movement to v and T. Agreement features will not be discussed any further in this chapter, as I do not consider them as triggers but only as reflexes of computational operations (see Alexiadou and Anagnostopoulou 1999c and chapter 5 for more discussion).

6.2. The features of dative DPs

The present section provides the featural analysis of movement processes involving DPs in languages belonging to group (ii) to (v) of the classification in section 6.1. Some remarks on PPs follow in section 6.3. The main point to be established is that not only structural DPs, but also inherent DPs and PPs may enter checking relations. This claim will be important in order to be able to appeal to featural locality in the account of interventional effects.

On the basis of the discussion in section 6.1, I propose that indirect objects with dative morphology carry a structural Case feature only when they alternate with nominative. According to this criterion, Japanese datives (group ii) are marked by structural Case, in line with suggestions by Larson (1988), Baker (1988) and Ura (1996), among others. Two additional pieces of evidence that Japanese datives are structural have been provided by Sadakane and Koizumi (1995; cited in Ura 1996: 204-205):

(i) Numeral quantifier float is tolerated with dative indirect objects, but blocked with DPs bearing inherent Case (-*kara*), as shown by the contrast in (138):

(138) a. *John ga   tomodati ni   san   nin*
           John NOM   friends   DAT three -Cl
           tegami o   okut-ta
           letters ACC   send-Past
           'John sent letters to three of his friends'
       b. * *John ga   tomodati kara   san   nin*
           John NOM   friends   from   three -Cl
           tegami o   orat-ta
           letters ACC   receive-Past
           'John received letters from three of his friends'

(ii) The dative Case-particle –*ni* must delete when the indirect object appears in the focus position of cleft sentences, as illustrated

in (139a). In this respect, the dative marker behaves like the structural accusative Case particle *–o* in (139b) and unlike the inherent Case-particle *–kara* in (139c), which must be retained:

(139) a. *[[John ga   t tegami-o   okut-ta]   no]   wa*
        John NOM t letter-ACC send-Past] Nominl TOP
        Mary (*ni)   da
        Mary DAT   is
        'It is to Mary that John sent a letter'
    b. *[[John ga   t Mary kara morat-ta]   no]*
        John NOM t Mary from receive-Past] Nominl]
        wa   tegami (*o)   da
        TOP letter   ACC is
        'It is a letter that John received from Mary'
    c. *[[John ga   t tegami o   morat-ta]   no]*
        John NOM t letter   ACC receive-Past] Nominl]
        wa   Mary *(kara)   da
        TOP Mary from   is
        'It is from Mary that John received a letter'

Since datives and accusatives surface with structural Case in Japanese, I assume that they have a Case as well as a categorial feature that can be checked against T. When the indirect object undergoes movement in passives ([94c] repeated below), it checks EPP and Case on T. The same applies to direct object movement (see [94b]):

(94) b. *Kunsyoo ga   Yoshida-syusyoo   ni*
      Medal-   NOM Yoshida-prime minister   by
      Tanaka-tuusandaizin ni   atae-rare-ta
      Tanaka-minister   DAT   award-Passive-Past
      'The medal was awarded to Minister Tanaka by Prime
      Minister Yoshida'

c. *Tanaka-tuusandaizin ga   Yoshida-syusyoo   ni*
Tanaka-minister   NOM Yoshida-prime minister by
kunsyoo   o   atae-rare-ta
medal   ACC   award-Passive-Past
'Minister Tanaka was awarded a medal by Prime Minister Yoshida'

This creates the appearance of a symmetric passive, and, indeed, some researchers assume that Japanese is a symmetric double object language (see, for instance, Baker 1988; Hoffman 1991; Ura 1996; but see section 7 for an alternative).

Indirect objects which retain their morphology under passivization in group (iii) languages such as Icelandic and Greek bear inherent Case, i.e. their Case feature does not match v or T. In double object constructions, inherent datives only possess a categorial feature, which permits them to enter EPP-relations with v or T.

In Icelandic, checking can take place in one of two ways depending on the verb. As discussed in Holmberg and Platzack (1995), Icelandic has two classes of ditransitive verbs (see also Rögnvaldsson 1982; Zaenen, Maling and Thráinsson 1985; Falk 1990; Ottósson 1991; Collins and Thráinsson 1996). In passives formed by verbs of both classes the indirect object may or must check a categorial feature of T without checking Case.

The largest class of verbs, which I will be calling "*class 1*-verbs" (*gefa* 'give', *segja* 'tell', *senda* 'send', *synja* 'show' etc.), take a dative indirect object and an accusative direct object, as illustrated in (140) (from Holmberg and Platzack 1995: 187):

(140) a. *Jón   gaf Ólafi   bókina*
John-NOM   gave Olaf-DAT a book-ACC
'John gave Olaf a book'
   b. *Hún   sagði þeim   sögu*
She-NOM   told   them-DAT a story-ACC
'She told them a story'

In passives formed with verbs of class 1, either the goal or the theme moves to T, and the theme is obligatorily realized as nominative. The two options have already been presented in the course of the preceding discussion. The relevant examples, (107a) and (110b), are repeated below:

(107)   a.   *Honum   voru sýndir drengirnir*
             Him-DAT   was   shown the boys-NOM
             'The boys were shown to him'
(110)   b.   *Hún   var   sögð einhverjum   börnum*
             It-NOM   was   told some   children-DAT
             'It was told some children'

In the feature system adopted here, the nominative *theme* moving to T in (110b) checks both EPP and Case, similarly to nominative *goals* in English and Japanese. By contrast, EPP-checking in (107a) is separated from Case checking, similarly to expletive constructions (see, e.g., [124] discussed in section 4): EPP is checked by the dative *goal* in subject position while Case is checked by the post-verbal nominative *theme*.

   The second class of Icelandic ditransitives, which I will refer to as "*class 2*-verbs" (*skila* "return", *ræna* "rob"), include direct objects marked by lexical dative, genitive or accusative. An example in which the theme bears lexical dative is provided by (141a). With these verbs, only the goal is allowed to move to T, as illustrated in (141b), as opposed to the ungrammatical (141c) with theme movement (data from Holmberg and Platzack 1995: 188-189):

(141)   a.   *María skilaði   mér   bókini   minni*
             Maria   returned me-DAT the book my-DAT
             'Maria returned my book to me'
        b.   *Jóni   var   skilað   bókunum*
             Jon-DAT   was   returned   the book-DAT
             'John was given the book back'

c. * *Bókunum   var   skilað   Jóni*
   The book-DAT   was   returned   Jon-DAT
   'The book was returned to John'

Note that, with verbs of class 2, neither argument becomes nominative in passives and the verb surfaces with default 3rd person, singular agreement. I take these facts to suggest that in passives formed with class 2 predicates, Case on T may remain unchecked (see chapter 5, section 7 for discussion). Moreover, the EPP feature of T is checked by movement of the goal in (141b).

Turning finally to German and Dutch (groups iv and v in section 6.1), if it is correct that *bekommen / krijgen*-passives are transformationally derived, then datives in these constructions must be assumed to have an active Case feature since they can surface as nominative, similarly to Japanese. In *werden*-passives, on the other hand, datives bear inherent Case, similarly to Icelandic. In other words, datives in these languages are either structural or inherent. The argument that moves to T in both kinds of passives checks both EPP and Case on T. In *bekommen*-passives, this is the goal, whereas in *werden*-passives this is the theme.

6.3. The features of dative PPs

Above, it was seen that EPP can be checked by inherent DPs. But there is also evidence coming from *Locative Inversion* that even PPs may satisfy the EPP requirement.

Locative inversion, exemplified by (142a), is a construction found with certain intransitive verbs in English (see Levin 1993: 92-94 for discussion and references), which features a preverbal PP and a postverbal NP which bears the same relation to the verb as the surface subject in non-inverted contexts (142b):

(142) a. *Down the hill rolled the baby carriage*
       b. *The baby carriage rolled down the hill*

Locative inversion is also found in Chicheŵa (Bresnan and Kanerva 1989; Bresnan 1994), where the subject prefix of the verb agrees obligatorily with the locative phrase, as illustrated by (143) (data and glosses from Bresnan and Kanerva 1989: 9):

(143)   *Ku-mu-dzi   ku-na-bwér-á   a-lĕndo*
          17-3-village 17 SB-REC PST-come-IND   2-visitor
          'To the village came visitors'

Bresnan and Kanerwa (1989) argue that locative inversion in Chicheŵa instantiates the marked option of a construction in which a PP serves as the subject. In a similar vein, Hoekstra and Mulder (1990) suggest that locative inversion in English involves A-movement of the PP into SpecIP. Branigan (1993) assumes that the PP moves to an EPP phrase πP. In the same spirit, Collins (1997) analyzes locative inversion in Chomsky's (1995) framework in terms of optional EPP-driven movement of the PP to SpecTP.

   Thus, Bresnan and Kanerva (1989), Branigan (1993) and Collins (1997) explicitly link PP-fronting to the EPP. The other argument checks nominative Case, as can be seen from the fact that the post-nominal NP agrees with the verb in English (144a) and that the NP cannot cooccur with the object marker in Chicheŵa (data and glosses in [144b] from Bresnan and Kanerva 1989: 15):

(144) a. *In the woods lives an old woman*
       b. * *Ku-mu-dzi   ku-na-wá-bwér-a*
             17-3-village   17 SB-REC PST-2OB-come-IND
             a-lendô-wo
             2-visitor-2 those
             'To the village came them, those visitors'

As pointed out by den Dikken (1995: 119), locative inversion is also attested with goal PPs:

(145) a. *To Bob was sent (off) a package*
       b. *To Mary was sent a letter*

Paradigms such as (145) support the assumption that dative PPs have a categorial (EPP) feature that is visible for attraction by T.

Note finally that agreement relations in locative inversion are parametrized: in English, T agrees with the nominative argument (see 144a), while in Chicheŵa, T agrees with the locative subject (see 143). This is reminiscent of the parametrization of agreement relations in the case of the person restrictions observed in Icelandic quirky subject and Greek genitive constructions (see section 6.1).

6.4. Summary of checking relations

Table 5 summarizes the EPP- and Case-checking relations involving DPs and PPs in English, Japanese, Icelandic, German and Dutch.
The table lists ten kinds of passives from five different languages. In three out of the ten passives, EPP and Case are checked separately. Dative DPs with inherent Case undergo EPP-driven movement to T (in Icelandic *d* and Icelandic *e*), as do indirect object PPs in inversion constructions (English *h*). When an inherent dative or a PP checks EPP, Case of T is checked either by the postverbal subject (in Icelandic *d* and English *h*), or not at all (in Icelandic *e*). In the seven remaining constructions, EPP and Case are checked by one and the same DP: either the nominative goal (in English *a,* Japanese *b,* German and Dutch *j*) or the nominative theme (in Japanese *c,* Icelandic *f,* English *g,* German and Dutch *i*).

Table 5. EPP-checking and Case checking with DPs and PPs

		EPP on T checked by	Case on T checked by
a.	English indirect passives	goal DP	goal DP
b.	Japanese goal passives	goal DP	goal DP
c.	Japanese theme passives	theme DP	theme DP
d.	Icelandic class 1 indirect object passives	goal DP	theme DP
e.	Icelandic class 2 indirect object passives	goal DP	-
f.	Icelandic class 1 direct object passives	theme DP	theme DP
g.	English theme passives with a PP goal	theme DP	theme DP
h.	English PP-inversion passives with a post-verbal theme	goal PP	theme DP
i.	German and Dutch *werden*-passives	theme DP	theme DP
j.	German and Dutch *bekommen*-passives	goal DP	goal DP

In conclusion, this section has discussed the features of goals and themes in double object and prepositional constructions and has presented evidence from various languages that goal DPs and PPs as well as theme DPs have Case and / or categorial features that can be checked against T. In the next two sections, I discuss locality theoretic aspects of these constructions. Section 7 examines contexts in which the goal surfaces as a DP, and establishes that high indirect objects uniformly block movement of lower direct objects to T and v in languages with asymmetric passives. Languages with symmetric passives differ in this respect. Section 8 investigates PP-dative constructions and symmetric passives, reaching the conclusion that in these environments, higher arguments block movement to T only when they are in a minimal domain which excludes lower arguments.

7. Second ingredient: c-command

This section investigates the relation between linear order, hierarchical order and A-movement. It is divided into three parts. In the first part, I investigate the well-formedness conditions on NP-movement of goals and themes in English, Japanese and Icelandic passives and present evidence for the following four claims:

(i) Goal passives are well formed because they result from the derivation in (146). The goal (DP_1) moves to T from a position higher than the theme (DP_2), respecting *Shortest Move*:

(146)   ✓ [DP_1 ...   [t_1 ... DP_2]]

(ii) Theme passives are ruled out when the theme moves to T from the DP_2 position across a higher (DP_1) goal, as illustrated in (147). This derivation violates *Shortest Move / Closest Attract.*

(147)   * [DP_2 ...   [DP_1 ... t_2]]

(iii) Whenever theme passives are licit, they result from (146) rather than (147), i.e. the theme moves to T from a (derived or base generated) position above the goal (DP_1).

(iv) Goals and themes undergo and block movement in (146) and (147) regardless of whether they bear structural or inherent Case.

In the second part, I argue that A-movement of objects to transitive v is local in languages with asymmetric passives and appears to violate locality in languages with symmetric passives. More specifically, I extend the analysis in terms of (146) and (147) to goal and theme object shift in Icelandic. (Icelandic is treated here as a language with asymmetric passives, despite the fact that the goal has dative Case; in the present system, goals with EPP-features and goals with Case and EPP features behave alike with respect to locality.) It will furthermore be seen that languages such as Swedish and Norwe-

gian, which seemingly tolerate improper derivations as in (147) in passives, also allow them in object shift constructions. All differences between Icelandic and Swedish / Norwegian identified in this section are taken up again in section 8, where they are explained in terms of minimal domains.

The final part presents two case studies from German and Greek. These languages pose complications for the correlation between linear order, hierarchical order and NP-movement established in the first two parts, but are nevertheless argued to fall under (146) / (147).

7.1. Hierarchical order of objects and local movement to T

In English, Japanese and Icelandic, there is a strong correlation between the linear and hierarchical order of objects in active sentences on the one side, and their ability to undergo NP-movement in passives on the other side. When both objects occupy an A-position in a transitive construction, only the leftmost – and highest – one may raise to T in the corresponding passive. This generalization provides *prima facie* evidence in favor of the derivation in (146) and against the derivation in (147).

To begin with, it is well known that in the English double object construction, the relative order of the two arguments is fixed. The goal obligatorily precedes the theme, as illustrated in (148):

(148) *IO >DO / *DO > IO*
    a. *I gave John the book*
    b. * *I gave the book John*

It is relatively uncontroversial that linear precedence reflects asymmetric c-command in English. Evidence for this is provided by Barss and Lasnik's (1986) tests in (111)-(116) presented in section 3. Moreover, only indirect passives are attested in English (examples repeated from above):

(55)   b.   *Mary was sent a letter*
(56)   ?* *A letter was sent Mary*

Given that the goal originates in a position above the theme in active sentences, the contrast between (55b) and (56) straightforwardly follows from the *Minimal Link Condition* (MLC), which licenses movement to T in (55b) (derivation 146), but not in (56) (derivation 147).

    Unlike in English, the relative order of goals and themes in Japanese is flexible, as illustrated by (149) (from Miyagawa 1997: 1):

(149)   *IO >DO / DO > IO*
        a.   *John ga   Mary ni   piza o   ageta*
            John NOM Mary DAT   pizza ACC   gave
            'John gave Mary pizza'
        b.   *John ga   piza o   Mary ni   ageta*
            John NOM   pizza ACC   Mary DAT   gave
            '*John gave pizza Mary'

The two surface strings in (149) are still bi-uniquely mapped into two different hierarchical tree representations, as documented by the distribution of anaphoric dependencies. In the order dative-accusative, the dative may bind a reciprocal contained within the accusative, as in (150a), whereas the accusative cannot license a reciprocal in the dative, as in (150b) (from Ura 1996: 193):

(150) a.   *IO$_i$ [$_{DO}$ reciprocal$_i$]*
            Mary ga   [John to Bill$_k$] ni   [otagai$_k$ no
            Mary NOM John and Bill   DAT   each other GEN
            sensei] o   syookaisita
            teacher ACC   introduced
            'Mary introduced each other's teachers to John and Bill'

b. * *[IO reciprocali] DOi*
    * *Mary   ga   [otagaik   no   sensei] ni*
      Mary   NOM   each other GEN   teacher DAT
      [John to Billk]   o   syookaisita
      John and Bill   ACC   introduced
      'Mary introduced John and Bill to each other's teachers'

In the accusative-dative order, binding relations are reversed. The accusative can bind a reciprocal inside the dative (see [151a]), from Ura 1996: 195), but not vice versa (see [151b], provided by Kazuko Yatsushiro personal communication; see also Miyagawa 1997: 4):

(151) a.   *DOi [IO reciprocali]*
             Mary   ga   [John to Bill]k   o   [otagaik   no
             Mary   NOM   John and Bill   ACC each other GEN
             sensei] ni   syookaisita
             teacher DAT   introduced
             'Mary introduced John and Bill to each other's teachers'
       b. * *[DO reciprocali] IOi*
           * *Mary   ga   [otagaik   no   sensei] o*
             Mary   NOM   each other GEN   teacher ACC
             [John to Bill] k   ni   syookaisita
             John and Bill   DAT   introduced
             'Mary introduced each other's teachers to John and Bill'

In the literature on Japanese, two analyses have been proposed for the facts in (149)-(151). According to one view (Tada 1989; Saito 1992; Ura 1996; Yatsushiro 2001), the goal c-commands the theme in the base order, and the serialization theme-goal results from A-scrambling of the theme to a position above the goal, as in (152):

(152)

```
                    VP
                   /  \
             themeᵢ    VP
                      /  \
                  goal    ....
                   /\      /\
                  /  \    /  \
            anaphorᵢ    tᵢ
```
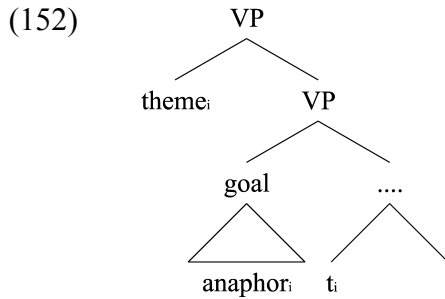
On the A-scrambling analysis, the theme may bind into the goal (see [151a]) from its derived A-position above the goal. The ill-formedness of (151b) follows moreover from a general prohibition on reconstruction of phrases that have been dislocated by A-scrambling (see, among others, Webelhuth 1992 and Mahajan 1990).

Miyagawa (1997) puts forth an alternative account, according to which the two word orders are not transformationally related, but base-generated as such. He argues that strings in which the goal precedes the theme qualify as double object constructions, whereas VPs with the order theme-goal are parsed into a PP-dative construction. The base generation analysis directly captures the binding contrasts in (150) and (151), as surface word order mirrors the hierarchical order of the internal arguments. Note that the theme asymmetrically c-commands the goal in the PP-dative construction, as e.g. illustrated by the English examples (153) (see Larson 1988 among others):

(153)   a.   *Mary described John to himself*
        b. * *Mary described himself to John*

Crucially for present purposes, the two serialization patterns in Japanese ditransitives correlate with two different strategies of passivization. As shown in (94b) and (94c), repeated from above, Japanese licenses goal as well as theme passives:

(94) b. *Kunsyoo   ga   Yoshida-syusyoo   ni*
          Medal-   NOM   Yoshida-prime minister   by
          Tanaka-tuusandaizin   ni   atae-rare-ta
          Tanaka-minister   DAT   award-Passive-Past
          'The medal was awarded to Minister Tanaka by Prime
          Minister Yoshida'
     c. *Tanaka-tuusandaizin   ga   Yoshida-syusyoo   ni*
          Tanaka-minister   NOM   Yoshida-prime minister   by
          kunsyoo   o   atae-rare-ta
          medal   ACC   award-Passive-Past
          'Minister Tanaka was awarded a medal by Prime Minister
          Yoshida'

Freedom of word order in actives accounts for the grammaticality of
the two passives in (94). In particular, the goal-theme construction
feeds the goal passive (see [94c]); such that the derivation aligns
with the scheme in (146). As for theme passivization, there are two
ways to account for the well-formedness of (94b), depending on the
analysis of the theme-goal order (A-scrambling vs. base-generation).

   If one adopts an A-scrambling approach towards the serialization
theme-goal, theme-passives can be interpreted as the output of a
derivation in which the theme scrambles to a position above the goal
prior to passivization (see Ura 1996; McGinnis 1998 for such pro-
posals). On this view, (94b) is not the product of the non-local deri-
vation schematized in (147), but is rather derived as in (154). In
(154), the theme scrambles to the left of the goal first (Step I), fol-
lowed by local-A-movement to T (Step II).[35]

(154)   [Theme ...   [t2$_{Theme}$ ...   Goal ...   t$_{Theme}$ ...]]
              └── STEP II ── └──────── STEP I ────────┘

Evidently, (154) instantiates a sub-case of (146), which differs from
(146) only in that DP$_1$ is a *derived* position above the goal, as illus-
trated by (146') (I will come back to these derivations in section 8.2):

(146')   ✓ [DP₁ ...   [t₁ ...   DP₂ ...   t₁]]

On the base-generation analysis of strings with order theme-goal, the theme originates in a position closer to T than the goal. Thus, the derivation yielding the theme passive (94b) – which corresponds to *the book was given to John* in English – proceeds once again as in (146) (see section 8 for a more detailed analysis of NP-movement in PP constructions).

Before concluding the discussion of Japanese, I would like to point out that evidence from quantifier float supports the base generation analysis of low datives. On the base generation analysis, the suffix *ni* is ambiguous: it serves as a Case marker in the goal-theme (double object) construction and as a postposition in the theme-goal (prepositional) construction. As documented by (155), quantifier float of numerals construed with datives leads to well-formed results only if the goal precedes the theme (Miyagawa 1997: 9):

(155) a.   *Mary-ga   tomodati-ni   futa-ri   CD-o   okutta*
           Mary-NOM   friends-DAT   2-CL   CD-ACC   sent
           'Mary sent two friends a CD'
      b. ??? *Mary-ga   CD-o   tomodati-ni   futa-ri   okutta*
           Mary-NOM   CD-ACC   friends-DAT   2-CL   sent

Recall now from section 6.2 (examples 138) that numeral quantifier float in Japanese is sensitive to the type of Case associated with the NP; floating is licit with structurally case marked NPs, but blocked if the NP is introduced by a postposition. Thus, the contrast in (155) is indicative that the goal in (155a) bears structural Case, and is realized as a PP in (155b), as postulated by the base-generation analysis.

Next, Icelandic displays properties of a split system which partially emulates English and partially resembles Japanese. It has already been pointed out that ditransitive predicates in Icelandic fall in one of two groups (class 1 and class 2). As will become evident,

structures including class 2 verbs pattern along with English, whereas class 1 verbs yield constructions of the type found in Japanese. To begin with, in active contexts formed with class 2 verbs, the goal must precede the theme ([156a] vs. [156b]), unless the goal is heavy, as in (156c) (data from Collins and Thráinsson 1996: 416-417):

(156)   a.   *IO >DO*
            Mannræninginn   skilaði   foreldrunum
            The kidnapper-NOM   returned   the parents-DAT
            börnunum
            the kids-DAT
      b. * *DO>IO*
         * *Mannræninginn   skilaði   börnunum*
            The kidnapper-NOM   returned   the kids-DAT
            foreldrunum
            the parents-DAT
            'The kidnapper returned the kids to the parents'
      c.   *DO > Heavy IO*
            Forstjórinn   svipti   vinnunni   manninn
            The boss-NOM deprived the work-DAT   the man-ACC
         * *(sem hafði unnið   hjá honum í   10   ár)*
            that   had   worked for him   for 10   years
            'The boss deprived of the work the man who had worked
            for him for 10 years'

Binding evidence attests to the fact that the indirect object in (156a) asymmetrically c-commands the direct object (examples from Rögnvaldsson; [157a] cited in Collins and Thráinsson 1996: 417, [157b] in Zaenen, Maling and Thráinsson 1985: 468):

(157) a. *IO$_i$ [$_{DO}$ refl$_i$]*
　　　Sjórinn　　　　svipti　　konuna$_i$　　　　manni
　　　The sea-NOM　deprived　the woman-ACC　husband
　　　sínum$_i$
　　　her(REFL)
　　　'The sea deprived the woman of her husband'
　　b. * *[$_{IO}$ refl$_i$] DO$_i$*
　　　* *Sjórinn　　　　svipti　　konu　　sína$_i$*
　　　The sea-NOM　deprived　wife-ACC　his(REFL)
　　　manninum$_i$
　　　the-man-DAT
　　　'The sea deprived his wife of the man'

Moreover, if the direct object precedes a heavy indirect object, the
direct object cannot bind into the indirect object (Collins and
Thráinsson 1996: 417):

(158) * *Sjórinn　　　　svipti　　manninum$_i$　　　[gömlu*
　　　The sea-NOM　deprived　the husband-DAT　old
　　　konuna sína$_i$　　sem　allir　　　vorkenndu]
　　　woman　his(REFL)　who　everybody　felt sorry for
　　　'The sea deprived of the husband his old woman who every-
　　　body felt so sorry for'

In the literature on Icelandic, this has been viewed as evidence that
the heavy indirect object in examples like (158) undergoes rightward
extraposition, and reconstructs for the computation of the binding
principles. Since extraposition in the case at hand does not change
binding relations, this type of movement will be disregarded in the
present discussion which is limited to constructions where both ob-
jects occupy an A position (see fn 36 below for more discussion).
　　While goal NP-movement is possible with verbs of class 2, theme
NP-movement is impossible, as was shown by (141b) and (141c), re-
peated below:

(141)   *GOAL MOVEMENT*
   b. *Jóni   var   skilað   bókunum*
      Jon-DAT   was   returned   the book-DAT
      'John was given the book back'
      * *THEME MOVEMENT*
   c. * *Bókunum   var   skilað   Jóni*
       The book-DAT   was   returned   Jon-DAT
       'The book was returned to John'

Thus, class 2 verbs in Icelandic pattern with English ditransitive verbs. Indirect objects are higher than direct objects, and are therefore allowed to move to T, conforming to the scheme in (146). Moreover, the ungrammaticality of direct object passivization in (141) is due to the presence of a higher, intervening indirect object, similarly to direct passives in English. In both languages, such constructions result from the improper derivation (147).[36]

Even though English and Icelandic class 2 constructions superficially behave alike, the two languages differ with respect to the features which passivized goals check on T. In English, the goal bears a categorial as well as a Case feature, which are both attracted by T and both block movement of the theme in direct passives:

(159)   *English double object constructions*

$$
\begin{array}{c}
\text{T}' \\
\diagup \diagdown \\
\text{T}_{[\text{EPP},\text{Case}]} \qquad \text{VP} \\
\diagup \diagdown \\
\text{goal}_{[\text{D},\text{Case}]} \qquad \text{VP} \\
\diagup \diagdown \\
\text{theme}_{[\text{D},\text{Case}]}
\end{array}
$$
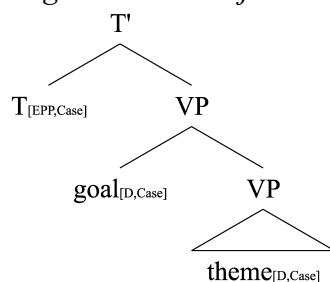
Icelandic class 2 verbs on the other hand head constructions in which the derivation is driven by categorial features only. The indirect object

checks EPP in T in well-formed passives, and blocks EPP-driven movement of the indirect object to T in the ill-formed cases:

(160)   *Icelandic class 2-constructions*

```
              T'
             /  \
        T[EPP]   VP
                /  \
          goal[D]   VP
                   / \
                 theme[D]
```
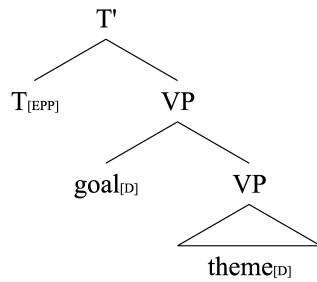
Turning finally to verbs of class 1, transitives formed with these predicates display two word orders associated with distinct binding properties. This correlates with the fact that goals and themes may move to T in passives. Thus, Icelandic class 1 verbs behave like Japanese ditransitives.

In the unmarked word order with class 1 verbs, the goal precedes the theme, but the reverse order – which is known in the literature on Icelandic as *"inversion"* construction – is also attested (data from Collins and Thráinsson 1996: 415):

(161)   *INDIRECT OBJECT>DIRECT OBJECT*
     a. *Hann   gaf   konunginum   ambáttina*
         He-NOM   gave the king-DAT   the maidservant-ACC
         'He gave the king the maidservant'
         DIRECT OBJECT>INDIRECT OBJECT
     b. *Hann   gaf   ambáttina   konunginum*
         He-NOM   gave the maidservant-ACC   the king-DAT
       * 'He gave the maidservant the king'

Inversion requires focal stress on the goal and is for this reason e.g. incompatible with reduced pronouns in the indirect object position (Holmberg and Platzack 1995; Collins and Thráinsson 1996: 417):

(162) a. *Þeir gáf'   `onum      `ana*
           they gave   him-DAT   her-ACC
           'They gave her to him'
   b. * *Þeir   gáf'   `ana       `onum*
           they   gave   her-ACC   him-DAT

In both serialization patterns precedence translates into c-command, as illustrated by the binding data in (163) and (164) (from Collins and Thráinsson 1996: 416):

(163) a. *IO$_i$ [$_{DO}$ refl$_i$]*
          Við sýndum foreldrunum$_i$ [krakkana sína$_i$]
          We showed the parents-DAT kids-ACC their(REFL)
          'We showed the parents their kids'
   b. * *[$_{IO}$ refl$_i$] DO$_i$*
     * *Við sýndum [foreldrunum sínum$_i$]   krakkana$_i$*
          We showed parents-DAT their(REFL)   the kids-ACC
          'We showed the kids to their parents'
(164) a. *DO$_i$ [$_{IO}$ refl$_i$]*
          Við sýndum krakkana$_i$ [foreldrunum   sínum$_i$]
          We showed the kids-ACC parents-DAT   their(REFL)
          'We showed the kids to their parents'
   b. * *[$_{DO}$ refl$_i$] IO$_i$*
     * *Við sýndum [krakkana   sína$_i$]   foreldrunum$_i$*
          We showed the kids-ACC their(REFL)   parents-DAT
          'We showed their kids to the parents'

Two analyses of "inversion" constructions have been proposed in the literature, which are (almost) identical to the ones suggested for word order alternations in Japanese. On the one hand, it is possible to consider the goal-theme order as basic and to derive the inversion structure by leftwards A-movement of the theme (Ottósson 1991). On the other hand, it has been suggested to base-generate both orders. According to the latter view, defended by Falk (1990), Holm-

berg (1991), Holmberg and Platzack (1995) and Collins and Thráinsson (1996), the goal-theme order is a double object construction, while the theme-goal order qualifies as a PP-construction. (In section 7.3, I will present an argument from object shift in favor of base-generation.)

Crucially, on both accounts, one is led to expect by now that flexible word order correlates with freedom in passivization. If Icelandic class 1 constructions work the same way as dative constructions in Japanese, then theme passivization will never result from the improper derivation in (147), given the availability of a derivation targeting the theme-goal string. And indeed, both the goal and the theme argument may undergo NP movement in passives of class 1 verbs, as has already been discussed. The examples illustrating this were (107a) and (110b), which are repeated below:

(107)   *DATIVE>NOMINATIVE PASSIVE*
   a.   *Honum   voru sýndir drengirnir*
        Him-DAT   was   shown the boys-NOM
        'The boys were shown to him'
(110)   *NOMINATIVE>DATIVE PASSIVE*
   b.   *Hún   var sögð einhverjum börnum*
        It-NOM   was told some   children-DAT
        'It was told some children'

Holmberg and Platzack (1995: 216-217) point out that the direct object passive in (110b) is most natural if the indirect object is focused, which provides evidence for the view that (110b) is derived from the inversion construction. They note, however, a complication. While an unstressed pronoun in active contexts of inversion leads to ungrammaticality, as was shown in (162b), an unstressed indirect object pronoun in passives is not completely ruled out, as illustrated by (165):

(165) a. ?? *Hún   var sögð þeim*
              It-NOM was told   them-DAT
              'It was told them'
       b.   *Hún   var sýnd   einhverjum börnum / ?þeim*
              It-NOM was shown some   children- / them- DAT
              'It was shown to some children / them'

At present, I take the observation that direct object passives improve when the indirect object is stressed as evidence that they are indeed derived from the direct object-indirect object construction. The complication posed by pronouns can be accounted for if weak pronouns in the high IO position permit passivization of the theme across them in Icelandic, similarly to English (see chapter 2, section 4.3; see the discussion of pronouns in chapter 4, section 7).

Class 1 constructions in Icelandic now share the same characteristics with Japanese which have been seen to define the relation between class 2 Icelandic and English; that is, class 1 Icelandic and Japanese display sensitivity to the same locality requirement, but they do so for different reasons. In Japanese, dative goals alternate with nominative under passivization and accordingly check both EPP and Case on T, as schematized in (166). In Icelandic, on the other hand, the goal, which preserves its Case, only satisfies the EPP feature on T. Case is finally checked by the *in situ* nominative theme, as in (167). Thus, theme promotion in the Japanese goal-theme construction is blocked by categorial as well as by Case features – Japanese looks in this respect just like English – whereas in the case of Icelandic class 1 verbs, only categorial features intervene. Moreover, blocking effects in Japanese and in class 1 Icelandic are obfuscated because there is an alternative derivation involving the theme-goal construction.

(166) *Japanese double object*   (167) *Icelandic class 1*
       constructions   *constructions*

```
            TP                                       TP
          /    \                                   /    \
   goal_{i[D,Case]}   T'                  goal_{i[D]}     T'
                    /   \                              /   \
          T_{[EPP,Case]}   VP              T_{[EPP,Case]}   VP
                         /  \                            /  \
                      e_i    V'                       e_i    V'
                           /  \                            /  \
                          V    theme_{[D,Case]}           V    theme_{[D,Case]}
```
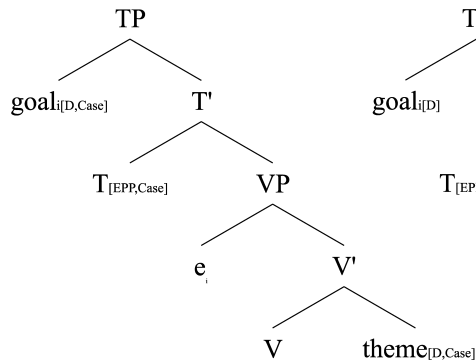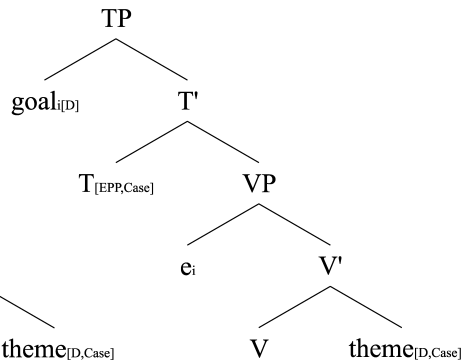
To conclude, so far I have discussed constructions with two objects in which linear precedence reflects asymmetric c-command. In these constructions, only the first and higher object can undergo NP-movement to T, in accordance with (146).

7.2. Local movement to v

In this section, I extend the analysis developed so far to local movement to v, instantiated in particular by object shift in Icelandic. Moreover, it will be seen that data from Scandinavian supports a hitherto unrecognized generalization, which correlates possible surface word orders for objects with their derivational history.

Definite DP objects in Icelandic undergo *object shift (OS)* i.e. movement to a position preceding negation or manner adverbs, which are taken to mark the left edge of the VP, as illustrated by (168a). OS is limited to contexts in which the verb has been overtly raised out of the VP, as is evidenced by the contrast between (168b) and (168c) (data from Collins and Thráinsson 1996: 394). This restriction is known as *Holmberg's Generalization* (Holmberg 1986):

(168) a. *Jón   las   bækurnar   ekki*
            John read the-books   not
            'John didn't read the books'
       b. *Jón   hefur   ekki   lesið   bækurnar*
            John has   not   read   the-books
            'John has not read the books'
       c. * *Jón   hefur   bækurnar   ekki   lesið*
            John has   the books not   read
            'John has not read the books'

It has been widely assumed that OS consists in movement of an object to a position in the functional domain above the (VP-internal) subject position. This position has been identified as [Spec, AgrOP] (see e.g. Bobaljik and Jonas 1996; Collins and Thráinsson 1996), or, in a framework that dispenses with Agr projections, as a second specifier position to a transitive v head (Holmberg and Platzack 1995; Chomsky 1995, 2000; Alexiadou and Anagnostopoulou 2001 among many others. I adopt here the latter analysis, implemented in terms of layered specifiers.[37] (Cf. Nilsen 2001 for an altogether different approach towards OS.)

In double object constructions, OS may target only the higher object, shifting it to a specifier of v. This is most clearly shown with class 2 verbs, i.e. predicates which mark the direct object by lexical dative, genitive or accusative. With class 2 verbs, the direct object is never allowed to undergo OS across an *in situ* indirect object (data from Collins and Thráinsson 1996: 421; see also Holmberg and Platzack 1995):

(169) a. *Ég   skilaði   manninum   ekki   bókinni*
            I   returned the man-DAT not   the book-DAT
            'I did not return the book to the man'
       b. * *Ég skilaði bókinni ekki manninum*

Class 1 verbs behave more liberally, in that the direct object may – un-der certain circumstances – also surface to the left of the negation, as schematically depicted in (170). In particular, whereas the indirect ob-ject may undergo OS freely (see [170a], exemplified by [171a]), the direct object may do so only if the indirect object bears stress (see [170b] and [170c], exemplified by [171b] to [171c]; Collins and Thráinsson 1996: 404, 420):

(170) a. IO *ekki* DO
      b. DO *ekki* IO$_{<stressed>}$
      c. * DO *ekki* IO$_{<unstressed>}$

(171) a. *Ég lána Maríu   ekki bækurnar*
         I   lend Mary-DAT not   the books-ACC
         'I do not lend Mary the books'
      b. *Ég lána bækurnar   ekki MARÍU*
         I   lend the books-ACC not Maria-DAT-stressed
      c. * *Ég lána bækurnar   ekki Maríu*
         I   lend the books-ACC not   Maria-DAT-unstressed

Holmberg and Platzack (1995) and Collins and Thráinsson (1996) take this contrast to indicate that only the inversion construction, in which the theme characteristically precedes a focussed goal (see [162]), feeds OS of the direct object. This in turn implies that the direct object cannot undergo OS across an indirect object.

Notice at this point that the restrictions on OS in Icelandic appear to be identical to the conditions which were seen to regulate passivi-zation (see exposition surrounding [107a] and [110b] in 7.1). This parallelism strongly suggests that movement to v (OS) and movement to T (passivization) should be treated on a par. More specifically, sup-pose that with class 2 verbs, the indirect object checks EPP in v in the well-formed OS construction (169a), as detailed by the schematized representation in (172a), but blocks EPP-driven movement of the indi-rect object to v in (169b), which is parsed as in (172b):

(172)   a.   ✓ [manninum_{[D]}   [t_{[D]}   bókinni_{[D]}]]

         b.   * [bókinni_{[D]}   [manninum_{[D]}   t_{[D]}]]

With class 1 verbs, OS of the goal to v in (171a) results from the goal>theme construction, as illustrated in (173a), whereas OS of the theme to v, as in (171b), operates on the inversion construction, as detailed by (173b). The ungrammaticality of (171c) with neutral stress can finally be traced back to the improper (non-local) derivation in (173c):

(173)   a.   ✓ [Maríu_{[D]}   [t_{[D]}   bækurnar_{[D/CASE]}]]

         b.   ✓ [bækurnar_{[D/CASE]}   [t_{[D/CASE]}   MARÍU_{[D]}]]

         c.   * [bækurnar_{[D/CASE]}   Maríu_{[D]}   [t_{[D/CASE]}]]

Following these deliberations on movement of one of the objects to v in Icelandic (single object shift), I now turn to the locality conditions governing fronting of both objects to v (multiple object shift).

7.3. Multiple object shift: parallel movement to v

When two objects undergo OS in Icelandic, their base-order must be preserved. Consider first an example with an Icelandic class 2 verb (data kindly provided by Gunnar Hrafn Hrafnbjargarson, personal communication). As illustrated by (174), multiple OS must not alter the pre-movement order of the objects. Following Müller (1997), I will refer to this phenomenon by the term *"parallel movement"*.

(174)   a.   *Ég skilaði   manninum   bókinni   ekki*
               I   returned the man-DAT the book-DAT not
               'I did not return the book to the man'

b. * *Ég skilaði   bókinni   manninum   ekki*
  I   returned the book-DAT the man-DAT not
  'I did not return the book to the man'

Parallel movement effects show up with Icelandic class 1 verbs as well. To begin with, multiple OS must never result in the order *DO IO Neg*, irrespective of the prosodic properties of the string (see [175]). The results of multiple OS improve markedly, though, if the indirect object precedes the direct one (*IO DO Neg*) and if the sentence is assigned 'special' intonation, as in (176) (Collins and Thráinsson 1996: 406):

(175) * *Ég lána bækurnar   María / MARÍU ekki*
   I   lend the books-ACC Maria-DAT   not
   'I do not lend Maria the books'

(176) a. ? Ég lána Maríu bækurnar EKKI
   b. ? ÉG lána Maríu bækurnar ekki

Hence, multiple OS object shift preserves the pre-movement (goal > theme) order in class 1 as well as in class 2 constructions.

 Note, at this point, that the ungrammaticality of (175) under any intonation pattern entails that the inversion construction does not feed multiple OS. The "inverted" goal is not allowed to move along with the theme, unlike the direct object of class 2 verbs in (174a) and the theme in non-inverted orders in (176). This restriction can be naturally accounted for on the assumption that "inverted" goals have the categorial status of PPs, which are – in contrast to DPs – not allowed to partake in OS in Icelandic (data by Gunnar Hrafn Hrafnbjargarson, personal communication):[38]

(177) *María   fór *til Ameríku ekki / √ekki til Ameríku*
   Maria-NOM went to   America not / not   to America
   'Maria did not go to America'

As for the analysis of multiple OS, I follow Richards (1997) in assuming that parallel movement arises when two XPs target a single head, represented by X in (178). The argument that is closest to X moves first (αP in 178a), followed by raising of βP, which "tucks in" to a position beneath the first specifier, as detailed by (178b):

(178)   a.   b.

```
         XP                          XP
        /  \                        /  \
      αP    X'                    αP    XP
           /  \                        /  \
          X    YP                    βP    X'
              /  \                        /  \
            αP    Y'                     X    YP
                 /  \                        /  \
                Y    ZP                    αP    Y'
                    /  \                        /  \
                  βP    Z'                     Y    ZP
                                                   /  \
                                                 βP    Z'
```
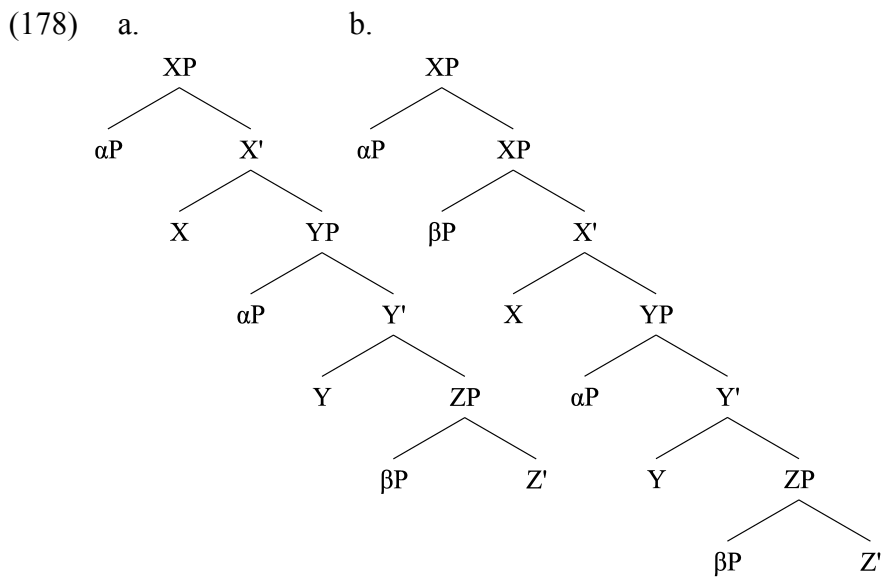
In the object shift constructions discussed here, the head X is instantiated by v. According to this analysis, multiple object movement to v in Icelandic respects the locality condition (146), similarly to movement of a single object to v and T. (This derivation raises questions with respect to cyclicity. I return to these questions in chapter 4, section 5.)

This concludes the discussion of Icelandic, where NP movement to T and object shift to v proceed in a strictly local fashion. In the next section, I turn to those languages of Mainland Scandinavian which possess symmetric passives (Swedish and Norwegian). Crucially for present purposes, Swedish and Norwegian indicate that movement to v and movement to T are governed by the same set of principles. Moreover,

section 7.4 will also establish a new generalization pertaining to the derivation of multiple OS.

7.4. Non-local movement in symmetric languages

The present section pursues two goals: first, it presents evidence from Mainland Scandinavian that symmetric double object languages also have symmetric object shift, in support of the hypothesis that NP-movement and object shift are subject to the same type of locality conditions. Second, I will discuss a correlation between local and non-local OS on the one side and parallel and non-order preserving OS on the other side, respectively. [39]

In Mainland Scandinavian, object shift is generally limited to pronouns, as is illustrated in (179) with examples from Swedish (Holmberg and Platzack 1995: 141):

(179) a. *Johan känner henne inte*
           Johan knows her   not
           'Johan doesn't know her'
       b. *Läste studenterna den / *artikeln inte alla?*
           Read the-students it / the-article not all
           'Didn't the students all read it / the article?'

Despite this difference between Mainland Scandinavian and Icelandic, the two phenomena are commonly assumed to have the same syntax, as they display the same range of properties. For example, pronominal shift in Scandinavian is also subject to Holmberg's Generalization, which prohibits OS in the absence of verb movement (Holmberg and Platzack 1995: 143-144):

(180) * *Studenterna vill   den inte läsa*
         The-students want it   not read
         'The students do not want to read it'

As has already been mentioned (see e.g. chapter 2, section 4.1.2), Swedish and Norwegian are symmetric languages, i.e. either the goal or the theme argument may be passivized, as shown by (181) for Norwegian and by (182) for Swedish (Holmberg and Platzack 1995: 217-218):

(181)   a.   *Jon   ble   gitt   en   bok*
             John   was   given   a   book
             'John was given a book'

        b.   *En   bok   ble   gitt   Jon*
             A   book   was   given   John
         ?* 'A book was given John'

(182)   a.   *Johan   förärades   en   medalj*
             Johan   was-presented   a   medal
             'John was presented a medal'

        b.   *Medaljen   förärades   Johan*
             The-medal   was-presented   Johan
         ?* 'The medal was presented John'

In both languages, the base order of the two objects is fixed; the indirect object precedes and asymmetrically c-commands the direct object, as is illustrated in (183) with examples from Swedish (Holmberg and Platzack 1995: 188, 191):

(183)   a.   *Jag gav   Johan en bok*
             I   gave Johan a   book
             'I gave John a book'

        b. * *Jag gav   en bok   Johan*
             I   gave a   book Johan
           * 'I gave a book John'

        c.   *Kann   du   inte ge   Johan$_i$ sina$_i$ kläder?*
             Can   you   not give   Johan   his(REFL)   clothes?
             'Can't you give John his clothes?'

    d. * *Kan   du   inte   ge   sin$_i$ rätta   ägare   tavlan $_i$*
        Can   you not   give   its   rightful   owner   the-painting?
        'Can't you give its rightful owner the painting?'

Thus, it seems as if Swedish and Norwegian not only allow local pas-sivization of the higher (goal) argument as in (181a), (182a) (cf. deriva-tion [146]), but also license a non-local derivation as in (181b), (182b) (cf. [147]) in course of which the theme raises across the goal on its way to T. I will elaborate on the latter derivation in more detail in sec-tion 8.

    It can now be demonstrated that the apparent relaxation of the local-ity conditions in Swedish and Norwegian passives is also reflected by the properties of OS in these languages. As illustrated by the Swedish paradigm (184), a pronominal goal can move to v in the presence of an *in situ* pronominal theme (see [184a,b]), but a pronominal theme can also move to v in the presence of an *in situ* pronominal goal (see [184c,d]); (Hellan and Platzack 1999: 131-132): [40]

(184) a. *Han visade   henne inte den*
       b. *Han visade   'na   inte 'n*
           He   showed her   not   it
           'He did not show it to her'
       c. *? Han gav   den inte henne*
       d. *Han gav   'en inte 'na*
           He   gave it   not   her
           'He did not give it to her'

That is, similarly to passivization, OS in symmetric double object lan-guages can be the output of a non-local derivation (i.e. [147]), in which the direct object moves to v across an indirect object. Recall that it was exactly this kind of derivation which was blocked in Icelandic.

    Before concluding, it is necessary to point out that the parallelism between object shift and passivization in symmetric double object lan-guages is not complete. When the indirect object is a DP and the direct

object a pronoun, only the DP can move to v (see Holmberg and Plat-zack 1995: 172 that DP-object shift is possible with indirect objects), as illustrated by the contrast in (185) (Anders Holmberg, personal com-munication):

(185)   a.   *Jag   gav   Elsa   inte   den*
             I   gave Elsa   not   it
             'I did not give it to Elsa'
        b. * *Jag   gav   den   inte   Elsa*
             I   gave it   not   Elsa

Thus, object shift in Swedish forbids a non-local derivation (i.e. [147]) whenever the indirect object is realized as a full DP. No such asymme-try is found in passives. Thus, movement to T and movement to v are subject to similar – but not fully identical- locality conditions.

Next, let us consider the nature of multiple OS in Mainland Scandi-navian. Observationally, the languages belonging to this family falls into one of two groups: whereas pronominal OS in partial double object languages such as Danish exhibits parallel movement effects, OS in the symmetric double object languages Norwegian and Swedish fails to do so. To exemplify, (186b) (Holmberg and Platzack: 215) and (186d) (Anders Holmberg, personal communication, citing Vikner 1989) dem-onstrate that Danish fails to license theme passivization as well as OS of a theme in the presence of an *in situ* goal. Moreover, the contrast be-tween (186e) and (186f) attests to the fact that multiple OS is order pre-serving and results in the order IO>DO (from Müller 1997):

(186)   a.   *Jens   blev   givet   bogen*
             Jens   was   given   book-the
             'Jens was given the book'
        b. * *Bogen   blev   givet   Jens*
             Book-the was   given   Jens
           ?* 'The book was given Jens'

c. *Peter   viste   hende jo   den*
    Peter   showed   her   indeed it
    'Peter indeed showed it to her'

d. * *Peter   viste   den jo   hende*
    Peter   showed   it   indeed   her

e. *Peter   viste   hende den   jo*
    Peter   showed   her   it   indeed
    'Peter indeed showed it to her'

f. * *Peter viste den hende jo*

Multiple OS in Swedish and Norwegian may on the other hand yield both possible surface orders, as shown by the Swedish examples in (187) (the data have been provided to me by Anders Holmberg, personal communication; see also Hellan and Platzack 1999: 131, examples [21] and [22]):[41]

(187) a. *Jag gav   honom   den inte*
            I   gave him   it   not
            'I didn't give it to him'

       b. *Jag gav   den   honom   inte*
            I   gave it   him   not
            'I didn't give it to him'

Note also that in contexts not licensing OS, the indirect object has to precede the direct object, indicating that the pronominal objects cannot be freely base-generated in any order:

(188) a. *Jag ville   inte ge   honom den*
            I   wanted   not   give him   it
            'I didn't want to give it to him'

       b. * *Jag ville inte ge den honom*

Crucially, there is a clear difference between Swedish and Norwegian on the one hand and Danish and Icelandic on the other in that

only the former languages tolerate OS of a direct object pronoun across an *in situ* indirect object pronoun (see [184c,d] above).

The distribution of facts discussed so far points to a curious new generalization, which correlates the scope of movement (local vs. non-local) with the surface order of the objects (parallel movement vs. non-order preserving OS). More specifically, it can be observed that: (i) Parallel Movement coincides with a local derivation (see [146]). (ii) Non-order preserving OS correlates with a non-local derivation (see [147]). Clause (i) of this generalization describes asymmetric languages, which do not permit theme passivization in the presence of a higher goal, whereas clause (ii) depicts the systematic alternations found in symmetric languages, where theme passivization may proceed in the presence of a higher goal.

The generalization stated above receives further support from an additional restriction on OS in Swedish. Although multiple OS in general leads to free word order for the objects, parallel movement effects all of a sudden emerge if the indirect object is realized as a full DP (and the direct object is a pronoun). In such environments, the indirect object DP must precede the direct object, as shown by (189) (Anders Holmberg and Christer Platzack, personal communication):

(189) a. *Jag visade Elsa den inte (foerraen langt senare)*
           I   showed Elsa it   not (until   much later)
           'I did not show it to Elsa until much later'
      b. * *Jag visade   den Elsa inte (foerraen langt senare)*
           I   showed it   Elsa not   (until   much later)

According to the generalization above, parallel movement correlates with local movement. Given that the Swedish DP>pronoun construction only licenses order-preserving OS, one is now led to expect that the DP-pronoun construction should also display locality effects, i.e. disallow derivations which proceed as in (147). This prediction is in fact borne out: As was shown by (185), a direct object pronoun cannot undergo non-local OS across an indirect object DP.

The correlation between local and parallel movement, on the one hand, and long-distance and non-order preserving movement, on the other, will be further discussed in section 8. In particular, it will be argued to derive from the parameter distinguishing asymmetric from symmetric languages.

In sections 7.1 to 7.4, I have discussed languages in which precedence relations translate into asymmetric c-command. In all the constructions considered so far (except for the extraposition in Icelandic; see [158]), the argument to the left could bind (into) the argument to the right, but not vice versa. The next two sections present two languages in which the match between precedence and asymmetric c-command appears to be less systematic. Section 7.5 will focus on a puzzle reported by the literature on German. Even though the goal precedes the theme in unmarked clauses, a goal cannot bind a theme-anaphor to its right, while the reverse binding relations are attested. This strongly suggests that the binding principles are computed on the basis of a structure in which the theme precedes the goal, and not vice versa. Section 7.6 takes up a similar observation from Greek. In Greek, the order between genitive goals and themes is free, but the two orders are apparently not mapped into two different structures as far as binding is concerned. More precisely, goals may bind into themes to their right, but themes cannot bind into goals. Just as in German, this indicates that the match between precedence and c-command is not complete.

Apart from introducing two additional patterns of variation in double object constructions, German and Greek will be seen to provide further evidence for a specific typology whose contours have already emerged in the discussion of Japanese and Icelandic (see sections 7.1, 7.3). In particular, this typology was based on variation in the relative hierarchical (base-)position of themes with respect to goals which bear dative or genitive morphology:[42] that is, goals can be generated either high or low.

7.5. Pattern I: dative goals in German are merged low

Ditransitive predicates in German have four distinct realizations that differ in the morphological marking of the direct and indirect object as well as the "unmarked linearization" of the two objects (Lenerz 1977; Höhle 1982; Fanselow 1991; Haider 1992, 1993; Sternefeld to appear). The four patterns are schematically represented in (190) and exemplified in (191) (description and data from Beermann 2001):

(190)   *German argument linearization and morphological case*
    a. NOM>DAT>ACC
    b. NOM>ACC>DAT
    c. NOM>ACC>ACC
    d. NOM>ACC>GEN

(191)   a. *Sie   hat dem Mann   das Buch   geschenkt*
        She-NOM has the   man-DAT the book-ACC given
        'She has given the man the book'

      b. *Er   hat den Patienten   der Operation*
        He-NOM   has the patient-ACC the operation-DAT
        unterzogen
        submitted
        'He has submitted the patient to the operation'

      c. *Sie   hat die Schüler   das Lied   gelehrt*
        She-NOM has the students-ACC the song-ACC taught
        'She has taught the students the song'

      d. *Man   hat den Mann   des Verbrechens beschuldigt*
        One-NOM has the man-ACC the crime-GEN   accused
        'One has accused him of the crime'

Dative and accusative case marking is associated with different grammatical functions in (190) / (191) (see e.g. Beermann 2001; Müller 1995: 412 fn 3; Sternefeld to appear). More specifically, morphological dative marks indirect objects in (190a) / (191a) and oblique arguments in (190b) / (191b). Morphological accusative canonically marks direct

objects, but it may also exceptionally mark indirect objects, as in (190c) / (191c). A test identifying the different grammatical functions of arguments bearing the same case morphology is passivization (see Beermann 2001 for discussion and references). Dative indirect objects in (191a) can be passivized when the auxiliary is *kriegen / bekommen* (as discussed in section 6), while dative oblique objects in (191b) cannot do so, as illustrated by (192):

(192)   a.   *Der Mann   bekam ein Buch   geschenkt*
             The man-NOM got   a   book-ACC given
             'The man was given a book'
        b. * *Die Operation   bekam den Patienten   unterzogen*
             The operation-NOM got   the patient-ACC submitted

Accusative indirect objects such as in (191c) become subjects in *bekommen*-passives (see [193a]), while accusative direct objects such as in (191a) become subjects in *werden*-passives (see [193b]):

(193)   a.   *Die Schüler   bekommen das Lied   gelehrt*
             The students-NOM   get   the song-ACC taught
             'The students are taught the song'
        b.   *Ein Buch   wurde dem Mann   geschenkt*
             A   book-NOM was   the   man-DAT given
             'A book was given to the man'

Restricting the attention to the structures in (190) / (191), it can be observed that the unmarked linearization of arguments in German can be derived from the hierarchy (194) (see, e.g. Lenerz 1977; Webelhuth 1989, 1992; Frey and Tappe 1991; Müller 1995 and many others):

(194)   Subject>IO>DO>OBLIQUES>V

   While the description so far reflects more or less "the standard view" on German ditransitives, the precise analysis of the DAT>ACC con-

struction in (190a) / (191a) is controversial in at least two respects. First, it is not clear whether goals in this construction bear inherent or structural Case. Second, there is considerable debate about the question whether the DAT>ACC construction represents a base or a derived order. I will here concentrate on the second issue, and only briefly comment on the first one, as the latter has already been addressed in sections 2 and 6. The view I will eventually adopt, following Müller (1995, 1997), is that the unmarked DAT>ACC serialization is derived from the underlying order ACC>DAT.

Turning to the nature of the Case on goals first, recall from sections 2 and 6 that lack of passivizability of dative goals in *werden*-passives can be taken as an indication that they are marked by inherent Case. (This conclusion is partially dependent on the assumption that *kriegen / bekommen* passives, which are less productive than *werden*-passives, are lexically derived.) On the other hand, Reis (1985), Czepluch (1988), von Stechow (1990) and Müller (1995), among others, have argued that the dative in DAT>ACC constructions is structural, because (i) its distribution is entirely predictable and (ii) it alternates with nominative in *bekommen*-passives, which are widely held to be transformationally related to the corresponding actives. Note, however, that the two tests of predictability and *kriegen / bekommen* passivization lead to contradictory results when applied to objects of monotransitive verbs. The case on 'single dative' objects, as in (195a), is non-structural, i.e. not predictable and lexically determined by the verb. And yet, German speakers (at least one group of them; see Beermann 2001 and Kathol 1999 for discussion) accept *kriegen / bekommen* passives of single dative objects (see [195c]). Thus, even idiosyncratic, i.e. supposedly inherent datives may alternate with nominatives in this particular configuration:

(195) a. *Maria   hilft   ihm*
           Mary-NOM helps him-DAT
           'Mary helps him'

b. * *Er   wird geholfen*
 He-NOM is   helped
 'He is helped'

c. *Er   kriegt geholfen*
 He-NOM gets   helped
 'He is helped'

In view of the facts in (195), it appears premature to consider the Case-theoretic status of goals in DAT>ACC settled once and for all.

 The issue whether the dative in the double object construction originates above or below the accusative is even more intensely under debate. On the standard view (Lenerz 1977 and many others), the DAT>ACC construction is base-generated as such. However, this assumption encounters serious problems which come in form of the distribution of anaphoric dependencies between objects. To begin with, Grewendorf (1984, 1988) points out that dative indirect objects cannot bind accusative anaphors in the IO>DO order (196a), while accusative themes may antecede dative anaphors to their right, as shown by (197a). The same effect shows up with reciprocals ([196b] and [197b]; but see Frey 1989 and Haider 1993 for additional complications).

(196) a. *daß der Arzt   dem Patienten$_j$ sich$_{i/*j}$*
   that the doctor-NOM   the   patient-DAT refl-ACC
   im   Spiegel zeigte
   in-the   mirror   showed
   'that the doctor showed himself to the patient in the mirror'

  b. * *daß man   den Gästen$_i$ einander$_i$*
   that one-NOM   the guests-DAT   each other-ACC
   vorgestellt   hat
   introduced has
   'that someone has introduced the guests each other'

(197) a. *daß der Arzt   den Patienten$_j$ sich$_j$*
           that the doctor-NOM   the patient-ACC refl-DAT
           im   Spiegel zeigte
           in-the   mirror   showed
           'that the doctor showed the patient to himself in the mirror'
       b. *daß man   die Gäste$_i$ einander$_i$*
           that one-NOM   the guests-ACC   each other-DAT
           vorgestellt   hat
           introduced has
           'that someone has introduced the guests to each other'

Müller (1995: 159-160) argues that in particular the data in (196), which attests to the inability of datives to bind anaphors to their right, militate against the widely held assumption that datives originate above accusatives (see e.g. Webelhuth 1989; Moltmann 1990 and Santorini 1990).[43] Müller therefore suggests that the underlying order is ACC>DAT, and that in the DAT>ACC construction the goal undergoes movement to an A'-position to the left of the theme. On this view, binding in (197) proceeds straightforwardly. Moreover, the goals in (196) occupy A'- positions, and binding is therefore precluded.

   Corroborating evidence for this analysis comes from the observation (due to Grewendorf 1984, 1988) that at least in some rigid varieties of German, direct object pronouns may corefer with an indirect object, but not with a subject (Müller 1995: 220-221):

(198) *daß der Artzt$_i$ dem Fritz$_j$ ihn$_{*i/j}$*
       that the doctor-NOM   the   Fritz-DAT   him-ACC
       im   Spiegel zeigte
       in-the   mirror   showed

Since the dative in (198) is located in an A'-position, coreference between the goal and the pronominal accusative theme is not ruled out by Principle B. On the other hand, coreference between the accusative pronoun and the subject in A-position is correctly blocked. Once again,

the competing account which generates datives above accusatives would prove to be inadequate, as it would incorrectly rule out coreference between the internal arguments in (198).

Müller (1997: 13-15) presents further, independent evidence in support of the ACC>DAT hypothesis. More specifically, movement of pronouns to the Wackernagel position normally results in a fixed order which respects the pattern NOM>ACC>DAT. The examples in (199) to (201) exemplify this generalization with data based on three combinatorial options of pronoun fronting:

(199) a. *daß sie   es   wahrscheinlich nicht lesen wollte*
            that she-NOM it-ACC probably   not   read wanted

      b. * *daß es   sie   wahrscheinlich nicht lesen wollte*
            that it-ACC she-NOM probably   not   read wanted

(200) a. *daß es   ihm   der Fritz   gegeben hat*
            that it-ACC him-DAT the Fritz-NOM gave   has

      b. * *daß ihm   es   der Fritz   gegeben hat*
            that him-DAT it-ACC the Fritz-NOM gave   has

(201) a. *daß sie   es   ihm   wahrscheinlich*
            that she-NOM it-ACC   him-DAT probably
            zum   Geburtstag schenken wird
            for-the birthday   give   will

      b. * *daß sie   ihm   es   wahrscheinlich*
            that   she-NOM him-DAT it-ACC probably
            zum   Geburtstag schenken wird
            for-the birthday   give   will

      c. * *daß es sie ihm..............*
      d. * *daß es ihm sie..............*
      e. * *daß ihm sie es..............*
      f. * *daß ihm es sie..............*

Müller (1997) argues that the rigid order of pronouns in (199)-(201) results from parallel movement which, as discussed at length in sections 7.3. and 7.4, in turn directly reflects the base-order of the argu-

ments. Thus, (200) and (201) argue that internal arguments are un-
derlyingly organized according to the marked order ACC>DAT.

From a theoretical perspective, observe that the considerations in
(199)-(201) dovetail with the hypothesis that contexts which display
parallel movement effects only license a derivation in terms of local
NP-movement (i.e. derivation [146]). On the one hand, it was seen
above that German pronouns move in an order preserving way. On the
other hand, German permits passivization of themes in the presence of
dative goals, since themes are merged higher than goals, and the deriva-
tion can therefore proceed locally:[44]

(202)   *Das Buch   wurde dem Fritz   gegeben*
        The book-NOM was   the   Fritz-DAT given
        'The book was given Fritz'

Thus, German supplied additional support for the descriptive generali-
zation established in section 7.4 (see though fn 44 above for a
complication).

Before closing this section, I would like to point to an interesting
conclusion which results from a comparison between German and
Icelandic *inversion* constructions. As has been mentioned several
times, DAT>ACC orders represent the unmarked serialization of
arguments in German. The ACC>DAT order is acceptable under
certain conditions, though: the theme must either be definite, or, if it
is indefinite, it cannot precede a definite goal. Moreover, the indirect
object should be focused and the direct object must be de-stressed.
Holmberg and Platzack (1995) notice now that *"...the conditions on
Icelandic inversion* [in double object constructions] *are essentially
the same as the conditions on IO-DO inversion in German double
object constructions with verbs like geben ..."* (Holmberg and Plat-
zack 1995: 212 quoting Ottósson 1989, 1991; see also reference to
Czepluch 1991 on p. 206, fn 2). Interestingly enough, despite these
surface similarities, the two constructions turn out to be associated
with two quite different structures syntactically. More specifically,

the facts from binding and parallel movement discussed above indicated that the DAT>ACC order can be base-generated in Icelandic (see section 7.1), but not in German. Moreover, while goals in the ACC>DAT order have been argued to qualify as PPs in Icelandic, the categorial status of dative goals in German is at least undecided. (Recall that evidence from *bekommen*-passives in (192) strongly suggested that datives cannot be treated as oblique arguments.) If the analysis pursued here is correct, German and Icelandic "inversion" constructions therefore have – despite surface appearance – to be kept apart and grouped with two separate classes of phenomena.

7.6. Pattern II: Greek genitive goals are never low

This second case study demonstrates that Greek, which qualified as an asymmetric language in all relevant respects, also conforms with the general picture outlined so far.

In the Greek genitive construction, the genitive precedes the accusative in the unmarked word order, but the alternative, marked serialization ACC>GEN is equally attested (see Markantonatou 1994; Tzartzanos 1945 / 1989 and Mackridge 1985 / 1987):[45]

(203) a. *Phanerosa   tis Marias   tin alithia*
            Revealed-1sg the Maria-GEN the truth-ACC
            'I revealed the Mary the truth'
       b. ? *Phanerosa   tin alithia   tis Marias*
            Revealed-1sg the truth-ACC the Maria-GEN

The obvious question arising in this context is whether Greek has "low genitives" of the type found in Icelandic, Japanese and German. In what follows, I argue that the answer is negative. More specifically, it can be shown that Greek genitive goals are always generated higher than accusative themes, and that the ACC>GEN order results from A'-movement of the theme to a position above the goal.

Below, I will present the relevant data from the GEN>ACC construction first, proceeding from there to the alternative order ACC>GEN. Note on the side that only four out of the six diagnostics for c-command used by Barss and Lasnik (1986) can be applied to Greek: The *negative polarity*-test cannot be used because the licensing conditions on Greek NPIs differ from those on NPIs in English (see Giannakidou 1998). Furthermore, the *anaphora*-test is inapplicable for the reasons discussed in detail in Anagnostopoulou and Everaert (1996, 1999).[46] It should also not go unnoticed that out of these four diagnostics, only two – *quantifier variable binding* and *'the each.....other'* – yield reliable results based on unanimously accepted intuitions, whereas the remaining two – *weak crossover effects with wh-phrases* and *superiority effects* – are considered controversial (see fn 49 and fn 51 below).

(i) *Quantifier variable binding*. The contrast in (204) attests to the fact that surface c-command is a necessary condition on pronominal variable binding in Greek:

(204) a.   *To   kathe pedhi$_i$ aghapai tin   mitera   tu$_i$*
            The every child-NOM   loves   the mother-ACC his-ACC
            'Every child loves his mother'
       b. ?* *I   mitera   tu$_i$ aghapai to   kathe pedhi$_i$*
            The mother-NOM his-GEN loves   the every child-ACC
            ?*'His mother loves every child'

As shown by (205), the goal asymmetrically c-commands the theme in the GEN>ACC order: [47]

(205)   a. ? *Edhosa   tu   kathe   fititi$_i$*
              Gave-1sg the every   student-GEN
              tin erghasia   tu$_i$
              the paper-ACC his-GEN
              'I gave every student his term paper'

b.?* *Edhosa   tu   sighrafea   tu_i*
Gave-1sg the author-GEN its-GEN
to   kathe   chiroghrafo_i
the every   manuscript-ACC
?*'I gave its author every manuscript'

   (ii) *Weak Crossover effects.*[48] At least for some speakers, the relation between wh-phrases and pronominal variables bound by these operators needs to observe the WCO generalization:[49]

(206) a. *Pjo   pedhi_i   aghapai tin mitera   tu_i?*
Which child-NOM   loves   the mother-ACC his-GEN
'Which child loves his mother?'
    b.?* *Pjo   pedhi_i   aghapai i   mitera   tu_i?*
Which child-ACC loves   the mother-NOM his-GEN
?*'Which child does his mother love?'

In double object constructions, a fronted genitive goal may bind a variable inside the accusative theme, but not vice versa. Thus, the goal originates in a position above the theme:[50]

(207) a. *Pjas   miteras_i   estiles   to pedhi   tis_i?*
Which mother-GEN sent-2sg the   child-ACC her-GEN
'Which woman did you send her child?'
    b.?? *Pjo   pedhi_i   estiles   tis miteras   tu_i?*
Which child-ACC sent-2sg the   mother-GEN his-GEN
?*'Which child did you send his mother?'

   (iii) *Superiority effects.* A group of speakers of Greek detect Superiority effects when a (non-discourse-linked – *d-linked* – [Pesetsky 1987]) object wh-phrase moves across a (non-d-linked) wh-subject:[51]

(208) a. *Pjos   aghorase   ti?*
           Who-NOM   bought-3sg   what-ACC
           'Who bought what? (ok on the non d-linked reading)'
       b.?* *Ti   aghorase   pjos?*
           What-ACC   bought-3sg   who-NOM?
          ?*'What did who buy?' (ok only on the d-linked reading)

Similar contrasts can be reproduced for the genitive construction, where Superiority effects emerge when a low theme is extracted across a high goal:[52]

(209) a. *Tinos   aghorases   ti?*
           Whom-GEN buy-2sg   what-ACC
           'Who did you buy what?' (ok on the non d-linked reading)
       b.?* *Ti   aghorases   tinos?*
           What-ACC buy-2sg   whom-GEN
          ?*'What did you buy who?' (ok only on the d-linked reading)

   (iv) *The Each....the Other construction*. Finally, the *each...the other* test provides further evidence for the assumption that genitive goals asymmetrically c-command accusative themes. While the indirect object can license a reciprocal in direct object position, reversing the structural relations results in strict ungrammaticality:[53]

(210) a. *Estila   tis mias miteras   to   pedhi*
           Sent-1sg the one   mother-GEN the child-ACC
           tis   alis
           the other-GEN
           'I sent each mother the other's child'
       b. * *Estila   tis miteras   tu   alu*
           Sent-1sg the mother-GEN   the other-GEN
           to *ena* pedhi
           the one   child -ACC
         *'I sent the other's mother each child'

Note on the side that the reciprocal test constitutes the most reliable diagnostic for the structural organization of Greek internal arguments, as it elicits extremely robust judgments.

Turning to configurations in which the accusative precedes the genitive, it can be observed that the accusative argument cannot bind into the genitive argument, as evidenced by the *quantifier-variable binding*-test in (211) and the *each...the other*-test in (212):

(211) a.*? *Estila   to   kathe vivlio$_i$ tu   sighrafea   tu$_i$*
            Sent-1sg the every book-ACC the author-GEN its-GEN
            'I sent every book (to) its author'
       b.*? *Sistisa   tin kathe   ghineka$_i$*
            Introduced-1sg the every   woman-ACC
            tu   antra   tis$_i$
            the husband-GEN hers-GEN
            'I introduced every woman (to) her husband'

(212) a. * *Estila   to   ena   pedhi*
            Sent-1sg the one   child-ACC
            tis   miteras   tu   alu
            the mother-GEN   the other-GEN
            'I sent each child (to) the other's mother'
       b. * *Sistisa   tin mia   ghineka*
            Introduced-1sg the one   woman-ACC
            tu   antra   tis alis
            the husband-GEN the other
            'I introduced each wife (to) the other's husband'

Thus, the ACC>GEN order can neither be analyzed as a base generated construction with a low indirect object, nor can it be derived by A-scrambling of a low accusative across a higher genitive. I propose that in this structure, the theme undergoes A'-scrambling to a position above the goal and that the theme obligatorily reconstructs for the computation of binding relations. This entails that the two internal arguments occupy A-positions only in the GEN>ACC order.

Further, independent, evidence for base-generating the GEN>ACC order is furnished by an interesting class of parallel movement facts noted by Gaberell Drachman (class lecture, University of Salzburg). In Greek, two wh-phrases can be conjoined and fronted, as illustrated by the paradigm (213). In this exotic construction, the serialization of argument wh-phrases is rigid: When the subject and the direct object move as in (213), the base order between the two arguments needs to be preserved, as illustrated by the contrast between (213a) and (213b). The construction can be salvaged, though, by inserting a resumptive direct object clitic, as in (213c):

(213)　a.　*$Pjos_j$　　　ke　ti_i　　　　t_j aghorase　t_i?*
　　　　　　Who$_j$-NOM　and　what$_i$-ACC　t_j bought-3sg　t_i
　　　　　　'Who bought what?'
　　　b. * *Ti_i　　　　ke　$pjos_j$　　　t_j aghorase　t_i?*
　　　　　　What$_i$-ACC　and　who$_j$-NOM　t_j bought-3sg　t_i
　　　　*'What did who buy?'
　　　c. ? *Ti_i　　　　ke　$pjos_j$　　　t_j to_i　　　aghorase　t_i?*
　　　　　　What$_i$-ACC and　who$_j$-NOM　t_j Cl$_i$-ACC　bought-3sg t_i
　　　　*'What did who buy?'

To my knowledge, the type of fronting illustrated in (213) has not been analyzed yet in the literature, and I will not attempt to do so here. However, since this movement is order preserving, it can be taken to reflect the base order of arguments, just as parallel movement constructions. Note now that when a genitive and an accusative object move together, the genitive must precede the accusative:

(214)　a.　*Tinos　　　ke　ti　　　aghorases?*
　　　　　　Whom-GEN　and　what-ACC　bought-2sg
　　　　　　'Who did you buy what?'
　　　b. * *Ti_i　　　　ke　tinos　　　aghorases?*
　　　　　　What-ACC　and　whom-GEN　bought-2sg
　　　　*'What did you buy who?'

This provides evidence that the goal is merged higher than the theme. Thus, Greek is the mirror image of German, where the goal is always merged lower than the theme. The fact that Greek lacks direct passives in the absence of clitics, as was extensively discussed in chapter 2, further suggests that Greek qualifies as a language which does not permit passivization to be fed by a non-local derivation such as (147).

8. Third ingredient: minimal domains

Section 7 investigated the restrictions on passivization and OS in asymmetric and symmetric languages and established two systematic differences between them, which are summarized in (215):

(215) a. (i) Passivization and OS in asymmetric languages result from a local derivation (i.e. [146]).
           (ii) Multiple movement is order-preserving.
       b. (i) Passivization and OS in symmetric languages appear to permit a non-local derivation ([147]) in addition to the local derivation.
           (ii) Multiple movement is non-order preserving.

The purpose of the present section, which concludes this chapter, is to argue that the Minimal Link Condition (MLC) does not apply within a domain but only checks the well-formedness of relations across different domains. As will be seen, incorporating minimal domains into the theory of locality straightforwardly accounts for the differences between asymmetric and symmetric movement summarized in (215).

The overall discussion is divided into three parts. In the first part (subsection 8.1), I present evidence from prepositional constructions that movement of two arguments from the domain of one and the same head is free. A lower argument can move across a higher one if both are in the same minimal domain (Chomsky 1995, 2000; Collins

1997). This entails that intervention effects arise only when an XP is crossing over a potential intervener which is contained within a higher minimal domain, which, in turn, will be seen to have an important consequence for the analysis of double object constructions. More specifically, since the goal in asymmetric languages systematically blocks passivization of the theme, the structure of the double object construction must include a head which introduces the goal and which is distinct from the head introducing the theme. As mentioned in chapter 1, Marantz (1993) has argued for such a decomposition structure for the double object construction on independent grounds. The restrictions on NP-movement discussed in this book therefore can be seen as providing a syntactic argument for Marantz's analysis.

In the second part (subsection 8.2), I argue that the structure Marantz (1993) posits for the double object construction explains the well-formedness of non-local and non-order preserving A-movement in symmetric languages ([b] of [215]) without the need to resort to the non-local derivation in (147). I argue that in symmetric languages the two objects are at some point in the derivation in the same minimal domain, and either one is allowed to move further to a higher head (T or v). By contrast, in asymmetric languages there is no stage in the derivation at which the two objects reside inside the same minimal domain, and movement is therefore both strictly local and order preserving ([a] of [215]).

Finally, in the third part (subsection 8.3) I defend the view that a relativization of locality to minimal domains straightforwardly accounts for the distribution of PPs in Greek, French and Italian (see chapter 2, sections 3.2 and 4.2).

8.1. The structure of the double object construction

Consider again the examples of locative and dative inversion discussed in section 6.3:

(142) a. *Down the hill rolled the baby carriage*
(145) b. *To Mary was sent a letter*

Recall that in these examples, the PP moves to the subject position checking the EPP feature of T, while Case is checked by the agreeing post-verbal DP.[54] Crucially, this derivation is *optional* (see Collins 1997 for discussion). The alternative derivation by which the DP moves to T is also grammatical, as exemplified by (142b) and (57), repeated below:

(142) b. *The baby carriage rolled down the hill*
(57)   *A letter was sent to Mary*

In (142b) and (57), the DP checks both the EPP and the Case feature of T, and movement of the PP does not take place.

Following Chomsky (1995, 2000) and Collins (1997), I take the free variation of the kind illustrated by the pairs above to indicate that in some configurations, an XP may raise across a c-commanding XP in apparent violation of Shortest Move / Closest Attract. The well-formedness of such non-local derivations is correctly captured by the version of the MLC given in (122), repeated from section 4:

(122) If β c-commands α, and τ is the target of movement, then β is closer to τ than α unless β is in the same minimal domain as (i) τ or (ii) α.

According to clause (ii) of (122), an XP can move across a c-commanding ZP if both arguments belong to the minimal domain of the same head. As will be seen briefly, in locative and dative inversion constructions the DP and the PP are generated within the same VP-shell, and movement may therefore target either one of the two arguments.

Consider now in more detail the underlying structure of the dative inversion construction (145b) (see Collins 1997: 27 for locative in-

version). Assume, following Larson (1988), that in prepositional ditransitives the goal PP is a complement of V and the theme DP is its specifier. Since dative inversion is found in passives, the VP containing the theme and the PP is merged with an (agentive) intransitive light v, which lacks an external argument and has no accusative Case feature. T is merged next, resulting in the structure (216):

(216)

```
                    TP
                  /    \
                 T      vP
                      /    \
       V<+agent,-trans>     VP
                          /    \
                        DP      V'
                     a letter  /  \
                              V    PP
                            send  /  \
                                 P    DP
                                to   Mary
```
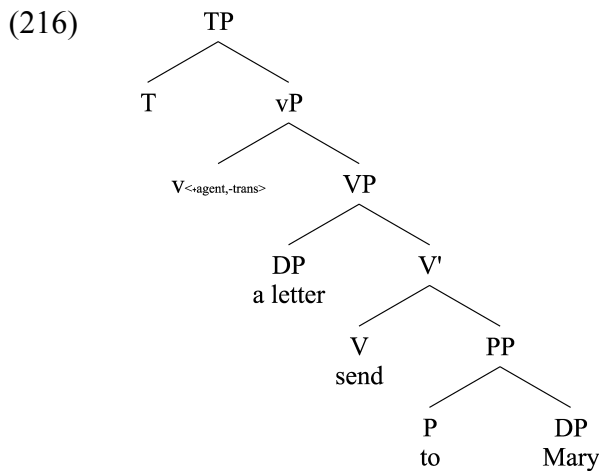
If closeness is defined as in (122), both the PP and the DP are allowed to move out of the VP in (216), because they are in the minimal domain of the head V. Moreover, since the light v dominating the VP is intransitive and lacks a specifier, movement beyond this domain is possible as well.[55] Note, finally, that the order of the two objects could be reversed with no effect, i.e. the PP could be generated higher than the DP (see section 8.3 below for discussion).

   This treatment of optional movement in prepositional constructions entails for the analysis of double object constructions that the goal and the theme cannot be generated within the same VP-shell:

(217)   *The incorrect structure (for the purposes of locality)*

```
                    vP
                  /    \
              agent     v'
                      /    \
                    v       VP
                          /    \
                       goal     V'
                              /    \
                            V       theme
```
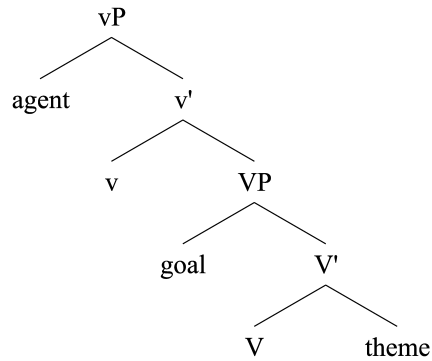
In (217) the theme and the goal are in the minimal domain of V, and passivization of the theme is incorrectly predicted to be grammatical, along with passivization of the goal. Thus, it must be concluded that the correct parse for the double object construction is one in which the goal originates in a higher VP-shell above the theme, blocking movement of the theme to T. Marantz (1993) has argued in favor of just such a structure for applicative and double object constructions:

(218)   *The correct structure (for the purposes of locality)*

```
                    vP
                  /    \
               NP        v'
         benefactive, goal /  \
                     vAPPL    VP (=event predicate)
                             /  \
                            NP/theme
```
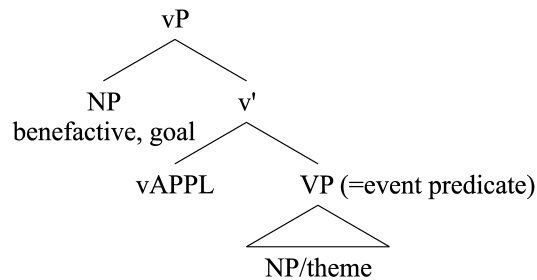
According to Marantz, the head vAPPL in (218) is a light v which takes as its complement an event denoting VP and at the same time introduces the indirect object. The indirect object can moreover be interpreted as the argument affected by the event in a compositional way.

Independent evidence for the presence of vAPPL comes from Marantz's study of applicative constructions (see chapter 2, section

4.1.2) as well as from morpho-syntactic properties of the double object construction (see Pesetsky 1995; Marantz 1993). Before concluding this subsection, I will summarize the relevant arguments falling in the latter group, which will be instrumental to the analysis of Romance ditransitives (section 8.3.2). (As argued for in Anagnostopoulou 2001, these diagnostics provide evidence that the Greek double accusative construction mentioned in chapter 2, section 2 does not include vAPPL, unlike the genitive construction. In Anagnostopoulou, to appear, I furthermore argue on the basis of the same diagnostics that Greek benefactive constructions in which the benefactor is introduced by the preposition *se* include vAPPL, unlike *se*-goal constructions; see section 8.3.1 below for the latter.)

The first piece of evidence for vAPPL is based on the observation that the double object construction is sensitive to the morphological make-up of the matrix verb. As is well known, many pairs of verbs which have a similar interpretation display an asymmetry with respect to their occurrence in the double object construction in English (Oehrle 1976: 121). For one, double object constructions cannot be generated from latinate roots (see [219]) or (opaque) prefix-verbs (see [220]):

(219)   *Mary gave / *donated Oxfam some canned food*
(220)   *Bill sent / *conveyed Sue his regards*

Pesetsky (1995: 129) suggests that these restrictions reflect morpho-phonological constraints on affixation. The PP-construction does not display comparable restrictions, indicating that vAPPL is absent from prepositional ditransitives.

The inability of derivational processes to target double object constructions has been argued to provide a second piece of evidence for the presence of vAPPL. It has e.g. been noted that while predicates with two internal arguments form adjectival passives by synthetic compounding (see [221]; Lieber 1983; Sproat 1985; Marantz 1989), double object verbs do not permit this kind of adjectival passive for-

mation. Neither benefactives or goals (see [222]) nor themes (see [223]) may incorporate into the verb:

(221) a. *hand-made cookies*   incorporated instrument
       b. *home-made cookies*   incorporated locative
       c. *paint-sprayed cart*   incorporated theme
       d. *clean-shaven face*   incorporated result
(222) a. * *children-baked cookies*   incorporated benefactor
       b. * *boss-given flowers*   incorporated goal
(223) a. * *cookie-baked children*   incorporated theme
       b. * *flower-given boss*   incorporated theme
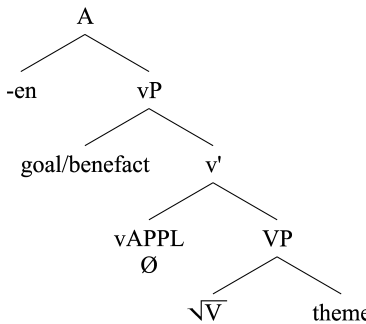
Marantz (1993) proposes that synthetic compounds are syntactically derived. The suffix -en takes as its complement a constituent including the verb and the most deeply embedded argument. The externalized argument is the highest constituent within the VP-shell:

(224)

```
              X
            /   \
         -en     VP
               /    \
         the face    V'
                    /  \
                shave   clean
```
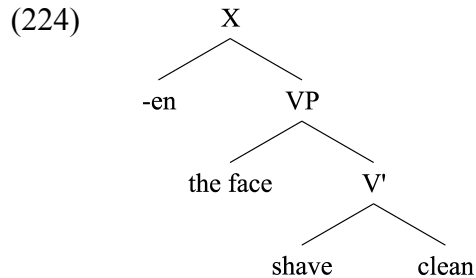
He furthermore argues that the ungrammaticality of the examples (222) and (223) follow from the structure (218) with vAPPL. On the one hand, the ill-formed examples with goal / benefactive incorporation in (222) violate compositionality, because the goal and the verb form a constituent to the exclusion of the theme. On the other hand, the ill-formed examples in (223), which involve theme incorporation and goal externalization, fail to observe *Myers's Generalization* in (225) (Myers 1984; Pesetsky 1995):

(225)   Zero-derived words do not permit affixation of further deriva-
tional morphemes

In order for the goal / benefactor to be present in (223), *en* must em-
bed vAPPL, as detailed by (226a). But this will yield the form in
(226b), with –*en* attaching to the zero-derived word [[$\sqrt{\text{give}}$ v] Øv],
in violation of Myers's Generalization:

(226) a.

b.   * [[[$\sqrt{\text{give}}$ v] Ø v]en A]

   Event nominals provide further evidence for a zero head in the
double object construction. As pointed out by Kayne (1984; he at-
tributes the observation to Wasow 1977), process nominalizations
can be derived from the PP construction, as in (227), but not from the
double object construction, as evidenced by the ungrammaticality of
(228):

(227)   a.   *Sue's gift of a book to Mary*
       b.   *John's assignment of a hard sonata to Mary*
(228)   a. * *Sue's gift of Mary (of) a book*
       b. * *John's assignment of Mary (of) a hard sonata*

Pesetsky (1995: 128) argues that this contrast follows from *Myers's
Generalization* on the two assumptions that (i) the double object con-
struction projects a zero affix which introduces the goal and that (ii)

the lexical verb combines with the zero affix before derivational morphology is added.

In conclusion, the contrast between prepositional constructions, which allow externalization of either object, and double object constructions, where movement of the theme across the goal is prohibited, motivated the adoption of a structure for the double object construction in which the goal is introduced by vAPPL. In particular, the restrictions on theme passivization were seen to add a further argument to the catalogue of evidence in support of vAPPL that can be found in the literature (synthetic compounding and nominalizations). Building on this proposal, it will be argued later on (e.g. sections 8.3.1, 8.3.2 and chapter 4, section 6) that restrictions on NP-movement can be used as a general diagnostic for structure which will be seen to discriminate among different classes of ditransitive constructions (see also Anagnostopoulou 2001, to appear).

8.2. Asymmetric and symmetric movement

Having argued that in the double object construction the goal is introduced by vAPPL, I am now in a position to spell out the details of passivization and OS in languages with asymmetric and symmetric movement. The main facts to be accounted for are stated in (215), repeated from above:

(215) a. (i) Passivization and OS in asymmetric languages result from a local derivation (i.e. [146]).
       (ii) Multiple movement is order-preserving.
   b. (i) Passivization and OS in symmetric languages appear to permit a non-local derivation ([147]) in addition to the local derivation.
       (ii) Multiple movement is non-order preserving.

8.2.1. The specifier of vAPPL parameter

Consider first passivization in asymmetric languages such as (American) English, Danish and Icelandic. Based on the previous discussion, I assume that passive ditransitives consist of three layers. The lowest VP contains V and the direct object (DO), the intermediate vP (v2P) includes vAPPL and the indirect object (IO) and the highest vP (v1P) is headed by an intransitive v with agentive features. T is merged with v1P. As schematized in (229), IO is allowed to undergo passivization because there is no intervener between T and IO. DO cannot raise across the intervening IO because IO resides within a minimal domain which excludes T and DO (see also Ura 1996):

(229)
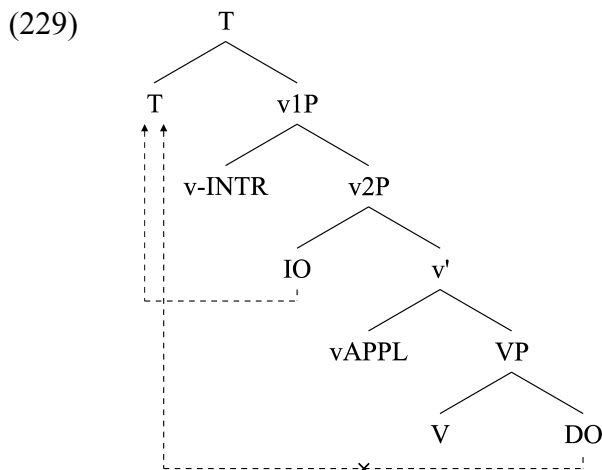
Thus, asymmetric languages license goal NP-movement in passives, but do not tolerate direct passives. Turning next to how OS proceeds in asymmetric languages, recall from section 7 that I take OS to be movement of an object to the specifier of a transitive vCAUS (v-TR). I furthermore assume that OS targets an outer specifier of v-TR, and that subjects are generated in the innermost specifier of v-TR (see Holmberg and Platzack 1995; Ura 1996). Evidence for this order of

specifiers comes from the observation that floating quantifiers asso-
ciated with the subject appear to the right of object shifted DPs and
pronouns, as illustrated by (230a) for Icelandic and (230b) for Swed-
ish (data from Holmberg and Platzack 1995: 141; see also Ura 1996):

(230) a. *Lásu   stúdentarnir greinina   ekki allir?*
           Read   the-students the-article   not   all
           'Didn't the students all read the article?'
       b. *Läste   studenterna den inte alla?*
           Read   the-students it   not all
           'Didn't the students all read it?'

Assuming Sportiche's (1988) theory of quantifier float, (230) sug-
gests that OS targets a position above adverbs and the base position
of the subject, as detailed by the tree in (231):[56]

(231)
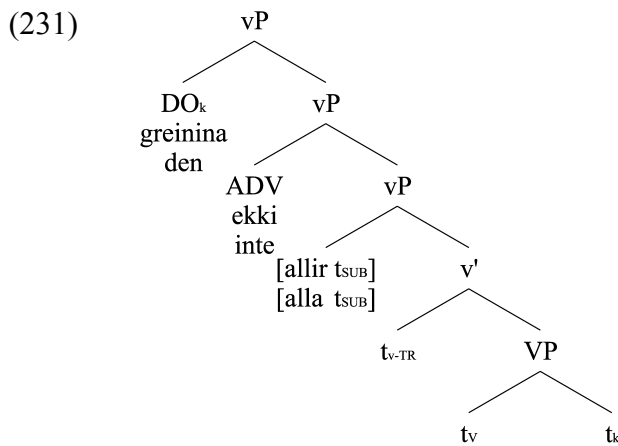
Since the landing site of the object is part of the same minimal do-
main as the subject – both are specifiers of v-TR – the derivation
(231) observes locality (in that it conforms with the MLC in [122]),
even though the object moves across the subject.

Proceeding to OS with ditransitives, I assume that negation and low adverbs may only adjoin to v1P and not to v2P (contra Ura 1996 and Collins and Thráinsson 1996; see fn 57 for further discussion). This entails that when an IO and / or a DO occur to the left of negation or other low adverbs, they must have shifted to an outer spec of v1P. (232) depicts OS of an IO above negation:[57]

(232)

```
                    v1P
                  /     \
              IO_k      v1P
                      /     \
                   ADV      v1P
                   ekki   /     \
                   inte  t_SUB   v'
                              /     \
                           v-TR    v2P
                                  /    \
                                t_k    v'
                                     /    \
                                  vAPPL
```
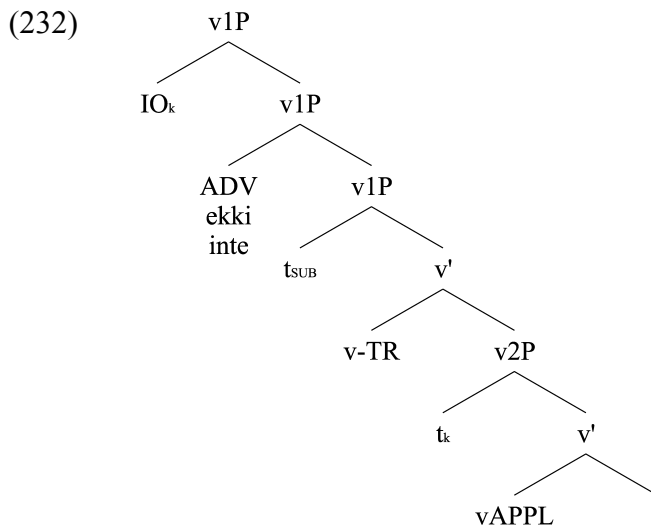
I propose that the derivation of OS of a single object in Danish and Icelandic proceeds exactly as in passives, except that v2P is merged with a transitive v. On this view, the IO may undergo OS to v-TR, as in (233) below, because the subject is contained in the same minimal domain. Movement of the DO is on the other hand blocked, since the intervening IO is neither included in the minimal domain of v-TR nor of DO. Thus, the locality account leads to a unified analysis for the prohibition on passivization (see [229]) and OS (see [233]) of DOs in Danish as well as in Icelandic (to be precise: Icelandic verbs of class 2 and class 1 without inversion; see section 7).

(233)

```
                    v1P
              ┌──────┴──────┐
                            v1P
                      ┌──────┴──────┐
                    SUB            v'
                              ┌──────┴──────┐
                            v-TR           v2P
                                      ┌──────┴──────┐
                                     IO            v'
                                           ┌──────┴──────┐
                                        vAPPL           VP
                                                   ┌──────┴──────┐
                                                   V            DO
```
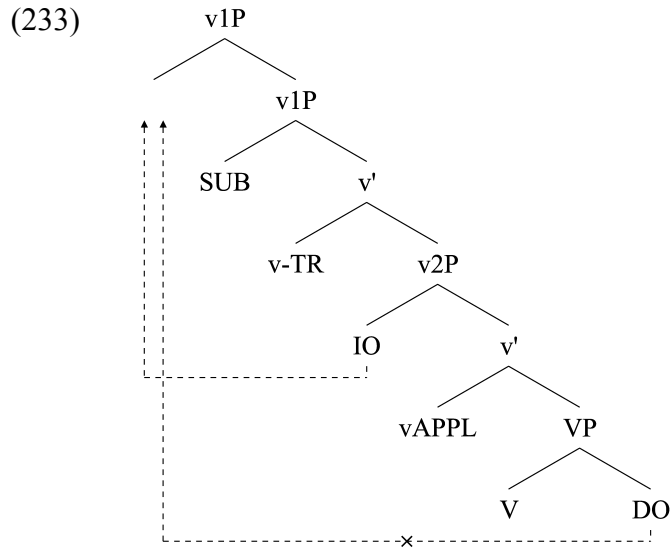
Finally, the tree in (234) tracks the derivation of constructions involving OS of both DO and IO, which proceeds in two steps:

(234)

```
                 v1P
           ┌──────┴──────┐
          IO           v1P
                 ┌──────┴──────┐
                DO           v1P
                       ┌──────┴──────┐
                     Subj           v'
                             ┌──────┴──────┐
                           v-TR           v2P
                                    ┌──────┴──────┐
                                  t_IO           v'
                                         ┌──────┴──────┐
                                      vAPPL           VP
                                                 ┌──────┴──────┐
                                                 V          t_DO
```

STEP I

STEP II
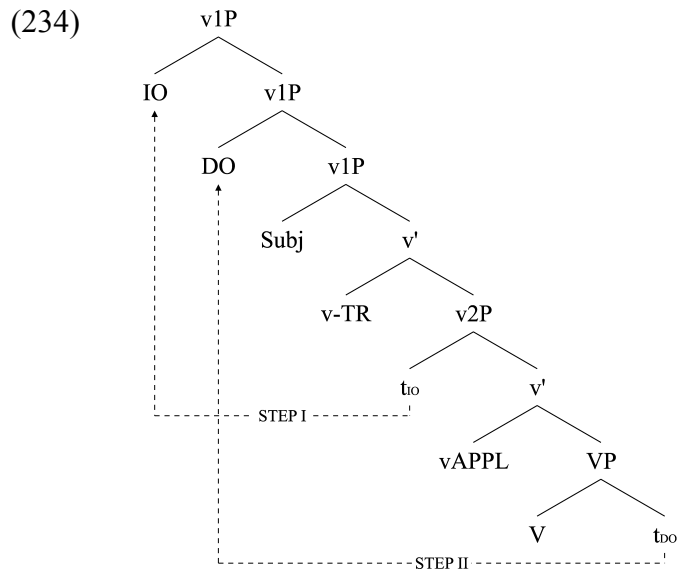
First, the IO, being closer to v-TR than the DO, undergoes OS. In the second step, the DO is then allowed to move to v-TR because IO no longer intervenes. The order IO>DO follows from the assumption that when two XPs target the same head, the XP moving second 'tucks in' beneath the one which has moved first, resulting in crossing paths, as argued for in Richards (1997) (see the discussion of [178] in section 7.3).

Note on the side that the tucking in condition only regulates multiple specifier configurations which result from multiple movement. Movement to a head which assigns a theta role to its specifier targets an outer spec; this ensures that XPs which have undergone OS precede floated QPs associated with the subject (see Ura 1996 and McGinnis 1998 for discussion of conditions governing movement to inner and outer specifiers).

To recapitulate, the assumptions that (i) the IO is introduced by vAPPL and (ii) the MLC applies to domains of different heads have been seen to provide a straightforward explanation for the properties of passivization and OS in languages with asymmetric movement. In passives, T can attract the IO, but not the DO, as the latter would have to pass the IO on its way to T. Similarly, a single application of OS always targets IO, which is closer to v-TR than the DO. The DO may however be shifted subsequent to OS of the IO, yielding the order IO>DO which reflects tucking in of the DO to a specifier beneath the IO.

Turning now to languages with symmetric movement, the present system can be directly extended to account for Norwegian and Swedish on the assumption that in these languages, the DO is allowed to land in an (outer) spec of vAPPL, resulting in the multiple specifier configuration (235), prior to further movement. In (235), both the DO and the IO are located in the minimal domain of vAPPL, and either of them may therefore move to a higher specifier. Raising of either IO or DO to T in the presence of an intransitive v results in a symmetric passive, whereas movement of IO or DO to v-TR feeds symmetric OS constructions. Finally, in contexts of multiple OS, movement of the IO and the DO to v-TR may proceed in either order, as both are contained in the same

minimal domain. If the IO moves first, the DO has to tuck in beneath it, resulting in the order preserving serialization IO>DO. If, on the other hand, OS of the DO precedes OS of the IO, the IO tucks in below the DO, leading to a reversal of the underlying word order.

(235)

```
                    v2P
                   /    \
                 DO      v2P
                 ↑      /    \
                 ¦     IO      v'
                 ¦           /    \
                 ¦        vAPPL    VP
                 ¦               /    \
                 ¦              V      DO
                 └--------------------------┘
```
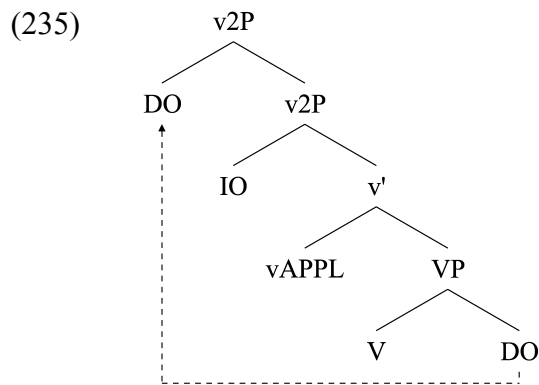
On this view, the differences between symmetric vs. partial double object languages described in (215) can be derived from the parameter in (236):

(236)   *The Specifier to vAPPL Parameter*
        Symmetric movement languages license movement of DO to a specifier of vAPPL. In languages with asymmetric movement, movement of DO may not proceed via vAPPL.

For the time being, I will have to relegate the question whether the parameter in (236) can be reduced to independent properties of the two groups of languages to further research.

8.2.2. Two issues

At this point, two remarks are in order regarding the analysis presented so far.

First, the *Specifier to vAPPL Parameter* allows the DO to move to a position immediately to the left of the IO in symmetric languages (recall that specifiers created by movement are above base-generated, theta-related specifiers). Given that the IO can remain *in situ*, there appears to be a second potential derivation for the inverted order DO>IO in Swedish and Norwegian, one in which the DO is stranded in the intermediate specifier of v2P and the IO is spelled out in its base position. Crucially, this alternative derivation generates the inverted order without the application of OS. However, it was seen above that inversion in Swedish and Norwegian, exemplified by the Swedish pair in (187) (repeated from section 7), is contingent on OS. (188) demonstrates that in contexts which fail to license OS to the left of negation or adverbs because the main verb does not move, both objects need to surface in their base order:

(187) a. *Jag gav   honom   den inte*
           I   gave him   it   not
           'I didn't give it to him'
    b. *Jag gav   den   honom   inte*
           I   gave it   him   not
           'I didn't give it to him'
(188) a. *Jag ville   inte   ge   honom   den*
           I   wanted not   give him   it
           'I didn't want to give it to him'
    b. * *Jag ville inte ge den honom*

At first sight, it therefore seems as if the analysis overgenerates in that it wrongly predicts (188b) to be well-formed.

This conclusion is premature, though. The complication above was caused by the premise that the DO can surface in the specifier of v2P. But there are good reasons to believe that movement to vAPPL must always be followed by a further movement step, i.e. that the DO may move through Specv2P only if it is attracted by a higher head (v-TR in case of OS or T in case of passivization). Given this additional

restriction, which prohibits the DO to be spelled-out in Specv2P, the analysis correctly predicts that the DO>IO serialization always correlates with OS.

Note that similar manifestations of the same condition are attested elsewhere in the grammar, for example in French participle constructions. As is well known, participles agree with objects displaced by relativization, cliticization or passivization, as in (237a) to (237c), but not with objects *in situ*, as in (237d):

(237) a. *La jupe$_i$ que Jean a fait(e)   t$_i$*
            the skirt that John has made(-FEM)
            'the skirt that John made'
       b. *Jean l'   a   fait(e)*
            John Cl-ACC   has made(-FEM)
            'John made it'
       c. *La jupe a ete faite par Jean*
            the skirt has been made by Jean
            'The skirt was made by Jean'
       d. *Jean a fait(*e)   la jupe*
            John has made(-FEM) the skirt
            'John made the skirt'

Adopting Kayne (1989b), agreement on the participle can be taken to signal a spec-head relation between the participle head and the object undergoing successive cyclic movement. Crucially for present purposes, this movement of the object to the intermediate specifier is always followed by further movement (to C, the clitic position, or in the case of unaccusatives and passives T). That is, just as with OS in Swedish and Norwegian, the object may pass through an intermediate specifier if it is attracted by a higher head, but it may not raise to that intermediate position without independent motivation. (See also Chomsky 2001a, 2001b for extensive discussion of the hypothesis that wh-movement of objects in English is always preceded by an invisible OS step.)

The second issue that needs to be addressed is that symmetric OS in Swedish and Norwegian is more restricted than symmetric passivization. Recall from section 7 that in Swedish and Norwegian, a DO pronoun cannot undergo OS across a full DP IO, as illustrated by (185), repeated here from above:

(185)   a.   *Jag   gav   Elsa   inte   den*
             I   gave Elsa   not   it
             'I did not give it to Elsa'
        b. * *Jag   gav   den   inte   Elsa*
             I   gave it   not   Elsa

This correlates with the fact that in multiple OS parallel movement effects arise when the IO is a DP and the DO is a pronoun:

(189)   a.   *Jag visade   Elsa den inte   (foerraen langt senare)*
             I   showed Elsa it   not   (until   much later)
             'I did not show it to Elsa until much later'
        b. * *Jag visade   den Elsa inte   (foerraen langt senare)*
             I   showed it   Elsa not   (until   much later)

To account for these cases in which OS appears to proceed as in the asymmetric double object languages Danish and Icelandic it has to be stipulated that in OS environments, a DO pronoun is not allowed to move to or through vAPPL when the IO is a DP. No such restriction has been reported in the literature for passives, suggesting that the DO can always use vAPPL as an escape hatch when it moves on to T.

At the moment, it is not clear to me how this disparity between passive and OS should be best accounted for. Anticipating the discussion of chapter 5, it should be pointed out, though, that there are various environments cross-linguistically which impose at first sight idiosyncratic restrictions on the shape and feature content of multiple

specifiers. It might therefore very well turn out that the contrasts in (185) and (189) fall under a more general pattern.

8.2.3. Comparing the analyses: Ura (1996)

It has already been mentioned that the idea that a multiple specifier parameter is responsible for the differences between partial and symmetric double object languages has also been pursued by Ura (1996) and McGinnis (1998). McGinnis's account is based on the interaction between locality and freezing effects induced by Case checking (Chomsky 2000; 2001a; 2001b), and will be discussed in chapter 5 (section 7), which more extensively addresses the agreement and Case properties of double object constructions. Here, I will compare the present analysis with the one advanced in Ura (1996), as they are similar in spirit but differ in details.

Ura also links the factor differentiating symmetric from asymmetric double object languages to the parametric availability of multiple specifiers. But unlike the present proposal, Ura's account postulates a strict correlation between the availability of (certain types of) OS and symmetric passivization, which, as will be seen briefly, comes at the cost of a less parsimonious cross-linguistic taxonomy.

More specifically, Ura assumes that passivization is directly fed by OS, with the qualification that OS may only target full DPs (shifted pronouns are arguably cliticized, as in e.g. Bobaljik and Jonas 1996). Technically, OS is implemented as movement to a layered specifier of the highest VP-shell (v1P) which at the same time serves as an escape hatch for successive cyclic raising to T in passives. On this view, one is led to expect that whenever a language permits OS of full DP indirect objects, it also licenses symmetric passivization. And in fact, this prediction is borne out for Mainland Scandinavian: Swedish and Norwegian freely allow OS of indirect object DPs. Danish on the other hand lacks OS of full DP indirect objects, as witnessed by (238), and accord-

ingly falls in the group of asymmetric languages ([238] from Ura 1996: 163, who credits Allan, Holmes and Lundskær-Nielsen 1995: 513):

(238)   *Jeg gav   Peter   ikke   bogen*
          I   gave   Peter   not   the book
          'I didn't give Peter the book'

A first complication for Ura comes in the form of Icelandic, which liberally employs OS of IO and DO definite DPs, but does not tolerate symmetric passives. Ura establishes a third group of languages (along with asymmetric and symmetric ones) for Icelandic. He furthermore assumes that languages belonging to this third group characteristically mark their objects with distinct morphological cases. But notice that this conception leaves open the question why locality conditions on multiple OS treat Danish and Icelandic alike (OS needs to proceed order preserving in both languages), and group them together to the exclusion of Swedish and Norwegian, where OS may lead to a reversal of the base order. This generalization (expressed by [215] above) clearly indicates that cross-linguistic differences in morphological object case marking do not correlate with distinct locality conditions on OS.

The present analysis provides a uniform account for Icelandic, Danish as well as for Swedish and Norwegian. In contrast to Ura, who directly links OS to symmetric passivization, I have argued that both OS and passivization covary with an independent factor, i.e. the availability of additional layered specifiers to v2P, the projection which introduces the IO. Moreover, the pure locality analysis advocated here does not need to treat OS of full DPs and OS of pronouns as two unrelated phenomena (following in this respect e.g. Holmberg 1986 and Holmberg and Platzack 1995), thereby achieving unification in another domain where Ura has to use two distinct analytical strategies. Recall that Danish allows OS of pronouns (see section 7), but not of full DP IOs (see [238]). It is essentially for this reason that Ura's OS-passive generalization has to refer to IO DPs, and not to

IOs in general. There is a further difference between Ura's system and the present one: for Ura, the DO can move to T only once the potentially intervening IO has been removed from its base position by OS. On the null hypothesis, one is therefore led to expect that whenever the DO is passivized, the IO has undergone OS to the left of adverbs and negation (Dutch appears to be such a language; see chapter 4, section 4 for discussion.) This is not the case in Swedish and Norwegian, where as demonstrated by the Norwegian example (181b), repeated here, passivization of the DO takes place in a context where the IO occurs after the participle, i.e. a non-V raising environment (which fails to license OS):[58]

(181) b. *En bok ble gitt Jon*
           A book was given John
       ?* 'A book was given John'

Note finally that on the assumptions adopted here, cross-linguistic variation in the choice of the categories which may undergo OS is not in any way related to issues of locality. The analysis offers in particular no explanation why OS may affect (i) only pronouns in Danish (ii) pronouns and full DP IOs (but not DOs) in Swedish and Norwegian and (iii) all definite DPs in Icelandic. Closing this section with a speculatory remark, it is however tempting to link the selection of possible targets for OS to another phenomenon which displays a remarkably similar range of variation across languages, namely clitic doubling (see Anagnostopoulou 1994; Alexiadou and Anagnostopoulou 2002). While in some Romance languages as e.g. Rio Platese Spanish, doubling may affect pronouns and all (animate) specific objects, in others such as Peninsular Spanish and Catalan, doubling is limited to pronouns and IO DPs (see Anagnostopoulou 2002 for a survey of the literature). Thus, while (239a) and (239b) are attested in all dialects of Spanish, (239c), which involves doubling of a direct object can be found in Rio Platese Spanish only:

(239) a. *Lo   vimos   a él*
           Cl-ACC saw-1pl a him
           'We saw him'
       b. *Miguelito le   regaló un caramelo a Mafalda*
           Miguelito Cl-DAT gave   a   candy   a Mafalda
           'Miguelito gave Mafalda a piece of candy'
       c. *Lo   vimos   a Guille*
           Cl-ACC saw-1pl *a* Guille
           'We saw Guille'

A further property OS and doubling have in common is that OS / doubling of pronouns is obligatory whenever it can take place, while OS / doubling of DPs is optional. Even though this variation is poorly understood, it seems to reflect a 'referentiality hierarchy' of NPs the effects of which have been argued to derive from the assumption that OS and doubling are operations overtly re-ordering arguments within the clause for interpretive purposes in Diesing (1993) and Diesing and Jelinek (1995).

This concludes the discussion of asymmetric and symmetric languages, which have been argued to provide support for the proposal that locality is computed on the basis of minimal domains.

8.3. The distribution of PPs

This section finally turns to a discussion of the blocking properties of *se*-PPs in Greek and *a*-PPs in French and Italian (see chapter 2, sections 3.2 and 4.2.), which present a further argument that locality should be relativized to minimal domains. These PPs will be argued to be well-formed in passives and unaccusatives, since they are generated in the same minimal domain as the underlying position of the derived subject. In raising environments, the PPs on the other side originate in a minimal domain which neither includes the surface nor the base position of the subject, inducing an MLC violation.

8.3.1. *Se*-PPs in Greek

Recall the basic asymmetry in the distribution of *se*-PPs in Greek (see section 3.2 of chapter 2). While goals and experiencers introduced by *se* are well-formed in passives and unaccusatives ([51] and [52]), *se*-experiencers may not intervene in raising contexts (53):

(51)   *To   vivlio   dhothike stin Maria apo ton Petro*
          The book-NOM gave-Nact to-the Maria from the Petros
          'The book was given to Mary by Peter'

(52) a. *I   thea   parusiastike   ston   Pari*
          The goddess-NOM presented-Nact-3sg to-the Paris
          ston   ipno tu
          in-the sleep his
          'The goddess appeared to Paris in his dream'
    b. *To grama   irthe stin   Maria me   kathisterisi*
          The letter-NOM came to-the Maria with delay
          'The letter came to Mary with a delay'
    c. *Afta   ta vivlia   aresun   ston   Petro poli*
          These the books-NOM please-3pl to-the Petros much
          'Peter likes these books a lot'

(53) a. *?*O   Gianis   fenete   stin   Maria eksipnos*
          The Gianis-NOM seem-3sg to-the Maria intelligent
          'John seems to Mary to be intelligent'
    b. **?Ta   pedhia   dhen fenonte s-tin   Maria*
          The children-NOM not   seem-3pl to the Maria
          na   meletun
          Subjunctive study-3pl
          'The children do not seem to Mary to study'

This contrast follows from the assumption that in (51) and (52), the nominative and the PP are located in the minimal domain of the same head, while they are part of distinct domains in (53), blocking NP-movement.

The present section fills in the details of the two derivations. I will expand on monoclausal contexts first, limiting the attention to passives, which elicit direct evidence for the c-command relations between the nominative theme and the PP. The analysis naturally extends to unaccusatives, given the view that they differ from passives only in that they lack an agentivity features on the intransitive v head (see sections 4 and 5). The final part of this section will focus on biclausal raising constructions involving the verb *fenete*.

Unlike English prepositional ditransitives,[59] Greek *se*-ditransitives freely permit both the $DP_{theme} > PP_{goal}$ and the $PP_{goal} > DP_{theme}$ order:

(240) a. *Edhosa   to   vivlio   ston   Petro*
           Gave-1sg   the book-ACC   to-the Petros
       b. *Edhosa   ston   Petro   to   vivlio*
           Gave-1sg to-the Petros the book-ACC
           'I gave the book to Peter'

In the DP>PP order, the DP asymmetrically c-commands the PP, as documented by the quantifier variable binding test in (241) and the *'each...the other'* test in (242):

(241) a. *Estila   kathe pedhi$_i$ stin   mitera   tu$_i$*
           Sent-1sg   every child-ACC   to-the mother   his
           'I sent every child to his mother'
       b. ?? *Estila   to   pedhi   tis$_i$ se kathe   mitera$_i$*
           Sent-1sg   the   child-ACC her-GEN   to every   mother
           'I sent her child to every mother'
(242) a. *Estila   to   ena   pedhi   stin   mitera*
           Sent-1sg   the   one   child-ACC   to-the mother
           tu   alu
           the   other-GEN
           'I sent each child to the other's mother'

b. * *Estila   to   pedhi   tis   alis*
      Sent-1sg the child-ACC the other-GEN
      stin   mia   mitera
      to-the one   mother
      *'I sent the other's child to each mother'

In the PP>DP order, the effects are reversed. The goal binds into the theme and not vice versa, as illustrated by (243) and (244):

(243) a.   *Estila   se   kathe mitera$_i$ to   pedhi tis$_i$*
         Sent-1sg to   every mother   the child her
    b. ?? *Estila   stin   mitera tu$_i$ to   kathe   pedhi$_i$*
         Sent-1sg to-the mother his   the   every   child
(244) a.   *Estila   stin   mia   mitera   to   pedhi*
         Sent-1sg to-the one   mother   the   child-ACC
         tis   alis
         the   other-GEN
    b. * *Estila   s-tin   mitera   tu   alu*
         Sent-1sg to-the mother   the   other-GEN
         to   ena   pedhi
         the   one   child-ACC

This match between word order and binding scope is reminiscent of the correlation which has been observed in Japanese *ni-*constructions and Icelandic dative>accusative constructions with class 1 verbs (see 7.1 and 7.2). The first question to ask, therefore, is whether Greek patterns along with Japanese and Icelandic in that PPs are generated as high datives in the PP>DP order, but originate low in the DP>PP order. In particular, an analysis along these lines would entail that (i) the morpheme *'se'* is ambiguous between a preposition and a Case marker, similarly to *ni* in Japanese and dative morphology in Icelandic, and that (ii) the PP>DP order (240b) constitutes a second manifestation of the Greek double object construction, which exists alongside the genitive construction discussed in section 7.6.[60]

As it turns out, though, evidence in support of the second claim above fails to materialize. For instance, the PP>DP order is not subject to an animacy restriction on goals in the same way that true double object constructions are, as is shown by (245).

(245) *Estila   stin   Galia   ena   dhema*
          Sent-1sg to-the France a   parcel-ACC
          'I sent the parcel to France'

I will therefore assume that PP>DP orders and DP>PP orders are both prepositional ditransitives.[61] Note that, as illustrated by the pair in (246), Greek generally displays a freedom in the ordering of verbal DP and PP complements, which is not found in English:

(246) a. *Evala   to   vivlio   s-to   trapezi*
              Put-1sg the book-ACC to-the table
              'I put the book on the table'
        b. *Evala s-to   trapezi to   vivlio*
              Put-I   to-the table   the book-ACC
            * 'I put on the table the book'

Limiting my attention to the DP>PP / PP>DP alternation in prepositional ditransitives, three analytical possibilities come to mind:

   (i) Both the DP>PP and the PP>DP serialization are base generated orders, as depicted in (247):

(247) a.   VP   b.   VP
              ╱   ╲   ╱   ╲
          DP   V'   PP   V'
                      ╱   ╲   ╱   ╲
                  V   PP   V   DP
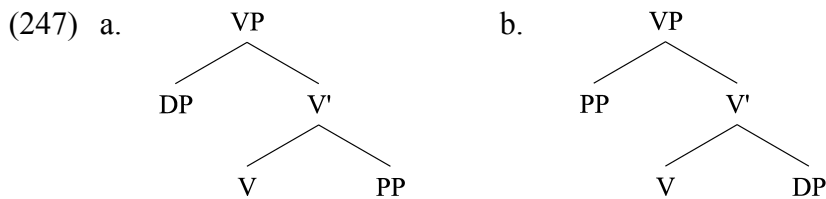
Such a free base analysis expresses the intuition that as long as two arguments are in the same minimal domain, there is no universal

linking principle forcing one to be generated higher than the other.[62]

(ii) The DP>PP order is underlying (see Larson 1988 for English), and the PP>DP order is derived by leftward A-scrambling of the PP.

(iii) The DP>PP is derived from a PP>DP base by leftward A-movement of the DP across the PP. Pesetsky (1995: 221-223) argues for such an analysis for English on the basis of the backwards binding facts (248a, b), first discussed by Burzio (1986: 199, 203):

(248)   a.   *Sue showed John and Mary to each other's friends*
        b.   *Sue showed each other's friends to John and Mary*
        c.   *Sue showed John and Mary each other's friends*
        d. * *Sue showed each other's friends John and Mary*

For Pesetsky, the availability of backwards binding in (248b) demonstrates that in the English PP construction, the goal c-commands the theme at some stage in the derivation. (The double object construction [248c,d], which does not exhibit reconstruction effects, serves as a control.)[63]

Note that all three alternatives presented above are compatible with NP-movement of the theme across a *se*-dative, as long as it is ensured that the two arguments start out in the minimal domain of V, and therefore are equidistant from T.[64] Note in this context also that *se*-goals are licit in nominalizations (249a), unlike genitive-goals (249b):

(249)   a.   *I   anathesi   tis sonatas   stin   Maria*
             The   assignment   the sonata-GEN   to-the   Maria
             'The assignment of a sonata to Mary'
        b. * *I   anathesi   tis sonatas   tis   Marias*
             The   assignment   the sonata-GEN   the   Maria-GEN
             *'The assignment of a sonata of Mary'

This provides evidence that *se*-PP goals are not introduced by vAPPL, unlike genitive goals (see the discussion of [227] and [228] in section 8.1).

Ordering restrictions on fronted, conjoined wh-phrases provides independent evidence that PPs and DPs originate in the same minimal domain. In section 7.6 it was pointed out that when two argument wh-phrases are conjoined and fronted in Greek, their serialization is rigid. In monotransitives such as (213), the subject must precede the object, and in ditransitives, exemplified by (214), the accusative direct object cannot precede the genitive indirect object (examples repeated from above):

(213) a. *Pjos$_j$*   *ke*   *ti$_i$*   *t$_j$ aghorase*   *t$_i$*?
           Who$_j$-NOM and   what$_i$-ACC   t$_j$ bought-3sg   t$_i$
           'Who bought what?'
       b. * *Ti$_i$*   *ke*   *pjos$_j$*   *t$_j$ aghorase*   *t$_i$*?
           What$_i$-ACC and   who$_j$-NOM   t$_j$ bought-3sg   t$_i$
           *'What did who buy?'

(214) a. *Tinos*   *ke*   *ti*   *aghorases*?
           Whom-GEN   and   what-ACC   bought-2sg
           'Who did you buy what?'
       b. * *Ti$_i$*   *ke*   *tinos*   *aghorases*?
           What-ACC   and   whom-GEN   bought-2sg
           *'What did you buy who?'

I have suggested that the contrasts in (213) and (214) can be interpreted as the result of a parallel movement condition, similar to the one which regulates multiple OS in asymmetric languages (see section 7.3). One of the central generalizations which emerged from the discussion of multiple OS in asymmetric and symmetric languages was that rigid serialization derives from movement of two arguments originating in different minimal domains, whereas free word order correlates with multiple movements out of the same minimal domain.

Observe now that fronting of a conjunct made up of a PP-goal and a DP-theme feeds both possible word orders:

(250) a. *Se pjon ke ti   estiles ?*
             To whom and what-ACC sent-2sg
       b. *Ti   ke se pjon estiles?*
             What-ACC and to whom sent-2sg
             'What did you send to whom?'

The facts in (250) constitute first hand evidence that in the PP construction, the PP and the DP are generated in the same minimal domain, unlike e.g. the two internal arguments in the genitive construction (214). Note that the locality analysis correctly predicts that the freedom of word order in (250) correlates with the availability of theme passivization in (51), repeated here.

(51) *To vivlio   dhothike   stin   Maria apo ton Petro*
        The book-NOM gave-Nact to-the Maria from the Petros
        'The book was given to Mary by Peter'

Turning now to the ill-formed strings in (53) above, in which the experiencer serves as an argument of *fenete* 'seem / appear', observe to begin with that the examples fall into two groups. In (53a), *fenete* takes an adjectival complement, whereas it combines with a subjunctive in (53b). As shown by (53a') and (53b'), dropping the experiencer rescues both constructions, suggesting that the deviance of (53) is to blame on the presence of the PP.

(53) a.' *O Gianis   fenete   (?*stin Maria) eksipnos*
             The Gianis-NOM seem-3sg to-the Maria   intelligent
             'John seems to Mary to be intelligent'

b.' *Ta   pedhia   dhen fenonte   (?*s-tin Maria)*
The children-NOM not   seem-3pl to-the   Maria
na   meletun
Subjunctive study-3pl
'The children do not seem to Mary to study'

The ban against PP-experiencers can be straightforwardly ac-
counted if *fenete* is taken to introduce two arguments, i.e. the ex-
periener (following Chomsky 1995: 305), and an IP or small-clause
AP, which contains the trace of the raised subject. I furthermore as-
sume that *fenete* undergoes overt raising to the left of the experi-
encer, as in Collins (1997), from where it moves on to T (Alexiadou
and Anagnostopoulou 1998, 2001). The relevant parts of the struc-
ture and the derivation are detailed in (251).

(251)   RAISING: INTERVENING PP
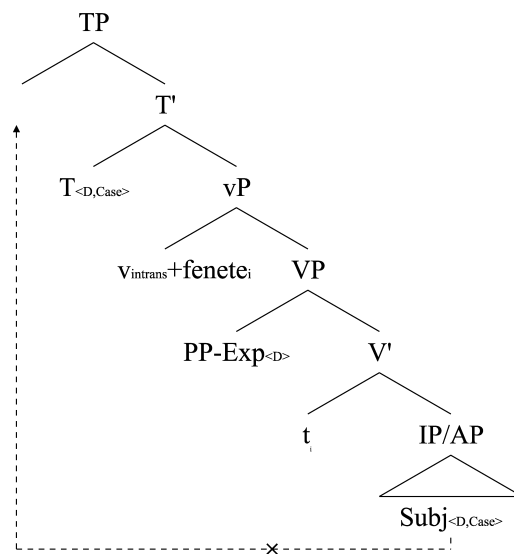
Since the experiencer is within the domain of matrix V, it blocks
raising of the embedded subject to matrix T.[65]

At this point, two potential objections against the locality account of the *fenete*-construction (53b) need to be addressed. The first one comes from a particular perspective on nominative Case assignment, while the second one disputes the premise that *fenete* lacks an external argument and qualifies as a raising predicate in the first place. In what follows, I will discuss these two points in turn.

First, notice that the complement of *fenete* in (53b) is an inflected subjunctive, i.e. the embedded verb agrees in person and number with the matrix subject. If, as suggested by Chomsky (2000, 2001a, 2001b building on George and Kornfilt 1981), agreement is a reflex of nominative Case, then the matrix subject cannot have raised from the lower clause. Crucially for present purposes, this view, which holds that *fenete* does not head a raising construction, makes it impossible to exclude (53b) by a condition on NP-movement.

The assumption that agreement signals the presence of nominative Case in Greek has been challenged in the recent literature, though. To begin with, it has been argued that Greek tenseless subjunctives which lack an overt subject are in principle ambiguous, they display – depending on other factors – properties of control, pro-drop (Iatridou 1993; Terzi 1992; Varlokosta 1994) or raising (Alexiadou and Anagnostopoulou 1999c). Moreover, it can be shown that whenever the embedded subject lacks nominative Case (i.e. control and raising), the local predicate cannot bear tense specifications, but may be marked for agreement.

Proceeding to the specifics, Iatridou (1993) pointed out that tense – and not agreement – determines the availability of control in Greek subjunctives. In (252a) the lower and the higher verb must share a subject, supporting a control analysis. In contrast to that, the logical subject of the subjunctive and the matrix subject in (252b) may be distinct in reference, indicating the presence of *pro*:

(252) a. *Ksero   na   kolimbao / *kolimbas*
          Know-1sg   Subjunctive   swim-1sg / swim-2sg
          'I know how to swim'

   b. *Elpizo   na   pro ertho / erthis*
        Hope-1sg Subjunctive pro come-1sg / come-2sg
        'I hope to come / I hope that you will come'

Furthermore, control contexts systematically disallow a [± Past] tense distinction in the lower clause, as illustrated by (253a). If the sentential complement is construed with a *pro* subject, as in (253b), it may also be specified for tense ([±Past]):

(253) a. * *Ksero   na   kolimbisa*
           Know-1sg Subjunctive swim-Past
      b. *Elpizo   na   pro irthe*
           Hope-1sg Subjunctive pro come-Past
           'I hope that he came'

From the paradigms above, Iatridou concludes that the absence of tense in the subordinate clause covaries with a control reading and with the absence of nominative Case. Alexiadou and Anagnostopoulou (1999c) extend the analysis to raising, which they argue is limited to a proper subset of tenseless and agreeing subjunctives.

    Taking as a point of departure the correlation between presence vs. absence of tense and presence vs. absence of Case in Greek subjunctives, observe to begin with that when *fenete* combines with a subjunctive clause, agreement between the subject and *fenete* is optional. When *fenete* does not agree with the subject, it shows third person singular default agreement:

(254) *Ta pedhia dhen fenonte / fenete   na   dhulevun*
        The children not   seem-pl / seem-3sg Subjunctive work-pl
        'The children do not seem to work'

Crucially, there is now a curious restriction on agreement, which aids in deciding the question whether subjunctive *fenete* constructions

instantiate a raising context. When the subject agrees with *fenete*, the lower verb cannot be marked for tense ([±Past]):

(255) ** Ta   pedhia   dhen fenonte   na   dhulepsan*
       The children not   seem-pl Subjunctive worked-Past
       'The children do not seem to have worked'

Conversely, as documented by (256), the embedded clause may bear past tense specification in the absence of agreement:

(256)   *Ta pedhia   dhen fenete   na   dhulepsan*
         The children not   seem-3sg Subjunctive worked-Past
         'It does not seems that the children have worked'

The contrast above can be accounted for on the two assumptions that (i) agreeing *fenete* qualifies as a raising verb and that (ii) nominative Case is dependent on tense, as argued in the literature. In (255), the ungrammaticality is due to the fact that the subject is not allowed to raise out of the tensed clause. In (256), the subject checks its Case inside the embedded, tensed clause, followed by topicalization (Clitic Left Dislocation) of the subject to the left of *fenete*. Finally, in the agreeing variant of (254) the tenseless subjunctive does not assign Case to the subject, which has to raise to matrix T where it triggers agreement with *fenete*. Thus, there is solid empirical evidence that in Greek subjunctive constructions, it is incompleteness in tense speci-fication, and not lack of agreement on the verb, which induces sub-ject raising into the higher clause. This observation removes a first latent problem for the locality account of intervention effects with raising (see [53b]).

   The second complication which has to be addressed pertains to the thematic status of the surface subject of *fenete*. It has occasionally been claimed in the literature (see e.g. Philippaki-Warburton 1992b) that agreeing *fenete* is not a raising predicate but rather denotes a verb of visual perception which assigns a theta role to the subject. On

this control reading for *fenete*, (53b) can roughly be paraphrased as *from the way the children look, it can be inferred that they do not study*. That control *fenete* assigns a theta-role to its subject can be inferred from the observation that it permits subject-oriented adverbs like *deliberately* and *consciously*, as illustrated by (257) (see Iatridou 1990: 560-562 who discusses a similar ambiguity of the verb *sound* in English):

(257) *I   zitiani   epitidhes   fenonte arosti*,
       The beggars deliberately seem   sick,
       gia   na   tus   lipithume
       so-that Subjunctive   them   pity-1pl
       'Beggars deliberately look sick, so that we pity them'

Given this alternative parse of *fenete*-constructions, one might object that the ill-formedness of examples such as in (53) is not grounded in a violation of a (locality) condition on raising, but rather derives from failure to observe some – yet to be specified – restriction on control. But the control analysis of (53) encounters substantial empirical problems of its own and can therefore not be maintained. More specifically, recall from chapter 2 that unlike full PP experiencers, experiencer clitics may combine with *fenete*. Interestingly, though, such clitics must not co-occur with subject-oriented adverbs, indicating clearly that the projection of an experiencer argument leads to the loss of the control reading of *fenete*:

(258) *I   zitiani   epitidhes   su   fenonte arosti*,
       The beggars deliberately Cl-GEN   seem   sick
       gia   na   tus   lipithis
       so-that Subjunctive   them   pity-2sg
     *'Beggars deliberately seem sick to you, so that you pity them'

It follows that the clauses (53), which feature an overt experiencer, must be analyzed in terms of raising, and not control.

Note in passing that the incompatibility of control *fenete* with an experiencer argument is not an idiosyncratic property of Greek, but that similar facts can also be found in English. Martin (1996) discusses an ambiguity of English *seem*, and lists various syntactic diagnostics to distinguish its raising interpretation from the control reading. For instance, Martin extensively argues that VP-ellipsis may exclusively target control structures. On the basis of this generalization, he observes that the contrast between present and past *seem* in (259) follows directly if present *seem* is analyzed as a raising predicate, while past *seem* is taken to head a control structure:[66]

(259)   a. * *Carl Lewis may still be the fastest American, but he doesn't seem (to me) to*
         b.   *Although John didn't actually [hit Bill], he seemed to [e]*

The asymmetry in (259) dovetails with the observation that in the present tense construction (raising) the embedded predicate must be stative, while past *seem* (control) also tolerates eventives:

(260)   a. * *Flavio seems to pass the ball right now*
         b.   *Flavio seemed to pass the ball just then*

He further points out that in control examples such as (260b), the subject functions as an agent which must have actively been involved in the action denoted by the embedded predicate (resulting e.g. in the appearance of his having passed the ball in [260b]).

All these properties characteristic of control vanish once the experiencer is overtly realized. For instance, projecting the experiencer blocks VP-ellipsis (see [261a]), and prohibits the use of an eventive predicate in the embedded clause (see [261b]):

(261)   a. * *Although John didn't actually hit Bill he seemed to Mary to*
         b. * *John seemed to Mary to hit Bill*

Moreover, in the presence of an experiencer, the matrix subject position can no longer be agentive, as illustrated by the adverbial test in (262):

(262)　a.　*John is intentionally seeming to hit Bill*
　　　　b. **John is intentionally seeming to Mary to hit Bill*

Thus, the Greek and the English facts converge; both languages present evidence that experiencers and the control construal of raising predicates are intrinsically incompatible. This entails the important consequence that it invalidates a potential alternative (control) analysis for the ungrammaticality of (53b).

8.3.2. *A*-datives in French and Italian

Elaborating on the behavior of indirect objects introduced by *a* in French and Italian, the present section in particular expands on some differences between ditransitives in Greek and French. This cross-linguistic variation will be related to the distinct status of the heads *a* and *se,* respectively.

To begin with, the prepositional element *'a'* in French and Italian can, similarly to Greek *se*, also function as a locative, non-directional preposition (French data [263] from Kayne 1975: 1, 67):

(263)　a.　*Les garçons sont tous partis à la guerre*
　　　　　　The boys　　are　all　gone　to the war
　　　　　　'The boys have all gone to the war'
　　　　b.　*J' ai　un portrait d' eux à la maison*
　　　　　　I have a　portrait of　them to the house
　　　　　　'I have a portrait of them in the house'

As in Greek prepositional ditransitives, precedence matches c-command in French and Italian ditransitives. (264a) and (264c) illus-

trate that indirect object quantifiers may bind pronominal variables to their right, whereas direct object quantifiers take scope over indirect objects which they precede, as documented by (264b) and (264d) (McGinnis 1998: 98-99):

(264) a.   *Jean a   attribué [à chaque mot]$_i$ son$_i$ symbole*
           Jean has attributed to each   word   its   symbol
           'Jean attributed to each word its symbol'
      b.   *Jean a   attribué [chaque mot]$_i$ à son$_i$ symbole*
           Jean has attributed each   word   to its   symbol
           'Jean attributed each word to its symbol'
      c.   *Sveva ha   attribuito a ciascuna parola$_i$*
           Sveva has attributed to each   word
           il proprio / suo$_i$ simbolo
           the own / its   symbol
           'Sveva attributed to each word its symbol'
      d.   *Sveva ha   attribuito ciascuna parola$_i$*
           Sveva has attributed each   word
           al   proprio / suo$_i$ simbolo
           to-the own / its   symbol
           'Sveva attributed each word to its symbol'

Furthermore, French and Italian resemble Greek once again in that the wellformedness of the two alternative permutations in (264) correlates with a more general freedom in the relative ordering of verbal DP and PP complements (see Belletti and Shlonsky 1995 for discussion; compare to Greek [246] above; data from Belletti and Shlonsky 1995: 516, 489):

(265) a.   *J' ai   mis ce livre sur la table*
           I have put this book on the table
           'I put this book on the table'
      b.   *J' ai   mis sur la   table ce livre*
           I have put on the table this book

(266) a.   *Ho   messo quel libro sul   tavolo*
           Have-1sg put   this   book on-the table
           'I put this book on the table'
     b.   *Ho   messo sul   tavolo quel libro*
           Have-1sg put   on-the table   this   book

Finally, in NP-movement constructions, the distribution of dative *a*-phrases in French and Italian mimics the one of *se*-PPs in Greek. Recall from chapter 2 (section 4.2.) that French and Italian *a*-datives block raising while they do not interfere in passives and unaccusatives:[67]

(66) b. ?* *Jean semble à Marie [t avoir   du talent]*
           Jean seems   to Marie   to have of talent
           'Jean seems to Marie to have talent'
 (67) b. ?* *Gianni sembra a Piero [t fare   il   suo dovere]*
           Gianni seems   to Piero   to do the his   duty
           'Gianni seems to Piero to do his duty'
 (68) a.   *Un cadeau a   été   offert à Marie*
           A gift   has been given to Marie
           'A   gift has been given to Marie'
     b.   *Gianni è stato affidato a Maria*
           Gianni is been entrusted to Maria
           'Gianni was entrusted to Maria'

The locality analysis straightforwardly captures the inhomogeneous intervention properties of datives. In the raising contexts (66) and (67), *à Marie* and *a Piero* are in the minimal domain of matrix V, blocking movement of the embedded subject. Passivization in (68) leads on the other side to well-formed results, because the theme moves to T from the minimal domain of V which also includes the dative *a*-goal. (*Ditto* for unaccusatives.)

   Independent evidence that *a*-datives in French and Italian are part of the minimal domain of V, and are not introduced by vAPPL, is

provided by the observation that they show up in nominalizations, as illustrated by (267) for Italian (from Belletti and Shlonsky 1995: 517-518; compare to Greek [249] in section 8.3.1 above):

(267) a. *La restituzione dei   territori ai   Palestinesi*
          The return   of-the territories to-the Palestinians
          'The return of the territories to the Palestinians'
    b. *La consegna della   lettera a Rina*
          The delivery   of-the letter   to Rina
          'The delivery of the letter to Rina'

Recall that in English (and Greek), nominalizations are derivationally related to the PP construction, as in *Sue's gift of a book to Mary*, but not to the double object construction, as in **Sue's gift of Mary (of) a book*. In section 8.1, this asymmetry has been accounted for in terms of the hypothesis that vAPPL, which introduces the goal in the double object construction, is not licensed in nominalizations. On this view, the well-formedness of (267) indicates that *a*-datives are not introduced by vAPPL.

The data discussed so far strongly suggest that *a*-datives and *se*-datives share the same syntax, namely that of a prepositional dative phrase blocking movement in biclausal but not in monoclausal constructions. However, *a*-datives and *se*-datives also differ in important ways with respect to their categorial status and their interaction with cliticization. In what follows, I will concentrate on these differences, which will be taken up again in later chapters in the context of a more detailed discussion of the properties of dative clitics. (I will limit myself to French *à*-datives, as they have been more extensively discussed in the literature.)

A first difference between Greek and French manifests itself in the categorial status of the term introducing the dative. Even though it has been claimed that *à* – like *se* – is a preposition (Kayne 1974, 1984), Jaeggli (1982: 28), drawing on Vergnaud (1974), presents convincing evidence that *à* is a Case marker, not a true preposition.

The arguments in support of this view are based on the behavior of *à* under co-ordination. First, co-ordinated *à*-datives may serve as the head of a relative clause which functions as a (derived) collective predicate, as shown by (268a). They contrast in this respect with co-ordinated PPs as in (268b). In (268b), the relative clause must attach to the NP of the second conjunct for reasons of interpretation, barring a group reading of the head in terms of non-Boolean conjunction:

(268) a. *Il   a   parlé   à   l'   homme et   à   la*
           He   has-3sg spoken to the man   and to the
           femme qui   se   sont recontrés hier
           woman who Cl-refl are   met   yesterday
           'He spoke to the man and the woman who met yesterday'
       b. * *Il   a   compté sur l'   homme et   sur la*
           He   has-3sg counted on   the man   and on   the
           femme qui   se   sont recontrés hier
           woman who Cl-refl are   met   yesterday
           'He counted on the man and the woman who met yester-
           day'

Second, while a conjoined NP may serve as the complement of a preposition, illustrated in (269a), an NP-conjunct cannot combine with *à*, as illustrated by (269b). Instead, co-ordination must target two full *à*-phrases, as in (269c), suggesting that *à*-phrases are NPs:

(269) a. *Ils   se   sont assis sur la   table et   les chaises*
           They Cl-refl are   sat   on   the table and the chairs
           'They sat on the table and the chairs'
       b. * *Ils   ont   parlé à Marie et   le   directeur*
           They have-3pl talked to Marie and the director
           'They talked to Mary and the director'
       c. *Ils   ont   parlé à Marie et   au   directeur*
           They have-3pl talked to Marie and to-the director
           'They talked to Mary and to the director'

Applying Vergnaud's tests to Greek reveals that Greek *se* – unlike French *à* – falls in the same group as prototypical prepositions: first, conjoined *se*-phrases can only marginally be assigned a group interpretation, as shown by (270a). Second, *se* can serve as the head of a conjunction of noun phrases, as in (270b) (judgments are subject to dialectal variation):

(270) a. ??*Estilan   gramata   ston   andra ke stin   ghineka*
          Sent-3pl letters-ACC to-the man   and to-the woman
          pu   zusan   mazi
          who were-living together
          'They sent the letters to the man and to the woman who
          were living together'
      b. *Estilan   gramata   stus   gonis   ke   tus / stus*
          Sent-3pl letters-ACC to-the parents and the / to-the
          papudhes   ton endhiaferomenon
          grandparents the interested-GEN
          'They sent letters to the parents and (to the) grandparents
          of the interested party'

The second difference between *se* and *à* emerges in contexts of cliticization. In Greek, cliticization (clitic doubling) may affect indirect objects bearing genitive case, as in (18), repeated from chapter 2, but it must not apply to goals which are introduced by *se*, as illustrated by (22):

(18)   *Tu   edhosa   tu Giani   to   vivlio*
        Cl-GEN   gave-1sg the Gianis-GEN   the book-ACC
        'I gave John the book'
(22) **Tu   edhosa   to   vivlio   s-ton   Giani*
        Cl-GEN   gave-1sg the book-ACC   to-the Gianis
        'I gave the book to John'

This restriction does not only hold of clitic doubling, but also discriminates between licit and illicit instances of *Clitic Left Dislocation*, as in (271), and *(Clitic) Right Dislocation*, as in (272), respectively (the former construction is discussed in Cinque 1990; Iatridou 1991 and Anagnostopoulou, van Riemsdijk and Zwarts 1997, the latter in chapter 2, section 2.2.):

(271)   a.   *Tu Giani   tu   edhosa   to vivlio*
             The Gianis-GEN Cl-GEN   gave-1sg the book

         b.   *S-ton Giani (* tu)   edhosa   to   vivlio*
             To-the Gianis Cl-GEN gave-1sg the book
             'To John I gave the book'

(272)   a.   *Tu   edhose   to   vivlio*
             Cl-GEN   gave-3sg the book-ACC
             I   Maria   # tu Giani
             the Mary-NOM   the Gianis-GEN

         b.   *(*Tu)   edhose   to   vivlio*
             Cl-GEN gave-3sg the book-ACC
             I   Maria   # s-ton   Giani
             the Mary-NOM   to-the Gianis
             'It was Mary that gave him a book, to John'

As will be seen immediately, French, in contrast to Greek, by and large limits cliticization to phrases headed by *à.* (Kayne 1975: 134-160; see in particular Kayne 1975: 141-2 for a reanalysis of apparent dative cliticization with *après, sur / dessus).* In this respect, *à*-phrases behave similarly to Greek genitive DPs and differ from *se*-PPs (see Jaeggli 1982: 29 for further discussion of cliticization with *à*-datives in French).

As has been pointed out in chapter 2 (section 2.2), French lacks clitic doubling (see e.g. Kayne 1975; Jaeggli 1982; Sportiche 1992, 1998 among many others; though see Kayne 1999 for a qualification concerning doubling of pronouns). Thus, independent factors exclude the French counterpart of (18). However, there are other constructions in

which dative clitics undergo chain formation. In these contexts, the foot of the chain must be occupied by an *à*-phrase. For one, in what Kayne (1975: 138-139) calls the *detachment construction*, a dative clitic may form a chain with a right dislocated PP headed by *à*, as illustrated by (273). Detachment with other PPs, such as *pour* in (274), leads to ill-formed results, though:

(273) a. *On leur   en   construira, à tes   amis*
               We Cl-DAT   Cl-PART build-FUT,   to your friends
               'We'll build some for your friends'
       b. *Cela leur   est pénible, à ces   enfants*
               This Cl-DAT is   painful, to those children
               'This is painful for those children'
(274) a. **On leur   en   construira,   pour tes   amis*
               We Cl-DAT   Cl-PART build-FUT,   for   your friends
               'We'll build some for your friends'
       b. **Cela leur   est pénible, pour ces   enfants*
               This Cl-DAT is   painful, for   those children
               'This is painful for those children'

Another instance of chain formation of a dative clitic with an *à*-phrase involves stranded quantifiers. As exemplified by the contrast between (275a) and (275b) (Kayne 1975: 136), dative clitics may associate with quantifiers introduced by *à*, but not, for example, with quantifiers introduced by *pour*:

(275) a. *Elle leur   a   souri   à   tous*
               She   Cl-DAT has smiled   to all
               'She smiled at all of them'
       b. **Il leur   en   a   construit pour tous les deux*
               He Cl-DAT Cl-PART has built   for   both of them
               'He built some for both of them'

In sum, cross-linguistic comparison between French and Greek demonstrates that French *à*-datives exhibit hybrid characteristics. The majority of the diagnostics suggest that *à*-datives share the syntax of prepositional ditransitives, i.e. they pattern with Greek *se*-datives. More precisely, it has been seen that (i) both *à* and *se* are either used as locative or dative prepositions; that (ii) goals headed by *se* and *à* may either precede or follow themes, and linear precedence is mapped into asymmetric c-command; that (iii) *se*-PPs and *à*-datives do not block NP-movement in passives and unaccusatives while they do so in raising constructions; and that (iv) both types of datives are licit in nominalizations. Moreover, the latter two criteria provide evidence that *à*-datives are not introduced by vAPPL. This entails as an important consequence that *à*-datives do not take part in the formation of double object constructions. (The same view is expressed in Kayne 1975, 1984 who treats *à*-constructions as the counterparts of prepositional ditransitives in English.)

But it was also seen above that two tests (co-ordination and cliticization) group *à*-phrases together with Greek genitive DPs, instead of Greek *se*-PPs. This complex patterning of *à*-datives signals that the typology of ditransitives is richer than is commonly assumed. In particular, the diagnostics derived from co-ordination and cliticization suggest that not all indirect objects which surface as DPs need to be related to an applicative head. I will have to leave the exploration of ramifications of this hypothesis to further research.

9. Finite Complements

This section briefly addresses a complication posed by structures in which *fenete* / 'seem' subcategorizes for an indicative – instead of a subjunctive – complement. Interestingly, these contexts are equally subject to the restriction that dative experiencers must surface either as clitics or as clitic doubled DPs:

(276) a. *Tis   fenete   (tis Marias)*
      Cl-GEN seem-3sg the Maria-GEN
      oti / pos ta   pedhia   dhoulevoun poli
      that   the children work-3pl   much
      'It seems to Mary that the children work hard'

   b. **Fenete   tis   Marias*
      Seem-3sg   the Maria-GEN
      oti / pos ta   pedhia   dhoulevoun poli
      that   the children   work-3pl   much
      'It seems to Mary that the children work hard'

   c. *?*Fenete   stin   Maria*
      Seem-3sg   to-the Maria
      oti / pos ta   pedhia   dhoulevoun poli
      that   the children work-3pl   much
      'It seems to Mary that the children work hard'

If it is assumed, as is standard practice, that the constructions in (276) do not involve raising, the contrast between (276a) on the one hand and (276b) / (276c) on the other can evidently not be explained by reference to locality. Below, I will consider and discard an alternative account, proceeding from there to some considerations which support a raising analysis of (276) after all.

The alternative account alluded to above exploits the different subcategorization of *fenete* in e.g. (276). Suppose that *fenete* invariably subcategorizes for a Clitic Phrase (ClP), which in turn can host a genitive clitic and / or a clitic-doubled DP (for discussion of ClP see Sportiche 1992, 1998; Anagnostopoulou 1994 and Torrego 1998 among others.) On one plausible implementation of this idea, the clitic in (276a) moves out of such a ClP to the immediate right of *fenete* (Uriagereka 1995). Thus, the clitic in (276a) signals the presence of a ClP, while (276b) and (276c) do not meet the subcategorization requirements of *fenete.*

There are however two reasons to reject the subcategorization analysis of (276). First, *fenete* falls in a well-defined class of unaccu-

sative predicates which are characterized by three properties: (i) they lack a thematic subject position when an experiencer is present, (ii) they do not assign structural Case and (iii) they are stative. The problem for the subcategorization account is now that all exponents of this group – with the exception of *fenete* – license experiencer *se*-PPs without cliticization. It would accordingly remain mysterious why only *fenete* requires the presence of a ClP and does not tolerate *se*-complements.

Second, the prohibition on PP-experiencers is canceled in contexts where *fenete* selects for an adjectival small clause, provided that the experiencer undergoes extraposition to the right of the AP (see fn 65, section 8.3.1 above for discussion of [277]):

(277) ? *O   Gianis   fenete kurasmenos s-tin   Maria*
         The Gianis-NOM   seems   tired   to-the Maria
         'John seems tired to Mary'

Crucially, (277) demonstrates that *fenete* does not exclusively subcategorize for a ClP. It also follows that the ungrammaticality of (276c) cannot be attributed to a subcategorization failure. But, as will be shown next, the examples in (276) can be treated on a par with their subjunctive variants.

In the literature, there are proposals according to which *seem*, qualifies as a raising-predicate even when it selects for a finite complement. This position is e.g. defended in Bennis (1986) and Moro (1997). Moro, in particular, argues that in a sentence like *it seems that John has left* the expletive *it* functions as a pro-predicate that raises to subject position, as schematized in (278):

(278)   [$_{IP}$ it$_i$ seems [$_{SC}$ [that John left] t$_i$]]

According to Moro, this analysis captures the observation that the clausal complement of *seem*, unlike the complements of other verbs, is never allowed to move to a sentence-initial position:

(279) a. *It was affirmed by Peter that John left*
     b. *It seemed to Peter that John left*
(280) a. *That John left was affirmed by Peter*
     b. ** That John left seemed to Peter*

Moro analyzes the examples (279b) / (280b) just like the copular sentences in (281). In both constructions, raising of the expletive *it* is obligatory.[68] He suggests that whatever underlies the ill-formedness of (281b) also accounts for the ungrammaticality of (280b):

(281) a. [$_{IP}$ it is [$_{SC}$ John t]]
     b. *[$_{IP}$ John is [$_{SC}$ t it]]

    Essentially the same distribution of facts is attested in Greek, as shown by (282) and (283), the only exception being that Greek lacks overt expletives due to the pro-drop nature of the language:

(282) a. *Veveothike   apo ton Petro oti efighe o   Gianis*
       Affirmed-Nact by the Petros that left   the Gianis
       'It was affirmed by Peter that John left'
     b. *Tu   fenete oti efighe o   Gianis*
       Cl-GEN seems that left   the Gianis
       'It seems to him that John left'
(283) a. *Oti efighe o   Gianis veveothike   apo ton Petro*
       That left   the Gianis affirmed-Nact by the Petros
       'That John left was affirmed by Peter'
     b. ** Oti   efighe o   Gianis tu   fenete*
        That left   the Gianis Cl-GEN seems
      *'That John left seems to him'

I therefore propose to adopt Moro's analysis for Greek *fenete*. On this view, the experiencer genitive DP in (276b) and the PP in (276c) block raising of the covert counterpart of *it* from the complement of *fenete* to the matrix T. The experiencer may on the other hand be

projected if it is part of a clitic dependency (276a). The reasons for this escape hatch strategy will be dealt with in the next chapter.

10. Summary: the theory, the data, the arguments

In this chapter, I argued that the complex restrictions on NP-movement in the presence of dative arguments are correctly accounted for in terms of three key hypotheses:
(a) Movement cannot proceed across intervening features (Chomsky 1995, 2000, 2001a, 2001b). In A-movement these are EPP and Case features (Alexiadou and Anagnostopoulou 1998, 1999c, 2001).
(b) The MLC is relativized to Minimal Domains (Chomsky 1995, 2000; Collins 1997).
(c) In the double object construction, the indirect object is introduced by a semi-functional head vAPPL merged above the VP containing V and the theme (Marantz 1993).

These hypotheses are logically independent and have been introduced in the literature on the basis of varying conceptual and empirical motivations. The present proposal is an attempt to synthesize them into a coherent theory of how A-movement proceeds in ditransitives. A comparative investigation of old and new data from various languages has led me to an analysis which incorporates the ideas in (a), (b) and (c) above as its basic components. More specifically, I argued that such a theory successfully accounts for the conditions on theme-NP-movement in passives and unaccusatives with a dative goal or experiencer; object shift in ditransitives, locative and dative inversion; and raising across an experiencer in Greek, English, Japanese, Icelandic, German, Dutch, Swedish, Norwegian, Danish, Italian and French. The essential steps in the development of the proposal can be summarized as follows:

In the first part of chapter 3 (section 2), I reviewed Case-based explanations for the absence of direct passives in asymmetric languages (e.g. English). I argued that these accounts cannot be maintained for

two reasons: First, there are languages like Greek, in which all arguments satisfy their respective Case requirements, but which nonetheless do not license direct passives (section 2). Second, Case-theoretic accounts are ill equipped to express generalizations which link the unavailability of theme passivization to the ill-formedness of raising across experiencers (section 8.3). The conclusion drawn was that locality-based theories (section 3) provide a better foundation for formulating restrictions on NP-movement in the presence of dative arguments.

The second part of chapter 3 (subsuming sections 6, 7 and 8) addressed the question of which version of locality (within the general framework outlined in section 4) can best accommodate the empirical generalizations. One important task of the theory consisted in predicting the communalities and disparities of the various manifestations of experiencers and goals. (They may surface as PPs, or DPs with structural or lexical / inherent Case). A second, partly related, desideratum was to correctly distinguish environments in which datives block movement from those where they do not. I argued that a coherent answer to these two questions is provided by a theory which takes A-movement to be sensitive to Case and EPP features (*hypothesis a*), and which locates each object in the double object construction in a VP-layer of its own (*hypothesis c*). Furthermore, cross-linguistic evidence mainly drawn from symmetric and asymmetric Germanic languages lent strong support to the conclusion that the locality metric on movement (MLC) is not just defined in terms of c-command, but has to be relativized to Minimal Domains (*hypothesis b*; this assumption also derived some hitherto unrecognized systematic dependencies between different types of object shift, passivization and order restrictions on multiple movement.) Finally, the actual factor responsible for all cross-linguistic variation between symmetric and asymmetric languages was identified with the parametric availability of successive cyclic A-movement (section 8.2). In short, I proposed that these differences follow from the hypothesis that in symmetric languages, themes are allowed to undergo successive cyclic movement to T (in passives) and v (in OS) through a

(secondary) specifier to vAPPL, while this option is not available for asymmetric languages.

Chapter 4
Clitics obviate locality effects

1. Introduction

In chapter 3, I argued on the basis of a detailed study of passiviza-
tion, OS and raising across languages that locality does not simply
reduce to "closest c-command" but is subject to the principle of
equidistance. In particular, A- movement of derived subjects across
higher goals and experiencers is illicit when the two arguments are in
different minimal domains and licit when they are in the same mini-
mal domain. The latter derivations fall under case (ii) of the defini-
tion of equidistance (122), repeated here:

(122)   If β c-commands α, and τ is the target of movement, then β is
        closer to τ than α unless β is in the same minimal domain as
        (i) τ or (ii) α.

Movement is licit because β (the c-commanding goal or experiencer)
is at some stage in the derivation in the same minimal domain as α
(the derived subject).

   In this chapter, I argue that MLC violations can be systematically
obviated when the dative argument is realized as a clitic or as a
member of a clitic doubling chain due to (i) of (122). In such cases,
movement is licit because β (the cliticized / clitic doubled goal or
experiencer) is in the same minimal domain as τ (the target of
movement T). Dative cliticization thus provides further evidence for
the central role of equidistance in the theory of locality.

2. Clitics in French, Italian and Greek

Recall from chapter 2 that cliticization of indirect objects systematically licenses A-movement, an operation blocked in the absence of clitics due to the MLC. This effect of clitics is found in all Greek NP-movement constructions (passives, unaccusatives, raising), as well as in French and Italian raising (in passives and unaccusatives without clitics, NP-movement is well-formed for the reasons discussed in chapter 3, section 8.3.2). Example (33) vs. (31a), repeated here, illustrates the rescuing role of clitics in Greek passives; (72b) vs. (67b), illustrates their role in Italian raising:

(31)   a.   ?* *To   vivlio   charistike   tis   Marias*
                 The book-NOM   award-Nact   the   Maria-GEN
                 apo   ton Petro
                 from   the Petros
            ?* 'The book was awarded Mary by Peter'
(33)   *To   vivlio   tis   charistike   (tis Marias)*
              The   book-NOM   Cl-GEN   award-Nact   the Maria-GEN
              'The book was awarded to Mary'
(67)   b.   ?* *Gianni sembra a   Piero   [t fare   il   suo dovere]*
              Gianni seems   to Piero   to do the his duty
              'Gianni seems to Piero to do his duty'
(72)   b.   *Gianni non gli   sembra [t fare   il   suo dovere]*
              Gianni not to him seem   to do the his duty
              'Gianni doesn't seem to him to do his duty'

The grammaticality of (33) and (72b) can be accounted for by an analysis that takes clitics to undergo movement from the indirect object position to the same head targeted by the derived subject, namely T. More specifically, Kayne (1989a, 1991) has argued that clitics move to the left of the functional head in which the verb is found as a result of V-to-I movement. Following, among others, Alexiadou and Anagnostopoulou (2001), I take this head to be T. It is

uncontroversial that nominative arguments also move to T. This entails that in dative cliticization constructions, both the indirect object and the subject target the same functional head. Recall now that, in principle, two arguments are allowed to target the same head. Chapter 3 (section 8.2.1) has already discussed one such instance of multiple movement, i.e. multiple OS to v-TR. In this context, the higher object, which is closer to v-TR, undergoes OS first. The lower object is then allowed to raise to v-TR because the intervening higher one has already been removed. Extending this proposal to NP-movement constructions with dative clitics, I suggest that when a potential intervener (the indirect object) is realized as a clitic, NP movement is licensed by the same strategy which is responsible for multiple OS.

Turning to the details, I will first discuss dative cliticization in the presence of an external argument, proceeding from there to the derivations of e.g. (33) and (72b) in which the external argument is absent.

(284) depicts a derivation involving a dative clitic and a deep subject. As the subject serves as the external argument, it is contained in the minimal domain of v-TR, which excludes the dative, and therefore moves to T first (Step I in [284]). The dative clitic in the minimal domain of vAPPL is fronted next. Movement of the clitic across the trace of the subject is legitimate because traces do not count as interveners (Chomsky 1995, 2000, 2001a, 2001b). In addition, the clitic may further raise to T because the raised subject is in the minimal domain of T (Step II in [284] is perhaps decomposed into movement to v-TR and movement to T; see below and chapter 5).

When the construction lacks an external argument, the derivation proceeds as in (285) (I assume that v-INTR does not serve as a target for movement). In the first step, the higher dative clitic moves to T, followed by raising of the lower nominative. Further A-movement of the nominative to T is licensed by clause (i) of (122), since the cliticized goal or experiencer is in the minimal domain of the target T. Neither Step I nor Step II of (285) violate the MLC at any stage, ex-

plaining the grammaticality of NP movement in the presence of indirect object genitive or dative clitics in examples like (33) and (72b).

(284)
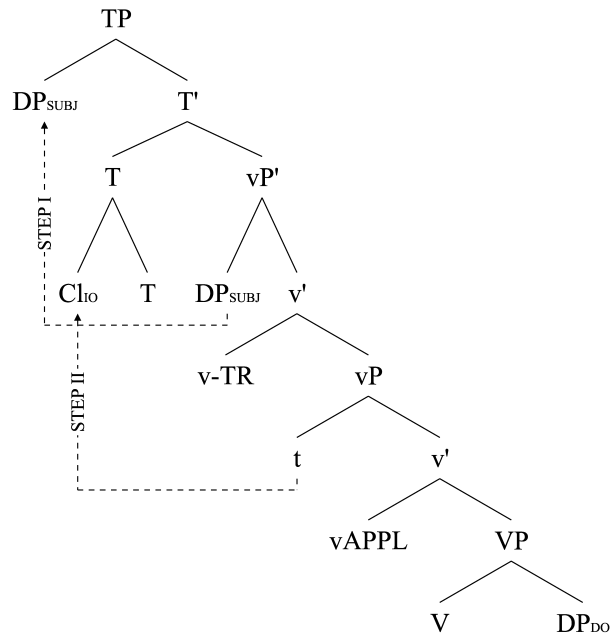
(285)
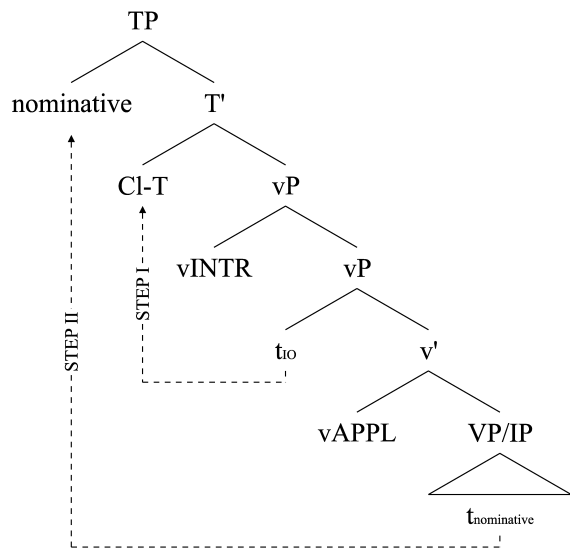
A potential objection to the analysis in (285) materializes at this point. Recall that, according to Richards (1997), multiple movements to a single head necessarily result in crossing paths, as they involve "tucking in". Richards (1997: 102) observes that cliticization in many languages is one case in point in which multiple movement operations lead to crossing dependencies. For example, Tagalog subject clitics necessarily precede object clitics, as shown by (286):[69]

(286) *Nakita niya   ako / *ako niya kahapon*
       Saw   (s)he   me / me   (s)he yesterday
       'She saw me yesterday'

But the derivation in (285) does not show the expected "tucking in" effect. I propose that this is so because the nominative moves as an XP while the clitic moves as a head (or as a set of features; see section 3 below). It appears that the base order among arguments is preserved only if all arguments uniformly undergo the same type of movement process (XP-movement e.g. in multiple OS, and head movement in contexts of multiple cliticization; for certain complications in the latter case arising from interactions between syntax and morphology see fn 69 above and chapter 5, section 5.3.7). On the other hand, when a construction combines phrasal and head movement to the same functional head, the phrase moves to a specifier and the head moves to the head, resulting in a configuration in which the phrase precedes the head, regardless of the order of the movements. For this reason, the derivations (284) and (285) lead to identical word orders.

The analysis of the obviation effect of clitics developed in this section generates two predictions. First, it leads one to expect that in Greek constructions with a genitive indirect object and an accusative direct object, cliticization should operate just like OS in Icelandic. This is so as the vP-shell of these contexts is structured in the same way as the vP which underlies OS in Icelandic. The relevant derivation for Icelandic OS is repeated below (see chapter 3, section 8.2.1):

(233)

```
            v1P
           /  \
             v1P
            /   \
         SUB     v'
                /  \
            v-TR    v2P
                   /  \
                 IO    v'
                      /  \
                  vAPPL   VP
                         /  \
                        V    DO
```
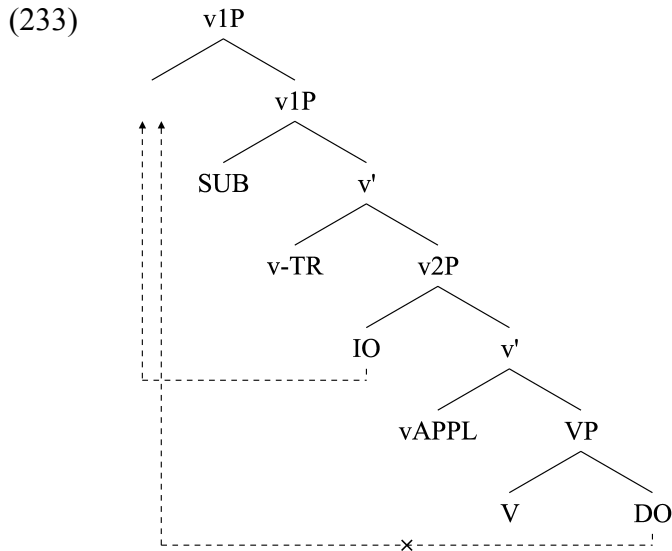
More specifically, in transitive sentences, indirect objects in Greek should be allowed to surface as clitics when direct objects are realized as accusative DPs, while the reverse – i.e. indirect object DPs with direct object clitics – should not be attested. Assuming that cliticization involves movement, the indirect object DP should block cliticization of the direct object, in the same way in that indirect objects in Icelandic block OS of the direct object.

To be more precise, in chapter 3, it has been argued that the Greek genitive indirect object is introduced by vAPPL. The direct object clitic will thus have to move across the indirect object in order to (i) raise to v-TR and then to T (by hypothesis, v-TR is a potential landing site for movement, unlike v-INTR) or in order to (ii) move to T directly, which hosts complex verb Vb, consisting of v-TR, vAPPL and V. (See [292] below for the details of the latter derivation.) Since the genitive indirect object is in the minimal domain of vAPPL, which contains neither the direct object nor the target of the direct object clitic (v-TR or the complex T-Vb), DO cliticization across the genitive is predicted to be blocked. Locality should on the other hand

permit cliticization of the indirect object; again, the derivation runs parallel to Icelandic, which permits OS of the IO, but not of the DO.

Recall, furthermore, that in Icelandic, the ban on OS of the DO is lifted if the IO has undergone OS as well, as illustrated by (234):

(234)
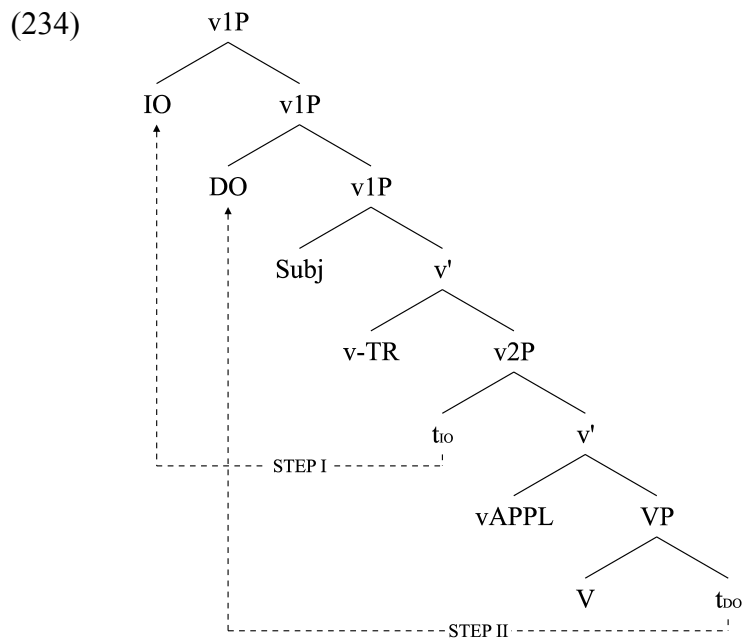
The second prediction, therefore, is that in Greek active sentences, the direct object should be able to cliticize as long as the indirect object is also cliticized, similarly to Icelandic, where OS of the direct object is contingent upon OS of the indirect object.

Interestingly, although the predictions above are borne out for Greek, they manifest themselves only in a limited, but well-defined, set of contexts: DO cliticization is dependent on IO cliticization only if the DO clitic is marked for gender. When the DO clitic is unspecified for gender, it may freely move across the IO in apparent violation of the MLC. The sentences in (287) and (288), which involve feminine and masculine animate direct object clitics, respectively, exemplify the regular pattern (the a-examples serve as controls).

Combining a DO clitic and an IO DP leads to deviance, as in (287b) and (288b), whereas cliticization of the IO is not only tolerated (see c-examples), but even licenses DO clitics (d-examples).

(287) a. *Sistisa   tu adhelfu   mu*
         Introduced-1sg the brother-GEN my
         tin fili   mu   tin Maria
         the friend-ACC my-GEN the Maria-ACC
         'I introduced my brother my friend Mary'

    b.*?*Tin   sistisa   tu adhelfu   mu*
         Cl-ACC-FEM introduced-1sg the brother-GEN my
         'I introduced her to my brother'

    c. *Tu   sistisa   tin fili   mu*
         Cl-GEN introduced-1sg the friend-ACC my
         tin Maria
         the Maria-ACC
         'I introduced my brother my friend Mary'

    d. *Tu   tin   sistisa*
         Cl-GEN-MASC Cl-ACC-FEM introduced-1sg
         'I introduced her to him'

(288) a. *Tha stilo   tis Marias   ton gio   mu*
         FUT send-1sg the Maria-GEN the son-ACC my
         gia tis dhiakopes   tu kalokeriu
         for the vacations-ACC the summer-GEN
         'I'll send Mary my son for the summer-vacation'

    b.*?*Tha ton   stilo tis Marias*
         FUT Cl-ACC-MASC send the Mary-GEN
         gia tis dhiakopes   tu kalokeriu
         for the vacations-ACC the summer-GEN
         'I will send him to Mary for the summer vacation'

    c. *Tha tis   stilo   ton gio   mu*
        FUT Cl-GEN-FEM send-1sg the son-ACC my
        gia tis dhiakopes   tu kalokeriu
        for the vacations-ACC the summer-GEN
        'I'll send Mary my son for the summer-vacation'

    d. *Tha tis   ton   stilo*
        FUT Cl-GEN-FEM Cl-ACC-MASC send-1sg
        gia tis dhiakopes   tu kalokeriu
        for the vacations-ACC the summer-GEN
        'I will send him to her for the summer vacation'

On the other hand, when the direct object clitic is inanimate and bears neuter gender, the intervention effect of the genitive IO is extremely weak, or vanishes all together, as illustrated by (289). While (289c) and (289d) are perfect, (289b) might be a bit marked, but contrasts sharply with (287b) and (288b) above:

(289) a. *O Gianis   edhose tis Marias   to klidhi*
         The Gianis-NOM gave-3sg the Maria-GEN the key-ACC
         'John gave Mary the key'

      b. ?*O Gianis   to   edhose*
         The Gianis-NOM Cl-ACC –NEUT gave-3sg
         tis Marias
         the Maria-GEN
         'John gave it to Mary'

      c. *O Gianis   tis   edhose*
         The Gianis-NOM Cl-GEN-FEM gave-3sg
         to klidhi
         the key-ACC
         'John gave Mary the key'

      d. *O Gianis tis   to   edhose*
         The Gianis Cl-GEN-FEM Cl-ACC-NEUT gave-3sg
         'John gave it to her'

The observations above support the generalization that genitive IOs in Greek block cliticization of accusative DOs when the accusative DOs are specified for animacy (+animate) and gender (+feminine, +masculine). When the accusative DOs are [-animate] and / or [neuter], the predicted MLC effects are missing.

Whether the ungrammaticality of examples like (287b) and (288b), where DO clitics are animate, masculine or feminine, is due to grammatical gender or due to animacy can, in principle, be decided on the basis of contexts such as in (290) where the accusative clitic is [-animate], but its gender is feminine or masculine. Unfortunately, these environments involve another complication. Keeping constant the gender of IO and the [-animate] clitic as in (290b) leads to results which greatly improve over combinations of IOs and DOs that do not observe gender matching, as in (290c).

(290) a. *O   Petros eghrapse mia karta   ke*
           The Peter   wrote   a   card-ACC-FEM and
       b. *tin   estile   tis Marias*
           Cl-ACC-FEM   sent-3sg   the Maria-GEN-FEM
           'Peter wrote a card and he sent it to Mary'
       c. *??tin   estile   tu Kosta*
           Cl-ACC-FEM   sent-3sg   the Kostas-GEN-MASC
           'Peter wrote a card and he sent it to Kostas'

In addition, such a "gender matching" effect is not attested when the clitic is animate, as in (291), in which the choice of verb (*sistino* 'introduce') enforces an animate interpretation of the masculine or genitive clitic:

(291) a.*? *Tin   sistisa   tis adhelfis   mu*
           Cl-ACC-FEM   introduced-1sg the sister-GEN   my
           'I introduced her to my sister'

b.*?*Ton   sistisa   tu adhelfu   mu*
    Cl-ACC-MASC introduced-1sg the brother-GEN my
    'I introduced her to my brother'

These sentences are ungrammatical, even though the grammatical genders of the accusative clitic and the genitive DP match.

Since it is not easy to decide whether the feature responsible for the selective intervention effect of genitives in cliticization contexts like (287)-(291) is animacy or gender, I will assume that the effect illustrated above is related to a single feature which subsumes both. In the literature animacy has been assumed to be a gender feature (see Corbett 1991 who describes a number of languages that make gender distinctions on the basis of animacy; see Alexiadou and Anagnostopoulou 2002 for a recent discussion).

Under the further assumptions that (i) neuter accusative clitics do not have a gender / animacy feature, (ii) feminine and masculine clitics have a gender / animacy feature and (iii) genitive indirect object DPs always have a gender / animacy feature (recall from chapter 2 that they have to be animate), the selective intervention effects described above can be accounted for if, in the contexts under discussion, the MLC violation is caused by gender / animacy. Specifically, I propose that in transitive sentences the gender / animacy feature of genitive DPs blocks movement of a [+animate / +gender] accusative DO clitic across it, an assumption that accounts for the ungrammaticality of (287b), (288b), (290c) and the examples in (291). The MLC effect in environments of NP-movement is induced by categorial D-features of genitive DPs, which block movement of the lower nominatives. On the other hand, it must be assumed that the D-features of genitives do not block cliticization in transitive environments in order to account for the well-formedness of examples involving a DO clitic not specified for gender like (289b). This leads to the conclusion that the intervention effect of genitive indirect objects in transitive sentences with direct object cliticization is not caused by the same feature that blocks NP-movement in non-active sentences. While genitive DPs block movement in both tran-

sitives and NP-movement constructions, the features causing the violation differ from case to case (animacy / gender in transitives, a categorial feature in passives, unaccusatives and raising sentences).

The reason for this disparity can be traced to the fact that two distinct functional heads serve as attractors of the accusative and the nominative argument, respectively: In Greek sentences involving NP-movement, the derived subject checks Case subsequent to movement to T. T in turn hosts a D feature, which needs to be eliminated by the closest suitable DP, accounting for the blocking effect induced by IO DPs. By contrast, accusative clitics in transitive clauses move to T through an intermediate movement step to v-TR, where they check Case (see the two OS-derivations [233] and [234] above). Assuming that the gender / animacy feature causing the MLC violation is an active feature on v-TR, gender / animacy effects are correctly predicted to be attested in transitive sentences. (See Alexiadou and Anagnostopoulou 2002 for arguments that gender / animacy features are systematically located in v-TR across languages and are checked by accusative objects.) More specifically, gender / animacy on v-TR must be checked against the closest DP bearing a matching feature, which in the configuration (233) is once again instantiated by the IO. There are now two ways to obviate locality effects. First, the DO may cliticize when the IO has been moved first, in analogy to the derivation of multiple Icelandic OS in (234). Second, a MLC violation can also be avoided if the DO clitic does not bear a gender feature, as in (289b). In these environments, the accusative clitic lacks a feature (i.e. gender) which the intervening dative DP could block in the first place. (Note that clitic movement is not triggered by gender, but by semantic or phonological factors; see e.g. Uriagereka 1995 or Diesing and Jelinek 1995.)

Finally, it should be pointed out that nothing in the analysis of cliticization developed in this section bears on the exact location in which clitics check their features. That is, the same results would obtain if clitics moved to T directly, subsequent to v-to-T raising. A derivation along these lines is depicted in (292). (292) proceeds just like (234), except that object cliticization is preceded by movement of v-TR to T.

In the first step of the derivation (292), the external argument raises to T. By assumption, T contains the complex T-Vb$_{[v-TR,vAPPL,V]}$. The subject checks – and deletes – the features of T, which represents the most proximate (external) head of this complex. Next, in Step II, the dative argument moves to T, where it enters into a checking relation with the lower head of the complex, namely v-TR. Finally, Step III raises the accusative argument to T, where the accusative again checks features of v-TR.

(292)
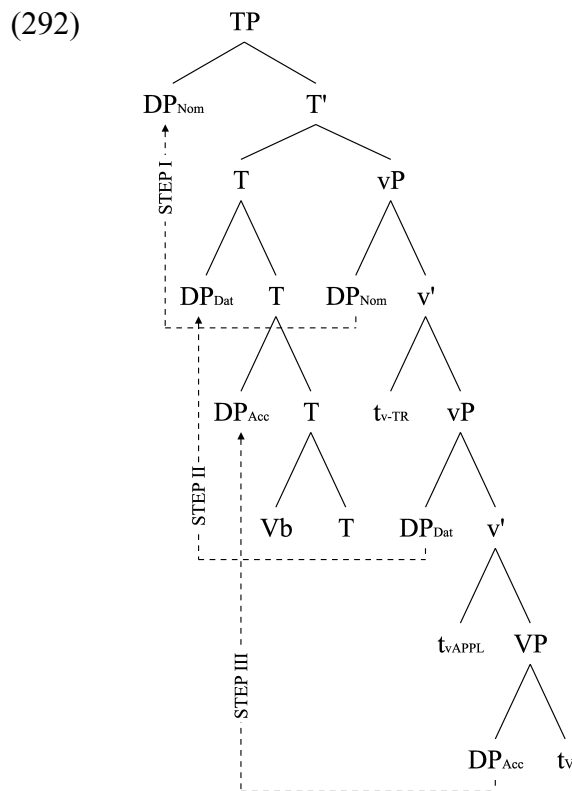
I return to multiple feature checking relations between clitics and functional heads in chapter 5, which addresses in detail person restrictions arising in contexts of multiple cliticization.

3. Clitic doubling in Greek

The analysis of MLC obviation in NP-movement contexts by indirect object cliticization outlined in the preceding section can be straight-forwardly extended to clitic doubling if doubling is also analyzed in terms of movement. On such an analysis, the clitic in T and the dou-bled DP left *in situ* form a chain created by movement, in which the higher position is spelled out as a clitic and the lower one as a DP. As schematized in (285') below, NP-movement across a doubled indirect object is well-formed because the D-features on the interven-ing DP have been removed by cliticization to T:

(285')
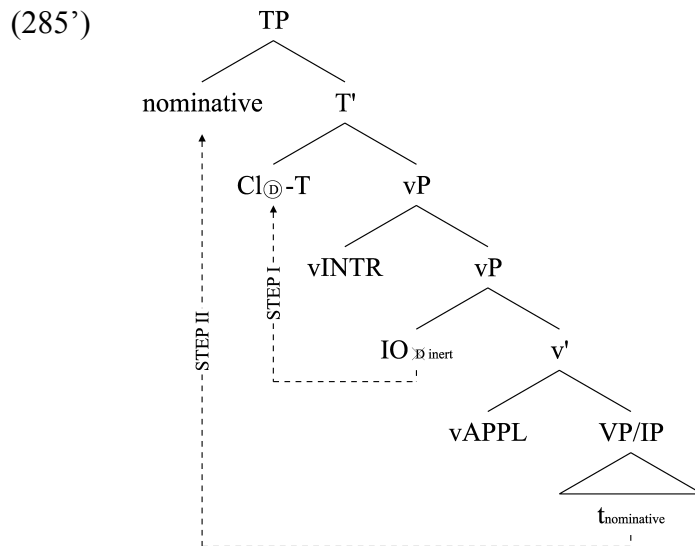
Given the independently motivated assumptions that (i) clitic dou-bling chains qualify as A chains (Sportiche 1992, 1998; Anag-nostopoulou 1994; Alexiadou and Anagnostopoulou 1997) and (ii) only the head of an A chain blocks movement (Chomsky 1995, 2000, 2001a, 2001b), the indirect object DP *in situ* is "invisible" to the movement of the lower nominative across it. Movement of the lower nominative across the *in situ* DP is therefore permitted. Further

movement to T is also permitted by equidistance, as discussed in section 2.

Evidence that clitic doubling is a movement dependency is provided by the observation that the presence of doubling clitics affects binding relationships among DPs (Alexiadou and Anagnostopoulou 1997, 2000b). Specifically, cliticization systematically leads to the cancellation of WCO violations, as is documented by the paradigm in (293). (293a) and (293b) show that in the absence of doubling, the usual subject-object asymmetry obtains. When the direct object is clitic doubled, as in (293d), the object may all of a sudden bind a pronominal variable inside the subject:

(293) a. *[Kathe mitera]$_i$ sinodhepse   [to pedhi tis$_i$]$_j$*
      Every mother-NOM accompanied [the child hers]-ACC
      'Every mother accompanied her child'

   b.*?*[I   mitera   tu$_i$]$_j$ sinodhepse*
      [The mother his]-NOM accompanied
      [to kathe pedhi]$_i$
      the every child-ACC
     ?* 'His mother accompanied every child'

   c. *[Kathe mitera]$_i$ to$_j$ sinodhepse*
      Every mother-NOM Cl-ACC accompanied
      [to pedhi tis$_i$]$_j$
      [the child hers]-ACC

   d. *[I   mitera   tu$_i$]$_j$ to$_i$ sinodhepse*
      [The mother his]-NOM Cl-ACC accompanied
      [to kathe pedhi]$_i$
      the every child-ACC

The same contrasts can be replicated for indirect object clitic doubling, as shown in (294):

(294) a.   *[Kathe mitera]ᵢ   edhose [tu pedhiu tisᵢ]ⱼ*
            Every mother-NOM gave   [the child   hers]-GEN
            faghito
            food-ACC
            'Every mother gave her child food'

    b.*?*[I   mitera tuᵢ]ⱼ   edhose*
            [The mother his]-NOM gave
            [tu kathe pedhiu]ᵢ   faghito
            the every child-GEN   food
    ?* 'His mother gave every child food'

    c.   *[Kathe mitera]ᵢ   tuⱼ   edhose*
            Every mother-NOM Cl-GEN   gave
            [tu pedhiu tisᵢ]ⱼ   faghito
            [the child   hers]-GEN food

    d.   *[I   mitera tuᵢ]ⱼ   tuᵢ   edhose*
            [The mother his]-NOM Cl-GEN   gave
            [tu kathe pedhiu]ᵢ   faghito
            the every   child-GEN food

The findings above indicate that clitic doubling leads to an exten-
sion of the scope domain of objects. Following Alexiadou and Anag-
nostopoulou (2000), this widening can be analyzed as the result of
object raising to the position of the clitic in combination with subject
reconstruction. Backward binding as in (293d) and (294d) follows
from the assumption that binding is computed on the basis of the
derived position of the quantificational object – i.e. the clitic position
– and the VP-internal position of the subject which contains the pro-
nominal variable. Subject reconstruction is optional, as illustrated by
the regular examples including forward binding in (293c) and (294c).

Similar optional reconstruction effects can be found in English
raising contexts, in which the subject may either be interpreted
within the binding scope domain of an intervening experiencer, as in
(295a), or serve as binder, as in (295b):

(295)   a.   *His_j father seems to every boy_j [t to be a genius]*
         b.   *Every woman_j seems to her_j son [t to be a genius]*

Backward binding in (295a) arguably results from reconstruction of the subject to the pre-movement position below the quantificational experiencer, similarly to what is suggested here for Greek clitic doubling (see e.g. Fox 2000 for recent discussion).

   Interestingly, in (some) clitic doubling constructions with a derived subject, the subject cannot take scope over a clitic doubled object, while the clitic doubled object may still bind into the subject (for exceptions see fn 70). As illustrated by (296), experiencer object constructions fall into this group:

(296)   a. ?? *Kathe ghineka_i   tu   aresi*
            Every woman-NOM Cl-GEN please-3sg
            tu   filu   tis_i stin   archi
            the   friend-ACC her   in-the beginning
            'Every woman appeals to her boyfriend in the beginning'
         b. *I   fili   tu_i tu   aresi*
            The friend-NOM   his Cl-GEN please-3sg
            tu   kathe antra_i stin   archi
            the every man   in-the beginning
            'Every man likes his girlfriend in the beginning'

This observation suggests that subject reconstruction is sometimes obligatory, a conclusion which is also supported by the behavior of derived subjects with respect to Principle C. In the transitive constructions in (297), reconstruction is optional and the cliticized object may therefore corefer with a name embedded inside the subject:

(297) a. *[I   mitera   tu   Petru$_i$]   ton$_i$ sinodhepse*
         [The mother the Peter]-NOM Cl-ACC accompanied
         pantu
         everywhere
         'Peter's mother accompanied him everywhere'
    b. *[I   mitera   tu   Petru$_i$]   tu$_i$ efere*
         [The mother the Peter]-NOM Cl-GEN   brought
         faghito
         food
         'Peter's mother brought him food'

If, on the other hand, reconstruction is obligatory, as is the case with experiencer predicates, a disjoint reference effect arises:[70]

(298)   * *[O   filos   tis   Marias$_i$]   tis$_i$ aresi   poli*
         [The friend the Maria]-NOM Cl-GEN please-3sg a lot
         'Mary's boyfriend appeals to her a lot'

Summarizing, according to the analysis proposed here, the obviation of WCO effects under clitic doubling in Greek results from an interaction of movement of the clitic doubled object across the base position of the subject and reconstruction of the nominative.

Note at this point that the analysis of WCO obviation by clitic doubling implies that non-doubling structures do not involve movement of the object to a position above the base position of the subject. This consequence aligns well with Chomsky's (2000, 2001c, 2000b) proposal that Case checking involves Agree instead of covert object raising to AgrO or a specifier of vP. Moreover, note that clitic doubling differs in a crucial respect from the superficially similar expletive construction in English. The latter environment contrasts with clitic doubling in that the associate cannot bind categories outside its surface c-command domain, as illustrated by anaphora licensing in (299), and by pronominal variable binding in (300) (see e.g. chapter 8 of Lasnik 1999 for discussion):

(299) a. *There seem to each other [t to have been many linguists given good job offers]*

   b. *Many linguists seem to each other to have been given good job offers*

(300) a. *There seems to his_j lawyer to have been some defendant_j at the scene*

   b. *Some defendant_j seems to his_j lawyer to have been at the scene*

This contrast follows from the assumption that while Case and agreement in expletive constructions are checked *in situ* by Agree, clitic doubling involves movement.

From a historical perspective, the approach towards clitic doubling based on movement and spell-out of both the head and the foot of the chain is reminiscent of the analyses of wh-elements and resumptive pronouns by Engdahl (1985), Demirdache (1991) and Fox (1994). The two phenomena are not identical, though, as in clitic doubling the pronominal element surfaces in the head position of the chain while in resumptive pronoun constructions it fills the trace. Moreover, in recent work, Pesetsky and Torrego (2001: 372) analyze English *that* as a reflex of T-to-C movement, yielding a chain in which *that* "doubles" T. In their analysis, *that* is the overt realization of the highest occurrence of T in C, similarly to the analysis of clitic doubling proposed here (and also in Anagnostopoulou 1999c; see in particular the discussion in Pesetsky and Torrego 2001: 409, fn 31).

As to the precise nature of the clitic and its relation to the doubled DP object *in situ*, there are at least three ways of describing them, and all three of them are compatible with the analysis in (285'). First, adopting the copy theory of movement, the clitic can be interpreted as the pronominal copy of the DP *in situ*. Similar analyses have been proposed for resumptive pronouns. Second, the clitic can be analyzed as a determiner in a complex DP which also contains the doubled category (Torrego 1988; Uriagereka 1995). The clitic and its associate are separated by movement of the clitic to T, stranding the rest of

the phrase. A third possibility, which I have suggested in previous work (Anagnostopoulou 1997b, 1998, 1999c) presents itself in the form of the assumption that clitics are the phonetic realization of sets of formal features of DPs which overtly move to T (see Roberts 1998 for a similar analysis of auxiliaries as realizations of V-features). On this view, clitics spell out those features of indirect objects which cause MLC violations if cliticization fails to apply, i.e. D-features (the clitic pied-pipes Case features; see Alexiadou and Anagnostopoulou 2001 for the latter).

Morphological evidence that Greek clitics are either determiners or instantiations of D-features of DPs comes from the similarity between clitics and definite determiners in Greek. As can be seen from the paradigms in (301) and (302), third person accusative and genitive determiners are – with the exception of genitive plural – identical to the corresponding clitics.

(301)   *Determiners*

		Masculine	Feminine	Neuter
	Singular			
	Genitive	tu	tis	tu
	Accusative	ton	tin	to
	Plural			
	Genitive	ton	ton	ton
	Accusative	tus	tis	ta

(302)   *Clitics*

		Masculine	Feminine	Neuter
	Singular			
	Genitive	tu	tis	tu
	Accusative	ton	tin	to
	Plural			
	Genitive	tus	tus	tus
	Accusative	tus	tis	ta

Note that the determiner-movement analysis as well as the D-feature movement approach towards doubling relate the ability of the

associate to bind outside its c-command domain to the D-element / clitic (i.e. determiner or D-feature), and not to the properties of the full DP (cf. Yatshushiro 2001 for Japanese locative constructions).

I will close this section with some remarks on the implications of the present analysis for the theory of cliticization, which will be seen to support the position that clitic doubling involves feature chains.

Analyses of cliticization fall into one of two major groups (see van Riemsdijk 1999; Anagnostopoulou 2002 for overviews). According to one view, clitics are generated in an argument position and undergo movement to their surface position (see Kayne 1975, 1989a, 1991 and many others following Kayne). On the alternative conception, clitics are affixes which are base generated in their surface position and which are related to an overt or covert category in the argument position by a relation similar to agreement (Rivas 1977; Jaeggli 1982, 1986; Borer 1984; Suñer 1988; and many others following them). A classical argument for the movement analysis of clitics comes from the lack of clitic doubling in languages such as French and Italian. More specifically, it has been argued that the complementarity between clitics and DPs in non-clitic doubling languages naturally lends itself to an analysis that links the clitic to its argument position by movement. On the other hand, clitic doubling languages are usually taken to support base-generation analyses, since in doubling constructions the argument position is occupied by the DP and therefore cannot serve as the source position for the clitic. I have argued here for the opposite conclusion, i.e. that a language with extensive clitic doubling such as Greek presents syntactic evidence for movement rather than base-generation.

But the present analysis also differs from existing movement approaches. In recent years, two influential theories of cliticization have been developed which both incorporate a movement component: Sportiche's (1992, 1998) *CliticVoice* theory, and the *Complex DP* theory (Torrego 1988; Uriagereka 1995) mentioned above. According to Sportiche (1992, 1998), clitics are functional heads projecting their own phrase to which the doubled DP moves covertly.

The present analysis is incompatible with Sportiche's theory because movement in doubling constructions needs to proceed overtly (it has to precede movement of the nominative, and it is EPP-related). Thus, the determiner movement approach appears to fare better with respect to the Greek data.

But the complex DP approach also encounters problems of its own. To begin with, there is no direct evidence for determiner cliticization out of DPs in Greek (see Uriagereka 1995 for evidence in Galician); moreover, complex DPs of the type postulated in this theory never surface as such. Both problems are resolved if, instead of determiner movement, clitic doubling is analyzed as an overt feature movement construction, with a PF reflex. Feature movement provides a straightforward characterization of clitic doubling chains, which were problematic for all previous theories. In addition, a feature movement analysis naturally accounts for the widely discussed fact that doubling and cliticization chains show properties of XP-movement with respect to locality but pattern with X^0 movement with respect to their landing sites (see in particular Sportiche's [1992, 1998] extensive discussion of the double status of clitic-constructions). As pointed out by Chomsky (1995), formal features of DPs are expected to target head positions, but should be sensitive to intervening features of DPs and therefore observe XP-type locality.

Moreover, this proposal also offers a new perspective on the clitic doubling parameter. Given that doubling is the result of movement without pied-piping of the minimally containing DP, the absence of clitic doubling in e.g. French and Italian can be reduced to the assumption that these languages do not permit formal feature raising without pied-piping.

It should be emphasized that I do not claim that all clitics must be analyzed along the lines proposed here for Greek (and also, for French and Italian). For example, if the analysis of Sesotho clitics suggested in chapter 2 is on the right track, then clitics in this language add an extra case / agreement marker, licensing unaccusatives

based on the applicative construction. On this view, the properties of clitics in NP-movement constructions provide a key to their morpho-syntax. (See section 6 below for an investigation of Spanish clitics in light of this general proposal.)

Finally, as has already been mentioned several times, Chomsky (2000, 2001a, 2001b) seeks to replace feature movement by the simpler operation Agree. Above it was pointed out that expletive-associate chains, which Chomsky analyzes in terms of Agree, do not share the binding properties of clitic doubling dependencies. Hence, the feature movement analysis of clitic doubling entails that feature movement must be postulated as an independent operation which cannot be reduced to Agree.

Summarizing, I have argued that clitics obviate locality violations because, under cliticization, the features of the intervener move out of the way of the lower argument. This leads to the prediction that other instances of movement show a comparable interaction with NP-movement. As will be discussed in sections 4 and 5, this prediction is borne out. Scrambling, topicalization and wh-movement interact with NP-movement in a way similar to cliticization.

4. Scrambling in Dutch

Recall from chapter 2 (section 4.4) that scrambling of datives in Dutch passives and non-alternating unaccusatives facilitates NP-movement of nominatives. Example (79a), repeated below, illustrates the effect of scrambling in passives:

(79) a.?* *dat het boek   waarschijnlijk Marie*
            that the book-NOM probably   Mary-DAT
            gegeven wordt
            given   is

b. *dat het boek   Marie   waarschijnlijk*
    that the book-NOM Mary-DAT   probably
    gegeven wordt
    given   is
    'that the book is probably given to Mary'

NP-movement of the theme across the goal leads to deviance, as shown by (79a), unless the goal scrambles to a position to the left of the adverb, as in (79b). Thus, Dutch provides evidence that scrambling of the indirect object rescues NP-movement constructions, similarly to cliticization in Greek, French and Italian and clitic doubling in Greek.

Miyagawa (2001) argues extensively that A-scrambling in Japanese targets T and is triggered by an EPP-feature. If an analysis along these lines is extended to Dutch scrambling, then the well-formedness of examples like (79b) can be accounted for in terms of the derivations (285) and (285') proposed in sections 2 and 3 for cliticization and clitic doubling respectively. In the first step, the dative argument scrambles to T. In the second step, the nominative argument moves to T as well. Lack of "tucking in" in strings like (79b) can be derived from the assumption that movement to specifiers which check features of different types does not tuck in, as argued for by McGinnis (1998: 115). In (79b) the nominative argument checks Case while the dative checks either EPP or a special feature triggering scrambling (McGinnis 1998 and others have called this feature "Scr").

Even though the analysis for (79) just outlined appears plausible, it misses a broader generalization. In particular, indirect objects in Dutch block all types of movement, and scrambling of the IO is a precondition for any movement operation which shifts categories to the left of the IO, not just for A-movement. For one, den Dikken (1995) points out that the indirect object intervenes in NP-movement as well as in wh-movement of the direct object. Just like in passives and non-alternating unaccusatives, scrambling of the indirect object

opens an escape hatch for wh-movement of the direct object. This is illustrated in (303a,b):[71]

(303) a.?* *Wat   zal Jan waarschijnlijk Marie geven?*
      What   will Jan probably   Mary   give?
   b. *Wat   zal   Jan Marie waarschijnlijk geven*?
      What   will Jan   Mary   probably   give?
      'What will John probably give to Mary?'

Greek behaves more liberally in this respect. In Greek, wh-movement of the direct object is licit in the presence of an undoubled genitive indirect object, as shown by (304):

(304) *Ti   edhoses   tu   Giani?*
    What-ACC   gave-2sg the Gianis-GEN
    'What did you give John'

Furthermore, the intervention effect also emerges in contexts in which the DO moves to the left of the IO by scrambling, as documented by (305a). The contrast between (305b) and (305c) finally demonstrates that multiple applications of scrambling necessarily result in order preserving dependencies, similarly to multiple OS in Icelandic and Danish (see chapter 3, sections 7 and 8; data from Neeleman 1994 discussed in Müller 1997; see also fn 22, chapter 2):

(305) a. * *dat Jan de foto   gisteren de mannen   toonde*
      that Jan the picture yesterday the men   showed
   b. *dat Jan de mannen de foto   gisteren toonde*
      that Jan the men   the picture yesterday showed
   c. * *dat Jan de foto   de mannen gisteren toonde*
      that Jan the picture   the men   yesterday showed
      'that Jan showed the men the photo yesterday'

All three observations above lend themselves to a uniform analysis on the assumption that NP-movement and wh-movement of the direct object in Dutch is contingent on scrambling of both objects to one and the same functional head. As has been discussed in chapter 3 (section 8.2.3), Ura (1996) has proposed this analysis for languages with symmetric passives like Swedish and Norwegian. Recall that one important reason for rejecting Ura's account for Swedish and Norwegian was that it leads to the false prediction that whenever the DO is passivized, the IO has to undergo OS as well. Ura's (1996) analysis yields the correct results for Dutch NP-movement, though, and can can therefore be adopted for this language and be also extended to wh-movement (see Richards 1997 for the latter; for an approach based on Case see Broekhuis 2000).

Turning to the details, the facts that in Dutch, (i) the DO cannot scramble across the IO and that (ii) multiple scrambling is order preserving indicate that the specifier to vAPPL parameter, which permits movement of the DO through an intermediate landing site, namely an outer specifier to vAPPL, is not operative in this language. Dutch contrasts in this respect with Norwegian and Swedish (see chapter 3, section 8.2.1), but patterns along with Icelandic and Danish. As the derivation in (306) shows, multiple scrambling in Dutch proceeds just like multiple OS in Icelandic. First, the IO moves to the scrambling head (X), as it is closer than the DO to the attractor; next, the DO tucks in below it, accounting for the order preserving nature of multiple scrambling. From the scrambling position in (306), the DO is allowed to undergo further movement to a higher head because it is in the same minimal domain as the IO. The DO moves to T in the well-formed example (79b), which involves NP-movement, and to C in (303b). The scrambling head X in (306) either instantiates a functional head between v and T (see Richards 1997 who suggests to analyze it as an Agr-head), or the highest v in the vP-shell (see Ura 1996), which can be equated with v-TR in transitives, and v-INTR in passives and unaccusatives.

(306)

```
                    XP
              ┌──────┴──────┐
             IO            XP
              ↑       ┌─────┴─────┐
              ┊      DO          XP
              ┊       ↑      ┌────┴────┐
         STEP I     STEP II │         │
              ┊       ┊    ┌┴──┐     ┌─┴──┐
              ┊       ┊    X   vP
              ┊       ┊      ┌──┴───┐
              ┊       ┊     t_IO    v'
              ┊       ┊          ┌───┴────┐
              ┊       ┊        vAPPL     VP
              ┊       ┊                ┌──┴──┐
              ┊       ┊                V    t_DO
              └┄┄┄┄┄┄┄┘
```
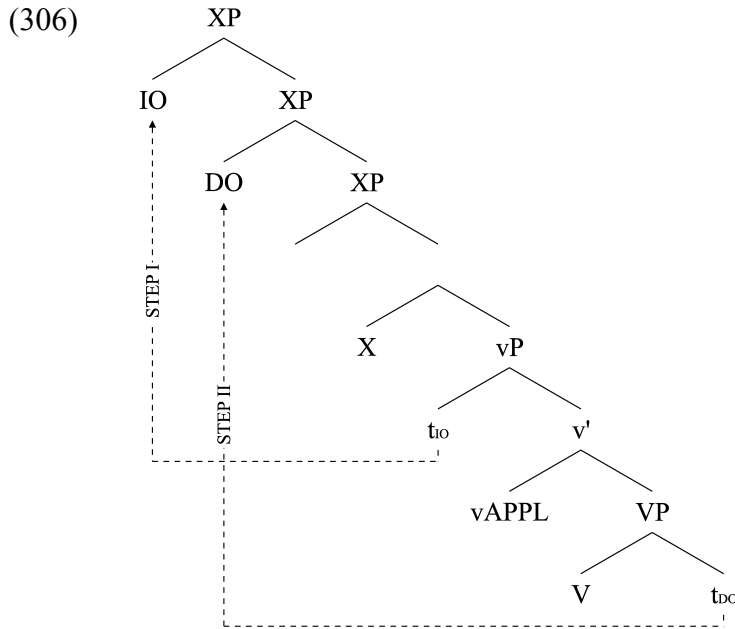
Finally, recall from chapter 2 (section 4.4) that there is a curious difference between Dutch and Greek passives and unaccusatives in which the nominative argument remains *in situ*. While in Dutch, the dative DP may also remain in an unscrambled position in such environments, the well-formedness of the corresponding Greek construction is still contingent on clitic doubling or cliticization. The relevant contrast is repeated in (82a) and (83a):

(82) a. *dat waarschijnlijk Marie   het boek*
          that probably   Mary-DAT the book-NOM
          gegeven   wordt
          given   is
(83) a.*?*(tu)   dhothike   tu Petru   to vivlio*
          Cl-GEN   gave-Nact-3sg the Petros-GEN the book-NOM
          'The book was given to Peter'

The acceptability of (82a) can be accounted for in one of two ways: On a covert movement approach, (82a) can be seen as the result of a covert derivation in which the two objects undergo scrambling, followed by further movement of the nominative to T.

Alternatively, the indirect object in Dutch can be assumed to bear a set of features which blocks Move, but does not interfere in Agree relations (see section 7 below for discussion of the reverse effect in English raising where Move is not blocked but Agree is). More concretely, suppose that the feature turning Dutch datives into interveners is their EPP-feature, and not their Case feature. On this view, Dutch datives bear an EPP feature blocking Move but not Agree, and movement of the direct object across the indirect object is accordingly prohibited unless the indirect object scrambles. T can on the other hand enter an Agree relation with the *in situ* nominative across a (scrambled or unscrambled) dative.

Turning to Greek, the obligatoriness of clitic doubling in (83a) follows from independent factors. In particular, Alexiadou and Anagnostopoulou (2001) argue that the relation between subject agreement on V and the subject in Greek is an instance of clitic doubling. Now, given that clitic doubling involves feature movement, the formal features of the nominative move to T even when the nominative occurs *in situ* (see Alexiadou and Anagnostopoulou 1998 and Alexiadou and Anagnostopoulou 2001: 224-226). Furthermore, feature movement must not cross an intervening dative in a higher minimal domain. It follows that the features of the potentially intervening dative in (83a) must also move to T, accounting for the obligatoriness of clitic doubling.

5. A' movement in French, Italian and Greek

In Italian and French, experiencers which are fronted by topicalization or wh-movement do not prohibit raising, and behave in this respect similarly to clitics (Rizzi 1986; McGinnis 1998). (307a) dem-

onstrates that Italian permits raising in combination with topicaliza-
tion of the experiencer, while (307b) exemplifies the same effect for
wh-movement in French:

(307) a. *A Piero$_i$ Gianni$_j$ sembra t$_i$ [t$_j$ fare il suo dovere]*
       To Piero Gianni seems   to-do the his duty
       'To Piero, Gianni seems to do his duty'
   b. *A qui$_i$ est-ce que Jean$_j$ semble t$_i$ [t$_j$ avoir du talent]?*
       To whom is-it that Jean seems   to-have of talent
       'To whom does Jean seem to have talent?'

Similar facts have also been reported for Greek raising (see Boeckx
2000b, crediting Arhonto Terzi, personal communication), although
the intuitions are not shared by all speakers. More robust judgments
are elicited by passives and unaccusatives, in which NP-movement
of the theme can be salvaged by wh-movement of the indirect object:

(308) a. *Tinos   dhothike   to vivlio?*
       Who-GEN gave-Nact-3sg the book-NOM?
       'Who was the book given to?'
   b. *Tinos   aresun   ta mathimatika?*
       Who-GEN please-3pl the mathematics-NOM
       'Who likes mathematics?'

   The sentences in (307) and (308) provide further support for the
view that movement of an intervener to a higher position is a strategy
systematically used to avoid locality violations. In addition, these
examples show an interaction of the C system with the T system,
which, as will be seen below, can be taken as evidence against
Chomsky's (1995) proposal to derive cyclicity from *feature strength*.
Finally, the paradigms in (307) and (308) will also be shown to con-
stitute an argument in favor of the concept of *phases* (see Chomsky
2000; 2001a; 2001b).
   Consider in more detail the well-formed examples in (307) and

(308). At first sight, they appear to be identical to the derivations considered so far in that the intervener moves first, followed by NP-movement of the lower argument (raising from the embedded to the matrix T in [307]; NP-movement to T from the vP in [308]). However, there is a crucial difference between (307), (308) and all other constructions presented up to now, which included multiple OS, NP-movement salvaged by indirect object cliticization or clitic doubling, cliticization of two objects, and order preserving scrambling of two objects. In all these environments, the higher and the lower argument target the same head (possibly followed by further movement). As extensively discussed in Richards (1997), such derivations align well with the condition (309), which is employed to derive cyclicity in Chomsky (1995):

(309)   A strong feature must be checked as soon as possible after being introduced into the derivation

According to (309), a strong feature must be eliminated as soon as it is introduced in the derivation. This account of cyclicity has two parts to it: (i) it prohibits a lower head with an unchecked strong feature to be merged with a higher head and (ii) it eliminates derivations in which a strong feature is passed by a category that could potentially check it. Crucially, (309) entails that derivations in which a higher argument moves prior to a lower argument are cyclic as long as both arguments target the same head. This is precisely the situation encountered in all the structures discussed so far.

   The examples in (307) and (308) fail to conform with (309), though, as wh-movement / topicalization and NP-movement target different heads (C and T, respectively). On the one hand, the MLC forces A'-movement to C to precede raising of the derived subjects to T. Such a derivation violates (309), though, because the intervener moves to C directly by-passing the strong feature on T. If, on the other hand, the subject raises to T before the experiencer / goal moves to C, cyclicity is observed, but an MLC violation ensues. The

only way to resolve this conflict in the system of Chomsky (1995) would consist in adopting the highly implausible assumption that wh-experiencers and wh-goals may move to C via the intermediate landing site T. Thus, it appears as if the paradigms in (307) and (308) can be seen as *prima facie* evidence against a reduction of cyclicity to feature strength.

Another phenomenon which supports this conclusion, and which is also characterized by dependencies involving T and C, is *stylistic inversion* in French. In contexts of stylistic inversion, the subject is postponed in wh-questions, as in (310a), or in relative clauses, as in (310b) (data from Déprez 1990: 48-49; see also Kayne and Pollock 1978; Collins and Branigan 1997; Watanabe 1996 and others). Subject postposition is contingent on wh-movement, as shown by (311):[72]

(310) a. *Je me demande quand partira   Marie*
           I   wonder   when will-leave Mary
           'I wonder when Mary will leave'
      b. *les resultants   que nous donnent ces   expériences*
           the results   that us   give   these experiments
           'the results that these experiments give us'
(311)   * *Partira   ton   ami*
             Will-leave your friend
             'Your friend will leave'

The ill-formedness of (311) demonstrates that in French the subject must move to T overtly, checking its EPP feature (see e.g. Alexiadou and Anagnostopoulou 1998, 2001 for discussion).

Déprez (1990) has argued extensively that in stylistic inversion, the subject remains inside vP, while the verb resides in C. Adopting this analysis, Alexiadou and Anagnostopoulou (2001) suggest that T raises to C, while the EPP-feature of T is checked in C by the wh-phrase. The subject, which in French normally raises to check EPP, remains in its vP-internal position as EPP can be checked by another

element, similarly to expletive constructions. What is central for present purposes is the observation that this derivation also violates the featural cyclicity condition (309). This is so because (309) does not allow C to merge with T before the (strong) EPP feature of T has been eliminated. To conform with (309), one would once again need to resort to the unorthodox assumption that the wh-phrase moves to C via an intermediate movement step to T, in order to eliminate the EPP feature on T.

The problems posed by (307) / (308) and (310) can both be resolved if countercyclic derivations are admitted in well-defined environments. More precisely, countercylicity should be tolerated as long as the targets of movements are T and C, enabling a wh-phrase to skip T on its way to C. A system which allows exactly these types of limited violations of the strict cycle condition is the theory of *phases* developed in Chomsky (2000, 2001a, 2001b).

In a nutshell, *phases* are syntactic objects which are derived by choosing a subarray from the numeration, and combining the terms of this subarray in the workspace. Once the subarray is exhausted, the computation has formed a phase, and returns to the numeration, extending the tree up to the next phase. Phases are assumed to be characterized by a number of unifying properties: they are "propositional", they are reconstruction sites, they have a certain degree of phonetic independence and are potential targets for (EPP-driven) movement. Furthermore, Chomsky argues that only CPs and vPs headed by a transitive v qualify as phases. Hence, each subarray forming a phase must contain exactly one C or v-TR. Crucially, for present purposes, neither TP nor vP headed by passive or unaccusative v constitute phases. (The discussion here is limited to what Chomsky calls "strong phases").

In a system employing phases, derivations need to proceed strictly cyclically phase-internally, but are subject to somewhat more relaxed conditions as long as they do not cross a phase. Chomsky (2000) introduces two cyclicity conditions on phases, the second of which is standardly referred to as *Phase-Impenetrability Condition (PIC)*:

(312) The head of a phase is "inert" after the phase is completed, triggering no further operations

(313) In phase *a* with head H, the domain of H is not accessible to operations outside α, but only H and its edge.

Condition (312) ensures that a phase head cannot trigger Merge or Attract in a later phase, preventing e.g. Merge of the external argument with v-TR after the derivation has proceeded beyond the vP level. The PIC (313) prohibits operations from looking into the complement of a head of a phase, forcing e.g. movement of an object wh-phrase through a second specifier to v-TR (the edge of vP), so that it can be visible for further movement. In Chomsky (2001b: 13-14), it is furthermore suggested that interpretation / evaluation of a phase takes place at the next higher phase-level, as stated in (314), which leads to the reformulation of the PIC as in (315), where ZP is the next relevant phase Ph_2 and H the head of Ph_1:

(314) Ph_1 is interpreted / evaluated at the next relevant phase Ph_2

(315) The domain of H is not accessible to operations at ZP; only H and its edge are accessible to such operations.

Under the definition (315), a head which does not define a phase, – such as T – is allowed to look into the complement of H – e.g. v-TR – while, for instance, C, which heads a phase, is not allowed to access the complement of v-TR. Note that on this conception, the derivations (285) and (285') proposed for NP-movement in contexts of cliticization and clitic doubling are licit because TP does not count as a phase (see sections 2 and 3, respectively). Therefore, T is free to access the nominative object in the complement of vAPPL, even if vAPPL is – similarly to v-TR – assumed to be able to head a phase. On the other hand, C is prevented from accessing the nominative in the complement position of vAPPL, in case vAPPL is taken to head a phase. By (315), the wh-nominative must therefore move to the edge of the vP headed by vAPPL. (If it were alternatively assumed that

vAPPL does not head a phase, no asymmetry would be expected to arise between NP-movement and wh-movement: in both cases, the argument in the complement of vAPPL should be accessible to T as well as to C.)

The view that cyclicity is determined at the phase-level, combined with the proposal that T does not head a phase, provides a straight-forward account for the countercyclic derivations (307) and (308), which underlie the interaction between wh-movement and NP-movement. These derivations are permitted, because neither movement of the higher experiencer to C nor raising of the lower subject to T crosses a phase boundary. Assuming that cyclicity regulates the interaction between phases according to the conditions (312)-(315), C and T "match" (Haider 1988) for purposes of cyclicity, i.e. they behave as if they were a single head. Furthermore, this proposal also solves the problem posed by stylistic inversion in (310). In (310), movement of T-to-C creates a configuration in which the EPP is checked by the wh-phrase, while the subject remains *in situ*. Once again, such a countercyclic derivation is licit since TP does not qualify as a phase.

A different solution to the same problem can be found in McGinnis (2001), who, following Chomsky (2001a: 27), parses the examples under (307) in terms of the derivation (316). Adopting condition (314), McGinnis (2001) takes a partially representational approach towards the MLC, and argues that locality does not consti-tute a general, panchronic constraint on Move, but is rather evaluated at the completion of each phase. On this semi-representational inter-pretation of the MLC, derivation (316) is ruled in because the local-ity violation induced by subject raising across the experiencer is re-paired by subsequent movement of the experiencer to C, resulting in a well-formed representation at the phase level (i.e. CP). (See also Chomsky 2001a for discussion of subject raising to T across a wh-object which moves to C through an intermediate step of OS.)

(316)

```
                    CP
                   /  \
            PPexpⱼ      C'
                      /   \
                    C       TP
                          /    \
                      Nomᵢ       T'
                                /   \
                              T       VP
                                     /  \
                                   tⱼ     V'
                                        /   \
                                      V       IP
                                             /  \
                                           tᵢ     I'
```

STEP II

STEP I
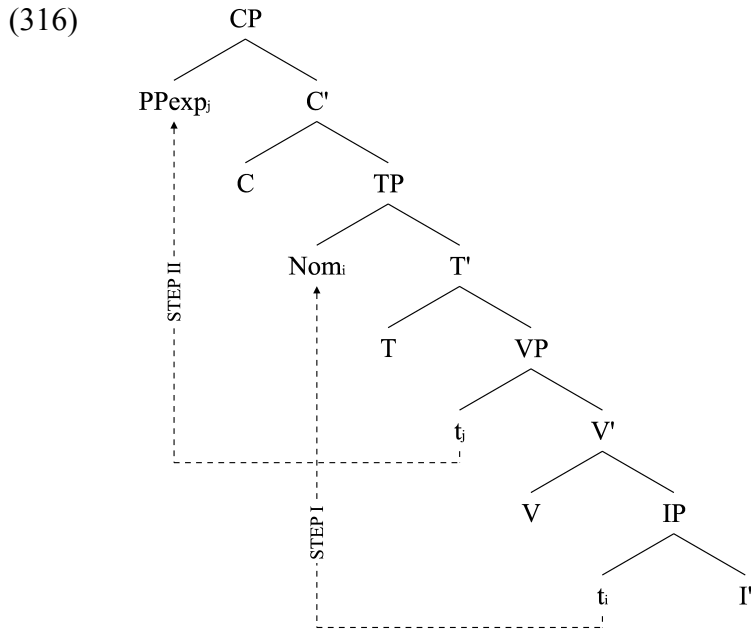
McGinnis (2001) assumes with Chomsky (2001a) that there are two separate notions of cyclicity. On the one hand, strict cyclicity provides a metric for how derivations proceed within phases. Cyclicity at the phase level is on the other hand determined by the conditions stated in (312) to (315) (see also Chomsky 2001a: 27ff). Once this premise is adopted for (307) and (308), it follows more generally that (i) the MLC is always evaluated at the phase level, that (ii) strict cyclicity regulates the order of operations within phases, and that (iii) the cyclicity conditions (312)-(315) restrict relations among sequences of phases. However, as will be seen shortly, this position cannot generally be maintained. In a nutshell, there are counter-cyclic derivations in which two categories target a single head. Crucially, in these contexts the order of the operations is not determined by cyclicity – as predicted by the generalized account sketched in (i)-(iii) above – but by the MLC. In addition, it is also possible to find constructions in which properties of T are satisfied only subsequent to T-to-C movement. This finding is not expected if operations

within a phase need to proceed in a strictly cyclic fashion. In what follows, I discuss these issues in turn.

If derivation (316) is adopted for (307), it should also be generalized to all examples discussed so far in which a higher and a lower argument target the same head. That is, all these examples should be reanalyzed as in (317). In (317) the lower argument DP2 moves across the higher DP1, violating the MLC. Subsequent movement of the intervener DP1 to X repairs the MLC violation.

(317)
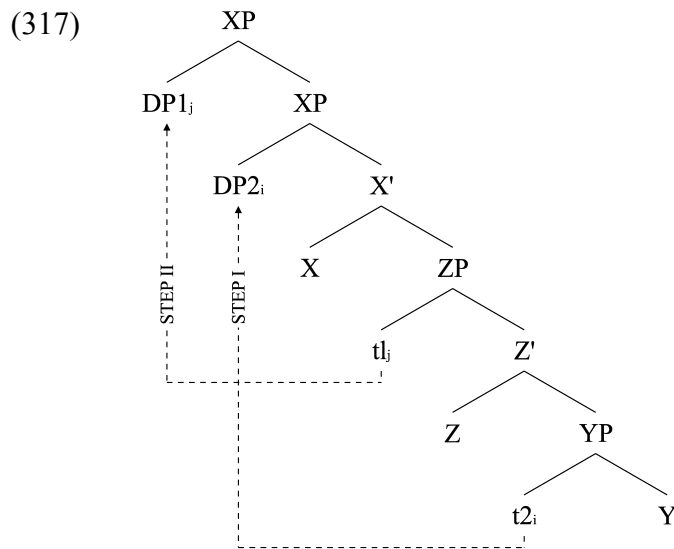
In this analysis, "parallel movement" effects do not involve "tucking in" but rather they follow from the Extension Condition. In (317), DP1, which moves second to X, targets a specifier external to DP2, extending the phrase marker.

The problem for an analysis of multiple movement constructions along these lines comes in form of data that will be discussed in greater detail in chapter 5. Anticipating somewhat, chapter 5 presents evidence that (317) yields incorrect results for combinations of object clitics, and combinations of weak object pronouns which move to the same functional head (v-TR). For the analysis of both con-

structions it is instrumental to assume that the higher indirect object raises to v-TR before the lower direct object moves. This ordering condition is reflected by the observation that the indirect object imposes a restriction on possible person specifications of the lower argument. Crucially, such a derivation clearly fails to align with the claims inherent in (317), but is directly compatible with the MLC solution pursued here. This finding in turn can be taken to indicate that the MLC is part of the definition of Move, regulating the order of movement operations, rather than a condition on chains which is evaluated at the phase level.

A second problem for the view that derivations proceed strictly cyclically within phases is posed by the observation that cyclicity must be relaxed or suspended in the contexts of C / T interaction discussed above, among them stylistic inversion (and possibly also V-2 phenomena; see Haider 1988). In examples like (310a) and (310b), the requirement of T to merge with a specifier (EPP) is satisfied only after T and the wh-phrase move to C. This explains why the subject remains *in situ*, an option otherwise unavailable in French. If strict cyclicity were indeed part of the algorithm guiding the order of operations within phases, the subject would have to move to T before C is merged, because the requirement of T to merge with an XP would have to be met as soon as T is inserted into the tree.

On the alternative view advocated here, satisfaction of the EPP-feature of T can be delayed until C is merged, because TP is not a phase. *Ceteris paribus*, the same analysis carries over to (307) and (308). To begin with, the computation observes the MLC, as movement of the experiencer or goal to C precedes subject raising to T. Moreover, the cyclicity conditions in (312)-(315) are met throughout the derivation. Thus, locality governs the order of operations within phases, while the cyclicity conditions (312)-(315) determine how the $v_{TR}P$ and CP domains interact.

The considerations above conclude the discussion of wh-movement. It was seen that wh-movement constitutes a further strategy to avoid locality violations, apart from cliticization, clitic dou-

bling and scrambling. Finally, the analysis provided evidence that the principles underlying cyclicity count sequences of heads within one phase as a single head, resulting in derivations which permit phase-internal counter-cyclic movement.

6. Clitics and clitic doubling in Spanish

In Spanish, raising across a cliticized or a clitic doubled dative experiencer is illicit, unlike French, Italian and Greek (Torrego 1996, 1998; McGinnis 1998). This is exemplified in (306) for simple cliticization:

(318) a. *Este taxista   parece [t   estar   cansado]*
           this   taxi driver seems   to-be   tired
           'This taxi driver seems to be tired'
       b. *Me   parece [que esta taxista   esta cansado]*
           Me-DAT seems that this   taxi driver is   tired
           'It seems to me that this taxi driver is tired'
       c. **Este taxista   me   parece [t estar cansado]*
           This taxi driver me-DAT   seems   to-be tired
           'This taxi driver seems to me to be tired'

In the absence of an experiencer clitic, as in (318a), raising is licit. When the clitic is present, as in (318c), raising is blocked. When the raising predicate selects for a finite clausal complement, as in (318b), the experiencer clitic is allowed.

At first sight, the contrast between (318a) and (318c) appears to suggest that clitics induce an MLC effect in Spanish, unlike their counterparts in Greek, French and Italian. This is proposed by Torrego (1998) who suggests that French and Italian clitics are merged with T while in Spanish, clitics are merged in a lower position. Being in T French and Italian do not interfere with raising due to equidistance. In Spanish, though, clitics are in the minimal domain of a head

below T and the subject cannot raise across them (see also McGinnis 1998 for a related account based on an interaction between locality and Case).

From the present perspective, the blocking effect of clitics in (318c) would follow from locality if Spanish clitics were not creating a movement chain with the overt or covert experiencer in argument position, unlike French, Italian and Greek. And indeed, it has been independently argued in the literature that Spanish clitics have an altogether different syntax than the one proposed above for Greek, French and Italian.

In particular, Demonte (1995) has argued that Spanish ditransitives displaying clitic doubling of goals share relevant characteristics with the double object construction in English while sentences without clitic doubling show properties of prepositional ditransitives. One piece of evidence for this conclusion comes from interpretational differences between the two constructions. As pointed out by Demonte, clitic doubling of a dative goal in Spanish is allowed only when the dative is understood as a "possessor" of the theme, similarly to English. In (319a), for example, *el mantel* can be construed as a part of *a la mesa*, and doubling is licit. On the other hand, *los platos* cannot be construed as a part of *a la mesa* in (319b), and doubling is ruled out (Demonte 1995: 12):

(319) a. *Le   puse   el   mantel   a   la   mesa*
           Cl-DAT put-1sg the tablecloth to the table
           'I put the tablecloth on the table'
       b. **Le   puse   los platos a la   mesa*
           Cl-DAT put-1sg the dishes to the table
           'I put the dishes on the table'

Moreover, binding asymmetries provide evidence that dative clitics signal the double object construction in Spanish:

In the absence of a dative clitic the direct object can bind a reflexive indirect object while the reverse is impossible (Demonte 1995: 10):

(320) a. *El   tratamiento psicoanalítico reintegró*
           the therapy   psychoanalytic gave-back
           a María   a sí misma
           to Mary-DO   to herself-IO
           'The psychoanalytic therapy gave back Mary to herself'
       b. **El   tratamiento psicoanalítico reintegró / devolvió*
           The therapy   psychoanalytic gave-back
           (a) sí misma   a Maria
           (to) herself-DO   to Mary-IO
           * 'The psychoanalytic therapy gave back herself to Mary'

In the presence of a dative clitic the indirect object binds into the direct object and not the other way round:

(321) a. **El   tratamiento psicoanalítico le   devolvió*
           The therapy   psychoanalytic   Cl-DAT gave-back
           a María   a la estima de sí misma
           to Mary-DO to the esteem of   herself-IO
           'The psychoanalytic therapy gave back her self-esteem to Mary'
       b. *El   tratamiento psicoanalítico le   devolvió*
           The therapy   psychoanalytic Cl-DAT gave-back
           a la estima de sí misma   a María
           to the esteem of herself-DO to Mary-IO
           'The psychoanalytic therapy gave back Mary her self-esteem'

The asymmetries in (320) and (321) are strongly reminiscent of the c-command asymmetries characterizing prepositional ditransi-

tives and double object constructions, respectively, in e.g. English (see chapter 3).

On the basis of the facts above, Demonte (1995: 17) proposes that clitic doubling constructions in Spanish are double object constructions which are furthermore represented as in (322):

(322)

```
                         VP2
                        /    \
              DP<subject>     V'
                             /  \
                           V2    DClP
                                /    \
                            α-DPᵢ     DCl'
                                     /    \
                                   Cl      VP1
                                   |      /   \
                                   le   tᵢ     V'
                                             /    \
                                           V1   DP<direct object>
```
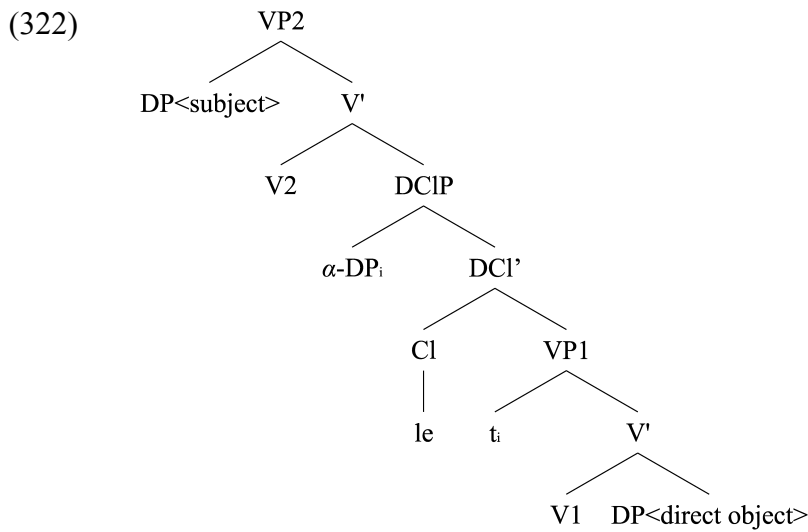
In (322), the clitic heads a dative Clitic-Phrase to the specifier of which the indirect object raises from a base position contained in the lowest VP-shell. Note that the dative Clitic Phrase in (322) is positionally identical to Marantz's (1993) vP headed by an applicative head. The difference between the two analyses is that in the applicative analysis, the goal is merged directly in the higher vP-shell rather than raising there from a lower position, as in (322). Demonte furthermore proposes that in constructions without doubling the *a*-phrase is a PP, the counterpart of *to*-PPs in English.

Bleam (2000: 35) offers morphological and semantic evidence for an analysis of Spanish dative clitics along similar lines. Bleam points out that dative clitics do not resemble determiners in Spanish, unlike accusative clitics. She views lack of resemblance as an argument that

dative clitics do not share the same syntax with accusative clitics. Building on Uriagereka (1995) who attributes the specificity effects induced by accusative clitics to their status as determiners, Bleam argues that the lack of specificity effects associated with dative clitics (see Suñer 1988 for discussion of this difference between accusative and dative clitics) derives from the status of dative clitics as agreement markers.

Note now that under Demonte's and Bleam's approach summarized above, Spanish clitics are agreement / applicative heads generated in a relatively low position. In other words, Spanish dative clitics and dative clitic doubled DPs are, according to these analyses, essentially like undoubled genitives in Greek. The ill-formedness of raising across a clitic or a clitic-doubled experiencer is precisely what these analyses predict.

A closer look into other NP-movement constructions, however, reveals that the account for the ungrammaticality of (318c) just sketched is incorrect. Specifically, under this analysis Spanish clitics and clitic doubled DPs are expected to block NP-movement in all contexts. This is not the case, though, as will be seen immediately.

First, passivization in the presence of a doubled *a*-dative goal is wellformed in Spanish, as shown by (323) (from Demonte 1995: 12):

(323) *El   premio Nobel (le)   fue concedido a Cela*
       The prize   Nobel Cl-DAT was awarded   *a* Cela
       el   año pasado
       the year last
       'The Nobel prize was awarded to Cela last year'

If clitics and clitic doubled DPs in Spanish block NP-movement in raising they are also expected to cause an intervention effect in passives. As a matter of fact, though, clitic doubled datives behave in examples like (323) exactly like clitic doubled genitives in Greek: both types do not induce MLC effects.

Second, Torrego (1998) points out that the experiencer argument of unaccusative experiencer object predicates (i.e. Belletti and Rizzi's *piacere* class) must be doubled obligatorily, as documented by (324):

(324) *(A   los   alumnos) *(les)   gusta   el   libro*
         To   the   students   Cl-DAT like-3sg the book-NOM
         'The students like the book'

Once again, clitics in Spanish do not cause MLC violations in unaccusatives, similarly to clitic doubled genitives – and unlike undoubled genitives – in Greek.

Finally, as illustrated in (325), Spanish requires clitic doubling of the experiencer when the raising predicate *parecer* combines with a finite clausal complement:

(325) ** (Les)   pareció a los linguistas que la   charla*
         Cl-DAT seemed to the linguists that the talk
         había sido muy buena
         had   been very good
         'It seemed to the linguists that the talk was very good'

Spanish behaves on a par with Greek in this respect too. As has been discussed in chapter 3 (section 9), the Greek counterpart of (325) also requires a clitic doubled experiencer. This requirement has been explained in terms of the postulation of a covert expletive corresponding to English *it*, which raises out of the complement of *fenete* (Bennis 1986; Moro 1997). The clitic is obligatory in the Greek counterpart of (325) because it facilitates raising of the expletive, as in all other NP-movement constructions. Once again, this entails that Spanish clitics do not block raising of the expletive pro in (325), similarly to Greek clitics.

On the basis of the grammaticality of doubling in (323), (324) and (325), I conclude that Spanish clitics do not block NP-movement,

contrary to what the raising examples in (318) suggest at first sight. In fact, the grammaticality of NP-movement in passives and unaccusatives suggests that doubling clitics in Spanish actually facilitate movement of derived subjects in Spanish, as in Greek, French and Italian. If they didn't, the passive in (323) and the unaccusative in (324) would be ungrammatical due to the MLC. In turn, this leads me to propose that Spanish clitics share the same syntax with Greek, French and Italian clitics, i.e. they raise to T from an underlying [Spec, vAPPL] position (without pied-piping the IO DP in clitic doubling constructions). The main difference between Spanish and Greek concerns the form of the double object construction in transitive environments. In Spanish, clitic doubling is obligatory in the double object construction, i.e. Spanish lacks the counterpart of the Greek genitive construction in transitives, it only has the counterpart of the clitic doubled genitive construction. At present, the reason for the obligatoriness of doubling in transitive double object constructions in Spanish is unclear to me. (Cliticization appears to be obligatory in double object constructions across Romance, see chapter 5, section 5.3.1 on French.)

Turning next to the analysis of undoubled datives in Spanish, the data in (319)-(321) demonstrate that they correspond to *a*-datives in French and Italian, which have been argued in chapter 3 (section 8) to share relevant properties with Greek *se*-datives. In chapter 3 I argued that *a*- and *se*-datives are not introduced by vAPPL, and therefore they behave in passives and nominalizations similarly to English goals introduced by *to*. In this analysis, the passive (323) is well-formed because the *a*-phrase is not introduced by vAPPL and, therefore, it does not block passivization.

If the above remarks are on the right track, then the obligatoriness of clitic doubling in (324) and (325) suggests that Spanish unaccusatives only license the double object / applicative construction, unlike their Greek counterparts, which also license the PP-construction. That is, even though Spanish clitics have been concluded to facilitate NP movement similarly to Greek, the obligatoriness of clitics in un-

accusatives does not provide direct evidence for this and should not be explained in terms of the MLC. Since the undoubled construction is prepositional, and prepositional constructions systematically permit NP-movement in passives and unaccusatives, the MLC would not have been violated in the presence of an undoubled *a*-dative.

Turning, finally, to the ungrammaticality of the raising example in (318c), in the present approach the ungrammaticality of subject raising in the presence of an experiencer clitic in (318c) is not an MLC effect, but rather results from an independent restriction. One option I will briefly explore before closing the discussion of Spanish is that the verb *parecer* is not a raising predicate when it combines with an experiencer (see Boeckx 2000b who elaborates on the idea to be presented below).

Torrego (1996) discusses a number of differences in the behavior of *parecer*, depending on whether it combines with an experiencer or not. Specifically:

(i) While both the present and the imperfect are allowed irrespective of the experiencer, *paracer* cannot be preterit unless an experiencer is present.

(ii) *Parecer* can be in the progressive in the presence of an experiencer but not otherwise.

(iii) *Parecer* allows the subjunctive in the subordinate clause while *parecer* + experiencer doesn't. In this respect, *paracer* without an experiencer behaves like an epistemic modal in Spanish.

(iv) The perfect auxiliary *haber* cannot combine with *parecer* without an experiencer while it can combine with *parecer*+experiencer.

On the basis of the differences above, Torrego (1996) concludes that when the experiencer argument of *parecer* is unexpressed it behaves like a defective verb. She furthermore proposes that the absence of an experiencer induces restructuring obligatorily.

Note now that all the tests Torrego (1996) employs to argue that *parecer* is a raising verb crucially involve constructions in which the subject has raised and hence the experiencer is absent. Thus, Tor-

rego's tests do not show that *parecer* is always a raising verb. They only show that *parecer* can be a raising verb when an experiencer is absent. If it is supposed that in Spanish, raising can only take place under restructuring, and that the presence of an experiencer blocks restructuring, then the ungrammaticality of raising in the presence of an experiencer can be attributed to the hypothesis that the experiencer prevents restructuring from taking place.[73]

To conclude, even though I do not fully understand the Spanish data (in particular, it is unclear to me why doubling is obligatory in the Spanish transitive double object construction), I have argued that the grammaticality of clitic doubling in monoclausal constructions (passives and unaccusatives) provides evidence against the view that clitics induce MLC effects in Spanish.

7. Agree, Move and pronouns

In the preceding sections, I presented a detailed investigation of locality conditions on Move. I argued that movement of an intervening dative to T or v-TR licenses movement of a lower nominative or accusative argument to the same head. In this final section, I will address the effects of the MLC on long distance agreement (Agree), concluding that the locality conditions on Agree are similar to the ones which restrict Move. Moreover, a comparison between Icelandic and English will reveal that the same strategy which leads to the obviation of MLC violations with movement is also available in contexts involving Agree. More specifically, it will be demonstrated that long distance agreement between T and a lower nominative across a higher dative is blocked, unless the dative agrees with T as well. Finally, I will discuss a puzzle for both Move and Agree which derives from the behavior of English pronouns.

In certain infinitival constructions in Icelandic, which Sigurðsson (1996) refers to as *Dative and Nominative with Infinitive*, the EPP can be satisfied by overt movement of the dative experiencer argu-

ment to T. In these contexts, the matrix verb optionally agrees with the nominative argument of the infinitival in number (see chapter 5 for discussion of person agreement). If the matrix predicate does not agree with the lower subject, it surfaces with default singular:

(326) a. *Mér   þóttu / þótti   þær   vera duglegar*
          Me-DAT thought-3pl / dft they-NOM- be   industrious
          'I thought they were industrious'
     b. *Mér   virtust / virtist   þær   vinna vel*
          Me-DAT seemed-3pl / dft they-NOM   work   well
          'They seemed to me to work well'

Interestingly, default agreement on the matrix verb is obligatory when a dative argument intervenes between the matrix T and the embedded nominative, as illustrated by (327) (data from Schütze 1997: 108):

(327) *Mér   fannst / *fundust henni   leiðast   þeir*
          Me-DAT seem-3sg / *3pl   she-DAT to-be bored they-NOM
          'I thought she was bored with them'

Chomsky (2000) proposes that default agreement in examples such as (327) is the reflex of an MLC effect in long-distance agreement relations (see also Schütze 1997 among others). The intervening dative blocks agreement between matrix T and the nominative, enforcing default singular morphology on the verb.

Furthermore, Chomsky (2000; 2001a) assumes that the MLC violation in (327) constitutes an instance of what he calls "a defective intervention effect". That is, even though the intervening dative is inactive in that it lacks a Case feature which matches matrix T, it still retains interpretable φ-features, which block the checking relationship between the matrix T and the φ-features of the embedded nominative. (Chomsky hypothesizes that the structural Case of the quirky dative has been checked and deleted in the embedded clause.)

There is good reason to believe, though, that the analysis of (327) in terms of "defective intervention" is at least incomplete. In Icelandic expletive constructions, the matrix verb agrees in number with the embedded nominative even if a dative experiencer intervenes (Jonas 1998 cited in McGinnis 1998: 51). In (328a), the matrix verb bears singular morphology, agreeing with the embedded nominative *Jón* across the intervening dative *sumum málfræðingum*, while the verb in (328b) enters into a plural agreement relation across an intervening plural dative experiencer:

(328) a. *Það virðist sumum málfræðingum Jón*
           there seem-sg some   linguists-DAT John-NOM
           vera duglegur
           be   intelligent
           'John seems to some linguists to be intelligent'
       b. *Það virðast sumum málfræðingum*
           there seem-pl some   linguists-DAT
           þessir stúdentar   vera duglegir
           these   students-NOM be   intelligent
           'These students seem to some linguists to be intelligent'

Thus, dative arguments block long distance agreement in Sigurðsson's contexts, exemplified by (327), but not in expletive constructions like (328).

The crucial difference between (327) and (328) is that in (328) the dative enters into an Agree relation with T while in (327) it doesn't. In particular, in (328) it is not the nominative but the dative which serves as the associate of the expletive in SpecTP (see McGinnis 1998; Chomsky 2000). Direct evidence for this assumption comes from the observation that violations of the *Definiteness Restriction (DR)* manifest themselves on the dative experiencer rather than on the embedded nominative. In (328), the dative experiencer is indefinite and the embedded nominative is definite; reversing the definite-

ness specification, as in (329), results in ill-formedness (Jonas 1998 cited in McGinnis 1998: 52):
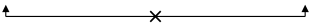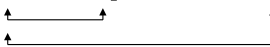
(329)   **Það   virðast   þessum   málfræðingum*
        there   seem-pl   these   linguists-DAT
        margir   stúdentar   vera   duglegir
        many   students-NOM   be   intelligent
        'Many students seem to these linguists to be intelligent'

Furthermore, Chomsky (2000, 2001a) argues that the expletive associate relation is mediated by T in that the expletive agrees with T, and T agrees with the associate in turn. On this conception, long distance agreement in expletive constructions is accompanied by an Agree relation between the intervening dative and the matrix T. Hence, the matrix T in (328) needs to enter into an agreement relation with (i) the expletive, (ii) the dative associate and (iii) the nominative it agrees with, as schematically represented in (330):

(330)

$$\checkmark \ [[\text{EXPL} \ \ T_1^0 \qquad \text{DAT} \qquad \text{NOM}]]$$
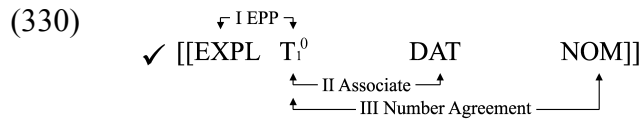
It can now also be concluded that "defective" intervention effects of datives as in (327) emerge whenever the dative argument does not enter into an Agree relation with the matrix T. As outlined by (331), the embedded dative is not the associate of T_1 in the matrix clause, and T_1 and the dative do therefore not Agree. Moreover, since long distance number agreement is contingent upon an Agree relation between the intervening dative and T_1, agreement between the nominative in the embedded clause and the matrix T_1 is blocked. When the intervening dative originates in the matrix clause and enters an Agree relation with T_1 as in (328), agreement between the lower nominative and T_1 is permitted (see [332]):

(331) $[_{\text{Domain }\alpha}\ T_1^0\quad [_{\text{Domain }\beta}\quad \text{DAT } T_2^0\quad \text{NOM}]]$

(332)   ✓ $[_{\text{Domain }\alpha}\ T_1^0\quad \text{DAT } [_{\text{Domain }\beta}\ T_2^0\quad \text{NOM}]]$

Multiple agreement is licit (Ura 1996; see also Chomsky 2001b; Hiraiwa 2002), similarly to all the cases of multiple movement discussed in sections 2-5 above.

   The hypothesis that the associate-relation between T and the dative experiencer in (328) is a precondition for agreement between T and the nominative receives interesting confirmation from English. As is well known, PP experiencers do for some reason not block raising in English, and contrast in this respect with PPs in Italian, French and Greek (see McGinnis 1998; Boeckx 2000b; Stepanov 2002 for alternative explanations):

(333)   *John seems to Mary to be the best*

Interestingly, though, PP-experiencers all of a sudden induce an intervention effect in expletive constructions, where they block long-distance agreement between the matrix T and the embedded subject. As discussed in Boeckx (2000b), who attributes the observation to Howard Lasnik (personal communication), the matrix verb must not agree in number with a plural subject in the presence of an experiencer, and needs to surface with default singular agreement:

(334)   a.   *The men seem to Mary to be the best*
        b.*? *There seem to Mary to be men in the room*
        c.   *There seems to Mary to be men in the room*
        d.   *There seem to be men in the room*

(334d) illustrates the possibility of number agreement between *seem* and the nominative subject *in situ*. If an experiencer is added, as in

(334b) and (334c), long distance agreement between *seem* and *the men* is precluded, and the verb must surface with default singular morphology. Thus, experiencers in English appear to induce "defective intervention effects" in a way similar to datives in Icelandic.

But there is also an important difference between English and Icelandic datives. "Defective intervention effects" are attested in the expletive construction only in English, but were seen to be absent in Icelandic (compare [334b,c] to [328a,b]). This finding can be correlated with the fact that the intervening experiencer enters an Agree relation with T in Icelandic, but not in English. Above, the Agree relation with the associate was diagnosed by the DR. Thus, the fact that in English, it is the lower nominative, and not the experiencer dative which is subject to the DR, indicates strongly that the nominative serves as the Agreeing associate. While the experiencer may be definite, as in (334), the embedded subject must be indefinite:

(335)   *There seems to a linguist to be Mary in the room*

The agreement relations between matrix T and the NPs in the English expletive construction can accordingly be schematized as in (336) (compare [336] to Icelandic [330]). Crucially, the current analysis correctly predicts that long distance agreement in (336) is blocked because the intervening experiencer does not Agree with T.

(336)
$$\checkmark \ [_{\text{Domain }\alpha} \text{EXPL} \quad \overbrace{T_1^0}^{\text{EPP}} \quad \text{PP-EXP} \ [_{\text{Domain }\beta} \quad \text{INDEF-ASSOC}]]$$
$$\underset{\text{Associate, Number Agreement}}{\underbrace{\qquad\qquad\times\qquad\qquad}}$$

The cross-linguistic similarities between English and Icelandic discussed above indicate that long-distance agreement and movement are subject to similar locality conditions. In both cases the relation between a functional head and a lower argument is blocked by an intervening argument, unless the intervener moves / agrees as well. [74] The only difference between Move and Agree is that violations of

the MLC lead to ungrammaticality in the case of Move but result in default agreement in the domain of Agree.

The correlation between movement and agreement becomes even stronger once two further facts discussed by Boeckx (2000b) are taken into account. Boeckx points out that in English, matrix *seem* is allowed to agree in number with the embedded subject in the presence of an experiencer in two environments.

First, agreement between matrix T and the associate is even required (i.e. default singular agreement is ruled out) when the experiencer has been removed by wh-movement, as in (337a), or topicalization, as in (337b) (Boeckx credits Howard Lasnik, personal communication, for the observation):

(337)   a.   *To whom do there seem / *seems to be two men in the room?*
        b.   *To Mary, there seem / *seems to be men in the room*

In (337) the experiencer undergoes wh-movement or topicalization to C, licensing a local Agree relation between the matrix T and the associate in the embedded clause. Recall that exactly this type of obviation strategy is also found in constructions involving Move instead of Agree. As was extensively discussed in section 5, wh-movement or topicalization of the experiencer facilitates raising in Italian and French, as well as NP-movement in Greek passives and unaccusatives.

The second similarity between Agree and Move relates to pronouns. Experiencers suddenly cease to act as interveners when they are pronominalized, as in (338) (observation attributed to Mona Anderson, personal communication):

(338)   *There seem / *?seems to her to be two men in the room*

Interestingly, similar effects are also attested in English, where passivization of the direct object may proceed across an unstressed but

not across a strong indirect object pronoun (Oehrle 1976 and Larson 1988; see chapter 2, section 4.3):

(70)   *A letter was given'im / *HIM by Mary*

Although the effects of pronominalization in (338) and (70) appear to look alike, the two cases also differ in important ways. While the raising construction (338) involves strong pronouns which are embedded in a PP, the English passive paradigm in (70) contains unstressed pronouns which are unembedded. Thus, the question arises whether the obviation effects of locality violations in (70) and (338) are in fact reflexes of the same underlying phenomenon or merely coincidentally resemble each other. I will close this chapter with some speculative remarks on this issue, but have to defer a more complete answer to this puzzle for further research.

   To begin with, note that the obviation effect with weak pronouns in (70) cannot be given the same explanation which was developed for Greek, French and Italian clitics in sections 2 and 3. This is so because the weak pronoun in (70) occurs in a position so low (below the participle) that it should invariably block NP-movement. More precisely, the weak pronoun in (70) resides in a minimal domain which excludes both the target of NP-movement (T) and the theme in the lower VP, and should therefore trigger an MLC violation according to the definition of equidistance in (122). And yet it does not do so, posing a serious challenge for a uniform analysis of nominal interveners.

   There are at least two directions which one could go in searching for an answer to this puzzle. A first possible solution is based on a correlation discussed in Ura (1996: 169-176) and the analysis of Dutch scrambling suggested in section 4. Ura observes that in American English (A.E.), which falls into the group of asymmetric passive languages, indirect objects are (marginally) allowed to precede adverbs if they surface as pronouns (compare [339] to [340]). By contrast, the pre-adverbial position in British English (B.E.),

which qualifies as a symmetric language, can be occupied by indirect object pronouns (see [339]) as well as DPs (see [340]):

(339)   a. *I gave him reluctantly the keys*   (Ok in B.E.; ? in A.E.)
          b. *I sent her immediately the parcel*   (Ok in B.E.; ? in A.E.)
(340)   a. *I gave Bill reluctantly the keys*   (Ok in B.E.; * in A.E.)
          b. *I sent Mary immediately the parcel* (Ok in B.E.; * in A.E.)

Assuming, following Ura, that the objects reach the pre-adverbial position by scrambling or cliticization, the contrasts in (339) and (340) can be taken to indicate that the availability of direct passivization (see [70]) systematically correlates with the ability of the IO to scramble / cliticize to the pre-adverb position in transitives (see [339]). This in turn suggests that NP-movement of the DO is licensed whenever it is preceded by a step in which both objects scramble to the same head, similarly to what was proposed in section 4 for Dutch. The DO would then be allowed to undergo further movement to T from this intermediate position. As for the cross-linguistic contrasts, one is led to conclude that British English licenses such a derivation with both IO DPs and pronouns, whereas American English limits this option to pronouns. Crucially, an account along these lines would offer a uniform analysis of the effects of weak pronouns in English (see [70]) and locality obviation in other domains.

  Even though the analysis looks promising at first sight, the overall approach sketched above suffers from the same criticism which was raised against Ura (1996) in chapter 3 (see discussion of Norwegian and Swedish, as opposed to Icelandic, in section 8.2.3). In addition, there is no direct evidence that British English – unlike Dutch – has scrambling in the first place. An analysis of (339) and (340) in terms of scrambling / OS would also entail far reaching implications for the architecture of the English clause, among them overt verb raising and OS. Even though analyses along these lines have been suggested in the literature (see Johnson 1991; Koizumi 1993 and others), the issue

remains controversial (see Alexiadou and Anagnostopoulou 2001 for a recent discussion).

But there is also a more conservative, alternative way of accounting for the behavior of weak pronouns. Assume, roughly following Baker (1988; see chapter 2, section 2), that weak pronouns cliticize onto the adjacent verbal head and thereby become invisible to the direct object as clitizication results in deletion of the Case features and features visible to EPP-driven movement. On this conception, the direct object would be free to undergo NP-movement across pronominal indirect objects. (The account can obviously not be extended to DPs in British English.)

None of the two alternative accounts of (70) is particularly satisfactory. To make matters even worse, neither of them can be extended to the data in (338), where the pronoun occurs inside a PP and does not block agreement between T and the embedded associate. Both analyses crucially rely on the assumption that weak pronouns may surface in positions which cannot be occupied by strong pronouns or DPs. But in (338), the pronoun is neither weak, nor is it occupying a designated position; rather, the embedding PP appears to be located in its canonical base position. Thus, if the similarity of (338) and (70) is not purely accidental, and if the two obviation strategies indeed reflect the same basic phenomenon, then it is unlikely that the role of the pronoun in (70) can be accounted for under a movement or cliticization analysis. This would lead to a complete dissociation of the effects of pronouns in English from the cases of IO movement discussed in the present chapter.[75] The issue as well as the proper analysis of (338) and (70) requires further investigation, though.

Chapter 5
Person restrictions

1. Introduction

Chapters 3 and 4 examined locality conditions on A-movement, and presented extensive crosslinguistic evidence that intervening EPP and / or Case features of dative (DP, PP) arguments prevent lower nominative and accusative DPs from entering Move / Agree with T and v-TR respectively. It has furthermore been argued that, in principle, two arguments are allowed to target the same head leading to an obviation of the observed MLC effects caused by intervening datives. When a higher dative argument enters Move / Agree with T / v-TR in e.g. NP-movement and object shift environments the lower nominative / accusative is allowed to access T / v-TR as well.

The present chapter, which concludes this book, attempts a detailed investigation of φ-feature checking processes taking place in such multiple Move / Agree contexts.[76] Specifically, I establish a correlation between a constraint on agreement / clitics and a restriction on nominative objects (cf. Boeckx 2000a):[77]

(i) The *Person-Case Constraint* (*me / lui / I-II constraint) which is attested in active ditransitive constructions and affects combinations of clitics, agreement markers and weak pronouns (Perlmutter 1971; Kayne 1975; Warburton 1977; Duranti 1979; Rosen 1990; Bonet 1991, 1994; Miller and Sag 1997; Monachesi 1996; Albizu 1997; Gerlach 1998; Anagnostopoulou 1999b; Romero and Ormazabal 1999; Ormazabal and Romero 2001; Haspelmath 2001).

(ii) The *Prohibition against (agreeing) 1st and 2nd person nominative objects* in Icelandic quirky subject constructions (Sigurðsson 1990-1991, 1996; Taraldsen 1994, 1995; Schütze 1997; Boeckx 2000a; Chomsky 2000, 2001a; Hrafnbjargarson 2001).

I argue for a common syntactic analysis of the two constraints in terms of checking theory. I propose that in constructions where a person restriction arises, verbal φ-features are not eliminated simultaneously. Person is checked separately from number. Split φ-feature checking takes place whenever two arguments, an argument with an indirect object role (carrying dative or genitive case) and a lower argument with structural Case (accusative, absolutive or nominative), relate to the same functional head via Move or Agree. In these configurations, the higher argument checks person and the lower one can only check number, resulting in a person restriction. In quirky subject constructions, the eliminated φ-features reside in T. In the Person-Case environments, the eliminated φ-features are located in v-TR.

The proposed analysis treats agreement inflections and clitics as reflexes of Agree / Move relations between arguments and functional heads resulting in φ-feature checking. As will become evident, the emergence of person restrictions in configurations of multiple agreement provides independent evidence for the view that derivations in which two arguments target the same head proceed counter-cyclically (as opposed to the alternative derivation in terms of strict cyclicity combined with a semi-representational view of the MLC which is suggested in Chomsky 2001a and has been discussed in chapter 4, section 5). Finally, the proposal that person restrictions derive from split φ-feature checking on T or v-TR has implications for the typology of indirect objects – in particular, the cross-linguistic distribution of quirky subjects (see the discussion of quirky arguments in chapter 3, section 6.1) – as well as the nature and properties of structural Case which will be discussed in some detail.

The chapter is organized as follows. In section 2 I introduce the two constraints. Section 3 establishes the correlation on the basis of a number of common properties of the two constraints. I then proceed to provide an outline of my background assumptions concerning the φ-features of arguments and their checking relationships in section 4. In section 5 I present my analysis which accounts for the common properties of the two restrictions. Their differences are discussed in

section 6. Finally, section 7 addresses the implications of the present account for the theory of Case and agreement.

2. The data

2.1. The Person-Case constraint

Perlmutter (1971) observed that in a combination of a dative and an accusative clitic, the accusative must be 3rd person. This constraint is known in the literature as the **me lui / I-II Constraint,* or *Person-Case Constraint.* The Person-Case Constraint ('PC-Constraint', based on Bonet 1991: 182) is formulated in (341): [78]

(341) *Person Case Constraint (PC-Constraint)*
      Context: Ditransitives with phonologically weak direct and indirect objects
      Observation: If a direct and an indirect object co-occur, the direct object has to be 3rd person.

The PC-Constraint as discussed in Bonet (1991, 1994) has five properties:

(i) It applies to a wide range of genetically unrelated languages. The languages / language families discussed by Bonet are Arabic, Greek, Romance, Basque, Georgian, Swiss German (see Haspelmath 2001: 5 for an additional list of languages). Bonet (1994) claims that the constraint is universal but her claim has been refuted by Ormazabal and Romero (2001) and Haspelmath (2001).

(ii) It affects phonologically *weak* elements, i.e. clitics, agreement affixes and weak pronouns.

The Greek examples in (342) illustrate the PC-Constraint arising with combinations of clitics. (342a) and (342b) containing a genitive clitic which co-occurs with an accusative 3rd person clitic are well-

formed. On the other hand, (342c) and (342d) in which a genitive co-occurs with a 1st and 2nd person accusative are ill-formed:

(342) a. *Tha   mu   to   stilune*
           FUT Cl-GEN,1sg Cl-ACC,3sg,neut   send-3pl
           'They will send it to me'
       b. *Tha   su   ton   stilune*
           FUT Cl-GEN,2sg Cl-Acc,3sg,masc send-3pl
           'They will send him to you'
       c. * *Tha   tu   me   stilune*
           FUT Cl-GEN,3sg,neut / masc Cl-ACC,1sg send-3pl
           'They will send me to him'
       d. * *Tha   mu   se   stilune*
           FUT Cl-GEN,1sg Cl-Acc,2sg   send-3pl
           'They will send you to him'

Clitic combinations in French, Italian, Catalan, Spanish and Arabic are subject to similar restrictions.

The Basque examples in (343) illustrate the PC-Constraint on agreement affixes (data from Ormazabal and Romero 2001):

(343) a. *Zuk   etsaiari   misila*
           You-ERG   enemy-DAT   missile-ABS
           saldu   d-∅-I-o-zu
           sell   PRES-3ABS-AUX-3DAT-2ERG
           'You sold the missile to the enemy'
       b. * *Zuk   etsaiari   ni*
           You-ERG   enemy-DAT   me-ABS
           saldu   na-I-o-zu
           sell   1ABS-AUX-3DAT-2ERG
           'You sold me to the enemy'

(343a), where a dative agreement marker co-occurs with a 3rd person absolutive marker, is well-formed. (343b), where a dative co-occurs

with a 1st person absolute, is ill-formed. Similarly in Georgian (Harris 1984; Anderson 1984) and Southern Tiwa (Rosen 1990).

Finally, the constraint restricts combinations of weak pronouns, as exemplified by the Swiss German examples in (344). (344a) is grammatical, and it contains a dative and a 3rd person accusative. (344b) where a dative and a 1st person accusative co-occur is ungrammatical (Harry Leder personal communication to Bonet 1991: 188, fn 12; Henk van Riemsdijk, personal communication):

(344)　a.　*D'　Maria　zeigt　mir　en*
　　　　　　The　Maria　shows　to-me　him
　　　　　　'Mary shows him to me'
　　　　b. **D'　Maria　zeigt　em　mich*
　　　　　　The　Maria　shows　to-him　me
　　　　　　'Mary shows me to him'

(iii) The third property of the PC-Constraint is that it only affects *combinations* of weak elements. As long as one of the two elements is realized as a strong pronoun, the constraint does not apply.

The Greek example (345) and the French (346) illustrate this 'repair strategy' of the PC-Constraint (Bonet 1991, 1994) for combinations of clitics with stressed pronouns. In (345) a genitive clitic co-occurs with a 2nd person accusative strong pronoun while in (346) a 1st person accusative clitic co-occurs with a dative strong pronoun. Both examples are well-formed:

(345)　*Tha　tu　　　　　　　　　stilune　esena*
　　　　FUT　Cl-GEN,3sg, masc / neut　send-3pl　you-ACC
　　　　'They will send you to him'
(346)　*Paul　me　　　　　présentera　à　lui*
　　　　Paul　Cl-ACC,1sg　introduce-FUT　to　him
　　　　'Paul will introduce me to him'

The Swiss German example (347) contains a dative weak pronoun and a 1st person accusative stressed pronoun. Observe that (347) is identical to the ungrammatical (344b), except that the accusative is stressed in (347) but not in (344b).

(347)   *D'   Maria zeigt   em   miich*
      The Maria shows to-him me
      'Mary shows me to him'

(iv) The fourth property of the PC-Constraint is that it also affects combinations in which the accusative clitic is *reflexive* (Kayne 1975: 173; Bonet 1991: 192 citing Herschensohn 1979):[79]

(348) ***Elle se   lui   est donnée   entièrement*
      She REFL him-DAT is   given-FEM entirely
      'She gave herself to him entirely'

As documented by (348), a dative cannot co-occur with an accusative reflexive clitic. Thus, reflexives pattern with 1st and 2nd person personal pronouns in being subject to the PC-Constraint.

(v) Finally, the PC-Constraint is limited to constructions with an external argument. Unaccusatives and passives with a dative and a 1st / 2nd person nominative / absolutive argument are well- formed. This is illustrated by the Greek example (349) for clitic languages (see also example [133] in chapter 3) and by the Basque example (350) for agreement-languages (from Laka 1991: 183; though see section 6 for more discussion of this property across PC-languages).

(349)   *Tu   irtha*
      Cl-GEN,3sg came-1sg
      'I came to him'
(350)   *Hi   niri   ettori   h-atzai-t*
      You-ABS me-DAT arrived 2ABS-AUX-1DAT
      'You came to me'

In (349) a 1st person subject (i.e. nominative) agreement marker is allowed to co-occur with a genitive clitic. In (350) a 2nd person absolutive agreement marker co-occurs with a dative affix. The difference between these examples and all other ungrammatical cases discussed so far is that the dative is added to an unaccusative rather than a transitive predicate.

Having presented the conditions under which the PC-Constraint is applicable, I now turn to a description of the restriction against 1st and 2nd person nominative objects in Icelandic.

2.2. *The person restriction on nominative objects*

Sigurðsson (1990-1991) observed a restriction on nominative objects in Icelandic quirky subject constructions, which is extensively discussed in Taraldsen (1994, 1995) and Sigurðsson (1996, 2000). This is formulated in (351):

(351)   *The Person Restriction on Nominative Objects*
      Context: Clauses in which the nominative object agrees with the verb.
      Observation: In the presence of a dative subject, the (agreeing) nominative object has to be 3rd person.

The core properties of the person restriction are summarized below:

(i) The constraint is found in Icelandic only, i.e. it looks like a language-specific restriction (though see section 6 for more discussion of this characteristic).

(ii) It is attested in constructions with a dative subject and a nominative object. Two main environments should be distinguished where the restriction applies, for reasons that will soon become evident:

(a) Bi-clausal quirky subject constructions in which the matrix subject is realized as dative while the nominative serves as an argument of the infinitival. These have been called by Sigurðsson (1996:

29) *"Dative and Nominative with Infinitive"* and have already been discussed, from a different angle, in chapter 4 (section 7). The restriction in this context is exemplified by the minimal pair in (352). (352a) contains a 3rd person nominative co-occurring with a dative subject, and the sentence is well formed. On the other hand, the embedded nominative argument is 1st person in (352b), and the sentence is ill formed (data from Sigurðsson 1996: 30):

(352) a. *Mér   höfðu fundist þær   vera gáfaðar*
            Me-DAT had   found   they-NOM be   intelligent
            'I had found them intelligent'
       b. * *Þeim   höfum alltaf   fundist við   vinna vel*
            Them-DAT have   always found   we-NOM work well
            'They have always thought that we work well'

(b) Monoclausal quirky subject constructions (passives, unaccusatives) with nominative objects. Here again there is a contrast depending on whether the nominative object is 3rd person as in (353a) or 1st, 2nd as in (353b) (data from Sigurðsson 1996: 25, 28):

(353) a. *Henni   leiddust   þeir*
            She-DAT   was bored-by-3pl they-NOM
            'She was bored by them'
       b. * *Henni   leiddumst   við*
            She-DAT   was bored-by-1pl   us-NOM
            'She was bored by us'

(iii) The third property of the Icelandic person restriction is that it rules out 1st and 2nd person nominative objects in contexts where nominatives *agree* with the verb. Absence of agreement leads to an obviation of the constraint. To illustrate this 'repair strategy' it is necessary to consider biclausal and monoclausal constructions separately, as the former show the interplay between agreement and the

emergence of the person restriction more straightforwardly than the latter.

(a) Recall from chapter 4 (section 7), that in *Dative and Nominative with Infinitive constructions*, agreement between the matrix verb and the nominative argument of the infinitival is optional. In (326), repeated below, the matrix verb is either plural, agreeing with the argument of the infinitival, or it shows 3rd person singular default agreement:

(326) a. *Mér   þóttu / þótti   þær   vera duglegar*
             Me-DAT thought-3pl / dft they-NOM be   industrious
             'I thought they were industrious'

      b. *Mér   virtust / virtist þær   vinna vel*
             Me-DAT seemed-3pl / dft they-NOM work   well
             'They seemed to me to work well'

The person restriction surfaces only when the matrix verb is marked for agreement (Sigurðsson 1996, 2000; Taraldsen 1995; Schütze 1997). This is shown in (354), where a 1st person nominative is illicit when it agrees with the matrix verb and licit when the verb shows default agreement:

(354) *Þeim   hefur / *höfum   alltaf   fundist*
       Them-DAT has-3sg / *have-1pl always   found
       við   vinna vel
       we-NOM   work   well
       'They have always thought that we work well'

(b) According to Sigurðsson (1996: 25-28, 32), in *monoclausal constructions,* agreement between the verb and the nominative object is in most cases obligatory.[80] For this reason, the restriction arises always. Still, there are certain exceptional cases in which the person restriction is relaxed in monoclausal constructions (Sigurðsson 1996:

33). The data below illustrate variability in native speakers' judgments depending on the specific agreement morpheme on the verb:

			AGREEMENT ON VERB	PERSON ON OBJECT
(355)	a. ??	*Henni líkaði ég*	1/3sg	1sg
		Her-DAT liked I-NOM		
	b. *	*Henni líkaðir þú*	2sg	2sg
	c. *	*Henni líkuðum við*	1pl	1pl
	d. *	*Henni líkuðuð þíð*	2pl	2pl
(356)	a. ?	*Henni leiddist ég*	1/2/3sg	1sg
		Her-DAT bored I-NOM		
	b. ?	*Henni leiddist þú*	1/2 /3sg	2sg
	c. *	*Henni leiddumst við*	1pl	1pl
	d. *	*Henni leiddust þíð*	2/3pl	2pl

Sigurðsson (1996: 34) points out that the cases that are judged acceptable by many native speakers (355a, 356a, 356b) have verb forms that *"...are homophonous with nonagreeing default forms (third person singular)"*, i.e. many native speakers tolerate 1st and 2nd person nominative objects as long as the morphology of the verb can be understood as default. I take this to mean that in monoclausal constructions – just as in biclausal constructions – the person restriction is canceled when the nominative does not enter agreement with the verb.

(iv) *Reflexives* behave on a par with 1st and 2nd person pronouns in being ruled out when they surface as nominative in the context of a dative subject (see Taraldsen 1994; though see fn 81 below for more discussion). In infinitival constructions with a quirky matrix subject reflexive nominatives, as in (357a), are ruled out. On the other hand, reflexive accusatives as in (357b) are licit (data from Taraldsen 1994: 48):[81]

(357) a. * *Maríu   fannst   sig   vera gáfuð*
           Mary-DAT thought-3sg *sig*-NOM be   gifted-NOM
           'Mary thought she was gifted'
       b. *María   taldi   sig   vera gáfaða*
           Mary-NOM believed-3sg *sig*-ACC be   gifted-ACC
           'Mary believed she was gifted'

   (v) Finally, in Icelandic the restriction is limited to constructions without an external argument. As already pointed out in chapter 3 (section 6.1), active ditransitives with a dative and a 1st, 2nd person accusative pronoun are well formed (Collins and Thráinsson 1996: 423, fn 42; Schütze 1997: 117 citing Halldór Sigurðsson, personal communication). Examples (132) and (137), repeated here from chapter 3, illustrate this difference between passive sentences and their active counterparts:

(132) * *Honum   varst   gefinn þú*
         Him-DAT was   given   you-NOM
         'You were given to him'
(137) *Ég   gaf honum   þig   í jólagjöf*
         I-NOM gave him-DAT   you-ACC as Christmas-gift
         'I gave you to him as a Christmas present'

Example (132) features a passive ditransitive verb, and the nominative theme cannot surface as 2nd person. Its active counterpart (137) which contains an accusative 2nd person theme is impeccable.

3. Similarities and differences

3.1. The two constraints match

The PC-Constraint and the person restriction on nominative objects display a number of common properties:

(i) *Roles of the arguments affected*: In both cases, the restriction arises in environments involving an *argument with an indirect object role* (goal, benefactor, experiencer) and another argument with a *direct object role* (theme) or, in infinitivals, a *lower subject*. Active ditransitives with a goal, benefactor or possessor co-occurring with a theme constitute the main environment in which the PC-Constraint is attested.[82] Similarly, in Icelandic the restriction arises in quirky subject constructions formed with passivized ditransitives or with unaccusatives, i.e. they typically involve a goal, experiencer or benefactor co-occurring with a theme (monoclausal constructions) or a lower subject (biclausal constructions).

(ii) *Case properties of the two arguments*: In both construction types, the indirect object argument typically bears *morphological dative or genitive case* while the other argument has *structural Case* (though see fn 83 and section 7 for more discussion of this). In the core PC-environments, the indirect object with dative (Romance, Basque, Swiss German) or genitive (Greek)[83] co-occurs with the direct object, which has accusative (Romance, Swiss German, Greek) or absolutive (Basque). In quirky subject constructions, the quirky subject, which has dative, co-occurs with the object bearing nominative case.

(iii) *Structural Case–3rd person*: In both cases, the argument with structural Case has to be 3rd *person*. In PC-constructions, the accusative or absolutive object cannot be 1st, 2nd person. In quirky subject constructions, the nominative object cannot be 1st, 2nd person.

(iv) *Constraint on SE-Reflexives*: The fourth property the two constraints have in common (though see fn 79 and fn 81 above for more discussion) is the fact that reflexives pattern with 1st and 2nd person

person pronouns in not being able to co-occur with the dative argument. This has been demonstrated in (348) for the PC-Constraint and in (357) for Icelandic, respectively.

(v) *Relation to the same verbal head*: Another property with respect to which the two constraints match is that they arise whenever the dative and the argument with structural Case relate to *one and the same head* via Move or Agree**.** In section 2.1 it has been seen that in PC-constructions, the constraint applies only to *clusters* of weak pronouns and clitics, which in chapters 3 and 4 have been argued to move to the same functional head. As long as one of the two arguments is a strong pronoun realized in its base position, as in the examples (345)-(347) above, the constraint does not arise. (Clusters of agreement markers are presumably analyzed along the same lines as clitics; see the discussion of Greek subject agreement in chapter 4, section 4. Alternatively, they can be analyzed as instances of multiple Agree, see section 5.3.2 below.) As has been argued for in section 2.2, in quirky subject constructions the restriction arises only when the dative argument undergoes EPP-driven movement to [Spec, TP] and the nominative *agrees* with the inflected verb, i.e. both arguments relate to T via Move (the quirky subject) and Agree (the nominative object).

(vi) *Some notion of competition is involved*: Finally, independent and otherwise obligatory constraints are relaxed in order to circumvent a violation of the 1st / 2nd person prohibition in both domains:

(a) Starting from the PC-Constraint, clitic doubling of strong personal pronouns is obligatory in all dialects of Spanish (see Anagnostopoulou 2002 for a survey of the literature on obligatory doubling of this type). This is illustrated by (358a) for direct objects and (358b) for indirect objects. Both are ungrammatical if the doubling clitic is absent:

(358) a. **(La)*   *nombraron*   *a ella*   *como embajadora*
          Cl-ACC   appointed-3pl *a* her-ACC as   ambassador
          'They appointed her as ambassador'

    b. *(*Le)   di   el libro a él*
        CL-DAT   gave-1sg the book to   him-DAT
        'I gave the book to him'

Interestingly, the requirement for clitic doubling of datives is suspended in the presence of 1st / 2nd person accusatives, in order for the PC-Constraint not to be violated (see Bonet 1994 for an Optimality theoretic account). In (359a) clitic doubling of the dative strong pronoun in the presence of an accusative 1st or 2nd person clitic does not take place, and the result is grammatical. On the other hand, clitic doubling of the dative in (359b) is ruled out because it leads to a violation of the PC-Constraint (data from Bonet 1994: 43):

(359) a. *Me / te   recomendaron   a él*
          Me / you-ACC recommended-3pl   to him
          'They recommended me / you to him'
      b. **Me   le   recomendaron   a él*
          Me-ACC Cl-DAT   recommended-3pl to him
          'They recommended me / you to him'

   (b) Turning to the person restriction on nominative objects (see Sigurðsson 1996; Schütze 1997 for discussion), recall that in Icelandic monoclausal constructions, agreement with nominative objects is by and large obligatory. In the exceptional cases where agreement is optional, as in (360) (see fn 80), the agreeing form is preferred over the non-agreeing one.

(360) *Henni   líkuðu / líkaði ekki þessar   athugasemdir*
      Her-DAT liked-3pl / dft not   these   comments-NOM
      'She did not like these comments'

It has been pointed out, though, in section 2.2 that some speakers allow 1st / 2nd person nominative objects in mono-clausal constructions when the agreement on the verb can be interpreted as default.

The examples illustrating this were (355) and (356). Thus, even though agreement in Icelandic mono-clausal constructions is obligatory or strongly preferred, it is relaxed in the presence of a 1st or 2nd person nominative object. Just like Spanish clitic doubling – which is otherwise required – is not triggered in order to avoid a violation of the PC-Constraint, agreement between nominative objects and verbs in Icelandic – which is otherwise strongly preferred – is suspended in order not to incur a violation of the person restriction.

3.2. But there are also some differences

Despite their similarities, the PC-Constraint and the ban against 1st and 2nd person nominatives differ in three respects:

(i) *External arguments*: First, the PC-Constraint is found in constructions *with external arguments* while the person restriction in Icelandic is attested in constructions *without external arguments*. Recall that the PC-Constraint is not attested in passives and unaccusatives, while the person restriction in Icelandic is unattested in active ditransitives.

(ii) *Weak elements vs. full DPs:* The second difference relates to the fact that the PC-Constraint affects combinations of weak elements (clitics, agreement affixes, weak pronouns) while the person restriction in Icelandic affects full pronominal nominatives, i.e. "lightness" or "heaviness" do not seem to play a role.

(iii) *Emergency strategies:* A related difference concerns the strategies employed to overcome the ban on 1st and 2nd person pronouns. While violations of the PC-Constraint are salvaged by employing full dative or accusative pronouns, choosing a non-agreeing verb form saves structures that would otherwise cause a person restriction in Icelandic.

3.3. Summary of the data

In table 6, I provide a summary of the similarities and differences between the two constraints:

Table 6. Summary of similarities and differences

	PC-Constraint	Icelandic restriction
I. SIMILARITIES		
1. IO / DO or SUBJ of lower clause	yes	yes
2. IO: dative / genitive Case	yes	yes
DO or SUBJ: structural Case		
3. If structural Case, then 3rd person	yes	yes
4. Constraint on SE reflexives	yes	yes
5. Move to- / Agree with the same head	yes	yes
6. Competition with other constraints	yes	yes
II. DIFFERENCES		
1. External argument present	yes	no
2. Weak elements affected	yes	no
3. Emergency strategies	strong pronoun	no agreement

In the next sections, I will develop an account for the two constraints in terms of split φ-feature checking in multiple Move / Agree constructions, which captures the similarities and explains the differences in table 6. But before proceeding to the analysis, it is necessary to outline my background assumptions on the feature content and checking relations of pronouns and dative arguments. These issues will be addressed in section 4.

4. Features and checking relations of pronouns and datives

4.1. The content of pronouns

I will start with my assumptions on the feature content of pronouns.

(a) *The content of 1ˢᵗ / 2ⁿᵈ person pronouns.* Following Bonet (1991), Taraldsen (1995), Ritter (1995), Kayne (1998) and others I assume that 1ˢᵗ and 2ⁿᵈ person pronouns combine a person feature with a number feature. Their structure is represented in (361) (Taraldsen 1995):

(361)

```
              P
            /   \
         N        P
       {sg, pl}  {1, 2}
```
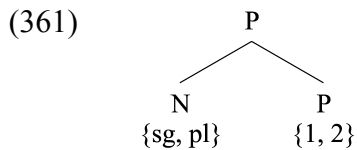
Taraldsen (1995: 311) argues that 1ˢᵗ and 2ⁿᵈ person necessarily combine with singular or plural because they cannot be interpreted otherwise. The interpretation of *we* and *you* (plural) follows from a structure in which [1] and [2] combines with number as in (361). The value of P determines an object p in a given context. N stands for a set A whose cardinality is 1 or greater than 1. The meaning of the combination of N and P is Q, the intersection of A and {p}. Thus, e.g., the denotations of "I" and "we" are sets including the individual p, such that p is the only member when the number value is singular and p is the member of a set that has additional members when the value of number is plural. By contrast, in 3ʳᵈ person personal pronouns, number just induces plurality, as opposed to singularity.

(b) *The content of SE-pronouns.* Following Bonet (1991, 1995), Taraldsen (1995) Reuland (1996, 2001), Kayne (1998) among others, I assume that reflexive SE-pronouns form a natural class with 1ˢᵗ and 2ⁿᵈ person pronouns in bearing a person feature. Unlike 1ˢᵗ and 2ⁿᵈ person pronouns, SE shows no singular-plural distinctions representing *bare person*. Thus, *sig* is represented as in (362):[84]

(362)

```
        P
        |
       sig
```
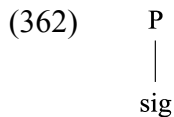
Morphological evidence that *se*-pronouns are person pronouns is provided by languages where person determines clitic ordering. In these languages reflexive clitics occupy the same slots as 1st and 2nd person clitics. For example, Bonet (1991) demonstrates that in Barceloní 1st, 2nd and reflexive clitics systematically occur in a different slot than neuter, 3rd person clitics, locatives, partitives and ablatives. 1st, 2nd person and reflexive clitics always precede 3rd person clitics, regardless of Case and grammatical function. Bonet argues that in order to account for clitic placement in this dialect, it is necessary to integrate each class of clitics into two different groups, depending on whether they bear person features or not. Clitics of the two groups occupy different fields in the Morphology Component, and are inaccessible to each other. 1st, 2nd and reflexive clitics have [person] and occur first occupying what she calls "field A". All other clitics, which lack [person], occur in what she calls "field B".

Further evidence that *se*-pronouns are person pronouns is provided by discourse anaphora. The pronoun *sig*, which belongs to this class, is systematically employed in long-distance *logophoric* relations in Icelandic (see e.g. the various contributions to Koster and Reuland 1991). The view that *se*-pronouns instantiate a feature [person] explains the logophoric uses of *sig* under a conception of logophoricity as orientation towards *discourse participants* along with the time and place of the utterance (i.e. towards *discourse centers* Fillmore 1971; see Reinhart and Reuland 1991 for this notion of logophoricity). Pronouns bearing person / participant features may retrieve discourse participants more readily than pronouns lacking such features.

(c) *The content of 3rd person pronouns*. Finally, I assume that 3rd person personal pronouns are "determiner pronouns" following a large body of literature starting from Benveniste (1966) (see Postal 1966; Silverstein 1986; Bonet 1991; Taraldsen 1995; Ritter 1995; Kayne 1998; among others). They are represented as in (363) (Ritter 1995):

(363)

```
              D
            /    \
          D       NumP
      [definite]    |
                   Num
```
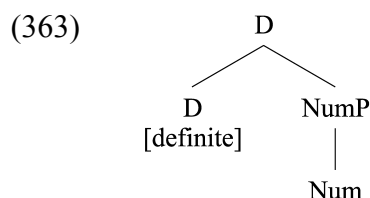
As mentioned above, 3rd person pronouns occupy "field B" in e.g. Barceloní, together with non-person neuter, locative, partitive and ablative clitics. This provides morphological evidence that they lack person.

4.2. Dative arguments and φ-feature checking

On the basis of the person restriction on nominatives in Icelandic quirky subject constructions, Taraldsen (1995) and Sigurðsson (1996, 2000) argue that dative DPs may enter into checking / agreement. I will assume that this proposal is correct. If datives were not connected with inflection there would be no reason for imposing a restriction on the person of the nominative object. In this section, I will provide a more specific implementation of how datives enter into agreement, which, by and large, follows and modifies Taraldsen (1995).

Following Sigurðsson (1991) and Taraldsen (1995), I take the fact that quirky datives regularly enter into control relations as in (364a), (where they are controlled) and (364b) (where they control), and bind subject-oriented *SE*-reflexives as in (364c) (see Zaenen, Maling and Thráinsson 1985 for extensive discussion) as evidence that they are syntactically "active".

(364) a. *Strákarnir   vonast   til   að   PRO*
          The boys-NOM   hope   for   to   PRO-DAT
          leiðast ekki öllum   í   skóla
          bore   not   all-DAT in school
          'All the boys hope to not be bored in school'
      b. *Strákunum   leiddist   að   PRO*
          The boys-DAT   bored-dft   to   PRO
          verða kosnir   í   stjórnina
          be   elected-NOM,pl to the board
          'The boys were annoyed at being elected to the board'
      c. *Konunginum   voru gefnar ambáttir í   höll   sinni*
          The king-DAT were given slaves   in palace his
          'The king was given slaves in his palace'

On the assumption that Control and *SE*-reflexive binding are processes reflecting checking of φ-features in T (see Ura 1996 who argues that Control depends on φ-feature checking against T and Reinhart and Reuland 1991; Reuland 1996, 2001 who argue that binding of subject oriented reflexives is a relation mediated through φ-feature checking in T), the above facts constitute evidence that quirky dative subjects enter a checking relation with (some of) the φ-features of T.

It is straightforward that quirky datives in Icelandic do not check the number feature of T. As discussed in chapter 4 (section 7) as well as in section 2.2. above, the inflected verb agrees overtly in number with the nominative object, not with the dative subject in quirky subject constructions.

Taraldsen (1995: 310-312) proposes that datives enter into checking with the person feature of T. He furthermore argues that even though verbs enter person checking with quirky subjects, they do not overtly agree with them because of failure of number agreement. Consider a sentence like (365) where the dative subject is 1st person and the verb inflects for 3rd person ([365] from Taraldsen 1995: 310):

(365) *Mér   líkar / *líka   bókin*
       I-DAT   like-3sg / *1sg the book-NOM
       'I like the book'

Taraldsen suggests that the fact that the dative and the verb do not agree in number provides a key to the understanding of the person agreement pattern in (365). Just as in the case of pronouns (see the discussion of [361] in the preceding subsection), 1st and 2nd verbal agreement must result from a combination of 1,2 with singularity or plurality. Crucially now in (365) the person feature of the verb is checked against the person of the dative but the number of the verb is not checked against the number of the dative. Since 1 does not combine with number in this case, 1 is not a possible specification for verbal inflection. As a result, the verb must surface as 3, which Taraldsen takes to be the only person that does not need to combine with number (see fn 84 above).

I will adopt the essentials of this proposal, recasting it in Chomsky's recent theory of checking according to which uninterpretable φ-features are unvalued, and feature checking is the mechanism that values them (Chomsky 2001a; 2001b). Specifically, I will assume that the dative in (365) is "defective" in the sense that its number feature is inaccessible to T (in Chomsky's terminology "it does not match T"). Under the view that the values 1 or 2 must combine with the values [singular] or [plural], 1 in (365) is not a possible value for the person feature of T because the dative is not allowed to also check and value the number feature of T. Therefore, the person value of the verb in (365) is the default (Chomsky 2001a; 2001b).

The above considerations lead to a partial characterization of the difference between arguments with dative / quirky Case and arguments with structural nominative Case – which have been discussed in chapter 3 (section 6.1) from the point of view of EPP and Case – in terms of their φ-feature checking potential. In Icelandic, dative arguments are φ-defective: they can only check a subset of features on T, more specifically person. Arguments with structural nomina-

tive are φ-complete: they can check both person and number on T. Since 1 and 2 on the verb are possible values only under complete (i.e. person and number) φ-checking, 1st and 2nd person verbal agreement inflection may obtain only when a nominative argument raises to Spec,TP as it can check and value simultaneously person and number on T.

Note at this point that the incompatibility of datives with number agreement is not universal. There are languages in which dative subjects enter into number agreement. For example, in Georgian quirky subject constructions (in the, so-called, "inverse pattern" found with the "Perfect" series; see Harris 1984; Anderson 1984; Bejar 2000), as in (366), dative subjects agree in number with the verb and nominative objects don't (examples and glosses from Harris 1984: 268):

(366) a. *Turme   student-ebs   gamougzavnia-t gela*
           Apparently students-DAT sent-him-EV-pl   gela-NOM
           'Apparently the students have sent Gela'
       b. *Turme   gelas   gamougzavnia   student-ebi*
           Apparently gela-DAT   he-sent-him-EV students-NOM
           'Apparently Gela has sent the students'

Thus, datives may or may not enter number agreement with T. In Icelandic quirky subject constructions, datives do not trigger number agreement while in Georgian quirky subject constructions they do.

Apart from demonstrating that the capacity of dative arguments to enter into number agreement is parametrized, Georgian provides morphological evidence that dative arguments have a person feature comparable to 1 and 2, even when they are 3rd person. Consider table 7, which represents the basic verbal agreement markers of the 'Present-(future) series' and the 'Aorist series' in Georgian (from Anderson 1984: 161):

Table 7. Agreement in Georgian

		Subject	DO	IO	IO	IO	IO
	Series	**v**	**m**	**h**	**u**	**e**	**a**
Person / Number							
1sg		v-	m-	m-	mi-	me-	ma-
2sg		0	g-	g-	gi-	ge-	ga-
3sg		-s,-a	0	h-	u-	e-	a-
1pl		v-....-t	gv-	gv-	gvi-	gve-	gva-
2pl		-t	g-....-t	g-...t	gi-.....-t	ge-..-t	ga-..-t
3pl		-en	0	h-	u-	e-	a-

As shown in table 7, agreement in Georgian is marked either (i) as a prefix, preceding the verb root (e.g. the marker *v-* for first person singular subject agreement in table 7) or (ii) as a suffix, following the verb stem (e.g. the markers *–s,-a* for 3rd person singular subject agreement in table 7). 1st and 2nd person subject as well as direct object agreement markers are realized as prefixes. By contrast, 3rd person subject and direct object agreement markers are suffixes. The distribution of subject and direct object agreement in Georgian (1 / 2 prefix vs. 3 suffix) strongly suggests that [+ person] agreement markers are prefixes while markers that lack [person] are suffixes. Interestingly, indirect object agreement is always prefixal, even for 3rd person, as shown in table 7. The prefixal nature of indirect object agreement in all persons provides evidence that all dative markers are [+person] (even when they are 3rd person).

Note, finally, that the person feature of datives must be understood in terms of a more abstract feature, such as [Participant] or [Local] (cf. Boeckx 2000a, who suggests that dative arguments encode 'point of view') which does not have a morphological correlate in all languages. In e.g. Barceloní, 3rd person dative clitics occupy "field B", together with 3rd person accusative, neuter, locative, partitive and ablative clitics (see Bonet's 1991 analysis of clitic placement summarized in section 4.1 above). Apparently, clitics are or-

ganized strictly according to [person] features (1, 2 vs. 3) in Barce-
loní, while in Georgian, organization into prefixes and suffixes de-
pends on the opposition speaker / addressee / point of view vs. any-
thing else, i.e. [Participant] features. (The prefix vs. suffix distinction
in Georgian also depends on *Number* vs. *Participant*; see Bejar 2000
for a syntactic analysis of the latter opposition.) The relation between
[Participant] and [person] is comparable to the relation between
[Animate] and [gender]. The latter have been discussed in chapter 4
(section 2) in the context of MLC effects caused by genitive IOs in
Greek when [+Animate], [+gender] DO clitics move across them.

5. Capturing the similarities of the two constraints

5.1. Sketching the proposal

Having discussed the feature content of pronouns and datives, I am
now in a position to propose my analysis. Here is an overview of the
main facts to be accounted for:

(367) a. *The Icelandic person Restriction:*

   * $SUBJ_{DAT}$ - $OBJ_{NOM, \text{[1st / 2nd person]}}$ (OBJ agrees with verb)

   $SUBJ_{DAT}$ - $OBJ_{NOM, \text{[3rd person]}}$ (OBJ agrees with verb)

   * $SUBJ_{DAT}$ - SE-reflexive$_{NOM}$

   b. *The PC-Constraint:*

   * IO_{DAT} - $DO_{ACC, \text{[1st / 2nd person]}}$ (IO and DO are weak pronouns)

   IO_{DAT} - $DO_{ACC, \text{[3rd person]}}$ (IO and DO are weak pronouns)

   * IO_{DAT} - SE-reflexive$_{ACC}$

1st and 2nd pronouns are illicit in the presence of a dative, determiner
pronouns and DPs are licit, and *se*-reflexives are illicit.

   In order to capture the properties the two constraints have in
common, I propose that both arise when a dative argument moves
first to a functional head F (or agrees first), checking person as in

Step I of (368). The argument with structural case moves (or agrees) *second*, and checks the remaining number, as in Step II of (368):

(368) a. *Base:*

```
              FP
            /    \
     F {P, N}     XP
                /    \
          DP_DAT      X'
                    /    \
                   X      ZP
                         /  \
                        /____\
                    DP_ACC / ABS / NOM
```
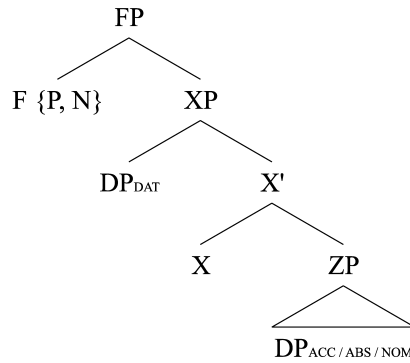
(P = person features

N = number features)

b. *STEP I: Checking of person by dative*

```
              FP
            /    \
        DAT       F'
                /    \
          F{0, N}     XP
                    /    \
                   e      X'
                        /    \
                       X      ZP
                            /  \
                           /____\
                      ACC/ABS/NOM
```
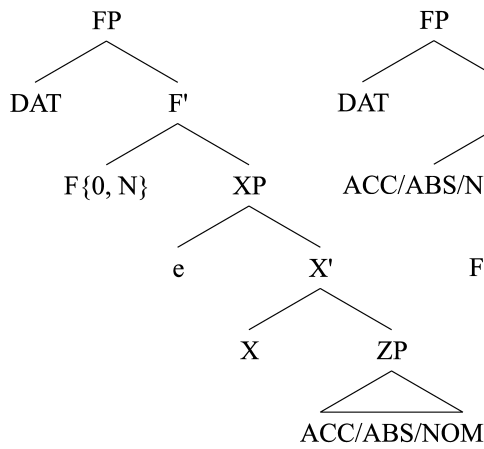
c. *STEP II: Checking of number by structurally marked DP*

```
              FP
            /    \
        DAT       FP
                /    \
     ACC/ABS/NOM      F'
                    /    \
              F{0,0}      XP
                        /    \
                       e      X'
                            /    \
                           X      ZP
                                /  \
                               /____\
                                 e
```
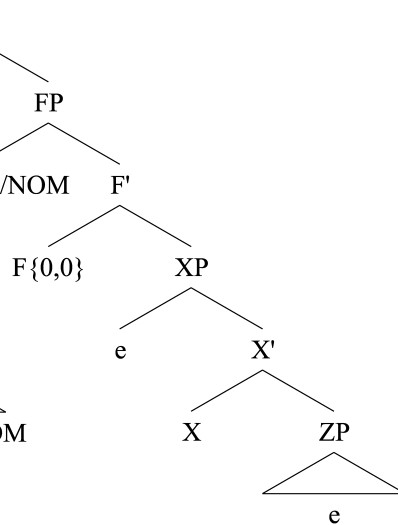
In (368) there is a functional head F that contains person P and number N, and there are two arguments that can move to- /agree with F, a higher dative and a lower accusative, absolutive or nominative.

Being closer to F, the dative moves / agrees first, and checks F's P feature. The lower accusative, absolutive or nominative argument moves / agrees next, and it only checks the remaining N feature of F. If the lower argument is of an appropriate type (third person determiner pronouns, i.e. pronouns with no P feature) the derivation converges. If, on the other hand, the nominative / accusative or absolutive argument is inappropriate (1st, 2nd person or *se* pronoun, i.e. with a P feature) the derivation crashes.

The most straightforward way of explaining the inappropriateness of 1st and 2nd person and *se* pronouns in contexts where only the N feature of F is available for checking is to propose that [person] arguments entering Move / Agree must check their P features, i.e. they must check person along with number. In other words, accusative, absolutive and nominative arguments must check the complete set of their φ-features. In turn, the requirement for complete checking can be linked to structural Case. If, as suggested by Chomsky (2000, 2001a), structural Case checking results from complete φ-checking, then arguments entering Move / Agree are not allowed to have φ-features that remain unchecked because their Case also remains unchecked. In (368) the P feature of F has already been checked by the dative in Step I. Only determiner pronouns are allowed to check the remaining N of F in Step II because only they have an N and no P feature. 1st 2nd and *se* pronouns are ruled out because they have P along with N, and their P feature will remain unchecked in this configuration.

In conclusion, according to the analysis just sketched, person restrictions are explained in terms of two key hypotheses. (i) Person and number features of functional heads are not checked simultaneously (i.e. checking of φ-features of functional heads not always takes place under "complete matching"; contra Chomsky 2000; 2001a).[85] (ii) Complete checking of φ-features of DPs is required in order for structural Case checking to take place as a result of Move or Agree (in line with Chomsky 2000, 2001a).

In the next subsections, I will fill in the details of (368) by applying it to Icelandic first, and to the PC-Constraint next.

5.2. The person restriction in Icelandic

As discussed in chapter 3, in Icelandic quirky subject constructions the dative is introduced by vAPPL while the nominative is in a lower domain, the VP in monoclausal constructions and the infinitival TP in biclausal constructions. Recall that in passives and unaccusatives an intransitive v (v-INTR) is present, which lacks a specifier and cannot check Case of the object. I propose that v-INTR is φ-inactive, i.e. it doesn't check φ-features. T – with active φ-features – is merged with vP resulting in (369).

(369)

```
                    TP
                   /  \
              T{P,N}   vP
                      /  \
                 v-INTR   vP
                         /  \
                      DAT    v'
                            /  \
                        Vappl   VP/IP
                                /  \
                              NOM
```
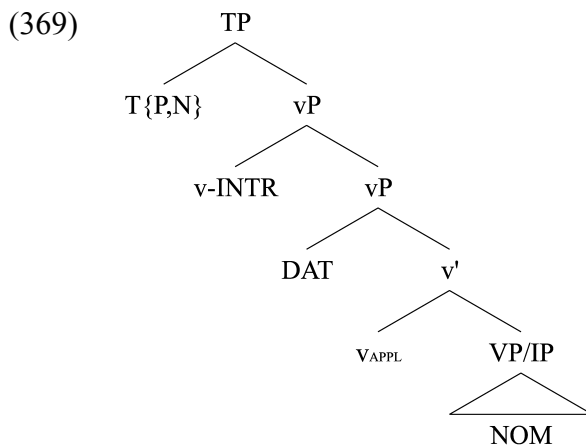
In (369) the dative must raise to T because it is in the minimal domain of vAPPL, which excludes T and the nominative. As schematized in (370), the dative moves and checks the P feature of T. Since the P feature of T has been checked by the dative, the lower nominative, which enters agreement with T next, has to be 3rd person. It can't be 1st / 2nd person or *sig*:

(370)

```
                    TP
                   /  \
              DP_DAT    T'
                       /  \
                 T{0,N}    vP
                          /  \
                    v-INTR    vP
                             /  \
                            t    v'
                                /  \
                           V_APPL   VP
                                   /  \
                                  V    a. *  DP_Nom, 1st/2nd pers
                                       b. *  SE_Nom
                                       c. ✓ DP_Nom, 3rd pers
```
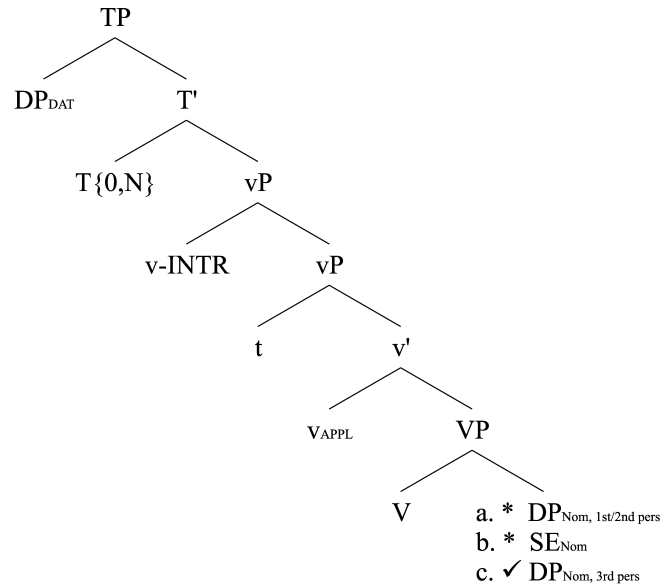
In (370), determiner pronouns match T{0,N}, because they lack P features. 1st / 2nd person pronouns and reflexives do not match T{0,N}, because they have P features.

5.2.1. Order of checking operations

In Icelandic passives the relative order of dative and nominative arguments correlates with the presence / absence of a person restriction on nominatives. This supports the correlation proposed above between the order of operations (Move / Agree), the order of checking processes, and the person restriction as the consequence of a particular order of checking.

Recall from chapter 3 (sections 6 and 7.1) that Icelandic class 1 verbs form passives where both the dative>nominative order and the nominative>dative order are attested. As exemplified by (371a), 1st / 2nd person nominative arguments are licit when they precede datives. The person restriction arises only when the nominative fol-

lows the dative, as in (371b) (Sigurðsson 1990-1991, 1996; data from Schütze 1997: 117):

(371)   *√2Nom>Dat*
   a. *Þú*   *varst* *gefinn honum*
     You-NOM were-2sg given him-DAT
   *Dat>2Nom
   b. **Honum* *var / varst* *gefinn* *þú*
     Him-DAT was-3sg / 2sg given you-NOM
     'You were given to him'

The analysis of (371) is straightforward. The optionality in the order of arguments in (371) is related to the existence of two base orders with class 1 verbs. (371a) results from the 'inversion' theme>goal construction and (371b) from the canonical goal>theme double object construction (see chapter 3). When the 'inversion' construction is the input to NP-movement and the nominative moves to T, as in (371a), person and number of the nominative are checked against all of T's φ-features, as schematically represented in (372):

(372)
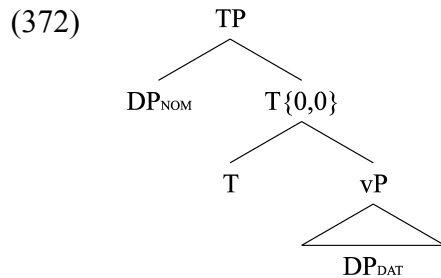
As a result of complete checking, T inflects for person and number (2sg in [371a]) and the second person nominative pronoun in Spec,TP is licit.

 By contrast, movement of the dative argument to Spec,TP in (371b) leads to ungrammaticality because the checking relations established are as in (370) above. The 2nd person nominative object *þú*

in (371b) does not match T{0N} because it has P features that remain unchecked.

5.2.2. Move or Agree?

According to the analysis outlined above, the Icelandic person restriction is contingent upon Move or Agree between the nominative object and T, which is established after the dative moves and checks the P feature of T. Move / Agree must be taken to correlate with the presence of a specified agreement inflection on the verb because when the verb surfaces with default agreement, the person restriction does not arise. (See also chapter 4, section 7, where default agreement has been analyzed as the result of failure of Agree between matrix T and the embedded nominative due to the presence of an intervening dative.) Recall the basic example illustrating the effect of agreement which is repeated below:

(354)   *Þeim   hefur / *höfum   alltaf   fundist*
        Them-DAT   has-3sg / *have-1pl always found
        við   vinna vel
        we-NOM   work   well
        'They have always thought that we work well'

The question that arises is whether agreeing *við* in (354) actually moves to T or merely agrees with it, i.e. whether agreement inflection on the verb signifies Move or long-distance Agree.

   In chapter 4 (section 3), I argued on the basis of clitic doubling in Greek, as opposed to expletive-associate chains in English, that the difference between feature chains and Agree is reflected on binding. Being an instance of Move, feature movement affects binding relationships among DPs because it alters the c-command domain of the element undergoing feature movement. Long-distance Agree, on the

other hand, does not alter the position, and hence the binding domain, of the agreeing element.

Taraldsen (1995) offers binding evidence strongly suggesting that the relation between the nominative object and T in Icelandic quirky subject constructions of the type showing the person restriction falls under Move rather than Agree. More specifically, he points out that in Icelandic quirky subject constructions, the agreement domain of nominative objects matches their binding domain. Coreference options between a dative subject and a nominative pronominal object inside a subordinate clause co-vary with agreement, as illustrated in (373) (from Taraldsen 1995: 317):

(373)   *Agreement: Disjoint reference effect*
   a. * *Konunum$_i$*   *fundust*   *þær$_i$*
      Women-the-DAT   seemed-3pl   they-NOM
      vera   gáfaðar
      be   gifted-NOM,fem,pl
      'The women thought they were smart'
      Lack of Agreement: Coreference possible
   b. *Konunum$_i$*   *fannst*   *þær$_i$*
      Women-the-DAT   seemed-3sg   they-NOM
      vera   gáfaðar
      be   gifted-NOM,fem,pl
      'The women thought they were smart'

In (373a) where the nominative pronoun agrees with the verb coreference between the nominative pronoun and the dative subject is impossible. On the other hand, coreference is possible in (373b) where the nominative pronoun does not agree with the matrix verb. Under the assumption that agreeing nominative objects raise to the matrix T (raising can be assumed to be either feature movement or covert category movement), (373a) is straightforwardly ruled out as a Principle B violation. On the other hand, the nominative does not agree, i.e. move to matrix T in (373b) and Principle B is respected.

Not all Icelandic speakers agree on the judgments in (373), though. According to Halldór Sigurðsson, personal communication, example (373a) is perfect with coreference between the agreeing nominative pronoun and the dative quirky subject. This is exactly what we expect to find if agreement in (373a) is an instance of Agree rather than Move, similarly to the English and Icelandic expletive-associate examples discussed in chapter 4 (section 3 and section 7). Since the judgments on (373a) are contradictory, I consider the question of whether agreement in these examples signifies Move or Agree unsettled. Regardless of whether agreement is a reflex of Move or Agree, both relations lead to φ-feature checking, and, therefore, 1st, 2nd agreeing pronouns as well as *sig* reflexives are ruled out.

With these considerations I conclude the discussion of the person restriction in Icelandic. In the next section, I turn to the PC-Constraint.

5.3. The Person Case constraint

5.3.1. Dative clitics and the double object construction

In this section I will investigate the structure feeding cliticization of datives, which will prepare the ground for the analysis of the PC-Constraint. I will provide evidence that in languages showing the constraint, i.e. Greek, Spanish, Georgian, Basque, French etc., the double object construction provides the input to dative cliticization.

The connection between indirect object clitics and the double object construction in Greek has been extensively discussed in chapters 2 and 4. The same relation has been established in particular by Demonte (1995) for Spanish, as has been discussed in chapter 4 (section 6). Doubling clitics have been seen to be optional in Greek transitive double object constructions and obligatory in Spanish. Regardless of this difference, the double object construction has been argued to feed indirect object cliticization / doubling in both languages. McGinnis (1998) ar-

gues that dative constructions showing agreement with the dative object are double object constructions in Georgian, and Ormazabal and Romero (2001) propose the same for Basque. Turning, finally, to French, Kayne (1975: 154-160) presents an argument from stranded quantifiers that French clitics signal the double object construction, just like their Spanish counterparts. The rest of this section discusses Kayne's quantifier facts, not only because they provide non-trivial evidence that French clitic constructions are instances of the double object construction but also because they open a window into the syntax of French ditransitives, an issue that has also been addressed, somewhat inconclusively, in chapter 3 (section 8.3.2).

Consider the paradigm in (374), which documents an interaction between (i) the presence or absence of dative *à* (discussed in chapter 3, section 8.3.2), (ii) the relative order of datives and accusatives, and (iii) dative cliticization in French:

(374) a. *Elle leur   offrira   des   bonbons à   tous*
           She Cl-DAT will-give some   candies   to all
           'She will give some candies to all of them'
       b. ?*Elle leur offrira tous des bonbons*
       c. *Elle offrira des bonbons à tous*
           'She will-give some candies to all'
       d. ** Elle offrira tous des bonbons*

All speakers of French accept (374a), in which a dative clitic is associated with stranded *tous* which in turn follows *à*. Interestingly, a group of speakers also judge (374b) to be well-formed, where the stranded indirect object *tous* is not preceded by *à*. Crucially, the presence of a dative clitic is required in order for the floated quantifier to surface without *à*, as shown by the contrast between (374c) and (374d). As pointed out by Kayne, sentence (374d), which lacks both *à* and the dative clitic, is ruled out for all native speakers, even for those that accept (374b).

Kayne suggests that (374b), where *tous* is not preceded by *à*, is a prepositionless dative construction – akin to the double object construction in English. Word order provides evidence for the double object analysis of (374b). The prepositionless indirect object *tous* precedes the direct object in this example, similarly to "dative shifted" datives in English. The contrast in (375) below (Kayne's examples [275]) furthermore demonstrates that prepositionless datives, obligatorily precede accusatives in French, unlike *á*-datives, which may either follow or precede accusatives (see chapter 3, section 8.3.2):

(375) a. ?*Je leur ai   tous   tout   montré*
           I them have all-DAT all-ACC showed
       b. **Je leur ai   tout   tous   montré*
           I them have all-ACC all-DAT showed
          'I showed them all everything'

Crucially for present purposes, the prepositionless construction with stranded quantifiers is limited to contexts containing dative clitics, such as (374b) and (375a), as evidenced by the ungrammaticality of (374d). This provides evidence that clitics are *obligatory* in the French double object construction.

A different set of facts points to the conclusion that clitics are *limited* to the double object construction in French. As discussed in chapter 3 (section 8.3.2), French dative clitics may only relate to – or form a chain with – phrases introduced by *à*. No other prepositional phrase can co-occur with a clitic in e.g. right dislocation. Examples (273a) and (274a) illustrating this are repeated here:

(273) a. *On leur   en   construira, à tes   amis*
           We Cl-DAT Cl-PART build-FUT, to your friends
          'We'll build them some, your friends'

(274) a. **On leur   en   construira,   pour tes   amis*
           We Cl-DAT   Cl-PART build-FUT,   for   your friends
           'We'll build some for your friends'

Interestingly, dative cliticization is possible with a *subset* of predicates selecting for *à*-complements (Kayne 1975: 145-152). As illustrated below, cliticization is possible with the predicate in (376) but not with the predicate in (377) (see Jaeggli 1982 for further discussion of these facts):

(376) a.   *On a construit une maison à Jean*
             'They built a house for Jean'
       b.   *On lui construit une maison*
             'They built a house for him'
(377) a.   *Elle pense à toi*
             'She thinks of you'
       b. * *Elle te pense*
             'She thinks of you'

The difference between (376) and (377) can be accounted for in terms of the assumption that an applicative v can be added on the main predicate in (376) but not in (377). Predicate restrictions on the formation of the double object construction, and hence the addition of vAPPL, have been seen in chapter 2 to apply in both English and Greek. This strengthens the link between clitics and the double object construction.

  Now if it is correct that dative clitics are limited to the double object / applicative construction in French, then the presence of a clitic in both (374a), where *tous* is preceded by *à*, and (374b), where *tous* occurs without *à* in a position preceding the DO, entails that these examples represent two different instances of the double object construction. This variation can be interpreted in one of two ways.

  One possibility is that French has two variants of the double object construction, one without *à*, as in (374b), which is accepted only

by one group of native speakers, and one with *à*, as in (374a), accepted by all speakers (cf. Anagnostopoulou to appear, where it is argued that benefactors are either realized as genitive DPs or they are introduced by the preposition *se* in Greek applicative benefactive constructions). In such a view, the string (374c), where *tous* is preceded by *à* without being doubled by a clitic, is the counterpart of a PP-ditransitive. IOs preceded by *à* are in this analysis inserted in two different frames: they are either introduced by v-APPL, as in (374a) which contains a clitic, or not, as in (374c) which doesn't contain a clitic.

An alternative possibility to consider is that the paradigm in (374) reflects different stages of a "dative shift" transformation, of the kind proposed by work influenced by Relational Grammar (see chapter 3, section 2). In this analysis, the position of the quantifier in (374c) reflects the base DP(accusative)>PP order of the two arguments. Placement of the quantifier in (374b) reflects the intermediate 'double object' DP(dative)> DP(accusative) construction, with movement of the dative to the specifier of an applicative head, similarly to what has been proposed by Demonte (1995) for Spanish. These considerations lead to a partial analysis of (374b) along the lines of the derivation in (378). (Compare [378] to Demonte's tree [322] in chapter 4, section 6.) Since prepositionless *tous* preceding the DO is possible only in the presence of a dative clitic, the "dative shift" step in (378) is an intermediate step in French, permitted only when followed by cliticization. In (374a) the clitic spells out the head and *à tous* the foot of the three-membered chain consisting of the clitic, the intermediate Spec,vAPPL position and the VP-internal position. In (374b), on the other hand, the clitic is in the head position of the chain and *tous* in the intermediate "dative shifted" position (see Kayne 1975: 158-160 for suggestions along these lines).

(378)

```
                           vP
                    ╱            ╲
            DP<subject>           v'
                            ╱         ╲
                        v-TR           vP
                                 ╱          ╲
                              tousᵢ          v'
                               ↑        ╱        ╲
                               ┆    vAPPL          VP
                               ┆               ╱        ╲
                               ┆             DO           V'
                               ┆                      ╱       ╲
                               ┆                    V1        α-tousᵢ
                               └─────────────────────────────┘
```
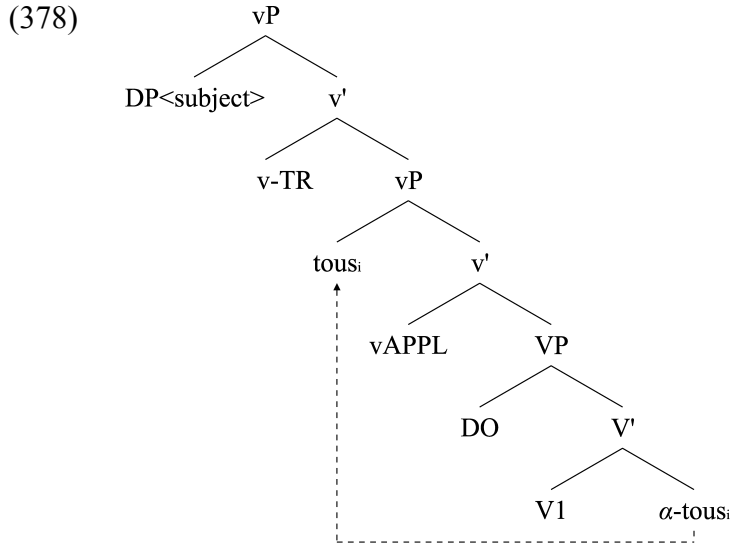
Regardless of how the paradigm in (374) is best analyzed, it constitutes evidence that dative clitics are required in the French double object construction, just as in its Spanish counterpart (see chapter 4, section 6). Unlike Spanish, clitics are not allowed to double full indirect object DPs in French, due to the Clitic Doubling Parameter. For this reason, "doubling" is limited to contexts with stranded quantifiers, as in (374) and (375) (according to Kayne 1999, doubling is also permitted in contexts with strong pronouns; see section 6 below). As a result of the Clitic Doubling Parameter, the double object construction in French is limited. Its existence can be detected only in constructions with simple (i.e. non-doubling) clitics, clitic doubled quantifiers and, according to Kayne (1999), strong pronouns. By contrast, the double object construction is possible with all DPs in Spanish since clitic doubling of indirect object DPs is licit in all dialects of Spanish (see fn 8).

5.3.2. The analysis of the PC-Constraint

Turning to the analysis of the PC-Constraint, I argued in the preceding section that the double object construction provides the input to dative cliticization. Based on the discussion in chapters 3 and 4 I assume that in the double object construction the indirect object is a specifier to vAPPL (base-generated there, as in Marantz 1993, or moved there, as in [378] tentatively suggested above for French) while the direct object originates VP-internally. Since the PC-Constraint is attested in transitive sentences, the external argument is introduced by a higher transitive v, v-TR, which is merged with the vP headed by vAPPL. I propose that v-TR contains φ-features to check, namely person and number (cf. Chomsky 2000; 2001a; 2001b), while v-APPL introducing an argument with dative / inherent Case (in section 7, I will come back to v-APPL in languages where both objects have structural Case) is inactive, i.e. it lacks φ-features for checking.

Extending the analysis of quirky dative subjects outlined in sections 4.2 and 5.2 for Icelandic to indirect objects in languages showing the PC-Constraint, I furthermore propose that dative indirect objects in Greek, French, Spanish, Basque etc. double object constructions have an active [Participant / person] feature (related to the fact that they are typically animate, affected etc.) which can be checked against v-TR. Dative IOs are "defective" in that they do not have a number feature accessible for checking by v-TR. Evidence that dative objects do not trigger number agreement is provided by Romance participle agreement (see Taraldsen 1995: 310-311). As illustrated in (379), dative clitics do not agree in number with participles, unlike accusatives:

(379) a. *Gli   ho   telefonato / *i*
           Cl-DAT-pl   have-1sg called-masc,sg / *masc,pl
           'I have phoned them'

b. *Li   ho   visti / *o*
    Cl-ACC-pl   have-1sg   seen -masc,pl / *masc,sg
    'I have seen them'

Finally, accusatives – just like nominatives – are φ-complete, i.e. they can check person and number simultaneously on v-TR. Similarly to nominatives, accusatives are allowed to check bare number when a higher dative has already checked person and must check their complete set of φ-features under Move or Agree in order for their structural Case feature to be checked.

Clitics ultimately target T. In transitive sentences, they move to T after the subject raises, as represented in (284), repeated below from chapter 4 (section 2). (284) contains two steps. A subject movement step to T followed by a step in which the indirect object cliticizes to T from the Spec,vAPPL position.

As anticipated in chapter 4, though, cliticization to T (e.g. Step II in [284]) should actually be decomposed into two smaller steps. One in which the clitic targets v-TR and one in which it undergoes further cliticization to T. The requirement for decomposition is obvious for accusative DO clitics which, on standard assumptions, check their Case against v-TR. The assumption that v-TR and the IO have matching [person] features forces decomposition of Step II into two smaller steps for IO clitics as well. The IO will have to move through v-TR on its way to T because the P-feature of IO is the closest feature matching the P-feature of v-TR. As a result, the IO cannot skip v-TR and move directly to T. (Unless v-TR has moved to T prior to cliticization; in the latter case the IO targets the complex T-Vb directly – see below for the details of this derivational option.)

(284)

```
                        TP
                    ╱        ╲
              DP_SUBJ          T'
                 ↑         ╱        ╲
                 ┊        T          vP'
            STEP I      ╱  ╲        ╱    ╲
                 ┊    Cl_IO   T  DP_SUBJ   v'
                 ↑                      ╱    ╲
                      STEP II        v-TR      vP
                                           ╱      ╲
                                          t         v'
                                                  ╱    ╲
                                              vAPPL       VP
                                                        ╱    ╲
                                                       V       DP_DO
```
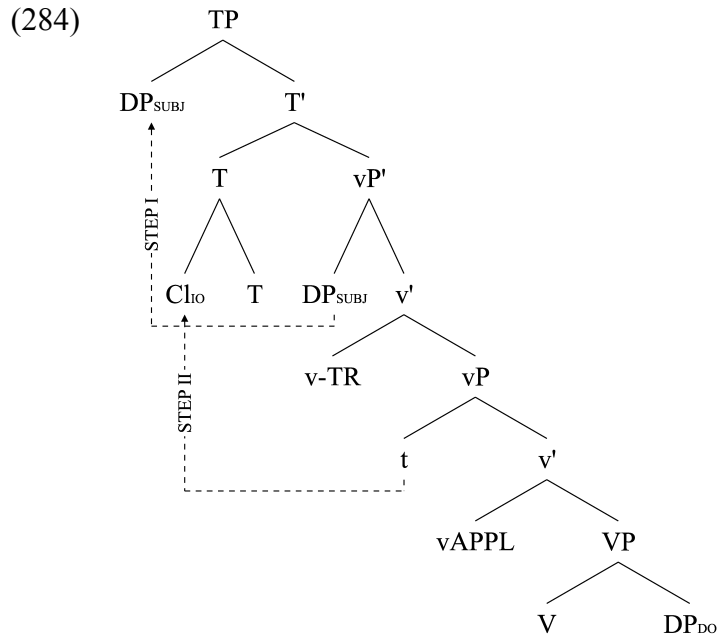
Consider now how the derivation proceeds when both a dative and an accusative clitic undergo cliticization to T via v-TR. In the double object construction, the dative is closer to v-TR than the accusative by Chomsky's (1995) definition of closeness: the dative clitic originates in the minimal domain of v-APPL and the accusative clitic in the minimal domain of V. This entails that in multiple cliticization environments, the dative moves to v-TR before the lower accusative. It moves and checks the P feature of v-TR. The accusative moves next, checking the N feature of v-TR. This derivation is illustrated in (380) below. (380) is licit only when the DO is a determiner pronoun (i.e. a 3rd person pronoun). Since the IO has checked the P-feature of v-TR in Step I, only 3rd person accusative pronouns match v-TR $\{0,N\}$ in Step II. 1st / 2nd person pronouns and reflexives do not match v-TR$\{0,N\}$ due to their P feature. The result is the PC-Constraint.

(380)

```
                        v1P
              ┌──────────┴──────────┐
           IO{P}                    v1P
              ▲           ┌──────────┴──────────┐
              ┊        DO{N}                    v1P
              ┊           ▲           ┌──────────┴──────────┐
              ┊           ┊        Subj                     v'
              ┊           ┊           ┌──────────┴──────────┐
              ┊           ┊       v-TR{00}                 v2P
   I: P-Checking   II: N-Checking       ┌──────────┴──────────┐
              ┊           ┊           t_{IO}                  v'
              └ ─ ─ ─ ─ ─ ┼ ─ ─ ─ ─ ─ ─ ┘      ┌──────────┴──────────┐
                          ┊                  vAPPL                   VP
                          ┊                                ┌──────────┴──────────┐
                          ┊                              V                       t_{DO}
                          └ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┘
```
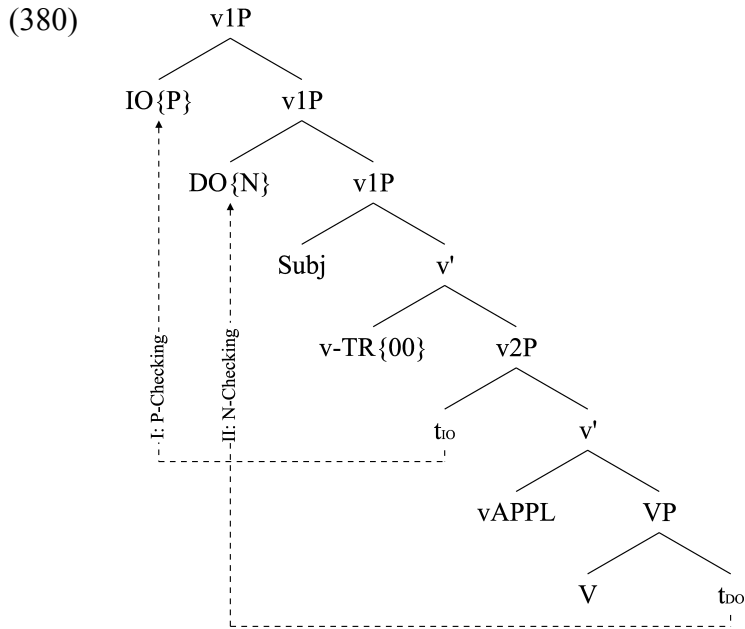
Note that nothing in this analysis would change if clitics checked φ-features on the complex head [v-T], i.e. if cliticization involved (i) movement of the verbal complex Vb to T first, followed by (ii) cliticization of the IO to T-Vb and (iii) cliticization of the DO to T-Vb. In the derivation (292), repeated here from chapter 4 (section 2), the nominative external argument raises first (Step I) and enters a checking relation with the most proximate (external) head, namely T, checking and deleting its φ-features. In Step II, the dative clitic raises and enters checking with v-TR which is embedded under T: it checks v-TR's P-features. Finally, the accusative clitic raises last, and can only check the remaining N features of v-TR (Step III).

(292)

TP
- DP_Nom
- T'
  - T
    - DP_Dat
    - T
      - DP_Acc
      - T
        - Vb
        - T
  - vP
    - DP_Nom
    - v'
      - t_v-TR
      - vP
        - DP_Dat
        - v'
          - t_vAPPL
          - VP
            - DP_Acc
            - t_V
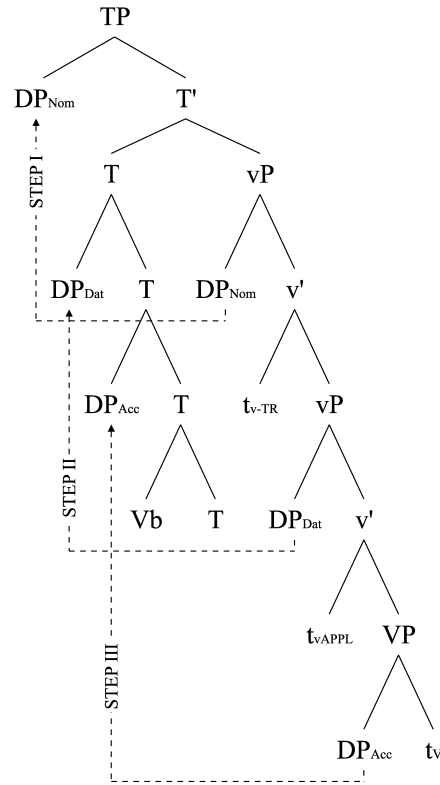
STEP I: Checking of P and N of T by the Nominative Subject

STEP II: Checking of P of v-TR by the dative IO clitic

STEP III: Checking of N of v-TR by the accusative DO clitic

This concludes the discussion of the PC-Constraint with clitics.

The analysis of combinations of clitics straightforwardly extends to clusters of weak pronouns, which have been argued in chapter 3 to target v-TR. The PC-Constraint with weak pronouns results from derivation (380).

Turning, finally, to the PC-Constraint on clusters of agreement markers, in principle, this can be analyzed in one of two ways depending on whether agreement markers in individual languages reflect Move or Agree (recall that binding provides the main diagnostic for teasing apart Move from Agree). If agreement markers have the syntax of clitics, as e.g. argued for by Laka (1991) for Basque agreement (see also the analysis of subject agreement in Greek proposed by Alexiadou and Anagnostopoulou 2001; see section 4 of

chapter 4), then the analysis of clitics in terms of the derivation (380) or (292) straightforwardly extends to clusters of agreement markers.

If, alternatively, agreement markers in individual languages qualify as reflexes of long-distance Agree between v-TR and the two objects, then v-TR must be assumed to enter Agree with the IO *before* it agrees with the DO, in order for the PC-Constraint to be accounted for (contra Chomsky 2001b who assumes that multiple Agree within a phase is simultaneous). The different timing of Agree, in turn, reduces to the MLC. Recall that Move and Agree are subject to the same type of locality (chapter 4, section 7), i.e. a functional head X is not allowed to enter Agree with an argument Z across an argument Y, unless Y agrees with X as well. Assuming that multiple Agree proceeds exactly as multiple Move, i.e. in a counter-cyclic fashion guided by the MLC (see chapter 4, section 5), Agree of v-TR with the higher IO takes place first, leading to checking of the P feature of v-TR. As a result, the PC-Constraint emerges: v-TR can enter Agree with 3rd person determiner pronouns because they match v-TR$\{0,N\}$ but not with 1st and 2nd person pronouns, which have P-features that remain unchecked.

5.3.3. Person vs. animacy

In this section, I will consider – and dismiss for Greek – a proposal put forth in recent literature according to which the PC-Constraint is triggered by Animacy / gender features rather than Participant / person features. This proposal is advocated in Ormazabal and Romero (2001), mainly on the basis of evidence from Spanish.

Ormazabal and Romero investigate the PC-Constraint in the, so-called, *leísta* dialects of Peninsular Spanish, which have the interesting property that they encode animacy on accusative 3rd person clitics. More specifically, in a subset of *leísta* dialects 3rd person accusative clitics surface with dative case morphology when they are

animate and with accusative case morphology when they are inanimate, as exemplified in (381):

(381) *Le*   */ Lo*   *vi*
    Cl-3ACC$_{Dat\,/\,+animate}$ / 3ACC$_{Acc\,/\,-animate}$ saw-1sg
    'I saw him / I saw it'

In the dialects that have this animacy split on accusatives, animate 3rd person DO clitics can never co-occur with dative IO clitics. Only inanimate 3rd person clitics are licit in multiple cliticization environments, as documented by (382):

(382) *Te*   *lo*   */ *le*   *di*
    Cl-2DAT   3ACC$_{Acc\,/\,-animate}$ / *3ACC$_{Dat\,/\,+animate}$ gave-1sg
    'I gave it to you / *I gave him to you'

As correctly pointed out by Ormazabal and Romero, this fact is not predicted if the PC-Constraint is linked to Person. In (382), both animate and inanimate accusative clitics are 3rd person, i.e. they lack P features, and both should be able to co-occur with an IO clitic. And yet, only the inanimate one is well-formed.

In order to account for the contrast in (382), Ormazabal and Romero propose that the PC-Constraint actually reflects an Animacy restriction. Languages that encode animacy, such as the *leísta* dialects transparently show this, in examples like (382). On the other hand, the languages discussed by e.g. Bonet (1991) do not overtly encode animacy on third person clitics and, therefore, the PC-Constraint manifests itself only on arguments encoding animacy in their feature specification, i.e. 1st and 2nd person. 1st and 2nd person pronouns are [+animate] per definition, since they refer to the Speaker and the Addressee. Therefore, they are ruled out in contexts of multiple cliticization in all languages.

Ormazabal and Romero are probably correct for *leísta* dialects of Spanish and other languages showing an animacy split of the type

illustrated in (381). (Ormazabal and Romero 2001 point out that Mohawk, as described by Baker 1996, is such a language.) For these languages, the analysis proposed in the preceding section for the PC-Constraint would have to be reformulated in terms of Animacy / gender checking, in order for the effect in (382) to be accounted for. More specifically, it would have to be proposed that v-TR in e.g. (380) or (292) has an active Animacy / gender feature, the IO also has one such feature, and the animate DO clitic with dative morphology in (381) has Animacy / gender that needs to be checked in order for its Case to be checked. In multiple cliticization contexts, the IO checks Animacy on v-TR preventing the DO from checking Animacy / gender. This leads to a crashing derivation due to failure of Case checking of the DO.

An analysis along the lines just sketched, though, cannot be extended to Greek, for the following reason. Ormazabal and Romero's analysis entails that the PC-Constraint never affects 3rd person accusative clitics in Greek because they are not specified for animacy; they are contextually interpreted as either animate or inanimate. Under the assumption that 3rd person accusative clitics do not have a [+Animate] feature visible to the computational system, the syntactic principles regulating the PC-Constraint, which refer to a syntactic feature [+Animate], never apply to them.

It is indeed correct that Greek does not overtly encode animacy of DOs by means of special case morphology, but we saw evidence that Animacy / gender of DOs is a property syntactically encoded in Greek. Recall from chapter 4 (section 2) that the MLC is violated when a [+animate], [feminine] or [masculine] DO clitic moves across an IO DP. The basic paradigm illustrating the intervention effect posed by Animacy / gender is repeated here:

(287) a. *Sistisa*   *tu*   *adhelfu*   *mu*
           Introduced-1sg the brother-GEN my
           tin fili   *mu*   *tin Maria*
           the friend-ACC my-GEN the Maria-ACC
           'I introduced my brother my friend Mary'

      b.*?*Tin*   *sistisa*   *tu*   *adhelfu*   *mu*
           Cl-ACC-FEM introduced-1sg the brother-GEN my
           'I introduced her to my brother'

      d. *Tu*   *tin*   *sistisa*
           Cl-GEN-MASC Cl-ACC-FEM introduced-1sg
           'I introduced her to him'

I have argued that the ungrammaticality of (287b), with a [+animate] [feminine] clitic provides evidence that DO clitics have Animacy / gender features that are visible to v-TR leading to an MLC effect. If the PC-Constraint was due to Animacy / gender multiple cliticization examples in environments showing the MLC effect would be un-grammatical. This prediction is not borne out, though: as discussed in chapter 4, (287d), repeated above, which contains a combination of a dative clitic and a [+Animate], [feminine] accusative 3rd person clitic is well-formed. The well-formedness of (287d) in turn entails that in Greek, Animacy / gender checking is not a pre-requisite for Case checking of DO clitics. By contrast, the requirement for Animacy / gender checking must be met in *leísta* Spanish, in order for Case checking to take place and, therefore, (382) is ruled out when the DO clitic is animate.

In conclusion, the comparison between *leísta* Spanish and Greek demonstrates that φ-feature checking of arguments with structural accusative Case is parametrized. Accusative clitics must check Ani-macy against v-TR in *leísta* Spanish but not in Greek, where they only check Person.[86]

5.3.4. Order of movements and order of checking

Recall from section 2.1 that Bonet's (1994) claim that the PC-Constraint is universal has been refuted by Ormazabal and Romero (2001) and Haspelmath (2001). They note the existence of counter-examples, i.e. languages not showing the restriction. The present account makes a prediction concerning a class of possible exceptions to it. Since the analysis crucially relies on the premise that the PC-Constraint arises when the dative argument moves to v-TR blocking person agreement, it is predicted that clusters of weak pronouns will not be subject to the PC-Constraint if the accusative moves to v-TR before the dative. In such a case the accusative will check all of its φ-features at once, and it will surface as 1st and 2nd person without any problem. In this section, I will present evidence that this prediction is borne out, which comes in form of data from Swiss German. The relevant facts are discussed in Bonet (1991: 188; they are attributed to Harry Leder) and have been confirmed to me by Henk van Riems-dijk, personal communication.

In Swiss German, the order of weak pronouns correlates with the presence / absence of a reflex of the PC-Constraint. When the accusative is 3rd person the word order among the weak pronouns is free, as illustrated in (383):

(383) a. *D' Maria zeigt en   mir*   *Acc3 > Dat*
           The Maria shows him   to-me
       b. *D' Maria zeigt mir   en*   *Dat > Acc3*
           The Maria shows to-me him
           'Mary shows him to me'

When the accusative is specified for person, however, it has to pre-cede the dative, as in (384a). When it follows the dative, as in (384b), ungrammaticality arises:

(384) a. *D' Maria zeigt   mi   em   Acc1 > Dat*
          The Mary   shows me   to-him
       b. * *D' Maria zeigt   em   mich   *Dat > Acc1*
          The Maria shows to-him me
          'Mary shows me to him'

The above facts are correctly predicted by the present analysis. More specifically, the optionality in the word order of pronouns in (383) indicates that in Swiss German, either the accusative or the dative are allowed to move to v-TR first. This is possibly related to the existence of two base orders for datives in Swiss German, similarly to Japanese and Icelandic discussed in chapter 3. In (383a) the accusative pronoun moves to v-TR first and checks all of its φ-features against v-TR. The dative moves to v-TR next, and there are no φ-features left for checking, as illustrated in (385). (Presumably, the dative only checks definiteness and / or phonological features.) By contrast, the dative raises first in (383b), checking P, and the accusative checks the remaining N, as schematized in (386):

(385)   vP   (= 383a)
             /   \
         ACC   v{0,0}
                    /   \
                DAT   v
                          /   \
                       v-TR

(386)   vP   (= 383b)
             /   \
         DAT   v{0,N}
                    /   \
                ACC   v{0,0}
                           /   \
                        v-TR

Since the accusative is 3rd (i.e. no) person, the result is grammatical.

Consider now (384) where the accusative is specified for person. When the accusative moves to v-TR first, as in (384a), it checks all of its φ-features, as schematized (387). On the other hand, when the dative raises first, as in (384b), it checks person on v-TR. Further movement of the 1st person accusative pronoun to v-TR leads to ill-formedness, because the pronoun ({P,N}) cannot be checked against v-TR{0N}:

(387)   vP   (compare to 383a / 385)

ACC{P,N}   v{0,0}

DAT   v

v-TR

(388) *   vP   (compare to 383b / 386)

DAT   v{0,N}

ACC{P,N}   v{0,N}

v
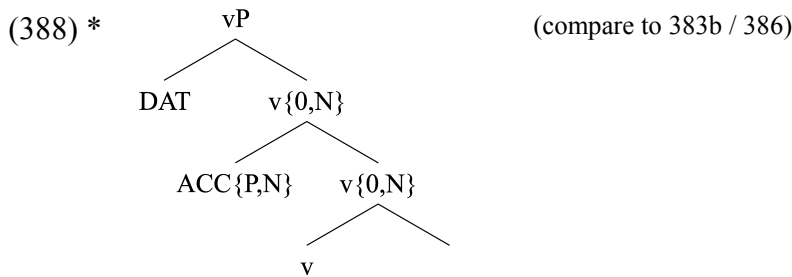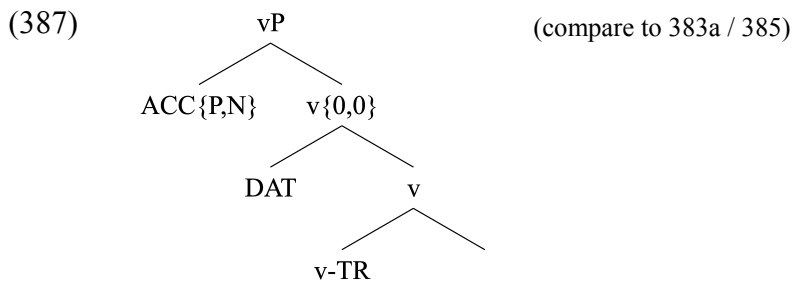
In sum, the Swiss German facts in (383) and (384) demonstrate that word order determines the occurrence of a person restriction, a fact strongly supporting a syntactic approach towards the PC-Constraint. As acknowledged by Bonet (1991) herself, the interaction between word order and the emergence of the PC-Constraint cannot be explained in a morphological account. This interaction further-more argues against the view that the reason for the constraint is lack of harmony between a person / animacy scale and a semantic / the-

matic role scale, as suggested by e.g. Farkas and Kazasis (1980), Aissen (1999), Haspelmath (2001) and others. The latter approach doesn't make reference to syntax and hence cannot state the correlation underlying the contrast between (384a) and (384b). Most importantly for present purposes, the Swiss German facts in (384) provide evidence in favor of counter-cyclic derivations and "tucking in", and against the view advocated by Chomsky (2001a) and McGinnis (2001) that the MLC is evaluated at the Phase-level. The rest of this section elaborates on this point.

Recall from chapter 4 (section 5) Chomsky's (2001a) reanalysis of counter-cyclic multiple movement in terms of the strictly cyclic derivation (317) repeated below:

(317)
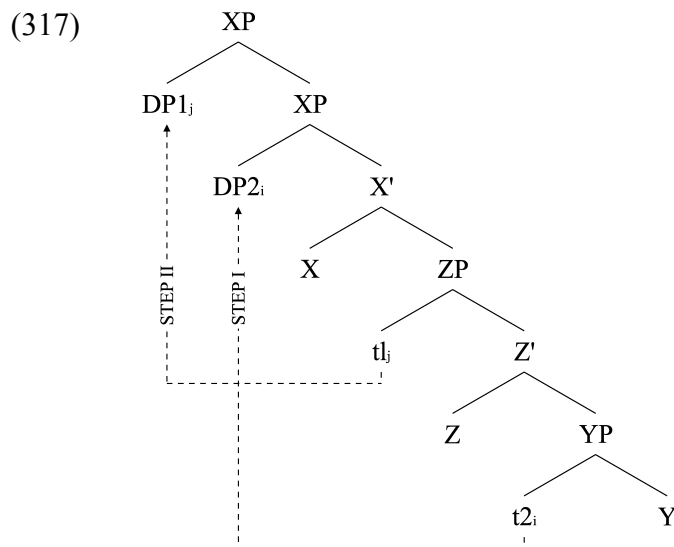
Chomsky proposes that when two arguments target the same head the lower one (DP2 in [317]) moves first and the higher one (DP1 in [317]) moves next. Order preserving serialization of DP1 and DP2 is not the result of "tucking in" but rather it follows from the Extension Condition, i.e. when a DO and an IO undergo object shift the DO

moves first and the IO attaches above it, extending the phrase marker.

Turning now to the Swiss German facts in (384), an analysis along the lines of Chomsky (2001a) would entail that the DAT>ACC order in (384b) results from movement of the accusative followed by movement of the dative, as schematized in (389) below. On the other hand, the ACC>DAT order in (384a) results from movement of the dative followed by movement of the accusative, as in (390).

(389)   (390)
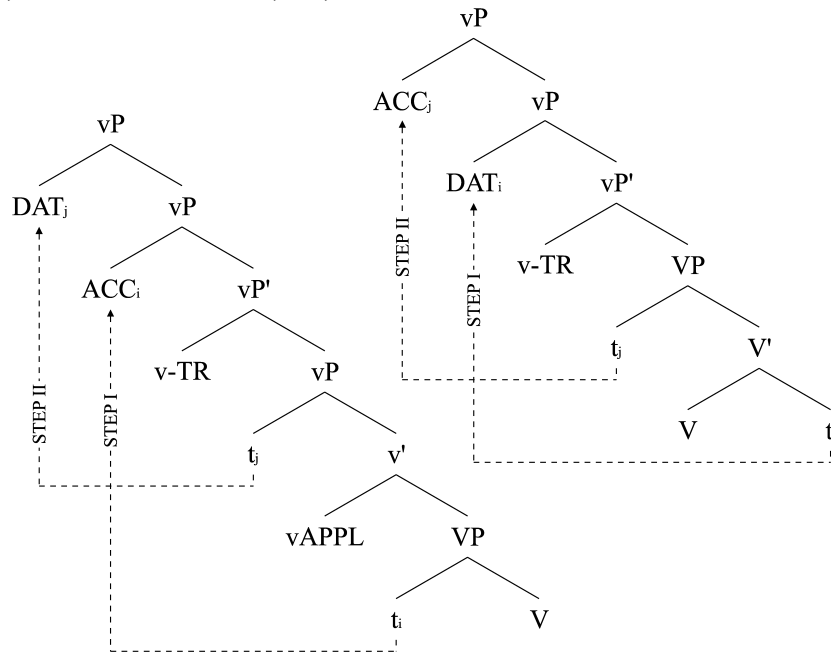
The problem posed by derivations (389) and (390), though, is that they do not explain why a 1st or 2nd person accusative is licit only in the ACC>DAT order. In fact, they incorrectly predict that the ACC>DAT order should be the problematic one. Consider why.

Starting from the derivation which derives the ACC>DAT order, in (390) the dative raises and enters a checking relation with v-TR

before the ACC does. Since it moves first the dative is expected to influence the checking relation between the accusative and v-TR in that order, contrary to facts. Turning to (389) which generates the DAT>ACC order, this derivation should be as unproblematic as one in which a weak accusative pronoun co-occurs with a strong dative pronoun *in situ*. In (389) the accusative 1st person pronoun moves to v-TR before the dative and can check both its P and its N feature. The ban against a 1st person accusative pronoun in the DAT>ACC order is thus not explained.

Recall, finally, that in Icelandic passives, the prohibition against 1st and 2nd person nominatives arises when datives raise and enter a checking relation with T, not when nominatives raise. The Icelandic facts are repeated here from section 5.2.1:

(371)   *√2Nom>Dat*

    a. *Þú   varst   gefinn honum*
         You-NOM   were-2sg given him-DAT
       *Dat>2Nom

    b. **Honum   var / varst   gefinn   þú*
        Him-DAT was-3sg / 2sg   given   you-NOM
        'You were given to him'

A very similar situation obtains in Swiss German, where 1Acc>Dat is wellformed and Dat>1Acc is illformed, as shown by (384a) and (384b) respectively. An analysis of multiple pronominal movement in terms of "tucking in" directly expresses the correlation between the Icelandic facts in (371) and their Swiss German counterparts in (384). In both cases, a 1st and 2nd person nominative / accusative is well-formed when it enters checking before the dative, which is reflected on the entirely parallel orders NOM>DAT (structural>dative) in Icelandic (371a) and ACC>DAT (structural>dative) in Swiss German (384a).

5.3.5. Feature checking on v

So far, I have concentrated on examples of the PC-Constraint which involve dative goal arguments. Benefactors and datives of inalienable possession constructions are also subject to the constraint (Bonet 1991: 196-197, 1994), as shown by (391) with a benefactive and by (392) with a possessive dative:

(391) a. *A   la Mercè, li   faré   un pastís immens*
          To the M.,   Cl-DAT will-make-1 a   cake   enormous
          'I will bake a huge cake for Mercè'
      b. * *Me   li   va pintar*
          Cl-ACC-1sg   Cl-DAT-3sg   painted-3sg
          '(S)he painted me for him / her'

(392) a. *On   va   lui   mettre   le   bébé*
          Impers. is going to Cl-DAT   put   the baby
          dans   les   bras
          inside   the   arms
          'They will put the baby in his / her arms'
      b. * *On   va   te   lui   mettre*
          Impers. is going to Cl-ACC-2sg   Cl-DAT-3sg   put
          dans   le   bras
          inside   the   arms
          'They will put you in his / her arms'

As is well known, benefactors and possessors occur in the double object construction, similarly to goals. It is therefore expected that these datives enter into checking with v-TR, an operation leading to the PC-Constraint.

On the other hand, the presence of an ethical dative does not lead to a PC-Constraint effect, as exemplified in (393) (Bonet 1991: 197; Laka 1991: 185):

(393) *te   me   han   vendido al   enemigo*
      Cl-ACC-2sg Cl-DAT-1sg have-3pl   sold   to-the enemy
      'They have sold you to the enemy (on me)'

Ethical datives neither relate to DP arguments via e.g. clitic doubling nor can be realized as full DPs in languages / dialects lacking clitic doubling. Following Jaeggli (1982), I propose that this entails that they are – in contrast to other datives – not merged in the vP domain, i.e. they are not arguments of the (complex) verb. Assuming that only vP internal arguments can check their features against v-TR,[87] it is correctly predicted that ethical datives do not trigger the constraint.

5.3.6. Checking of φ-features

Locative clitics do not induce a violation of the PC-Constraint either, similarly to ethical datives. In Catalan as well as in dialects of French and Italian (Bonet 1991, 1994), the PC-Constraint is inactive when the locative clitic *hi* is used instead of the dative clitic *li*. This is illustrated in (394) with examples from Catalan. (394a) with a locative clitic and a 1st person accusative is well-formed, contrary to (394b) which contains a dative clitic (from Bonet 1991: 209):

(394) a. *A   en Pere, m'   hi   va recomanar*
          To   the Pere, Cl-ACC,1sg Cl-LOC   recommended-3sg
          en   Josep
          the Josep
          'As for Pere, Josep recommended me to him'
      b. **A   en Pere, me   li*
          To   the Pere, Cl-ACC,1sg   Cl-DAT,3sg
          va recomanar   en Josep
          recommended-3sg   the Josep
          'As for Pere, Josep recommended me to him'

The contrast in (394) suggests that locative clitics, unlike dative clitics, do not check person features. In (394a), the person feature of v-TR remains unchecked, and the 1st person accusative can jointly check person and number, resulting in a convergent derivation. This is impossible in (394b) where the dative checks person. Even though locatives and datives behave similarly with respect to EPP (both can check the EPP feature of T as discussed in chapter 3), they differ with respect to φ-feature checking (datives check person, locatives do not).

5.3.7. Tucking in and morphology

In section 5.3.4, I argued that the "tucking in" analysis of the surface order of weak pronouns in Swiss German explains the fact that the PC-Constraint arises in the DAT>ACC order and not in the ACC>DAT order. Before closing the discussion of the PC-Constraint I will investigate the question whether the "tucking in" analysis of combinations of weak pronouns can be extended to combinations of clitics.

  If linear order of clitics was determined by their syntax, DAT>ACC sequences would result from a derivation in which the dative moves before the accusative. The reverse ACC>DAT serialization from a derivation in which the accusative moves before the dative. Accordingly, the PC-Constraint would arise only in languages showing the DAT>ACC order. As a matter of fact, data from a number of languages with clitics appear to support the correlation just sketched between clitic ordering and the emergence of the PC-Constraint. The order of clitics is DAT>ACC in Serbocroatian, Greek,[88] Romanian, Albanian, Polish, Slovak, Russian, Czech (Vos and Veselovská 1999: 938), Standard Italian, Valencian, (Bonet 1991: 72), and many of these languages are reported to show the PC-Constraint. The PC-Constraint in Italian, Valencian and Greek is discussed in Bonet (1991). Haspelmath (2001: 5) in addition men-

tions Romanian (citing Farkas and Kazazis 1980) and Albanian (citing Buchholz and Fiedler 1987: 449-50). Czech[89] is discussed in Vos and Veselovská (1999: 972). These languages behave as predicted.

As pointed out in sections 4.1 and 4.2, though, the surface order of clitics does not always reflect their syntax. More specifically, Bonet (1991) – basing herself on Perlmutter (1971) – convincingly argues that in many Romance languages / dialects, arrangement of forms within the clitic cluster is determined by morphology. Bonet points out that linearization can, in principle, be argued to derive from operations in narrow syntax only in languages and constructions where (i) the order of clitics correlates with significant syntactic regularities and (ii) clitic combinations result in transparent forms. In many cases, though, neither (i) nor (ii) hold.

Starting from (i), it is well-known that in languages with complex pronominal clitic systems, clitics do not have the same status syntactically. They are arguments, adjuncts, or ethicals. If surface arrangement of clitics was determined by their syntax, a fixed order among arguments, adjuncts and ethicals would obtain, reflecting their syntactic function. For example, arguments would be arranged according to their Case (which reflects grammatical function), and ethicals would be the most external clitics since they do not belong to the argument structure of the verb being special types of discourse-markers (see section 5.3.5 above which discusses the fact that ethical datives do not trigger the PC-Constraint). But instead, in many Romance languages specific clitics occupy a specific position within the clitic cluster, regardless of their syntactic function. For example, in Catalan the linear order of clitics is always 2nd person followed by 1st, independently of grammatical function. Thus, in combinations of ethical with inherent clitics, when the inherent clitic is 2nd person and the ethical 1st the order is *inherent>ethical*, as in (395a), and when the ethical is 2nd and the inherent 1st, the order is *ethical>inherent*, as in (395b) (Bonet 1991: 66):

(395) a. *No   te   m'   enfadis*
          Not Cl-REFL-2 Cl-ETH-1 get angry,2sg
          'Don't be angry (on me)!'
     b. *No   te   m'   enfadaré*
          Not Cl-ETH-2 Cl- REFL-1 get angry,1sg
          'I won't get angry (on you)'

Standard Catalan and Barceloní (which is close to Standard Catalan) provide strong evidence that clitics are arranged by person, not by their syntactic role. As pointed out in section 4.1, Bonet (1991) demonstrates that 1st, 2nd and reflexive / impersonal clitics form a natural class, while neuter, 3rd person dative and accusative clitics, locatives, partitives form another natural class with respect to their position within the clitic group. A templatic approach towards clitic ordering of the type argued for by Bonet (1991) and others is descriptively more adequate for languages of this type.

As a result of organization according to person in Catalan, 1st or 2nd dative clitics precede 3rd person accusative clitics, as in (396a). Ungrammatical combinations involving a 1st or 2nd accusative and a 3rd person dative show the reverse accusative>dative order, as illustrated by (396b) (Bonet 1991: 177):

(396) a. *M'   l   va recomanar   la   Mireia*
          Cl-DAT,1 Cl-ACC,3 recommended-3 the Mireia
          'Mireia recommended him to me'
     b. **Me   li   va recomanar   la   Mireia*
          Cl-ACC,1 Cl-DAT,3 recommended-3 the Mireia
          'Mireia recommended me to him'

The serialization of weak pronouns corresponding to the illformed (396b) has been seen in section 5.3.4 to be grammatical in Swiss German. Unlike Swiss German, though, where the ACC>DAT and the DAT>ACC orders result from syntactic movement and "tucking

in", the DAT>ACC and ACC>DAT sequences in (396) reflect organization of clitics according to [person] in Catalan.

Proceeding to point (ii), the existence of non-transparent forms does not enable us to draw conclusions concerning the order of clitics by looking at surface forms. In general, combinations of two person clitics and combinations of a person with a non-person clitic give transparent results. This is illustrated in (395) above with ethical and inherent 1st and 2nd person clitics. On the other hand, combinations of two non-person clitics often do not give rise to transparent results. Thus, in the combination of two 3rd person dative and accusative clitics instantiated in (397), the form *elzi* looks like the 3rd person dative plural clitic in isolation. It is neither the transparent *dative>accusative* form *lilez* nor the transparent *accusative>dative* form *lezli* we would expect (Bonet 1991: 84):

(397) *A en Miquel, les llibretes,   elzi donaré   després*
          to the Miquel, the notebooks Cl   will give-1sg later
          'I will give the notebooks to Miquel later'

In such a system, it is very hard to tell the order of the accusative relative to the dative by looking at two third person clitics. Surface forms in examples like (397) are determined by individual features (Bonet 1991, 1995).

On the basis of the above discussion, I conclude that, unlike weak pronouns, serialization in clitic combinations does not necessarily reflect the order of syntactic operations. The data that would falsify the present analysis of the PC-Constraint would thus have to involve combinations of weak pronouns rather than clitics.[90]

6. Accounting for the differences

The analysis in section 5 accounts for the properties the two constraints have in common (similarities 1-5 in table 6). In this section, I turn to their differences (1-3 in table 6).

6.1. Difference 1: the locus of dative checking

The two constraints have been argued to arise whenever two arguments check φ-features against a single functional head. The restriction on nominative objects results from split checking in T; the PC-Constraint from split checking in v-TR. This leads to a view according to which dative arguments check person features "parasitically" either on the head that canonically checks nominative (T) or on the head that canonically checks accusative / absolutive (v-TR). This is expressed in (398):

(398) *Dative checking*
       The dative argument checks [PARTICIPANT / PERSON] either on T or on v-TR
       a. [PARTICIPANT / PERSON] is checked on T.
       b. [PARTICIPANT / PERSON] is checked on v-TR.

Condition (398) accounts for the first difference between the two constraints, which is repeated below:

(399)   DIFFERENCE 1 OF TABLE 1:
       a. The restriction against 1st and 2nd person nominatives is found in constructions *without* external arguments.
       b. The PC-Constraint is found in constructions *with* an external argument

The ban against 1st and 2nd person nominative objects arises when a dative and a nominative check features against T, a process taking

place in constructions lacking an external argument. The PC-Constraint arises when datives and accusatives check features against v-TR, which introduces the external argument.

Some languages have been claimed to display the constraint in both transitive and unaccusative contexts. Italian appears to be such a language. According to David Pesetsky (personal communication), nominative themes in experiencer object constructions formed with predicates of the *"piacere"* class cannot be 1st and 2nd person in Italian. Moreover, impersonal reflexive sentences in this language have been argued to show a comparable restriction on nominative objects. Consider the sentences in (400) (from Taraldsen 1995: 313; cf. Burzio 1992). While an agreeing 3rd person DP is allowed in impersonal reflexives, as in (400a), an agreeing 1st person object in (400b) is not:

(400) a. *Si ammirano troppo   i giocatori di calcio*
           Si admire-3pl too-much   soccer players
           'One admires soccer players too much'
       b. * *Si ammiriamo troppo   noi*
           Si admire-1pl   too much   we
           'One admires us too much'

Under the assumption that *si* in (400) checks person against T, the nominative is not allowed to also check its person feature against T, similarly to Icelandic nominative objects.

Spanish appears to be like Italian. Ormazabal and Romero (2001) provide unaccusative examples with a dative and a nominative where the nominative cannot be 1st and 2nd person:

(401) a. *La   carta   me   llegó   tarde*
           The   letter-NOM Cl-DAT,1sg arrived late
           'The letter arrived late to me'

b. * *Tú   me   llegaste   tarde*
   You-NOM   Cl-DAT,1sg   arrived   late
   'You came late to me'

The existence of pairs like (401) in Spanish leads to the conclusion that dative arguments in this language check the feature [Participant / person] either in v-TR (in PC-environments) or in T (in certain unaccusatives).

Recall from section 2, though, that Greek[91] and Basque have a person restriction in ditransitives, never in passives and unaccusatives and, conversely, Icelandic has a person restriction in passives and unaccusatives, never in ditransitives. Languages like Icelandic, Greek and Basque etc. show that the locus of person checking of dative arguments is a potential parameter. T is the locus of [Participant / person] checking of dative arguments in Icelandic while in Greek and Basque the locus of dative checking is v-TR.

As pointed out in section 2, the PC-Constraint is attested in a wide range of languages while the person restriction on nominatives looks like a language-specific constraint, i.e. it is found mainly in Icelandic. Even in Italian and Spanish, which seem to have both, the restriction on nominative objects is less robust than the PC-Constraint. The former is limited to certain unaccusatives, the latter is found across all ditransitives. This difference between the PC-Constraint and the person restriction on nominatives entails that dative arguments check person features against v-TR more frequently than they do against T. I would like to suggest that this correlates with the fact that quirky subjects of the type found in Icelandic are crosslinguistically rare.

As is well known, the most convincing case for the existence of quirky subjects has been made for Icelandic (see chapter 3, section 6.1). Zaenen, Maling and Thráinsson (1985) have demonstrated that quirky datives are subjects not only because they behave differently from topicalized objects in being licensed in contexts where topicalization is ruled out but, especially, because they act like true subjects

with respect to phenomena that identify subjects such as ellipsis, complement-control and binding of subject oriented reflexives. Quirky subjects have been claimed to exist in a number of languages other than Icelandic, e.g. Italian (Belletti and Rizzi 1988), Spanish (Masullo 1993) and Greek (Anagnostopoulou 1999a). However, the tests that have been employed for the latter group of languages only show that the alleged quirky subjects differ from Clitic Left Dislocated (Cinque 1990; Iatridou 1991; Anagnostopoulou 1997a) objects. The tests do not identify datives as true subjects, as widely acknowledged (see, in particular, the discussion in Masullo 1993). In other words, the tests for quirky subject-hood are of two types. (i) Tests showing that certain kinds of datives do not behave like topicalized objects. (ii) Tests showing that certain kinds of datives behave like subjects. Icelandic datives qualify as quirky subjects with respect to both kinds of tests. Italian, Spanish and Greek datives qualify as quirky subjects only with respect to the former, less direct, family of tests. If the dative parameter proposed in this section is combined with the view that phenomena like e.g. control and reflexive binding are mediated through person checking on T (Ura 1996; Reinhart & Reuland 1991; Reuland 2001), we might have the beginnings of an answer as to why languages differ in this respect. Only Icelandic datives regularly check person in T in all unaccusatives and passives.

6.2. Differences 2 and 3: clitics and agreement

I finally turn to the two related differences of table 6:

(402)   *DIFFERENCE 2 OF TABLE 1:*
       a.   The person restriction affects *full* pronouns.
       b.   The PC-Constraint affects *weak* elements (clitics, agreement affixes, weak pronouns).

DIFFERENCE 3 OF TABLE 1:
- a. Structures which would otherwise offend the person restriction are saved by *non-agreeing* verbal forms.
- b. Violations of the PC-Constraint are salvaged by employing *full pronouns*.

Differences 2 and 3 will turn out to be only apparent. In both cases clitics / agreement reflect Move / Agree. In particular, I will argue that a Move / Agree relation between T and structural nominatives is signified through the presence of agreement inflection on the verb while Move / Agree between structural accusatives and v-TR is reflected on the presence of clitics / agreement markers.

I will take as a starting point the conditions under which the PC-Constraint does not arise. Two distinct 'escape strategies' fall under case (b) of difference 3 in (402). The PC-Constraint does not arise when either (i) the dative argument is spelled out as a strong pronoun or (ii) the accusative argument is spelled out as a strong pronoun. The first option is instantiated in French, as illustrated by (403):

(403) a. *Paul me   présentera   à   lui*
           Paul Cl-ACC   will-introduce to   him
           'Paul will introduce me to him'
       b. * *Paul   me   lui   présentera*
           Paul   Cl-ACC   Cl-DAT   will-introduce
           'Paul will introduce me to him'

As pointed out by Kayne (1975) and Bonet (1991), the reverse situation is impossible in French, Spanish and Catalan. A 3rd person dative clitic is not allowed to co-occur with an accusative 1st or 2nd strong pronoun, as exemplified by the French (404a) and the Spanish (404b):

(404) a. * *Paul   lui   présentera   moi*
              Paul   Cl-DAT-3sg   will-introduce   me-ACC
              'Paul will introduce me to him'
        b. * *Le   recomendaron   a   mi*
              Cl-DAT   recommended-3pl   *a*   me-ACC
              'They recommended me to him'

The restriction illustrated in (404) is not general, though. In Greek, such sequences are grammatical, as documented by the examples in (405) which instantiate the second 'escape strategy' leading to an obviation of the PC-effects, i.e. dative clitic and accusative strong pronoun:

(405) a. *Tu   sistisan   emena*
            Cl-GEN-3sg   introduced-3pl   me-ACC
            'They introduced me to him'
        b. *Tu   sistisan   esena*
            Cl-GEN-3sg   introduced-3pl   you-ACC
            'They introduced you to him'

And in contrast to French, an accusative clitic is not allowed to co-occur with a dative strong pronoun in Greek:

(406) a. * *Me   sistisan   ekinu / aftu*
              Cl-ACC-1sg   introduced-3pl   him / him-GEN
              'They introduced me to him'
        b. * *Me   sistisan   esena*
              Cl-ACC-1sg introduced-3pl   you-GEN
              'They introduced me to you'

According to Kayne (1975: 174), the ungrammaticality of the French example (404a), with a dative clitic and an accusative strong pronoun, stems from the fact that cliticization of accusative pronouns is a requirement which is inviolable in French. Kayne furthermore

suggests that (403a) – with an accusative clitic and a dative strong pronoun – is grammatical because the requirement for dative cliticization is sometimes suspended. (Cf. Kayne 1999 who argues that even though French has obligatory clitic doubling of accusative *moi* and dative *à moi*, the requirement for doubling of *à moi* can be alleviated by contrastive stress, unlike doubling of *moi*.) Adopting Kayne's account for French and extending it to Catalan and Spanish, I suggest that clitic doubling and cliticization of accusative personal pronouns is always compulsory in these languages while this requirement is less strict in the case of datives. This explains why only the first escape strategy is licit in Romance.

Unlike French, Catalan, Spanish, clitic doubling / cliticization of accusative personal pronouns is not required in Greek, as shown in (407) below. Therefore, examples like (405) with a dative clitic and an accusative strong pronoun are licit. On the other hand, doubling of genitive indirect object pronouns is obligatory in Greek, as illustrated in (408) below. For this reason, the examples in (406) above are ruled out, i.e. an accusative clitic cannot co-occur with an indirect object strong pronoun.[92]

(407) *Tha   sinantiso   esena*
     Fut   meet-1sg   you-ACC
     'I will meet you'

(408) *Tha *(su)   sistiso   esena   tin Maria*
     Fut Cl-GEN,2sg introduce-1sg you-GEN the Maria-ACC
     'I will introduce Mary to you'

Having clarified that the different strategies chosen in Romance and Greek, respectively, reduce to an independent factor, namely the conditions under which (undoubled) strong pronouns may remain *in situ*, I am now in a position to propose an explanation for these strategies.

Starting from French (403a) with a 1st, 2nd person accusative clitic and a dative strong pronoun, this example must be accounted for

similarly to Icelandic Nom>Dat sequences with 1st, 2nd person nomi-
natives, repeated below from section 5.2.1. Just as in the Icelandic
(371a) the nominative moves to T checking all of its φ-features at
once and the dative remains *in situ*, in the French (403a) the accusa-
tive moves to v-TR checking both person and number and the dative
does not move.

(371)　　√2Nom>Dat
　　　　a. *Þú　　　　varst　　gefinn　honum*
　　　　　　You-NOM　were-2sg　given　him-DAT
　　　　　　**Dat>2Nom*
　　　　b. **Honum　　var / varst　　gefinn　þú*
　　　　　　Him-DAT　was-3sg / 2sg　given　you-NOM
　　　　　　'You were given to him'

　　Note, on the side, that the construction feeding NP-movement in
(371a) is the 'inversion' construction (see chapter 3, sections 6 and
7) while in section 5.3.1 it has been argued that *à*-datives not doubled
by clitics in French are not introduced by vAPPL. The parallelism
between French (403a) and Icelandic (371a) is thus complete: both
display movement of the theme to v-TR (in French) and T (in Ice-
landic) from an underlying structure sharing relevant properties with
prepositional ditransitives.

　　Turning next to Greek (405) with a dative clitic and an accusative
strong pronoun, this has the same syntax as Icelandic quirky subject
constructions with non-agreeing verbal forms, as in (354), repeated
here:

(354) *Þeim　　　hefur / *höfum　　　alltaf　fundist*
　　　Them-DAT　has-3sg / *have-1pl　always　found
　　　við　　　vinna　vel
　　　we-NOM　work　well
　　　'They have always thought that we work well'

Recall that in Icelandic, presence vs. absence of agreement signifies presence vs. absence of a Move / Agree relation between the nominative and T. (As discussed in section 5.2.2, the question whether agreement in [354] signifies Move / or Agree should, in principle, be decided on the basis of binding, and the relevant sentences give rise to conflicting judgments.) When Move / Agree is not established between the nominative and T the verb does not bear agreement morphology and the nominative can surface as 1st and 2nd person. Nominative pronouns in Dat>Nom constructions can be specified for person as long as they do not enter Move / Agree.

In a similar manner, I propose that the presence or absence of an accusative clitic / agreement marker in (405) signifies the presence vs. absence of a Move / Agree relation between the accusative and v-TR. When there is no clitic on the verb, as in (405), Move / Agree has not been established between the accusative and v-TR, and the accusative can be 1st and 2nd person. Similarly to nominative pronouns, accusative pronouns in Dat>Acc constructions can be specified for person under the condition that they do not enter Move / Agree.

On the view suggested here accusative clitics and verbal agreement morphology share the same syntax: they reflect Move / Agree, resulting in φ-feature checking.

In conclusion, the *Person Case* Constraint has been argued in the literature to be either purely morphological applying specifically to clitics and affixes (e.g. Bonet 1991), or syntactic relating specifically to animacy and the syntax of double object constructions (Romero and Ormazabal 1999, Ormazabal and Romero 2001). I have argued on the basis of the similarities between the PC-Constraint and the restriction against agreeing 1st and 2nd person nominatives in Icelandic that neither the limitation to clitics and affixes nor the limitation to double object constructions and animacy are core properties of what underlies the PC-Constraint. The PC-Constraint reflects checking of person separately from number by the dative and the

accusative object, respectively, against one and the same head, similarly to the person restriction in Icelandic.

7. Concluding remarks: on agreement and Case

The analysis outlined in the preceding sections has implications for agreement and Case, and their relation to core computational operations such as movement and feature checking. Before closing this chapter, I will make these implications explicit, indicating, where relevant, how they relate to claims made in the literature.

(a) My analysis relies on the premise that φ-features reside in T and transitive little v (v-TR), i.e. those heads that, on standard assumptions, check Nominative and Accusative. Checking of φ-features is located on functional heads with active Case features. This aligns well with proposals that seek to reduce agreement to Case or vice versa (see Chomsky 2000, 2001a, 2001b building on George and Kornfilt 1981).

(b) According to the proposed analysis, person restrictions arise when two arguments check φ-features against a single functional head. When an external argument and two objects are present, the two objects check features against v-TR, which leads to a person restriction on accusatives. When the external argument is absent, i.e. v is intransitive (v-INTR) with inactive φ-features, the two objects check features against T, resulting in a person restriction on nominatives. The clause has two heads with active φ-features: v-TR and T. The restriction arises whenever there is "one argument too much". In such a case, each object is allowed to check features against Person and Number independently. Person restrictions are the result of an asymmetry: one active head against two active arguments. If, in turn, active φ-features are linked to active Case features (as Chomsky 2000, 2001a, 2001b suggests; see also point [a] above), then the PC-Constraint arises because only one head, v-TR, checks objective Case in the double object construction. In effect, this comes close to

the traditional view expressed in, among others, Larson (1988), Baker (1988, 1996) and Pesetsky (1995) (see chapter 3, sections 2.1 and 2.2) that only one source of Case is available for the two objects in the double object construction.

McGinnis (1998) argues that both light v heads check objective Case in applicatives and double object constructions. The applicative light v which introduces the indirect object checks the Case of the direct object. The higher causative light v introduces the external argument and checks the Case of the indirect object. Her account of intervention effects caused by datives in passives crucially relies on the hypothesis that passive morphology absorbs only one Case, and one of the two objects moves and checks Case against the v-head (v-INTR or vAPPL) not affected by Case-absorption. Since it checks Case, the object undergoing movement freezes in the Case-checking position (Chomsky 2000, 2001a). The other object is then allowed to undergo further movement to T.

Under the assumption that φ-features and Case are linked together, it is evident that the above proposal does not extend to languages with dative indirect objects and accusative / nominative direct objects. Person restrictions provide evidence that the two objects check their φ-features against a single functional head in transitives and passives: v-TR and T, respectively. The question that arises is whether languages in which both objects have structural Case behave differently in this respect, i.e. whether McGinnis' s hypothesis on how Case checking and absorption is performed in the double object construction should be maintained for English-type languages with asymmetric passives and Swedish, Norwegian-type languages with symmetric passives.

For English the answer to this question appears to be negative. Bonet (1991: 185), quoting David Pesetsky personal communication, points out that English has the PC-Constraint with combinations of weak pronouns, as illustrated by the examples (409):

(409)   a.   *Mary showed me 'm*
        b.   ** Mary showed 'm me*
        c.   *Mary showed 'm ME*

In (409a) both pronouns are weak, the dative is 1st person, the accusative 3rd, and the sentence is well-formed. In (409b), on the other hand, the weak dative is 3rd person, the weak accusative 1st, and the restriction arises. Finally, (409c) differs minimally from (409b) in that the second pronoun is stressed, and the sentence is grammatical. This entails that φ-feature checking relations in English work exactly as in Swiss German and Greek, i.e. the two arguments compete in order to check their features against one set of φ-features hosted on a single head. If φ-features on functional heads are linked to Case, then languages in which both arguments carry structural Case and languages in which the indirect object bears dative Case do not substantially differ with respect to the set of φ-features and, by assumption, the number of Case features on functional heads available for the two objects.

Haspelmath (2001: 28) discusses some facts that, in addition, suggest that English has a weak Animacy / gender restriction (illustrated in [410b]), along with a strong Participant / person restriction (illustrated in [410c]):

(410)   a.   *They showed me it*
        b.   ??*They showed her him*
        c.   ** They showed her me*

Interestingly, he points out that there is considerable variation among English speakers with regard to these examples. Some, especially American English speakers, find all three examples in (410) bad, while others, especially speakers of British English, find all of them grammatical. Recall now that American English is a language with asymmetric passives and British English a language with symmetric passives. The fact that there is an American vs. British dialect split

among English speakers concerning the sentences in (410b) and (410c) might suggest that languages with symmetric passives have two distinct sets of person and number features, each located on a different head: v-TR and v-APPL. Therefore the two objects do not compete for checking, and the person restriction does not arise. Keeping constant the premise that φ-features and Case are collapsed, symmetric languages must be concluded to have two Case checking positions for the two objects. An analysis along these lines comes close to Baker's (1988) parameter setting apart asymmetric from symmetric languages in terms of one vs. two objective Cases (chapter 3, section 2).

Note in this context also that, as pointed out by Hellan and Platzack (1999: 131), pronoun order and interpretation in symmetric Swedish interacts with person. When the order is 1st /3rd, as in (411a), the only possible interpretation is IO>DO. When the order of pronouns is 3rd / 1st, though, as in (411b), the interpretation IO>DO is for a group of speakers possible along with the alternative DO>IO interpretation:

(411)   a.   *Han visade mig   henne   inte*
             He   showed pronoun-1 pronoun-3 not
             'He did not present her to me'
       b.   *Han visade henne   mig   inte*
             He   showed   pronoun-3 pronoun-1 not
             'He did not present her to me / He did not present me to her'

Even though the analysis of these facts is not clear (it seems that linearization of pronouns in the OS position in [411] is sensitive to an interaction between Case and Person features), the mere availability of the "me to her" interpretation for (411b) once again suggests that the PC-Constraint is inapplicable in symmetric languages.

With these sketchy remarks, I conclude the discussion of English- and Swedish-type languages for the time being. Further research on

the connection between the PC-Constraint and the asymmetric vs. symmetric distinction is required.

(c) In section 4, it has been proposed that the most straightforward explanation for the person restriction on nominatives and accusatives is provided by the assumption that their person feature must be checked, i.e. they must check the complete set of their φ-features. It has furthermore been suggested that the requirement for complete φ-checking can be linked to Case checking. In section 6, though, it has been argued that derivations converge when nominative objects specified for person do not enter Move / Agree with the inflected verb. Similarly, accusative objects remaining *in situ* (i.e. not under-going cliticization or clitic doubling which signifies Move) are al-lowed to have person features. The complete picture is captured by the statement in (412):

(412)   Nominatives and accusatives moving to a Case checking head or entering Agree with a Case checking head must check- / agree in- all their features, not just a subset of them.

Crucially, the person checking requirement arises only under movement / agreement, not when 1st and 2nd person pronouns remain *in situ*, do not agree overtly. If the φ-features of functional heads and arguments remain unchecked in constructions where 1st and 2nd per-son pronouns remain *in situ* / do not agree overtly, then it must be concluded that unchecked φ-features on functional heads and argu-ments never lead to crashing derivations. This is presumably so be-cause languages employ the option of default verbal inflection and Case in such cases. In turn, this entails that φ-feature / Case checking does not drive computational operations; rather it is the result or re-flex of overt Move / Agree. (Note, on the side, that the correlation between movement and complete checking / agreement stated in (412) is reminiscent of systems in which movement of the subject to [Spec,TP] enforces full agreement on the verb while lack of move-ment results in partial or no agreement, e.g. Arabic, Irish.)

(d) The chapter discussed restrictions on pronouns. On the basis of pronouns, a number of more general conclusions can be drawn concerning the syntax of DPs and their relation to functional heads. Some of these conclusions have been addressed in this section. However, caution is needed. It could turn out, on closer inspection, that many of the proposals put forth above exclusively apply to pronouns and should not be extended to DPs. (For example, it could turn out that e.g. English pronouns have dative Case, unlike DPs and, therefore, the PC-Constraint applies in [409] and [410].) I leave this as an open question.

Notes

1. The difference is that Greek *se* is not specified as directional:
   (i) *O Gianis meni s-tin Olandia*
       The Gianis-NOM lives in-the Holland-ACC
       'John lives in Holland'
2. Verbs selecting for a single DP complement assign accusative case in Modern Greek. The verb *milao* 'talk' assigns genitive, but its complement can be a DP or a PP. Thus Greek has a "dative alternation" even with verbs that are not ditransitive and in this respect, it differs from English. There are also some formal styles verbs which may take only the genitive. These include *epofelume* 'take advantage of', *proighume* 'precede', *proedhrevo* 'preside over', *proiparcho* 'pre-exist', *iperischio* 'prevail'. These verbs neither permit the PP dative nor clitic doubling of the genitive (Holton, Mackridge and Philippaki-Warburton 1997: 263; see chapter 3, section 2.3.3 for discussion).
3. It has been suggested (see, for instance, den Dikken 1995: 127 and references cited therein) that the animacy restriction on the double-object construction derives from the fact that the theme and the goal entertain a *possessive relationship*.
4. With some manner of speaking verbs, the genitive construction is acceptable (i) while with others it is degraded (ii):
   (i) a. *Fonaksa s-ton Petro na viasti*
          Shouted-1sg to-the Peter Subjunctive hurry-3sg
          'I shouted to Peter to hurry up'
       b. *Fonaksa tu Petru na viasti*
          Shouted-1sg the Peter-GEN Subjunctive hurry-3sg
   (ii) a. *Murmurisa s-ton Alexandro pos icha kurasti*
           Murmured-1sg to-the Alexandros that had-1sg tired-Perfect
           'I murmured to Alexandros that I was tired'
        b. ??*Murmurisa tu Alexandru pos icha kurasti*
           Murmured-1sg the Alexandros-GEN that had-1sg tired-Perfect
5. And, conversely, there are some verbs translating "verbs of communication of propositions" such as *dhilono* 'declare / state' that behave like "verbs of communicated message".
6. Levin (1993) following Green (1974) classifies "carry verbs" (i.e. verbs denoting "continuous causation of accompanied motion in some manner") as permitting the double object alternation, contra Pinker (1989) and Pesetsky (1995) who argue that, crucially, such verbs don't permit it. Beth Levin (personal communication) suggests that unstable judgements possibly derive from

the fact that an "instantaneous causation of ballistic motion" meaning shift occurs with these verbs.

7. Such predicates require a PP explicitly denoting direction either due to the reasons discussed in Pesetsky (1995: 138-141) or because of the fact that verbs incorporating a manner component into their meaning cannot easily combine with directional *se*-PPs in Greek, unlike English:

    (i) a.   *Pigha   s-tin   korifi   tu   vunu*
                  Went-I   to-the   top   the   mountain-GEN
                  'I went to the top of the mountain'

        b.   *Perpatisa   s-tin   korifi   tu   vunu*
                  Walked-I   to-the   top-ACC   the   mountain-GEN
             * 'I walked to the top of the mountain'
             √ 'I walked around on the top of the mountain'

8. The distribution of clitic doubling in Romance can be roughly described as follows (see Anagnostopoulou 2002). French and Italian lack clitic doubling altogether (though Kayne in a recent paper [Kayne 1999] claims that clitic doubling of strong pronouns is possible in French; see chapter 5 for some more discussion). Peninsular Spanish and Catalan employ clitic doubling of indirect object pronouns and DPs as well as of direct object pronouns and lack clitic doubling of direct object DPs. Finally, Rio Platese Spanish and Romanian permit clitic doubling of both indirect and direct objects. It is reported in the literature that clitic doubling of indirect objects is not subject to restrictions relating to the semantics of the doubled DP while clitic doubling of direct objects is limited to definite, specific or partitive DPs (see Suñer 1988; Bleam 2000). Moreover, clitic doubling of direct objects is generally limited to animate DPs, which must be marked with special prepositions (*a* in Spanish, *pe* in Romanian).

9. In Romanian, clitic doubling of indirect objects does not necessitate the presence of *pe,* only direct object clitic doubling does (Dobrovie-Sorin 1990). Here I exemplify *Kayne's Generalization* with direct object clitic doubling because it is for this construction that the presence of a preposition has been considered to be the crucial factor underlying the clitic doubling parameter (see especially the discussion in Jaeggli 1986: 21).

10. Right Dislocation of subjects and objects is discussed in, among others, Antinucci and Cinque (1977); Jaeggli (1986); Calabrese (1990); Vallduví (1990) and Zubizarreta (1994, 1998). It is standardly assumed that in clitic doubling the object is generated as a complement of the verb while in right dislocation it is an adjunct. Recent work based on the LCA (Kayne 1994; Cecchetto 1996; Zubizarreta 1998) analyzes both constructions in terms of the same underlying representation, dispensing with right adjunction.

11. In chapter 4 (section 6), I will compare Greek to Spanish doubling.

12. In fact, doubling is obligatory in such contexts, as observed by Ordoñez (1997: 68). This suggests that V-IO-S orders are instances of the double object construction which in Spanish necessitates clitic doubling, unlike Greek (see chapter 4, section 6 for discussion).

13. According to Josep Quer (personal communication), sentences like (28b) are ungrammatical. The reason is that the full pronoun has emphasis, which makes emphasis on the subject impossible.

14. There is a complication, namely that in Greek VS, VSO orders are freely permitted (Philippaki-Warburton 1985; Tsimpli 1990; Alexiadou and Anagnostopoulou 1998, 2001 among many others). In this chapter, I will abstract away from this. The issue will be discussed in chapter 4 (end of section 4).

15. See Mackridge (1985/1987), Embick (1997, 1998) and references cited therein for a discussion of non Active voice morphology in Greek and Alexiadou and Anagnostopoulou (1999b, to appear) and references for a discussion of non Active voice in Greek alternating unaccusatives.

16. It is not always possible to omit the goal in such examples.

17. Passivization is not very productive in Greek, for unclear reasons.

18. Note that verbs of inherently directed motion do not participate in the causative alternation in English, something that, according to Levin and Rappaport (1995), is due to the non-causative nature of such verbs. In Hale and Keyser's (1993, 1997, 1998) configurational theta theory, the fact that these verbs are non-alternating is a problem, because in this system, transitivization of unaccusative verbs comes for free. The Greek verb *pao* is interesting because it can be used transitively with the meaning 'take'. The existence of this alternation in Greek can be taken to suggest that, in English as well, 'go' alternates with 'take' but there is stem suppletion which obscures the alternation. In the framework of Distributive Morphology (Halle and Marantz 1993), Marantz (1996) argues that elements showing stem suppletion are part of the universal inventory of functional material.

19. It should be noted that experiencer object predicates that belong to the class of *preoccupare* verbs also tend to require clitic doubling of the (accusative) experiencer in Greek (see Anagnostopoulou 1999a). Crucially, these predicates have an external argument (see Pesetsky 1995 and Landau 2001; in Greek these predicates can be shown to have an external argument position on the basis of Iatridou and Embick's 1997 test to be presented right below; see examples [46] and [47]). I assume that the requirement for clitic doubling in these cases has a different explanation than all cases discussed in this book (see Landau 2001 for a discussion of obligatory accusative doubling in Standard and Macedonian Greek).

20. The status of *na*-subjunctive complements has been extensively discussed in the literature (see e.g. Agouraki 1991; Philippaki-Warburton 1992a; Terzi 1992; Iatridou 1993; Varlokosta 1994; Giannakidou 1998; Quer 1998 among others).

21. I am grateful to Marcel den Dikken, Martin Everaert and Henk van Riemsdijk for helpful discussion and for providing me with Dutch data.

22. Martin Everaert (personal communication) points out that perhaps some people might find (80a), (81a) better than "?*", but there is definitely a contrast. The mildness of the ungrammaticality of (80a), (81a) is reminiscent of the fact that Greek undoubled genitives are also weakly ungrammatical. Henk van Riemsdijk (personal communication) points out that the ungrammaticality of (80a), (81a) and the examples discussed below should not be attributed exclusively to NP-movement. There is a clear contrast even without passivization of the direct object, but with scrambling of the direct object when the indirect object remains to the left of the adverb. I will come back to this in chapter 4, section 4.

23. Everaert (1990) also discusses middles, but I abstract away from them. I do not consider middles in this book, as their analysis is unclear.

24. Alternating unaccusatives are not always well-formed in Dutch, even with a PP. Everaert (1990) provides the following two ungrammatical examples:
    (i) a. * *De juiste combinaties   betalen   aan hen   uit*
              The right   combinations pay   to   them out
        b. ?* *Zijn verbazing uitte   zich   aan mij in gestotter*
              His surprise   expressed itself to   me in stammering

25. See also Ura (1996) and McGinnis (1998) for approaches based on these key properties. The present approach will be compared to Ura (1996) in section 8.2.3 and to McGinnis (1998) in chapter 5, section 7.

26. There are certain similarities between Pesetsky (1995) and Emonds's (1972, 1976, 1993) analysis of the double object construction. Emonds also proposes that in the double object construction the theme is preceded by a zero P. In both Emonds and Pesetsky, this zero P must be licensed. In Pesetsky, P is licensed by Incorporation into the verb, while in Emonds by being coindexed with an antecedent.

27. Pesetsky's argument that *get* is indeed a double object unaccusative verb is based on the fact that the recipient subject of *get* shows an animacy restriction, much like goals do in the double object construction (Pesetsky 1995: 124):
    (i) a. *The book got to Sue*
        b. *Sue got the book*
        c. *The book got to France*
        d. # *France got the book*

28. Larson, citing Feldman (1978), also mentions Ancient Greek as being such a language.

29. Note, though, that the external argument in the examples cited (and also the ones given by Larson 1988) is marked by the postposition *–ni* rather than *ni-yotte*. As pointed out by Watanabe (1993: 310; fn 38), "direct passives" which mark the external argument by *–ni* have sometimes been analyzed as "indirect

or adversity passives" to be introduced immediately (Kuroda 1979; Kitagawa and Kuroda 1992).

30. Whether Japanese direct and indirect passives should be given a uniform (monoclausal or biclausal, lexical or non-lexical) analysis is controversial (see Watanabe 1993: 309-322 for critical discussion).

31. Being bare or indefinite, this NP doesn't undergo clitic doubling (see Anagnostopoulou 1994, 1999d).

32. I have found two cases where the genitive looks as if it alternates with a nominative, with the verbs *klironomo* (will, inherit) and *gustaro* (like, appeal to). In both cases, the alternation occurs with unaccusatives and not with passives:

(i)   a. ? *O   Gianis   klironomise   tu Petru   ta vivlia*
         The Gianis-NOM willed-Act-3sg the Petros-GEN the books-ACC
         'John willed Peter the books'

      b. *O   Petros   klironomise   ta vivlia   apo ton Giani*
         The Petros-NOM willed-Act-3sg the books-ACC from the Gianis
         'Peter inherited the books from John'

      c. *Ta vivlia   ?*(tu)   klironomithikan tu Petru*
         The books-NOM   Cl-GEN willed-Nact-3pl the Petros-GEN
         apo ton Giani
         by   the Gianis

      d. * *O   Gianis   klironomithike ta vivlia   apo ton Petro*
         The Gianis-NOM willed-Nact   the books-ACC by   the Petros

(ii) a. *Ta vivlia   dhen ?*(tu)   gustarun   tu Petru*
         The books-NOM not   Cl-GEN please-3pl the Petros-GEN

      b. *O   Petros   dhen gustari   ta vivlia*
         The Petros-NOM not   please-3sg the books-ACC

With *klironomo* a nominative goal alternates with a genitive in the unaccusative (ib) but not in the passive (id). With *gustaro*, this looks like an alternation between an experiencer object predicate of Belletti and Rizzi's (1988) *piacere* class (*Class 3*) and an experiencer subject predicate (*Class 1*). For the time being, I am abstracting away of these cases.

33. Note though that it is not clear whether in a deletion under identity analysis genitive clitics are expected to be absent.

34. As discussed in Anagnostopoulou (1999a), the same facts are found with accusative experiencer objects of '*preoccupare*' predicates which, arguably, also have non-structural accusative. The properties of these arguments are not discussed here, as they present additional complications. See Landau (2001) for an illuminating proposal.

35. This analysis raises an obvious question. If no movement across a c-commanding DP is possible, as is claimed on the basis of passivization, then why is it that the theme can undergo local scrambling across the goal? This

example shows that a more refined version of locality is needed, which takes minimal domains into account. The issue is extensively discussed in section 8.

36. Note that there is one difference between Icelandic and English, namely that rightward extraposition is possible in Icelandic while it is impossible in English (English disallows heavy NP-shift of 'dative shifted' datives, see Larson 1988 and others). I will assume that rightward extraposition of an intervener does not interact with A-movement in Icelandic, i.e. extraposition does not provide an 'escape hatch' to NP-movement of the lower object to T. The issue is non-trivial, though, because there are cases in which A' movement of a higher argument permits an otherwise impossible movement of a lower argument, as will be discussed in chapter 4, section 5.

37. In a layered specifier approach combined with the version of locality outlined in section 4, it is not obvious how Holmberg's Generalization effects can be tied to locality (see Chomsky 1995 for discussion; see Broekhuis 2000; Pesetsky and Torrego 2001, and Chomsky 2001b for attempts to do so). The present account has nothing interesting to offer with respect to Holmberg's Generalization effects, similarly to Chomsky (1995) and Collins (1997).

38. Øystein Nilsen (personal communication) correctly points out that this is not necessarily an argument for the PP status of the dative in the inversion construction since the inverted dative is focused in this construction, and focused material is never allowed to undergo OS. The ungrammaticality of double object shift from the inversion construction is consistent with the PP analysis, though.

39. I am grateful to Anders Holmberg for providing me with data that made these correlations clear to me, and to Christer Platzack for further commenting on these data and for referring me to Hellan and Platzack (1999). I also would like to thank Øystein Nilsen for further discussing these facts with me, and for stressing the differences between Swedish and Norwegian discussed in fn 41.

40. Anders Holmberg, personal communication, has informed me that the same judgements obtain in Norwegian. The Swedish examples he gave me are the following:

(i)   a.   *Jag gav   honom inte den*
            I   gave him   not it
            'I didn't give it to him'

      b.   *Jag gav   den inte honom*
            I   gave it   not him
            'I didn't give it to him'

Anders Holmberg points out that the former example is more unmarked (as also noted by Hellan and Platzack 1999), but both are more or less grammatical. When the direct object undergoes object shift in the presence of an *in situ* indirect object, it is subject to some low-level morpho-phonological restriction. Thus, example (ii) is worse than (ib), possibly because in (ii) the indirect object pronominal has one syllable while in (ib) it has two:

(ii) *? Han gav   den inte mej*
   He   gave it   not me
   'He didn't give it to me'

Christer Platzack, personal communication, points out that the judgments in
(ib) are not shared by all speakers. In his grammar, object shift is strictly lo-
cal, i.e. a theme is not allowed to shift across an *in situ* goal.

41. Even speakers that do not allow a pronominal theme to undergo object shift
across a higher *in situ* pronominal goal (see fn 40) nevertheless permit both
orders when the two pronominal objects shift together (Christer Platzack, per-
sonal communication). According to Anders Holmberg, personal communica-
tion, and Øystein Nilsen, personal communication, in Norwegian it makes a
difference whether object shift is overt or not, i.e. whether negation or some
other adverb is present. The order DO>IO is allowed only when pronouns
visibly shift over negation / adverbs:

(i) a. *Jeg ga   den han ikke.*
   I gave it him not
   'I did not give it to him'
  b.* *Jeg ga den han.*

No such contrast obtains in Swedish, where both examples are well-formed,
as long as V-raising has taken place.

42. See Marantz (1993) and Pylkkänen (2000) for a proposal according to which
there are two types of applicatives crosslinguistically: high and low. Pylk-
känen (2000), following Marantz (1993), argues that applicative and double
object constructions split into two types. High applicatives relate an individ-
ual to an event, while low applicatives relate two individuals. In Pylkkänen's
typology, German goals to be discussed below would presumably qualify as
low applicatives while, so called, *free datives*, which are not discussed here at
all, would qualify as high applicatives. Note, though, that Pylkkänen 2000
takes low indirect objects to c-command themes, similarly to high indirect ob-
jects. German goals will be argued in section 7.5 to be merged lower than
themes (following Müller 1995, 1997).

43. Note that the reciprocal facts in (196b), (197b) are more significant than the
sich-facts. Since *sich* is a SE-anaphor in terms of Reinhart and Reuland's
(1993) typology, failure of binding between *sich* and *dem Patienten* in (196a)
could be analyzed as an effect of the subject orientation of the anaphor (see
the various contributions to Koster and Reuland [1991]; not all speakers ac-
cept the reading in [197a] according to Wolfgang Sternefeld, personal com-
munication).

44. What becomes a potential worry now is the well-formedness of indirect object
passivization in *bekommen* passives. This is not a problem in a lexical analy-
sis of *bekommen*-passives. In a transformational analysis, the problem can be
resolved by appealing to German scrambling which, unlike Dutch scrambling
and Icelandic object shift, is not order preserving (Müller 1997). This might

suggest that German behaves similarly to symmetric double object languages when it comes to movement of DPs and pronouns to all other positions, except for the Wackernagel position.

45. Mackridge (1985/1987) and Holton, Mackridge and Philippaki-Warburton (1997) point out that the genitive construction is limited to the spoken language ('*kathomiloumeni*') and that the undoubled genitive is less common than the doubled genitive.

46. The Greek anaphor *o eaftos tu* 'the self his' has the form and the structural properties of a definite description, consisting of the definite determiner *o,* the head noun *eaftos* and the possessive clitic *tu* which co-varies in φ-features with its antecedent. Iatridou (1988) has argued that the Greek anaphor is not subject to the Binding Principle A. Anagnostopoulou and Everaert (1996, 1999) analyze the Greek anaphor within Reinhart and Reuland's (1993) *Reflexivity* theory of anaphora and argue that *o eaftos tu* qualifies as a [+R,+SELF] anaphor. For this reason, it is not subject to the usual configurational effects showing up with [-R,+SELF] anaphors like *himself.*

47. The question mark in (205a) is due to the fact that QPs and indefinites are marginally acceptable as genitive goals in Greek. Markantonatou (1994) claims that QPs and indefinites are ungrammatical, but I disagree with her.

48. In the main text, I present the quantifier variable binding test separately from WCO effects with wh-phrases following Barss and Lasnik (1986) and Larson (1988). It is widely assumed in the literature, though, that quantifier-variable binding is subject to the same Condition governing WCO effects with wh-phrases.

49. In the literature on Greek, the existence of WCO effects in wh-questions has been questioned (see Catsimali 1990; Horrocks 1994 among others). I do have a contrast, though, and a number of speakers agree with me; other native speakers agree with Catsimali and Horrocks. There appears to be a dialect split on WCO judgments.

50. Wh-extraction of genitive goals is never perfect in Greek, a fact perhaps related to the marginality of indefinite and quantificational elements in the genitive construction more generally (see fn 47). As is well known, double object constructions in English and other languages resist long distance wh-movement and null operator movement. This is also the case in Greek. However, short-distance wh-movement gives rise to much better sentences. The marginal status of the examples discussed here should not be confused with the much stronger ungrammaticality of other instances of long-distance A' movement.

51. It is sometimes claimed that Greek does not have Superiority effects. As with WCO, there is a split among those speakers that detect Superiority effects and those speakers that don't. It is well-known that Superiority violations are amnestied under d-linking, and I believe that this factor interferes with the judgements. A group of undergraduate students at the University of Crete spontaneously came up with d-linking, without being aware of the relevant

literature. They pointed out to me that a question like (208a) is felicitous in a context where there is no set of people and things established in the discourse: *"Simera to vradi echume na pame se ena parti ke prepi na aghorasume faghita i pota gia na ferume mazi mas. Mipos kseris pjos tha aghorasi ti? / #ti tha aghorasi pjos?"* 'Tonight we have to go to a party and we need to buy food or drinks to bring along. Could you tell me who will buy what / #what will who buy?'

On the other hand, (208b) is felicitous only in a scenario where the members of ordered people-thing pairs can be drawn from sets in the discourse: *"Sto trapezi iparchun 3 dhora gia ta genethlia mu, pu mu ta eferan i Nina, o Jorgos ke i Christina: ena vivlio, ena CD ke ena bluzaki. Boris na mu pis ti agorase pjos?"* 'There are three presents on the table for my birthday, which were brought to me by Nina, George and Christina: a book, a CD and a t-shirt. Could you tell me what did who buy?'

The issue requires further investigation. As is well known, not all languages have Superiority effects: for example, German does not (see Richards 1997; Pesetsky 2000 and Wiltschko 1997).

52. Context in which (209a) is wellformed while (209b) not:

Speaker A: *Simera imun oli mera sta maghazia giati avrio tha pame stin Avstria ke eprepe na aghoraso dora.* 'Today I spent the day shopping because we are flying to Austria tomorrow, and I had to buy presents'.

Speaker B: *Tinos aghorases ti?* (Who did you buy what?) / #*Ti aghorases tinos ?* (What did you buy who?).

Context in which (209b) is licit:

Speaker A: *Aghorasa ena arkoudaki, ena vivlio ke ena bluzaki gia ton Michali, ton Konstantino ke tin Alexandra.* 'I bought a teddy-bear, a book and a t-shirt for Michalis, Constantinos and Alexandra'.

Speaker B: *Ti aghorases tinos?* (What did you buy who?)

53. Theophanopoulou-Kontou (1989) points out that 'the one' is invoked in reciprocals in Greek:

(i) *Ta pedhia   cheretisan to ena   to alo*
     The children-NOM greeted   the one-NOM the other-ACC
     'The children greeted each other'

54. Even if locative inversion is movement to an A' position, an A-movement step of the PP to T satisfying the EPP must be postulated since the subject remains VP-internal. English is a language in which the EPP feature of T must be checked by an XP (see Alexiadou and Anagnostopoulou 2001 for discussion; see also the discussion of stylistic inversion in chapter 4, section 5).

55. As pointed out by Collins, there is a complication, namely that locative inversion is possible with verbs that are classified as unergative (see Levin 1993 for discussion). For instance, *live* in examples like *in the woods lives a woman* is standardly classified as unergative. At present, I will assume the analysis in

the main text abstracting away from unergatives. An analysis of locative inversion with unergatives would have to explain how the locative PP moves across the external argument introduced by a light v. Note that locative inversion is never permitted in the presence of an object, as discussed, from a different perspective, in Alexiadou and Anagnostopoulou (2001).

56. The floating quantifier could also be adjoined to vP, along the lines of Dowty (1986).

57. Ura (1996: 158, 160-163) assumes that negative adverbs may also attach to v2P; only adjunction to VP is disallowed (see also Collins and Thráinsson 1996 in an Agr-based framework). If adverbs attach to v2P and adjoin to a position above the innermost spec of light vs (vCAUS and vAPPL) and below the target spec of OS (as the floating quantifier facts in [230] suggest), then multiple OS in e.g. Icelandic and Danish could be analyzed in terms of OS of the DO to v2P and OS of the IO to v1P (rather than as movement of both objects to v1P, as has been discussed in section 7 and will be discussed below). Such a derivation would involve the following steps. (i) The DO moves first to the outer spec of vAPPL. The IO resides in the inner spec of vAPPL and the negative adverb *ekki* attaches above the IO and below the shifted DO. This step respects locality because the higher IO is in the same minimal domain as the target of movement (also, the IO does not check features in vAPPL since it is theta-related to it). (ii) Next, v-TR is merged and the IO moves to it. Once again, the derivation conforms with locality. The result is a multiple OS configuration in which the two objects target two different positions. I will not assume that this is a possible derivation for multiple OS in Icelandic and Danish because, crucially, the DO can never shift to the left of an *in situ* IO in asymmetric languages, as has been seen in section 7. If v2P was allowed to host an object shifted DO, then nothing would block a derivation in which the DO undergoes OS to v2P and the IO remains *in situ*, yielding the string *DO ekki IO* which is ill-formed (unless the IO has the status of a PP, as in Icelandic 'inversion' structures). I will therefore assume that only v1P and not v2P is a landing site for OS in Icelandic (see also Ura 1996: 168-169). Thus, even if Ura is correct that adverbs adjoin to both v1P and v2P, only v1P may host OS.

58. Ura employs additional assumptions about possible base positions of adverbs, though, which make a direct comparison between the two analyses hard.

59. In English, the PP necessarily follows the theme and it is asymmetrically c-commanded by it (see Larson 1988 for more tests):

(i) a.   *John gave the book to Mary*
     b. * *John gave to Mary the book*
     c.   *John sent every book$_i$ to its$_i$ author*
     d. * *John sent his$_i$ book to every$_i$ author*

60. In this analysis, the well-formedness of the passive (51) would be related to the existence of the DP>PP construction which would feed passivization, similarly to Japanese ditransitives with a low *ni*-dative and Icelandic 'inversion' datives.

61. See Anagnostopoulou to appear, for arguments that benefactive constructions in which a benefactor is introduced by the preposition *se* qualify as double object constructions, unlike *se*-goal constructions.

62. See Marantz (1993) who argues that certain thematic roles are such that it doesn't matter where the one is merged relative to the other. If two arguments are interpreted as belonging to the same event there is a certain freedom in the order of merger of the two arguments. Typically this happens with themes and locative arguments, but not, for instance, with benefactors and themes.

63. Data from quantifier scope presented by Aoun and Li (1989) show a similar contrast. PP constructions allow a scope ambiguity not found in the double object construction.

64. Note that the fact that the DP contained in the goal-PP asymmetrically c-commands the theme DP in the PP>DP order shows that the extra structure introduced by the P does not count for command purposes. Why prepositions do not count for command is a complicated and partially unresolved matter that has received some attention in recent literature (see Pesetsky 1995; Brody 1995; Hornstein 1995; Phillips 1996).

65. There is a complication arising with AP-complements, though. The experiencer, when present, must follow the adjective in English:

    (i) a. *? *John seems to me intelligent*
         b.   *John seems intelligent to me*

    The same appears to be the case in Greek, where PP-experiencer sentences improve when the PP follows the adjective (see also section 9):

    (ii)   ? *O Gianis   fenete arostos s-tin Maria*
              The Gianis-NOM seems sick   to-the Mary

    The examples in (i) and (ii) are compatible with a locality approach if they involve extraposition of the PP to a position where it does not block raising of the embedded subject. Note, though, that the extraposition analysis would not cover English (i) because *John seems to Mary to be intelligent*, is grammatical, showing that the PP does not block movement in English. See Boeckx (2000b) and chapter 4, section 7, for more discussion of English.

66. At first sight, these facts resemble the tense restrictions in Greek (see [252]-[256]). English and Greek differ, though, in that in Greek, the embedded clause may bear past tense if the subject is realized as *pro* (see [253b]), while raising as well as control contexts do not allow past tense in the embedded subjunctive (see [253a] and [255]).

67. Chomsky (1995) notes that according to Viviane Déprez, the general issue concerning raising across an experiencer in French is considerably more complex than indicated here, with graded judgments and many other factors

involved, among them choice of infinitive versus small clause, ordering of PP and clausal complement, and idiom chunks (which give sharp distinctions) versus other phrases. McGinnis (1998) notes that native speakers disagree on the grammaticality of examples like (66b). Different judgments are reported in Rouveret and Vergnaud (1980: 146) and Chomsky (1995: 305), and McGinnis's own consultants are divided into those who accept and those who reject (66b). See Boeckx (2000b) for a proposal.

68. Note that an *it*-movement analysis is necessary for English as well, in order to account for the fact that the sequence *"?*It was told Mary that John is intelligent"* is deviant in English (Norbert Corver, personal communication). The deviance of this example straightforwardly follows from a goal-centered Case approach. To account for it in terms of locality it is necessary to assume a movement analysis for *it*-expletives along the lines of Bennis (1986) and Moro (1997).

69. As will be discussed in chapter 5, the order of clitics is often sensitive to morphological factors which alter the order predicted by this analysis. Nevertheless, Bonet (1991) points out that in the vast majority of languages with clitics, whenever a clitic order can be plausibly claimed to arise from purely syntactic factors, the order among dative and accusative clitics is dative>accusative. In the present proposal, this means that the two clitics target the same head T, and that they start out from a configuration in which the dative is merged higher than the accusative, in other words they derive from the double object construction. See chapter 5 for extensive discussion.

70. Not all subjects of passive and unaccusative predicates behave uniformly with respect to reconstruction. For example, in the passive and unaccusative sentences below reconstruction does not take place:

(i) a. *Kathe aftokinito$_i$ tu   epistrafike tu idhioktiti tu$_i$ chtes*
       Every car-NOM Cl-GEN return-Nact the owner   its-GEN yesterday
     'Every car was returned to its owner yesterday'

   b. *To aftokinito tis Marias$_i$ tis$_i$ epistrafike chtes*
      The car   the Mary-GEN Cl-GEN return-Nact yesterday
     'Mary's car was returned to her yesterday'

(ii) a. ?*Kathe grama$_i$ tu   irthe tu paralipti tu$_i$ arga*
        Every   letter-NOM Cl-GEN came the receiver its-GEN late
      'Every letter came late to its receiver'

    b. ?*I   epitaghi tis Marias$_i$ tis$_i$ irthe me kathisterisi*
       The check   the Mary-GEN Cl-GEN came with delay
      'Mary's letter came to her with delay'

I actually don't have clear judgments on many passive and unaccusative examples, and the judgments by other native speakers of Greek diverge to an extent that makes the formulation of generalizations difficult. Experiencer object predicates yield the most robust judgments. For this reason, I am hesitant to draw conclusions concerning the A / A-bar status of nominative and dative

arguments in these examples. One could claim that fronted external arguments are in an A position and for this reason they optionally reconstruct, while fronted themes of experiencer object predicates are in an A' position and for this reason they reconstruct obligatorily. This would entail that in unaccusatives or passives showing obligatory reconstruction, the true subject is the dative indirect object while in examples with optional reconstruction, the true subject is the nominative. Since it is not clear what the actual generalizations are, I am trying to avoid labels as much as possible (see chapter 3, section 6.1 for a discussion of various degrees of quirky subjecthood). I hope that later research on Greek will clarify the picture.

71. The same effect is apparently found in Dutch topicalization; see Richards (1997: 95 ex. [58]), who cites Sjef Barbiers and Iris Mulders personal communication.

72. Stylistic inversion in French also takes place in subjunctive sentential complements, but, following Kayne and Pollock (1998) and Alexiadou and Anagnostopoulou (2001), I assume that this is a different phenomenon than the one discussed in the main text.

73. This would make sense if we followed recent proposals (Wurmbrand 2001; Cinque 1999) according to which restructuring verbs are functional heads. On such a view, they are not able to assign a theta-role to the experiencer argument since they have no argument structure. On the other hand, non-restructuring raising verbs are lexical and can therefore combine with an experiencer (see Boeckx 2000b, who expands on the idea suggested in this footnote).

74. Note that the comparison between English (336), where long distance agreement is blocked, Icelandic (332), where long-distance agreement is licit and Icelandic (331), where long-distance agreement is blocked, shows that the exact domain where the intervening dative is situated does not matter for MLC effects on long-distance agreement. What is relevant is whether the intervener enters Agree with matrix T or not. More specifically, in English (336) and Icelandic (332) the experiencer is in the matrix clause (as opposed to Icelandic [331] where the dative is in the embedded clause), and agreement is blocked in (336) but not in (332). This could turn out to be a real difference between Move and Agree, namely that in the former, MLC effects are computed on the basis of (minimal) domains while in the latter, strictly on the basis of c-command. In such a view, multiple Move obviates MLC effects on Move because of Equidistance, while multiple Agree obviates MLC effects on long-distance agreement because the features of functional heads can be checked separately, against more than one DPs (chapter 5 elaborates on this), as long as no intervener breaks up the sequence of possible split agreement relations.

75. In this analysis, what would have to be explained is the difference between weak IO pronouns which permit passivization across them and strong IO pronouns which do not.

76. Preliminary versions of this chapter were presented at the 21st Glow Colloquium, ZAS-Berlin, March 29, 1999 (see Anagnostopoulou 1999b), at the Thermi International Summer School in Linguistics, July 5-30, 1999, and at the Tübingen Colloquium, Tübingen, May 31, 2000. I am grateful to Winfried Lechner for extensive discussions on earlier versions of the chapter. Thanks also to Halldór Sigurðsson for his written comments.

77. Boeckx (2000a) notes (without really establishing) the correlation and adopts a morphological approach towards the person restriction in Icelandic along the lines of Bonet (1991). The account developed here is syntactic. In particular, I am implementing Taraldsen's (1995) and Sigurðsson's (1996) analysis of the person restriction in Icelandic in terms of split φ-feature checking in a system without agreement projections (see also fn 85 below; Halldór Sigurðsson, personal communication, brought to my attention that he has developed independently a similar analysis to the one developed here, in Sigurðsson [2000]). I furthermore extend the split φ-feature checking analysis to combinations of clitics. For an alternative syntactic account of the *me-lui* Constraint, see Ormazabal and Romero (2001).

78. (341) is the *strong* version of the PC-constraint, which I will adopt throughout. Note that the *weak* version as given under (i) supports Murasugi's (1994) *Constraint on the Feature Specification of Agr*. I assume that (i) encapsulates a different constraint (see also Murasugi 1994: 138-139 fn 6 and Alexiadou and Anagnostopoulou 2002).

    (i)   In a combination of a direct object and an indirect object [clitic, agreement marker or weak pronoun], if there is a third person it has to be the direct object. (Bonet 1991: 182)

79. In an unaccusative / passive analysis of reflexive constructions (see Burzio 1981, 1986; Marantz 1984 among many others), the ungrammaticality of (348) cannot be assimilated to the ungrammaticality of e.g. (342c,d), because *elle* is not an external argument, but rather an externalized internal argument (cf. property v), and *se* is not a direct object clitic but rather it fills the external argument slot (see e.g. Pesetsky 1995; Embick 1998). Even in treatments of reflexive constructions in terms of internal theta-role reduction (Reinhart 1996; Reinhart and Siloni to appear), it is not clear that (348) can be analyzed as an instance of the PC-Constraint, as long as the reflexive clitic is viewed as a marker for a morphological process rather than occupying the internal argument position.

80. Lack of agreement is exceptional and largely limited to clauses with either *leiðast /* 'find boring' or *líka /* 'like'. Even there, agreement is preferred to nonagreement (Sigurðsson 1996: 24).

81. Not everybody believes that the restriction on *sig* should be accounted for along the same lines as the restriction on 1st and 2nd person pronouns (Martin Everaert, personal communication; Halldór Sigurðsson, personal communication). I don't see why this should reflect a different constraint given that *sig* is a [+person] pronoun (see section 4 below). Note that the reservations expressed in fn 79 concerning Romance reflexive clitics do not carry over to Icelandic given that *sig* qualifies a *SE-pronoun* in the sense of Reinhart and Reuland (1993) (see Koster and Reuland [1991] for justification and Reinhart and Reuland [1991] for some differences between Icelandic *sig* and Dutch *zich* with respect to logophoricity). In view of the ban against *sig* in Icelandic it is, in turn, tempting to treat the ungrammaticality of French (348) on a par with the ungrammaticality of Icelandic (357).

82. Causative constructions with a dativized embedded subject and an accusative object constitute another major environment in which the PC-Constraint is attested (see Bonet 1991). Causative constructions have been argued to be analytically similar to double object constructions (see, for example, Baker 1988) and thus the fact that they show the PC-Constraint is expected.

83. As pointed out by Ormazabal and Romero (2001) and Haspelmath (2001), the PC-Constraint also arises in languages where the indirect object has accusative or no morphology. I assume that indirect objects in these languages behave like the dative arguments discussed here. This has consequences for Case theory in connection to φ-feature checking that will be discussed in the concluding section 7.

84. Alternatively, *sig* can be assumed to be 3rd person, as in Taraldsen (1995) and Reuland (1996, 2001), who argue that the value 3 is the only person value that does not need to combine with number. Nothing crucial depends on this for present purposes. There are morphological reasons against postulating the existence of a value 3 for person features discussed in, among others, Noyer (1992).

85. Taraldsen (1995) and Sigurðsson (1996) argue that in quirky subject constructions, φ-checking is divided into person and number checking, and the 3rd person restriction is a reflex of number checking. The particular way they implement this is in terms of the assumption that person and number agreement are hosted on different functional heads (*the Split Agr Hypothesis*): AgrPerson and AgrNumber. I maintain the essentials of this hypothesis, extending it, furthermore, to clitics (see also fn 77).

86. As argued for by Alexiadou and Anagnostopoulou (2002) on the basis of split systems determined by either person or animacy on v, even the way in which person, animacy and number are distributed on functional heads varies across languages (in some languages they come as bundles, in others each feature is located in a different head etc.), giving rise to parametric differences in patterns of agreement (see also section 7).

87. This assumption follows from locality. Ethical datives are merged at least as high as T (or even higher, in e.g. Uriagereka's [1995] F) and are not able to check features against v-TR.

88. In Greek, the order of datives and accusatives is free in constructions with enclicis, but the PC-Constraint arises always, unlike Swiss German. Terzi (1999) argues that the dative always moves first to the cliticization site in accusative>dative orders and the accusative then moves with the verb past the dative. Under Terzi's analysis, it is correctly predicted that the PC-Constraint applies regardless of the linear order of clitics in enclisis contexts.

89. Haspelmath (2001) citing Lenertová (2001) provides an example from Czech where a 1st person plural dative co-occurs with a 2nd person accusative clitic. On the basis of this example, he claims that the PC-Constraint does not hold in Czech. However, in Vos and Veselovská's (1999) Clitic Questionnaire the Czech informant (Ludmila Veselovská) notes: *"…There are, however, some co-occurrence restrictions: For non-REFL argument DAT and ACC the order DAT-ACC is obligatory and they can co-occur, but if non-REFL DAT is present, non-REFL ACC cannot be 1st or 2nd person (with the exception of the combination of 1S / P-DAT mi / nám and 1S / P-ACC which is still acceptable)" (Vos and Veselovská* 1999: 972). It thus appears that Czech has the constraint with combinations of non-reflexive clitics, with the exception of the combination 1st DAT / 1st ACC which falls under the *weak version* of the PC-constraint presented in fn 78 above.

90. As pointed out by Perlmutter (1971), French is another language providing evidence that the order of clitics is determined by person rather than syntactic function. In (i) a 1st person dative clitic precedes the 3rd person accusative clitic (Kayne 1975: 83):

(i)   *Jean me   le   donnera*
        Jean Cl-DAT,1sg Cl-ACC,3sg will give-3sg
        'Jean will give it to me'

However, combinations of two 3rd person clitics always yield transparent orders in which the accusative precedes the dative (see Bonet 1991: 72, the example below is taken from Kayne 1975: 173):

(ii)   *Paul la   lui   présentera*
        Paul Cl-ACC,3sg Cl-DAT,3pl will introduce-3sg
        'Paul will introduce her to him'

The fact that the combination of two 3rd person clitics yields transparent results provides evidence that linearization in French takes into account clitics and not their individual features. Since French has the PC-Constraint it is therefore unexpected that the order of the two 3rd person clitics is ACC>DAT. In the present account, this order is either not derived by the syntax, or, if it is derived by the syntax, it represents a case in which multiple movement does not result in tucking in (in the latter alternative, the dative clitic moves first, and the accusative, which moves second, targets a position above the dative). Note in this context that cliticization of the dative embedded subject and the accusative embedded object to the matrix verb in causative constructions also results in an ACC>DAT order in French (Kayne 1975: 279):

(iii)   *Elle   le   lui   fera manger*
          She   it-ACC   him-DAT   have eat
          'She will have him eat it'

If, as is reasonable, cliticization of the two arguments in causatives takes place from an underlying position in which the subject is higher than the direct object, the *direct object>subject* order provides evidence against an approach towards 3rd person clitic ordering in French in terms of tucking in.

91. Ormazabal and Romero (2001) claim that the same judgments obtain in Greek. This is incorrect.

92. It is not clear why indirect object pronouns are ungrammatical without doubling in Greek.

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