Dative arguments and abstract Case in Greek

Thesis submitted for the degree of Doctor of Philosophy

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Abstract

This thesis investigates the syntax of so-called ‘dative’ arguments in Greek and the role of their abstract Case feature in their licensing, from a generative/minimalist perspective. The main claim of the thesis is that all dative arguments originate low, i.e. within the maximal projection of the root, in accordance with universal linking principles, and that all apparent variation regarding their realisation and their A-/A’-behaviour can be parameterised in terms of their Case feature and the way it is valued. The secondary claims/premises on which the main claim depends are: (a) a distinction between syntactically inactive and active inherent Case features, coupled with the assumption that dative arguments may also bear structural Case (which might be either distinct or indistinct from the accusative morphologically), (b) the assumption that minimality effects in phi-Agree must be relativised to Case features, (c) a movement analysis of dative shift, (d) a novel view of applicatives as elements that simply attract dative arguments to their specifier for Case-related reasons, rather than introducing/selecting them. In support of these assumptions, this thesis draws on evidence from (a) person restrictions in transitive contexts with datives and beyond, which seem to be best accounted for if the argument affected by the restriction is treated as a (defective) intervener between the dative and an applicative head; (b) the interference of (different types of) datives themselves with agreement relations in various configurations, in Greek as well as cross-linguistically; (c) the diachronic and cross-dialectal behaviour of dative arguments in Greek, which confirms some
empirical generalisations that necessitate the assumptions listed above, most notably the observation that both (i) the strong Person Case Constraint, and (ii) minimality effects in Agree across datives imply the availability of active Case on indirect object DPs.
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Chapter 1. Introduction

1.1. Main questions and claims

This thesis investigates the syntax of so-called ‘dative’ arguments, focusing on the role of Case features in the derivation of constructions with such arguments. The role and the possible parameterisation of Case is emphasised as a means, possibly the most decisive one, to account for the cross-linguistic and cross-categorial variation in the syntactic behaviour of datives. The proposed analysis is tested against the syntactic behaviour of dative constructions in Greek, both synchronically and diachronically, as well as from a micro-comparative perspective, along with cross-linguistic evidence, mostly from Romance.

The diachrony of Greek and its varieties presents us with most of the well-known puzzles that pertain to dative constructions, while also pointing towards a number of potentially theoretically significant correlates. More concretely, this thesis mainly aims to address the variability in the linear and hierarchical positioning of datives cross-categorially, cross-dialectally and diachronically, and its origins; in doing so, it will be discussed how and why this variation correlates with a number of concomitant effects, namely, passivisability/non-passivisability of each of the internal arguments in ditransitives, intervention effects in various dative constructions, the availability of dative alternations, and possibly the way in which person restrictions in the presence of dative arguments vary cross-linguistically. At the same time, this thesis is an investigation of the nature and the syntactic status of theta-related Case. It can be argued that, throughout the history of Greek, the Case of DPs carrying ‘dative’ theta-roles has remained Inherent, based on the traditional criterion of absorption in passives/exceptional assignment in ECM etc. (cf. (1) from Standard Modern Greek) – in fact, this has only been disputed for certain verb classes in Classical Greek, see the discussion in chapter 5). Yet, both its morphological exponence and its syntactic effects display considerable variation across varieties and historical stages, leading us to more fine-grained distinctions in the domain of abstract Case and to a rather radical dissociation between morphological case distinctions and the availability of abstract Inherent Case.
(1) a. Edhosa tu Jani ena vivlio
    Gave.1SG the John.DAT/GEN a book.ACC  ‘I gave John a book’

b. *O Janis dhothike ena vivlio
    The John.NOM was-given a book.ACC  ‘John was given a book’

The investigation of the syntax of dative arguments, however, touches upon some even more general issues in linguistic theory; thus, it has broad implications about core aspects of argument structure theory, namely the role of roots and (often null) derivational morphemes/heads in the selection and licensing of arguments, the relation between s-selection and c-selection and the so-called ‘linking problem’ as Baker (1997), *inter alios*, defines it, i.e. the question of mapping theta-relations onto structural relations or even to specific positions. With respect to the above questions, this thesis will defend the claim that all datives, and arguably all secondary/non-core arguments (except external arguments), are first merged within the maximal projection of the predicate/Root, much like direct objects, rather than in Specifiers of special (applicative etc.) heads. The first merged positions of internal arguments can be compatible with a strict universal thematic hierarchy, possibly in accordance with Baker’s (1988, 1997) own Uniform Theta-Assignment Hypothesis (UTAH), i.e. a hierarchy such as agent/cause > experiencer > theme/patient > goal/location/path.

This necessarily entails a movement approach to constructions with ‘high’/‘shifted’ indirect objects (IOs), which opens a number of issues relating to the semantics of dative alternations, their scopal and binding properties, and ultimately the question of the level or representation/stage of the derivation at which such LF-related properties are computed. In this respect, this analysis is a continuation or a revival of the transformational approach to double object constructions and akin in fact to its strongest form, as e.g. recently defined by Kayne (2010): ‘No dative is externally merged into its visible position’, where I construe ‘dative’ as any ‘dative’ DP/pronoun in a language which also has prepositional alternants. That said, our analysis allows for ‘low’ datives, possibly spelt out in their first-merged positions, in systems without dative alternations. This variation seems to relate to whether the Case of the dative argument also originates low¹.

¹ The other basic tenet of Kayne’s recent proposals, namely the idea that (at least some) datives and themes originate within the same constituent, will be briefly discussed in Appendix D.
This investigation does not deny the existence of applicative heads, which may also occupy different heights in the clausal spine, in the spirit of Pylkkänen (2002) and Cuervo (2003). However, their role is not to introduce arguments, i.e. no External Merge in their edge is possible\(^2\). Instead, they only attract ‘dative’ DPs/pronouns with active Case features from their low positions, thus allowing them to become accessible/visible to some φ-probe for Agree and Case deletion, which would otherwise be impossible due to the intervention of another internal argument, usually the direct object. The semantics, therefore, of these heads, if any, is not associated with the thematic role of the (moved) dative, but rather with the (semantic preconditions of the) additional entailments that constructions with ‘shifted’ datives are often said to have, as opposed to their prepositional counterparts.

As already implied, the presence of applicative heads working as described above presupposes the existence of an active Case feature on the ‘dative’ argument. This means that the attracted ‘dative’ must either carry a completely uninterpretable and lexically unvalued, i.e. structural, Case feature (as e.g. in English) or a special type of inherent, theta-related Case feature, which for some reason appears to be syntactically active, i.e. available for (in fact, \textit{in need of}) further (probing and) valuation, and deletion of what makes it active. Such a feature may be construed as a quirky Case feature in the sense of Chomsky (2000:127), i.e. as a “(theta-related) inherent Case with a [parasitic] structural Case feature”, or as a partially valued/interpretable thematic feature, which correlates with the DP’s thematic interpretation only partly; the former view entails that the parasitic structural Case feature must be matched and deleted by some phi-probe, while the latter construal of this hybrid ‘inherent’ Case could perhaps be conceived of and formalised as a complex theta-feature or a bundle of theta-features (in the spirit of Reinhart 2002), a part of which is inserted valued in the derivation, while the rest of it is unvalued (or simply absent, making the theta-cluster incomplete) and awaits valuation (or supplementation) by some head carrying the corresponding LF-interpretable information (e.g. Appl, which may come in different semantic flavours). These two conceptions of active Inherent Case may be

\(^2\) In relation to this point, Elena Anagnostopoulou notes that this ‘claim amounts to saying that Appl is like T rather than Voice’. Indeed, they are similar in that (a) their Spec can only be filled by IM and not EM, (b) they facilitate the licensing of XPs which cannot be licensed within the domain where they are externally merged; however, one significant difference is that Appl, arguably, cannot value the uninterpretable/unvalued Case feature of its goal itself, unlike T.
used interchangeably for most of the discussion, as both are theoretically appealing for different reasons; the latter view is briefly discussed in Chapter 6.

In fact, this hybrid Case feature is argued to be relevant for all (Greek) varieties that have dative alternations, i.e. both the DP-PP frame and a double object construction with an inherently Case marked indirect object DP (2).

(2) a. Edhosa ena vivlio sti Maria
    Gave.1SG a book.ACC to-the Mary.ACC ‘I gave a book to Mary’

    b. Edhosa tis Marias ena vivlio
    Gave.1SG the Mary.GEN/DAT a book.ACC ‘I gave Mary a book’

In those cases where the ‘dative’ DP is realized low, one must postulate that it carries a fully lexically valued, LF-interpretable Case feature, since an active feature as described above would not be able to get valued and ‘inactivated’, due to the intervention of a direct complement with an active Case feature between the ‘dative’ and any phi-probe. The diachrony (cf. Chapter 5) and several current dialects of Greek (cf. Appendix C) provide compelling evidence that systems with purely inherent (fully valued and interpretable) Case features lack dative alternations, as well as other properties that seem to follow from this, e.g. clitic clusters subject to the strong PCC etc.

Although it would be conceivable to have high ‘dative’ DPs with purely inherent Case as well, empirically this is not supported: in varieties with ‘shifted’ IOs (i.e. in an A-position c-commanding DO), dative DPs cause minimality effects (3). Such minimality effects are in part due to configurational reasons (high IOs intervene in direct passives, while low IOs do not) but this should not be enough if we are to account for the absence of minimality effects in raising/unaccusative contexts in varieties with ‘low’ IOs, where dative experiencers however do intervene between T and the nominative (4).

(3) a. ?*To vivlio dhothike tu mathiti (SMG)
    The book.NOM was-given the pupil.GEN.DAT
    ‘The book was given to the pupil’

    b. ?*To vivlio fanike tu mathiti (na ine) endhiaferon
    The book.NOM seemed.3SG the pupil.GEN/DAT (Subj. is) interesting
    ‘The book seemed to the pupil to be interesting’
(4) To vivlion efanin tis Marias (na en) kalon (Modern Cypriot Greek)
The book.NOM seemed the Mary.GEN/DAT (Subj. is) good.NOM
‘The book seemed to Mary to be good’

The simplest assumption would be to relativise minimality to Case features in such cases, i.e. to assume that datives with purely inherent Case do not even count as defective interveners, defective intervention being the property of active features previously matched and deleted in the course of the derivation. This is the central proposal of the thesis with regards to one of its major empirical questions, namely, how and why the availability of ‘low’ indirect object DPs appears to entail the absence of any intervention effects caused by dative DPs in any context, while the existence of such minimality effects necessarily entails the existence of dative alternations/‘dative shift’, 3 one other major question being how and why a system can diachronically shift from one state of affairs to the other.

Thus, this thesis explicitly adopts and defends Chomsky’s (2000, 2001) ‘Activity Condition’ in relation to Case checking and Agree. This does not necessarily imply that all Case/cases is valued exclusively on the basis of configurational factors; although this dissertation shows that uninterpretable/unvalued Case features do exist in syntax and drive/trigger certain operations in accordance with the Activity Condition, and that their de-activation has to take place syntactically, this view is not incompatible with the idea that the actual morphological value of case morphemes is determined post-syntactically, by algorithms such as those suggested by Marantz (1991) in his theory about ‘dependent Case’, or by Bobaljik (2008), who explicitly argues in favour of the distinction between (one) abstract Case and m-cases, which are the reflexes of post-syntactic agreement-related processes. More recently, Baker & Vinokurova (2010) have also argued that ‘[t]he two methods of case assignment’, i.e., the Chomskian way of assignment by designated functional heads and Marantz-style disjunctive hierarchies, ‘coexist, not only in Universal Grammar, but in the

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3 It must be noted that this is not a bi-conditional; if it were, then, as Elena Anagnostopoulou (p.c.) points out, English would be a counterexample, as it exhibits ‘no intervention in contexts like (4) and yet it has dative shift’. The existence of dative shift (i.e., of active Case on dative arguments) does not exclude the existence of non-active datives (e.g. dative experiencers) as well, cf. the discussion about Modern Cypriot Greek in Chapter 5. The implicational generalization here presupposes at least similar realization of shifted goals and XPs in intervention/A-movement contexts, while e.g. in English ‘dative’ experiencers in raising contexts are PPs (see however Hartman (to appear) on such ‘prepositional’ experiencers which do trigger intervention effects in tough-constructions and beyond/other A-movement contexts).
grammar of a single language’. In §3.4.5 (see (70) there), for instance, I discuss one such concrete case where the activity Condition might need to be combined with the notion of dependent Case. It is also worth noting that, given the above, the view defended here is not compatible with suggestions such as Pesetsky’s (2010/2012) that C/case categories may reduce to other categories, such as adpositions or determiners. In relation to oblique C/case, in particular, it is shown that oblique XPs are not necessarily prepositional – in fact, the presence/absence of P derives a number of differences in the distribution of different types of datives, while also it is shown that in earlier stages of Greek, prepositional XPs are restricted to non-argumental uses, so dative case morphology in Greek was (and has always been) non-prepositional.

1.2. Plan of the dissertation

In chapter 2, it is discussed how dative alternations correlate with the strong version of the Person Case Constraint (Bonet 1991) and it is argued that the PCC facts in a number of dative constructions in Greek and Romance in fact motivate a movement analysis of the double object construction. First, it is attempted to show that the PCC is a purely syntactic constraint (rather than a morphological or even an interface one), which reflects the Agree relations in vPs with ‘dative’ DPs. It should be pointed out that ‘dative’ here is used as an umbrella term for all the types of argumental DPs that bear theta-roles systematically associated with the respective oblique case, whether these DPs actually bear such case morphology. The relevance of Adger & Harbour’s (2007) [±Participant] feature is discussed and further motivated by the discussion of data that a Multiple Agree-based analysis cannot account for. Then, in Chapter 3, I discuss the specifics of the movement analysis, including the nature of the applicative head, the presence of two v-heads and its implications for Case and passivisability, the role of Case in defective intervention, the semantics of dative alternations and the level of application/computation of LF-related requirements (e.g. Principle A etc.). Chapter 3 also highlights the role of ‘dative’ clitics in obviating a number of intervention effects and I discuss their syntactic status (category/derivation), especially by comparing them to the respective constructions in other languages (e.g. Spanish).

In Chapter 4, I systematically test the above assumptions against all the dative constructions of Standard Modern Greek and beyond. To this end, I consider predicates with canonical dative alternations, benefactive/malefactive constructions,
raising-like constructions (with dative experiencers), *piacere*-type predicates, so-called ‘external’ possessors, as well as the ‘ethical’ dative construction. In chapter 4, I also discuss ‘dative’ DPs, clitics and PPs in deverbal NPs and APs, and argue that the relevant data also point towards a movement analysis of ‘dative’ DPs (when these alternate with PPs). It is also shown that the dative/genitive syncretism in Modern Greek is only apparent, since (NP-) possessors and ‘datives’ cannot be argued to carry the same abstract Case.

In chapter 5, our micro-comparative data are introduced and it is attempted to reduce all variation to the (radical) dissociation between morphological exponente and abstract (inherent) Case, while entertaining the idea that different types of dative arguments may carry different types of Case within the same variety. A syntactic typology of inherent Case is introduced and the relativisation of intervention/minimality to Case features is further motivated. Based on these data, it is attempted to offer a diachronic explanation of the shift from one type of inherent Case to the other, which is also shown to constitute indirect evidence in favour of a movement analysis of dative alternations.

Lastly, in chapter 6, I conclude and present some speculations regarding possible extensions of the analysis and directions for future research.

At this point, I need to clarify the way I use the term ‘dative’ throughout this thesis. I use the term ‘dative argument’ to refer to all XPs that fall under this description on the basis of their theta-role, whatever their morphological realisation. Instead, when referring to dative arguments realised as DPs, I use the term ‘dative DPs’; these DPs (and the respective clitics) in Standard Modern Greek, which features in most of the discussion, happen to be realised as morphologically genitive, due to a morphological dative/genitive merger that will be discussed in some detail in later sections (especially in §5.2 and §5.4).

Finally, the theoretical framework followed in this thesis is the principles and parameters theory, with fairly standard minimalist assumptions, particularly the probe-goal conception of feature checking/agreement and the role of phases in the derivation, as outlined in e.g. Chomsky (2000, 2001, 2005/2008, 2006). As we proceed, I will also present and define all the more specific technical assumptions required for our analysis, when these differ from or are modifications of the formulations and definitions found in general works.
Chapter 2. The PCC as a reflection of the syntax of dative shift

2.1. Introduction

This chapter explores how the Person Case Constraint (Bonet 1991, 1994), in particular its strong version, correlates with ‘high’/’shifted’ datives, in Modern Greek and elsewhere, and offers a novel theoretical account of it. The Person Case Constraint was first observed by Perlmutter (1971) and Kayne (1975) in relation to Spanish and French clitic clusters respectively and a fairly standard definition of the strong PCC that captures most of the observed facts is given in (1); illustrative examples from French and Modern Greek are given in (2) and (3) respectively.

(1) Person Case Constraint: If DAT, then ACC(ABS) = 3rd person (Bonet, 1991) (NB. where both DAT and ACC/ABS are somehow syntactically dependent on the same predicate)

(2) a. Il le/*me/*te lui montrera (French)
   He 3S.M.ACC.CL/1S.ACC.CL/2S.ACC.CL 3S.DAT.CL will-show.3S
   ‘He will show him/it/*me/*you to him’
   b. Il [me le / te le / *me te / *te me] montrera
   He 1S.DAT.CL-3S.ACC.CL/2S.DAT.CL-3S.ACC.CL/
   1S.DAT.CL-2S.ACC.CL/2S.DAT.CL-1S.ACC.CL will-show.3S
   ‘He will show [him to me/him to you/*you to me/*me to you]’

(3) a. Tu ton/tin/*me/*se sistisan (Greek)
   3S.M.DAT.CL 3S.M.ACC.CL/3S.F.ACC.CL/1S.ACC.CL/2S.ACC.CL
   introduced.3P
   ‘They introduced him/her/*me/*you to him’
   b. [Mu tin/su tin/*mu se/*su me] sistisan
   1S.DAT.CL-3S.F.ACC.CL/2S.DAT.CL-3S.F.ACC.CL/
   1S.DAT.CL-2S.ACC.CL/2S.DAT.CL-1S.ACC.CL introduced.3P
   ‘They introduced [her to me/her to you/*you to me/*me to you]’

In this chapter, it is suggested that, even if we restrict ourselves to active transitive contexts, the same restriction, in more or less different guises, applies to a wider array of contexts than
originally thought, providing evidence for a twofold claim: (a) the PCC is a purely syntactic constraint (see also Ormazabal & Romero 2007 for the same claim), rather than a morphological one (Bonet 1991, 1994, 2008) or the result of the interaction of syntax with the PF interface (as in e.g. Nevins 2007); (b) it reflects a configuration whereby datives have their own licensing heads, which match them unless some other argument with similar feature specification pre-empts this matching (partly in the spirit of Adger & Harbour 2007), rather than the reverse, i.e. a configuration where the dative intervenes between an agreement head and a goal that needs to Agree with it (as in Anagnostopoulou 2003, 2005 inter alios). The latter conclusion is one of the basic premises in our argumentation in favour of a movement analysis of dative shift.

In arguing for (a), in §2.2 I follow recent advances in the research of person and agreement and the syntactic representation of discourse participants (Baker 2008, Tsoulas & Kural 1999, Tenny & Speas 2003, Sigurðsson 2005, Schlenker 2003, 2005, Anand & Nevins 2004) and argue that a revised theory of person features/person agreement is needed. More specifically, the PF-interpretable person features on pronouns and agreement elements do not in fact correspond to inherent lexical features which are LF-interpretable per se. Rather, all pronouns are in fact variables potentially bound by speaker/hearer operators1; the apparent person of the pronoun is the result of the interaction of the nature of the operator (speaker/addressee/logophoric) and the interpretable deictic features ([±participant], [±author], [hearer]) that the pronoun may carry. While the former categories (speaker/addressee) are apparently universal, the way the latter may cluster together to form bundles varies cross-linguistically, yielding all the different partitions attested in the pronominal systems of different languages (see Harbour 2006). If the PCC is shown to be sensitive only to such deictic features (§2.3), then we are forced to the conclusion that it is a constraint reflecting a ban on some illicit configuration(s) at a level that handles such features, e.g. LF or rather a purely narrow-syntactic level, but certainly not PF, or even the syntax-PF interface.

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1 R. Kayne points out that ‘although syntax admits without question silent elements that have overt counterparts elsewhere, the existence of silent elements that never have overt counterparts elsewhere, in any language, is less certain’. The underlying assumption here, following in part Tenny & Speas (2003), is that Speaker and Hearer are the external arguments and the indirect object of the speech act respectively, i.e. their overt counterparts would be ‘John’ and ‘Mary’ in ‘John told Mary that…’ (which partly echoes Ross’s ‘performative hypothesis’). Also, some (but not all) of Finer’s (1985) cases of switch reference marking in some Caucasian languages might be instances of agreement with such silent operators.
Having established (a), two logical possibilities arise, which correspond to the two structural analyses alluded to above: (i) Person-Case effects arise when a dative intervenes and blocks an Agree relationship between a phi-probe and a 1st/2nd person lower argument (say a direct object), assuming that this Agree relationship would be needed for some reason such as clitic movement and/or Case valuation (Anagnostopoulou 2003, Rezac 2007); (ii) a PCC-violating configuration is one in which a 1st/2nd person argument prevents an Agree relation between the dative and a head that licenses it/its Case. Many analyses in the relevant literature are along the lines of (i). Here, however, a version of (ii) is advocated (§2.4), as it can provide an explanation for cases of similar person restrictions not accounted for by (i), as well as an elegant account of constructions apparently escaping the PCC, despite involving ‘illicit’ combinations of person/case features, e.g. constructions with strong pronouns realising 1st/2nd person direct objects instead of clitics (§2.5).

2.2. [Person] vs. [Participant]

2.2.1. Person as a derivative notion

Baker (2008) argues that a special case of agreement is the agreement between an operator and the variable that it binds (4), and he states his observation as in (5):

(4) Every boyₖ hopes that heₖ (*sheₖ, *theyₖ, *Iₖ) will pass the test.

| Person:3 | ✓ | ✓ | ✓ | * |
| Num:SG  | ✓ | ✓ | * | ✓ |
| Gender:M| ✓ | * | N/A| N/A |

(example from Baker 2008:121)

(5) If variable X is referentially dependent on operator Y (directly [i.e. if its immediate antecedent is an operator –DM] or indirectly [i.e. if it is dependent on something which is itself directly or indirectly dependent on an operator –DM]), then X has the same φ-features as Y. (Baker 2008:122)

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2 Anagnostopoulou (2003), in particular, argues that Agree is needed for Case valuation of clitics, while in situ (i.e., tonic/strong) accusatives are allowed to have defaults.
He further argues that in fact all person marking is an instance of operator-variable agreement, allowing only for unbound referential 3rd person pronouns. To this end, he postulates that 1st/2nd person pronouns are bound by abstract speaker/addressee operators in the CP system (when not bound by other 1st/2nd person pronouns). Although Baker himself does not make reference to the notion of (LF-) interpretability, this claim implies that 1st and 2nd person features are not LF-interpretable per se, but rather they can only denote the speaker or the addressee of the utterance by virtue of their being bound by the respective operator. Indirect evidence for this comes from cases like (6) below, where a pronoun \( X \) meant to refer to the speaker surprisingly cannot be 1st person, when c-commanded by a 3rd person expression \( Y \) which itself refers to the speaker. Apparently, for \( X \) to refer to the speaker, i.e. to be co-indexed with \( Y \), it must agree with \( Y \)’s person, as well as the rest of its \( \phi \)-features, in accordance with (5). Baker attributes this failure of 1st person to be interpreted as denoting the speaker, i.e. as accidentally and unproblematically co-indexed with \( Y \), to a locality condition, i.e. a requirement that \( X \) agree with its local binder, namely \( Y \), rather than the speaker operator \( S \) of its minimal CP (7).

(6) \([Y \text{ The man who is talking to you}], \text{ wants you to give } [X \text{ him/*me}], \text{ some money} \] (from Kayne 2000:154)

(7) \([CP,S, [TP[NP \text{ The man who is talking to you}]}, \text{ wants you to give him/*me, money}]\]

(from Baker 2008:127)

Further evidence comes from languages, like Amharic in (8), which allow pronouns to have shifted interpretations in certain embedded contexts; in (8), 1st person is used to refer not to the speaker of the utterance, but to a reported speaker, i.e. the subject of the matrix clause (although it must be noted that the non-shifted interpretation is still possible, see Schlenker 2003).

(8) \(\text{\textasciitilde jon j\textasciitilde j\textasciitilde n\textasciitilde n\textasciitilde n\textasciitilde n\textasciitilde n\textasciitilde y\textasciitilde l\textasciitilde a\textasciitilde l\textasciitilde l} \) (Amharic)

\(\text{John hero be.PF-1S 3M.say-AUX.3M}\)

‘John says that he is a hero.’ (lit. ‘John says that I be a hero.’)

(from Schlenker (2003), in Baker (2008:125))

Baker, citing examples with two levels of clausal embedding (cf. 8’), shows that the relation of shifted pronouns to their binders is subject to the same locality condition that was assumed
to be operative in (7), i.e. in the relation between ‘free’ pronouns and abstract speaker/hearer operators.

(8') John Susan tle golíʔaohde enfíweʔadi (Slave)
John Susan Norman Wells 1SG.OPT.go 3SG.want 3SG.say
‘John said that Susan wants (Susan/*John/*me) to go to Norman Wells’
[S, Johnk said [Sk Susan, wants [Sn I,n,*k,*i go.to Norman Wells]]]

The data in (6) and (8) admittedly constitute only indirect evidence in favour of Baker’s general theory of person agreement. However, they indeed undermine the view that person features on pronouns (either overt or covert, as in 8) used referentially, at least 1st and 2nd person, are inherent, i.e. lexically valued, with their own independent semantics specified in the Lexicon, largely like R-expressions—the difference being that the semantics of indexicals would be functions from contexts to individuals. Turning to the claim that in fact they are all variables, on semantic grounds, it is well known since Heim (1991) and Partee (1989) that some 1st/2nd pronouns can indeed be variables bound by overt quantified expressions (fake indexicals, cf. 9), in which case the person feature is valued in accordance with (5). Tsoulas & Kural (1999) further motivate the claim that (genuine) indexicals too, and consequently all pronouns, are always bound variables, on the basis of contrasts such as the one in (10): indexical pronouns can be interpreted as being in the scope of adverbs like ‘traditionally’, i.e. as participating “through a ceremonial role” (ibid: 553) in a series of similar situations with variable subjects, while other expressions, e.g. names (10b), cannot. Tsoulas & Kural convincingly attribute this to a “quantificational interplay” between the speaker operator and the adverb3, which is not available for rigid designators.

(9) Only I_k did my_k homework.
(For x = I, x did x’s homework; for all x, x ≠ I, not: x did x’s homework)
(10)a. Traditionally, I am allowed to have whatever I want as my last meal. (uttered by a death-row inmate before his execution)

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3 On their analysis, this is made possible by having the speaker operator higher than the (Davidsonian) event argument of the predicate, which is bound by ‘traditionally’, allowing the subject of the predicate to co-vary with the execution situations, while a non-pronominal DP subject would have to be interpreted as a non-variant part of the repeated situation.
b. #Traditionally, Bill is allowed to have whatever he wants as his last meal. (uttered in a similar situation)
(from Tsoulas & Kural 1999:552-553)

To sum up the above observations, then, there seem to be some good reasons to believe that person values are not inherent, lexical and LF-interpretable properties of pronouns, and postulate instead that 1\textsuperscript{st} and 2\textsuperscript{nd} person are always the result of operator-variable agreement, while 3\textsuperscript{rd} person may either be the result of operator-variable agreement with an overt 3\textsuperscript{rd} person operator, or the default value assigned to all unbound pronouns/DPs. To summarise the argument: (i) operator-variable binding obligatorily entails person matching; (ii) for all expressions marked for 1\textsuperscript{st}/2\textsuperscript{nd} person there is a binder: (a) there are some obvious instances of operator-variable binding where the bound variable is valued as 1\textsuperscript{st}/2\textsuperscript{nd} person\textsuperscript{4}; crucially, there are even instances of 1\textsuperscript{st}/2\textsuperscript{nd} person pronouns (shifted pronouns) bound by expressions that do not refer to either the speaker or the addressee of the utterance (cf. the Amharic cases); all these cases seem to obey the same locality conditions; (b) even genuine indexicals semantically require (abstract) speaker/addressee operators to bind them (which is the premise missing from Baker’s argumentation) – see Tsoulas & Kural (1999) for more arguments and details. Therefore, if the above are on the right track, then person seems to always be a derivative notion, rather than an inherent feature of referring expressions. The question that arises then is how exactly such features are computed and valued, if not lexically.

2.2.2. Person as an unvalued feature

On Baker’s (2008) theory of person agreement, the valuation of [person] derives from referential dependence, i.e. co-indexation. However, binding dependencies along with the assignment of indices are arguably not determined before LF (see Hornstein e.a. 2005:270-272, among others)\textsuperscript{5}, which would entail that [person] features would have to remain unvalued until after Spellout. Apart from this unwelcome conclusion, another potential

\textsuperscript{4} See also Heim (2008), who analyses this as a feature-copying process at PF.

\textsuperscript{5} Alternatively, one could perhaps assume that lexical items can carry their own referential index when entering the derivation, which would then allow co-indexation and agreement as its consequence (à la Baker) to take place in syntax; it is not, however, clear, in this case, how indices would be assigned to complex expressions such as ‘the person who is talking to you’ etc. without resorting to their semantics.
theoretical problem of this analysis is the introduction of operator-variable agreement as an entirely new operation, which is not reducible to any of the basic syntactic operations (e.g. Merge, Agree/Move). Baker explicitly attempts to divorce his mechanism of person agreement from Agree, in e.g. the following conjecture:

(11) Agree never puts the features +1 or +2 on a head; +1 and +2 features are always the result of operator-variable agreement.

Indeed, Baker provides examples of operator-variable binding, which unexceptionally require person matching, and in general phi-matching, without obeying any of the formal restrictions standardly associated with (phi-) Agree, namely the c-command requirement, minimality, the P(arse) I(mpenetrability) C(ondition) (cf. also (4) above) and the ‘activity condition’, i.e. the requirement for a case-valuation relationship holding between the probe and the goal. To begin with, (12) below indicates that operator-variable binding (and, therefore, agreement) is also possible when the variable is not c-commanded by the QP that binds it:

(12) Someone in every city_k loves its_k (*my_k, *your_k, *their_k, *his_k) weather.

(from Baker 2008:122, see also May (1985) for the original observation)

Nevertheless, this does not easily extend to cases of operator-variable binding/agreement involving 1st and 2nd person pronouns; for instance, in (13-15) there can be no operator-variable relationship between a 1st/2nd person pronoun and a quantified expression that does

6 A formal way to maintain that even in such cases of so-called ‘inverse linking’ the c-command requirement is met would be to assume that the QP which apparently does not c-command its variable, e.g. every city in (12), moves out of its ‘container’ DP and undergoes QR into a position that does c-command the bound pronoun (this is in fact the standard assumption, as Elena Anagnostopoulou points out to me). The resulting configuration, (i) [Op,...[[...x,...]......prn]], is a Weak Crossover Configuration if one adopts a broad definition of WCO, e.g. (ii) "*Op,...prn,...x, where prn and x do not c-command each other and Op c-commands both", i.e., a definition that treats WCO as merely attributable to Koopman & Sportiche’s (1983) Bijection Principle, but not if WCO is really subject to Chomsky’s (1976) Leftness Condition, i.e. if WCO only obtains when prn, precedes x. If this were the case, this would be a shortcut to our desired conclusion, namely the claim that operators and variables are always in an Agree-like configuration (at least at LF); but then, assuming that the contrasts (in (13-16) below) between c-commanding and embedded 1st/2nd person quantified expressions are real, we would not be able to account for them, if all embedded QPs can undergo this kind of sub-extraction for QR purposes. However, the main reason I am not pursuing this line of thought is the considerably low degree of acceptability of the configuration in (i) in e.g. wh-questions in Greek:

(iii) Pjanu, idhes [ti mitera t] na ton x, parighori?

Who.GEN saw.2SG the mother SUBJ. him.ACC.CL console.3SG
‘Whose mother did you see console him?’.
not c-command it; whereas quantified DPs embedded in subject-DPs can be the antecedents of 3rd person variables c-commanded by the predicate (13a-15a), this is not possible when the embedded expression contains a 1st/2nd person pronoun (13b-15b), even though it is certain that such expressions can indeed be interpreted as quantified (15c) and that 1st/2nd person pronouns can be interpreted as bound variables (15d)\(^7\).

(13) a. Ap’ ola ta vivlia, mono afto pu ghraftike ja ton Tsomski, ton, epeni
   Of all the books, only this that was-written for the Chomsky him.ACC.CL praises
   ‘Of all the books, only the one about Chomsky praises him’
   → ‘All other books do not praise Chomsky’
   → ‘All other books do not praise the person they are about’

b. Ap’ola ta vivlia, mono afto pu ghraftike ja mena me epeni
   Of all the books, only this that was-written for me me.ACC.CL praises
   ‘Of all the books, only the one about me praises me’
   → No other book praises me.
   ??/??* → No other book praises the person it is about.

(14) a. I martiries pu katatethikan [ja ton Jani mono/??mono ja to Jani], (ke kanenan alon)
   ichan san apotelesma na pro, silifthi
   The testimonies that were-submitted [for the John only/only for the John] and no
   one else had as result Subj. get-arrested
   ‘Only the testimonies that were given about John/The testimonies that were given

\(^7\) It is considerably harder to test this assumption with universally quantified 1st/2nd person expressions, see e.g. (i), in which the contrast is weaker perhaps because of the fact that the plurals outside the relative can independently exhibit some degree of distibutivity (but see 17).

(i) a. ‘I jinekes pu pandreftikane [oli tus/k’ i tris tus], prospathisan na tus, dhilitiriasun
   The women that married.3PL all they.GEN/and.additive the three them.GEN tried.3PL
   SUBJ them.ACC.CL poison.3PL
   ‘The women that they all/all three of them married tried to poison them’
   → ‘if A married X and B married Y, X tried to poison A, Y tried to poison B etc.’

b. ‘I jinekes pu pandreftikame [oli mas/k’ i tris mas]
   prospathisan na mas dhilitiriasun
   The women that married.1PL all we.GEN/and.additive the three we.GEN
   tried.3PL SUBJ us.ACC.CL poison.3PL
   ‘The women that we all/all three of us married tried to poison us’, ??* → ‘My wife tried to poison me, your wife tried to poison you etc.’ (perhaps more natural when a collaboration scenario is implied)
about John only; resulted in hisi arrest’
→ Testimonies about no one else led to John’s arrest
→ Testimonies about no one else; led to theiri arrest

b. I martiries pu katatethikan [ja esena mono/??mono ja esena] (ke kanenan alon)
ichan san apotelesma na pro siliifthis
The testimonies that were-submitted [for you only/only for you] and no one else
had as result Subj. get-arrested.2SG
‘Only the testimonies that were given about you/the testimonies that were given
about you only resulted in your arrest’
→ Testimonies about no one else led to your arrest
→ Testimonies about no one else; led to theiri arrest

(15) a. [?I voithia tu mono pros to Jani]?/mono i voithia tu pros to Jani]ii (tu) alakse ti zoi tu
The help his only to the John/only the help his to the John him.DAT.CL changed
the life his
‘Only his help to John; /His help to John only; changed hisi life’
i=??/ii=ok → ‘His help to others did not change their lives’

b. [I voithia tu mono pros emena]?/mono i voithia tu pros emena]ii (mu) alakse ti zoi mu
The help his only to me/only the help his to me.DAT.CL changed the life my
‘Only his help to me/his help to me only changed my life’
i=*/ii=?? → ‘His help to others did not change their lives’

c. I voithia tu [mono pros emena]/mono i voithia tu pros emena itan simandiki
The help his only to me/only the help his to me was important
‘Only his help to me/his help to me only was important’ → ‘He has helped
others too; however, his help to anyone else but me was not significant’

d. Mono eghok alaksa ti zoi mu
Only I changed the life my
'Only I changed my life' → 'No one else changed their life'

If we recognise the fact that both 1st/2nd person variables and fake indexicals require an antecedent (i.e., an anteceding operator) c-commanding them, then this should be the first step in reducing 1st/2nd [person] valuation to Agree. As far as the compatibility with the PIC is concerned, recall that the binding relationship in cases that apparently defy it, e.g. in (16), is mediated by the corresponding abstract operator of the embedded CP, A in our case. What follows is an argument that operator-variable binding in cases like (16) results from the concatenation of two Agree(-like) relations, none of which violates the PIC.

(16) [All of you]k are hoping [CP that A_k you_k (*I_k, *she_k, *they_k) will win the single’s title].
(for all x, x one of you, x hopes x will win the single’s title)
(adapted from Baker 2008:123)

As we already saw in the case of shifted pronouns (8, also repeated below), S/A operators can themselves be bound. However, the relation between John and S2 in (8) is not an Agree relation; this becomes more obvious in cases with shifted 2nd person pronouns, where the embedded A operator is apparently bound by the indirect object of a verb such as ‘tell’ in the

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8 Predictably, similar contrasts are observed with regards to the availability of sloppy identity readings: when the antecedent c-commands the pronoun, both 1st/2nd and 3rd person allow sloppy identity readings, but when it does not, sloppy identity is only allowed for 3rd person, cf. the following examples, adapted from Mavrogiorgos (2009):

(i) O Janis nomizi oti i Roksani ton echi erotefi ala to idhio nomizi ke o Tasos
   The John thinks that the Roxanne him.ACC.CL has fallen-in-love-with but the same thinks and the Tasos
   ‘John, thinks that R. has fallen in love with him, but Tasos, too thinks that R. has fallen in love with him_y’

(ii) Esi nomizis oti i Roksani se echi erotefi ala to idhio nomizis ke o Tasos
    You think.2SG that the Roxanne you.ACC.CL has fallen-in-love-with but the same thinks and the Tasos
   ‘You think that R. has fallen in love with you but Tasos, too thinks that R. has fallen in love with him/y’

(iii) Afti pu simbathun ton Jani nomizun oti i Roksani ton echi erotefi ala to idhio nomizun ke afti pu simbathun ton Taso
    Those who like John think that the Roxanne him.ACC.CL has fallen-in-love-with but the same thinks and the Tasos
    ‘Those who like John, think that R. has fallen in love with him, but those who like Tasos, too think that R. has fallen in love with him_y’

(iv) Afti pu se simbathun nomizun oti i Roksani se echi erotefi ala to idhio nomizun ke afti pu simbathun ton Taso
    Those who you.ACC.CL like think that the Roxanne you.ACC.CL has fallen-in-love-with but the same thinks and those who like Tasos
    ‘Those who like you think that R. has fallen in love with you but those who like Tasos, too think that R. has fallen in love with you/*him_y’.
matrix clause; this is why in these cases [person] matching between the embedded S/A operator and its controller does not take place and is not required.

(8) [S1k John; [S2, I, hero be+T say+T] (from Baker 2008:129)

Nevertheless, when both parts of an operator-variable relation are 1\textsuperscript{st}/2\textsuperscript{nd} person, then there is a strict c-command requirement, as shown by (13-15). The same holds for (16/17):

(17) I ghonis olon sas elpizun [\textit{CP} oti tha nikisete] (Greek)

\textit{The parents all.GEN you.GEN.PL hope that FUT win.2PL}

\textit{‘The parents of all of you hope that you will win’}

\textit{--> ‘…that all of you will win’}

\textit{-/-\textit{> ‘each parent hopes for their own child…’}}

So, \textit{all of you} and the embedded A in (16) are in an Agree-like configuration –and in order to further liken this configuration to an Agree configuration, we need to assume that S/A operators too enter the derivation with a [uPerson] feature\textsuperscript{9}, like pronouns/Ds\textsuperscript{10}. This Agree(-like) relationship between \textit{all of you} and A does not violate the PIC, if we adopt the revised version of it in Chomsky (2001:14) (18).

(18) PIC II (Chomsky 2001): The domain of a (phase head) H is not accessible to operations at ZP (the next [emphasis mine –DM] strong phase); only H and its edge are accessible to such operations.

\textsuperscript{9} I will assume, throughout the dissertation, that two Agreeing elements share all the features that are valued via Agree, in accordance with Chomsky’s (2000) Inclusiveness; for instance, phi-probes also carry a [uCase] feature, like their goals. The value of [uCase] is derivationally determined by the nature of the probe (e.g. T vs. v*), sometimes combined with inherent properties of the goal, e.g. theta-role (quirky case) or quantification/negation (partitive/genitive of negation, as e.g. in Russian). Likewise, [uPerson] on S/A and their goals/bindees is valued exactly on the basis of the probe’s nature and intrinsic properties of the bound pronoun, as will be suggested below. Two Agreeing S/A operators do not value each other; nevertheless their [uPerson] features must somehow match each other.

\textsuperscript{10} It must be mentioned that, technically, A and QP in (16) only indirectly agree, i.e. they do not value each other. It seems however that this matching configuration is a necessary condition for LF to assign a bound variable reading to 1\textsuperscript{st}/2\textsuperscript{nd} pronouns (which is obtained in our case after A Agrees with you in the embedded CP), and arguably LF cannot have access to such information as how each of the members of this matching relation had its [person] feature valued, see also the discussion under (22).
For Chomsky, in (19) any probe at a stage $\Sigma$ within ZP can access any element of the domain YP of HP, unless $\Sigma = ZP$.

\[
(19) \quad [ZP \ Z \ \ldots \ [HP \ \alpha \ [H \ YP]]]\]

Likewise, in our case, i.e. (16), all of you in Spec-TP can unproblematically match A in the embedded CP. Similarly, S and A operators can Agree with pronouns not only in the Spec of the maximal TP they c-command, but also in T’s vP/VoiceP complement, up to the next (if any) strong phase boundary, following the version of the PIC just presented, which explains how e.g. S/A can match an object pronoun. S and A are certainly below the CP phase boundary, i.e. the highest C-head (presumably Force, or the position of complementisers that are presumably even higher than Force –see Roussou 2000), given that (i) such operators probably belong to the S(peech) A(ct) Phrase, as e.g. Tenny & Speas (2003) argue, and that (ii) expressions standardly assumed to be inserted in the SAP projection, e.g. speech act adverbs, are systematically lower than complementisers such as that.

The idea that this kind of matching obeys the PIC implies that there can be no operator-variable binding between a 1st/2nd person QP and a 1st/2nd person pronoun, if they are in positions such that a dependency between them would violate the PIC or similar/related locality restrictions. Indeed, there seems to be some sensitivity to strong islands, e.g. relative clauses: these disfavour a bound variable reading of 1st/2nd person pronouns embedded inside them (20a), a fact that follows straightforwardly from the PIC, assuming that DPs are phases, while the binding of 3rd person variables in these same positions seems less problematic (20b)\(^{11}\).

\(^{11}\) It should be noted however that, if they are phasal, DPs too, like CPs, should contain S/A operators, which perhaps contribute to the deictic anchoring of such expressions and license any 1st/2nd person pronouns (e.g. possessors) inside them. If this is the case, then e.g. complex NPs could in principle be analysed like (16): the variable binding of the 1st person pronoun in the embedded CP by the quantified subject of the matrix CP is mediated by the S operators of (a) the DP [the fact that...] and (b) its CP complement: [Only I \ldots [DP S \ldots [CP S \ldots [vP me]]]]], without any violation of the PIC. It may just be then that the S/A operators of CPs introduced by DPs such as [the fact that...] are not conducing to variable binding by any quantified expressions in the matrix CP (in the same way as in (16)), precisely because the proposition they express is presented as a fact: this is probably what disallows their deictic coordinates to (co-)vary with the possible discourse participants of the matrix clause. S/A in such a CP refer to the ones that are contextually given, thus indirectly agreeing with the ones of the matrix CP. Variable binding of the 1st person pronoun in the embedded CP directly by the quantified subject of the matrix CP, without the embedded S mediating this relationship, would violate the PIC. Therefore, one should expect “island violations” like the ones illustrated in (20) only when the noun of the complex NP is such that the embedded CP is presented as a fact. It is probably for the same reason, then, that there appears to be a contrast between the availability of variable binding of 1st/2nd person (but not 3rd person) pronouns in non-factive and factive CPs:

(i) Mono egho, ipa oti pethane  o skilos mu
(20) a. mono esi kseris kapjon pu katalaveni to peiper su (Greek)
only you know.2SG someone.ACC that understands the paper your
‘Only you know someone who understands your paper’ (strict: ok, sloppy: *)
b. mono o Janis, kseri kapjon pu katalaveni to peiper tu,
Only the John knows someone.ACC that understands the paper his
‘Only John knows someone who understands his paper’ (strict: ok, sloppy: ok)

Therefore, it seems plausible to reduce operator-variable agreement for 1\textsuperscript{st}/2\textsuperscript{nd} person to Agree, even though operator-variable binding in general apparently is not Agree: as we saw, it requires a c-command relation, it does not violate the PIC, and [uPerson] itself is the feature that renders goals (and probes) for this Agree relation active. As for the fourth ingredient of Agree that Baker claimed to be absent from operator-variable agreement, namely sensitivity to minimality/intervention effects, I would argue that the locality condition Baker assumed to be operative in (6-7) above (also repeated here) must be construed as an intervention effect blocking Agree between an S operator and the pronoun.

(6) [\textit{Y} The man who is talking to you], wants you to give [\textit{X} him/*me], some money (from Kayne 2000:154)
(7) \([CP_S_i [TP [NP The man who is talking to you], wants you to give him/*me; money]]\)
(from Baker 2008:127)

Baker argued for the absence of intervention effects in what he calls operator-variable agreement on the basis of examples such as (21):

(21) [We all]\(_k\) told every teacher about our\(_k\) troubles with our\(_k\) parents.
(a modification of Baker’s (2008:122) example (20))

Person (and phi-) matching in (21) takes place unproblematically, despite the intervention of another quantified phrase. However, it is reasonable to assume that in an Agree relationship any minimality restriction must be relativised to these features (or perhaps to the corresponding class of features, following Rizzi 2001) that the probing head needs to match, rather than any features shared by the probe and an intervener: if person agreement resulted from operator-variable binding, as Baker suggests, then perhaps the relevant feature should be some operator-related feature (let us tentatively call it Op), and then any intervening operators should have a blocking effect, contrary to what is actually observed, hence binding cannot reduce to Agree; but if operator-variable binding depends on person agreement, as I will argue below, then the relevant feature need not be [Op], which explains why the second quantified expression in (21) does not have a blocking effect. Again, examples like (21) show something about the nature of operator-variable binding, but not about the nature of phi-matching, particularly person-matching, under binding. Apparently, as (6-7) show, what causes an intervening phrase to have a blocking effect is its denoting the same discourse participant as the goal (see p.25 (under ex. (23)) for a fuller explanation).

I deliberately choose to treat (6-7) as an instance of an intervention effect, rather than as the application of Baker’s locality condition, according to which the 3\(^{rd}\) person speaker-denoting DP agrees with the pronoun by virtue of being a more local binder. This is because 3\(^{rd}\) person matching under operator-variable binding, and as I will argue 3\(^{rd}\) person valuation on pronouns/DPs in general, does not have the properties of Agree (cf. 12). Rather, I will assume that 3\(^{rd}\) person is the default value for pronouns that fail to Agree with a S/A operator, as well as possibly for all non-pronominal DPs. Therefore, 3\(^{rd}\) person agreement on pronouns (apparently) anteceded by operators/quantifiers that might not c-command them in narrow syntax is in fact accidental; the pronoun and its antecedent share a value that they were both assigned by default and not because of the relationship between them. Admittedly, matching
in these cases is full phi-matching, not only person matching. However, [gender] and [number] are arguably LF-interpretatable on both the binder and the bindee, i.e. this matching is not the result of some syntactic or post-syntactic process, but is obligatory only for logical, not purely linguistic reasons, namely the unacceptability of the co-occurrence of two coreferential expressions with contradictory semantic properties\(^\text{12}\).

Paraphrasing Baker’s (2008:126) Person Licensing Condition (his (30)), then, our theory about person agreement so far can be summarised as follows:

(22) a. A DP X is first person iff X and (i) a (null) S(peaker) operator or (ii) some overt 1\(^{st}\) person operator and X are in an Agree configuration (i.e. c-command plus [person] matching).

b. A DP X is second person iff X and (i) a (null) A(ddressee) operator or (ii) some overt 2\(^{nd}\) person operator are in an Agree configuration.

c. Otherwise, a DP/NP is third person.

Consequently, on this view, it is not co-indexation that leads to feature matching, but rather matching/Agree that gives instructions for co-indexation at LF. In the same way that Case was assumed to make DPs/chains visible for theta-assignment, one can assume that [person] makes DPs/chains visible for index-assignment. The configurations in which DPs and operators are allowed to match their [person] are also the configurations that LF recognizes as eligible for operator-variable binding –probably as long as quantified expressions precede their variables, so that subsequent QR of a quantified expression does not lead to any kind of (strong or weak) Crossover. If this is so, particularly if (22c) and what we said about accidental 3\(^{rd}\) person variable agreement are on the right track, this may explain why 3\(^{rd}\) person operator-variable relations appear to be subject to what some authors have called ‘almost c-command’ (the idea being that this “putative c-command requirement is satisfied for the QP ‘by proxy’ by the ‘container’ DP” (Bhatt 2004), see also Ruys 2000 and Büring 2005).

\(^{12}\) Note that in languages with partial matching between grammatical and natural gender, like Greek, a mismatch between [gender] features in cases of quantifier-variable agreement can be marginally acceptable: (i) ?Kathe koritsi.NEUT, me ekane na tin.FEM, aghapiso: ‘Every girl, made me love her’, (ii) ?kathe koritsi.NEUT, theli/onirevete na tin.FEM, aghapisun: ‘Every girl, wants people to love her/dreams to be loved’.

22
It is however necessary, for the sake of precision, to draw a distinction between Agree driven by S/A operators and feature matching in cases of fake indexicals bound by overt 1st/2nd person quantified expressions. The former can indeed be argued to result in valuation of the [person] feature of the Agreeing parts; however, in cases of operator-variable agreement with 1st/2nd person quantified phrases, the bound variable’s [uPerson] is not directly valued by the QP’s [uPerson], which is itself assigned a value +1/+2 depending on the nature of the null operator in SAP that matches it (S vs. A). This configuration (i.e., [S/A[uPerson:v1] … QP[uPerson:v1] … prn[uPerson:v1]]) is reminiscent of case agreement in configurations like small clauses/secondary predication ([Case assigning head[uCase:v1] … DP[uCase:v1] … Pred[uCase:v1]]). The way DP and Pred end up sharing their Case feature must be similar to the way QP and the lower pronoun indirectly agree for [uPerson], the mechanics of which I will not discuss here in detail (see Chomsky 2001 and 2006 for participial agreement, as well as Spyropoulos (2005) for predicative constructions/small clauses). It is probably because of this indirect agreement relation that the bound variable reading of the pronoun is in fact optional: the pronoun is in a structural relationship of the sort described in (22a-b) with both QP and the null operator, therefore LF may either interpret it as bound by QP or as directly bound by the null operator, without co-varying with the referents of the quantified expression. The same optionality must also apply to cases like (16).

To conclude this section, the arguments presented here were an attempt to motivate the assumption that person valuation, as the result of the relation of pronouns to operators that bind them, may be reduced to Agree: if none of the properties of this relation is incompatible with the notion of Agree, then it should not be regarded as a distinct operation. One significant peculiarity of this probe-goal relation, which has not yet been addressed, is the fact that the probe in this case, unlike phi-probes, does not (at least obviously) value any of its uninterpretable/formal features on the basis of the values of any corresponding interpretable features on the goal; recall that [person] is lexically unvalued on both the probe and the goal (however, I will argue that S/A operators do probe for some interpretable features, and I will discuss what these interpretable features are in the next section). Moreover, S/A operators should be predicted to be present even in CPs that do not happen to contain any 1st/2nd person pronouns. Therefore, this sort of Agree is reminiscent of (and probably akin to) the kind of Agree induced by interrogative C: C_wh/Q/interrog probes and Agrees with/licenses any wh-phrases/polarity items (or other operator-like elements) in its Agree domain, but no ungrammaticality is induced by the lack of any such expression, as in
e.g. ‘yes/no’ questions; likewise, S/A probe and Agree with any 1st/2nd person pronouns in their Agree domain, otherwise their [uPerson] is vacuously valued (for the notion of vacuous Agree, see Roberts (2010:143-146, 152)).

2.2.3. What are the interpretable features of pronouns?

On Baker’s view of person valuation as operator-variable agreement, operators assign person features/values after matching an index which is the same as theirs. Such a view, apart from the assumption that indices are perhaps interpretable/inherent features of lexical items (or at least available at the numeration), would also force the conclusion that the different values of [person:] are only computed on the basis of the operator. However, this would allow for partitions in the person systems of the world’s languages that are in fact not attested. For instance, as reported by Harbour (2006), there are systems which only distinguish two types of pronouns, (a) one type that denotes speakers or plurals including the speaker, and (b) one that denotes anyone else but the speaker; at the same time, there are no systems with an (otherwise similar) bipartition where the crucial distinctive property would be reference to the hearer. The former kind of system would be predicted if everything bound by S (at least partially, in the case of plurals) was assigned one value, while everything else, bound by A or no operator at all, was assigned the other available value. Then, in principle, the latter systems should also exist: everything bound by A should be assigned one value, and the other value would be assigned to everything else, contrary to fact.

Harbour (2006) convincingly suggests that all attested partitions of person features can be predicted by all and only the permissible manipulations of an inventory of three features: [±participant], [±author] and possibly a privative [hearer] feature. Drawing on evidence from typologically diverse person systems, he shows that ‘defined in this way, there is no need to constrain licit feature combinations via a geometry: the features generate all and only those categories and systems that are actually attested’. Moreover, ‘rare systems are shown to require significantly more complex grammars (feature sets and operations thereon) than

---

13 One could indeed stipulate that S/A do have uninterpretable counterparts of the interpretable features that S/A probe for, in the same way that Chomsky (2000) postulated that interrogative C has an uninterpretable [Q] feature, which is interpretable on wh-phrases. Ian Roberts (p.c.) suggests that C in ‘yes/no’ questions (C[+Q]) may be different from C in wh-questions (C[+Q,+wh]), with the former not probing for +wh elements; however, it still licenses polarity items and if we reduce this licensing operation to Agree (rather than invoking some special separate operation), the same considerations apply: when no polarity items are in C’s complement domain, whatever the feature that renders it active is, it needs to get valued vacuously.
common ones’ (ibid.). I will not discuss here all his arguments in detail. Nonetheless, the distinction between (a)-type and (b)-type languages in the previous paragraph compelling evidence in favour of such an approach: Harbour’s theory only makes available a way to describe and define pronominal systems of the former type, by e.g. postulating that in such systems any pronoun may only be either [+author] or [-author]; hypothetical systems of the latter type are successfully ruled out, as our system would indeed allow for [+participant, -author] combinations, i.e. addressee-oriented pronouns, but there would be no coherent way to describe non-addressee-oriented ones as one class: the same series of pronominal forms would have to correspond to both [+participant, +author] and [-participant, (-author)] (also given that [hearer] is privative rather than bivalent), which obviously do not form a natural class. So, I will consider these three features that Harbour postulated to be the interpretable, lexically valued features that S/A operators probe for, which also partly determine the value of [uPerson]. Which (combinations of) features exactly count as suitable goals for an S/A operator may be subject to parametric variation, within limits, i.e. S may match [+participant, +author] in one language, and maybe just [+participant] in another, allowing for pronouns potentially bound by both S and A, however S should never be able to match [–author] or [–participant]. I will not explore the consequences of this further; for systems that distinguish 3 values for [person], I will assume that S can only match [+participant, +author], while A matches [+participant, -author, (hearer)].

The fact that these features can never determine the well-formedness, the form and the denotation of a personal pronoun on their own, without taking into consideration their interaction with some operator, is shown by (a) the failure of 1st/2nd person in cases such as (6), (b) their interaction with another kind of operator, which has not been discussed yet, namely logophoric operators (23).

(23) Olú so [LOGi pé [ōun i bábá ōun]] (Yoruba)
   Olu say that he.log see father him.log
   ‘Olu said that he (Olu) saw his (Olu’s) father.’
   (from Adesola 2004:185)

As far as (a) is concerned, examples like (6) show that pronouns specified as [+participant] and [±author] can only be co-indexed with DPs/operators that Agree with them; this is
probably a requirement that LF poses in order to assign an index to such pronouns\textsuperscript{14}. Therefore, (6) crashes at LF; the 3\textsuperscript{rd} person DP denoting the speaker is the closest expression which must necessarily be interpreted as co-indexed with the [+participant, +author] pronoun, but the pronoun’s Agree/matching requirement is not met; only a pronoun specified as [-participant] (or not specified at all) can survive in this context\textsuperscript{15}.

Turning to (b), logophoric operators are relevant (at least) for languages with morphologically distinct pronouns that appear in clausal complements of verbs such as ‘say’ and are necessarily bound by the external argument of such a verb; since in languages with shifted pronouns this binding relation is arguably mediated by the S operator of the embedded clause, in the case of logophoric pronouns one can assume that this role is played by special logophoric operators that license a special logophoric morphology, instead of 1\textsuperscript{st} person. Since logophoric pronouns are standardly interpreted as reported speakers, i.e. given the scarcity or the non-existence of morphologically distinct pronouns denoting reported hearers, it seems that the [+author/–author] distinction is not relevant. I will therefore tentatively assume that logophoric pronouns are only specified as [+participant], with no specification about [+author]; S/A operators cannot match such pronouns, consequently [+participant] pronouns can only be matched and bound by LOG operators in embedded clauses. The unacceptability of logophoric pronouns in matrix clauses is another argument for the role of operators in the licensing of [person] features. Finally, it must be noted that the relative positioning of LOG and S/A operators must be such that S/A probe and match first any pronouns specified as [+participant, ±author], so that the configuration only allows pronouns specified as just [+participant] to be matched by LOG.

Another interesting peculiarity of logophoric pronouns is that they are not subject to the same minimality condition as shifted pronouns (see 8’ above), as they can be bound by the

\textsuperscript{14} This is apparently contradictory to the view that [person] is both unvalued and uninterpretable: uninterpretable features are deleted at LF. However I am not claiming that indices are read off the [person] feature of DPs/chains; one possibility is that [person] features are indeed marked for deletion and LF identifies pairs of such matching features, in order to assign to their carriers the same index, before deleting them, without really interpreting them – recall that the specific values of [person] have no necessary semantic entailments per se. Or, alternatively, [person] features enter the derivation unvalued but are in fact LF-interpretable (à la Pesetsky & Torrego 2004), serving as (partial) instructions for index-assignment at LF. Again, similar technical assumptions should be made if one were to translate the Visibility Condition on theta-assignment in minimalist terms.

\textsuperscript{15} This way, we apparently lose the parallelism between (6) and (8’), which Baker’s Person Licensing Condition derives. However, there is still an elegant way to account for (8’), i.e. the minimality condition governing the binding of shifted pronouns, in terms of (22): in languages with shifted pronouns, embedded S/A have the option of being bound by some argument of the CP in which they are immediately embedded; otherwise, they need to be bound by the (non-shifted) S’/A’ operators of that CP, with which they are in an Agree-like relationship (hence the ambiguity of (8)). It is the intervention of non-shifted S’/A’ that blocks the binding of the embedded S/A by any DP higher than S’/A’.
external argument of a verb of saying/thinking etc. no matter how high it is, and whether
other possible antecedents of the logophor intervene: thus, in (23’), the logophoric pronoun of
the most deeply embedded clause can be bound by either the subject of the matrix clause or
the subject of the intermediate clause16.

(23’) Ozo rorró wèé Úyi tá wèé Adesuwa báá írèn òhó!ghé (Edo)
Ozo thinks that Uyi say that Adesuwa accuse him.log of.lying
‘Ozo thinks that Uyi said that Adesuwa accused him (Ozo or Uyi) of lying’
(from Baker 2008:137)

I will further assume that in languages where there is no morphological distinction of
logophoric and 3rd person pronouns, 3rd person pronouns too can be bound by LOG operators,
i.e. matching of a [+participant] pronoun by LOG may result in 3rd person assignment. An
example comes from Greek (24), where so-called ‘ethical’ dative clitics obligatorily denote a
discourse participant, namely, the speaker when 1st person, the addressee when 2nd person
and obligatorily a reported speaker when 3rd person, unlike other 3rd person dative clitics;
therefore, in (24), the 3rd person clitic has to be [+participant] (see more on this in chapter 3),
since it can only have a logophoric interpretation, whereas in (24’), the IO clitic can be
ambiguous between the logophoric (i.e. bound by LOG) and non-logophoric, unbound
interpretation, i.e. it may be either [+participant] or [–participant].

(24) proi thimoni [cp pu LOGi dhen tisik pandreftika akoma] (ethical dative)
pro.3SG resents.3SG that.FACTIVE not her.DAT.CL married.1S yet
‘She resents (the fact) that I haven’t yet gotten married’
(24’) proi thimoni pu dhen tisik edhosan to vravio (indirect object)
pro.3SG resents.3SG that.FACTIVE not her.DAT.CL gave.3P the prize.ACC
‘She resents (the fact) that they did not give her the prize’

To sum up, pronouns are inserted from the lexicon with one of the possible bundles of
[±participant], [±author], [hearer] features, including bundles where some or all of these

16 Like S/A (see fn. 15), we can assume that a LOG operator has the option to be bound by another higher
operator LOG', when not bound by the external argument of the vP that immediately dominates it. By
transitivity, then, LOG can be bound by any higher LOGn, which is ultimately bound by the external argument
of the vP that immediately dominates it: [EAi … [cp LOGi … [cp LOG’i … [cp LOGi … logophoric pronoun, …]]]]].
features are absent, are matched by an S/A/LOG operator or none at all, and value their [uPerson] accordingly, cf. table 1 for a tentative overview of the mechanism underlying familiar tripartite systems. Finally, it must be mentioned that, on this analysis, phi-probes value their [uPerson] in a slightly counter-cyclic fashion, i.e. after their goal values its own [uPerson] via Agree with an operator higher than the phi-probe; as also discussed in chapter 3 (see §3.4.6 in particular), this kind of counter-cyclicity is permitted, as long as the (interweaving) operations involved take place within a single phase, or rather within one constituent of the sort represented in (19) (see also Chomsky 2008).

<table>
<thead>
<tr>
<th>Intrinsic features</th>
<th>Probing operator</th>
<th>[person] value</th>
</tr>
</thead>
<tbody>
<tr>
<td>[+participant, +author]</td>
<td>S</td>
<td>1</td>
</tr>
<tr>
<td>[+participant, –author]</td>
<td>A</td>
<td>2</td>
</tr>
<tr>
<td>[+participant]</td>
<td>LOG</td>
<td>Logophoric / 3</td>
</tr>
<tr>
<td>[–participant], Ø</td>
<td>None</td>
<td>3</td>
</tr>
</tbody>
</table>

*Table 1: Tripartite person systems*
2.3. PCC and its sensitivity to [±participant]

The above theory of person agreement is going to be our basic premise in our argument about the syntactic nature of the Person Case Constraint. Features such as [±participant], [±author] etc. are present throughout the derivation but are not PF-interpretable, while [person] features have mainly morphological entailments; therefore, a constraint which is sensitive only to the latter may be a morphological or morphosyntactic restriction, while a constraint which is sensitive to the former cannot be PF-related, but purely syntactic or perhaps LF-related.

A little-noticed fact about these person restrictions is that a PCC-like constraint also applies to (non-anaphoric) bound pronouns; in a number of clausal complements of ‘say’/‘think’-verbs, like (25) below, there is a clear dispreference for the bound reading of the D(irect) O(bject) clitic in the presence of an I(ndirect) O(bject) clitic, while the bound reading of the IO clitic is perfectly possible, as is the bound reading of the DO clitic when no IO clitic is there.

(25) pro ipe oti tis ton sistisan (Greek)
pro.3S said.3S that her.DAT.CL him.ACC.CL introduced.3P
‘She said that they introduced him to her’

In terms of our theory so far, the restriction in (25) seems to indicate that the 3rd person direct object clitic must not have a [±participant] feature, which would force a LOG operator to Agree with it and bind it, as in (24) above. If this is correct, then the unification of this

---

17 The equivalent of this example in Italian too appears to have exactly the same grammatical and ungrammatical readings (Guasti, Guardiano p.c.).
18 Non-1st/2nd person [±participant] pronouns should then be all the pronouns with an obligatorily bound and de se interpretation (e.g., among others, morphologically distinct logophors, PRO etc.). The presence of a LOG operator, which guarantees de se readings, in the embedded CP might be regulated by selectional properties of the matrix predicate. In principle, their existence can be motivated for every language that exhibits syntactic/semantic contrasts between de se attitudes and accidental (‘de re’) coreference.
19 Some Greek speakers appear to be more tolerant to the bound reading than others (though in the literature the judgements about other languages appear to be more robust); however, even for these speakers, the bound reading is more acceptable when the indirect object clitic is absent. It must be noted that the restriction mainly arises with predicates which give rise to de se interpretations of clausal complements with a coreferential subject, which is why I believe logophoricity is at play here. However, even when the 3rd person DO clitic is not [±participant], it can in principle be accidentally coindexed with the matrix subject, especially with other types of matrix predicates (and one would expect cross-linguistic and/or intra-speaker variation in this lexical
restriction with the traditional PCC follows straightforwardly. A ban on [+participant] DOs in the presence of a dative also successfully rules out the illicit cases in (2) and (3), where this feature specification is reflected more directly in the person feature of the DO pronouns. Therefore, we may reformulate (1) as (1’):

(1’) Person Case Constraint: If DAT, then ACC(/ABS) cannot be [+participant]

Similar disjoint reference effects have been reported about Spanish (26) (in Ormazabal and Romero 2007, who acknowledge Roca 1992 as their source, via Richard Kayne) and Serbo-Croatian by Bhatt & Simik (2009). Predictably, French, which features the strong version of the PCC, also behaves in an entirely similar way, as shown in (27), where a contextually/pragmatically salient or even forced bound reading of the DO clitic is grammatically excluded.

(26) a. Mateo piensa que lo entregaste a la policía (Spanish)
  Mateo thinks that him.ACC.CL handed.SUBJ.2S to the police
  ‘Mateo thinks that you handed him over to the police’

b. Mateo piensa que se lo entregaste a la policía
  Mateo thinks that 3S.DAT.CL him.ACC.CL handed.SUBJ.2S to the police
  ‘Mateo thinks that you handed him over to the police’

(from Ormazabal & Romero 2007:327)

(27) (Est-ce que tu trouves impressionnant que Sarkozy connait Jean?) Jean m’a dit qu’on [le, lui, l’/*le, lui, l] a présenté à Lyon il y a trois ans (French)
  ‘Do you find it surprising that Sarkozy knows John? John says that they introduced him to him three years ago’

Interestingly, as Ormazabal & Romero (2007:328) note, “the same obligatory disjoint reference effect is obtained no matter how far away from the potential antecedent the clitic cluster is” (26’). This seems to strengthen the assumption that the illicit binding relationship...
(which, on the analysis pursued here, is made possible by a [+participant] feature on the DO clitic lo) is of logophoric nature, given that logophors allow such long distance binding – see (23’) and fn. 1520.

(26’) *Mateo_i cree que Sara piensa que se lo_i entregaste a la policía

Mateo believes that Sara thinks that 3DAT 3ACC handed to the police
‘Mateo believes that Sara thinks that you handed him over to the police’

*[Mateo_i cree [CP que LOG_i Sara piensa [CP que LOG’_i se lo_i[+Participant] … ]]]

(from Ormazabal & Romero 2007:328)

The data presented so far would be compatible either with an account based on logophoricity, or with an account based on the idea that bound 3rd person pronouns in general have some property that assimilates them to 1st/2nd person pronouns, and hence makes them illicit in clitic clusters, while differentiating them from other, free, 3rd person pronouns. Indeed, Bhatt & Simik (2009) do not directly associate this restriction with logophoricity, as they quote examples in which the binding restriction applies even to clitic clusters embedded in restrictive relatives (but crucially not in non-restrictive ones) or adjunct clauses. However, interestingly, they observe that the restriction never arises when the potential binder of the DO clitic is in what they call ‘deeply embedded positions’, e.g. inside relative clauses modifying the matrix subject (quoting examples from Czech, cf. 28). They attribute this to the fact that in such cases the co-indexed DO clitic is not really a bound variable, as these contexts wouldn’t allow relations such as quantifier-variable binding.

(28) Ten človek, co Petra ošídil, tvrdil, ze jí ho Marie doporučila (Czech)

The person that Petr tricked claimed that her.DAT.CL him.ACC.CL Mary recommended
‘The person that tricked Petr said that Mary introduced him to her’

However, as we saw, this is not quite accurate: there are indeed cases in which a 3rd person pronoun can be anteceded by a quantifier that does not c-command it (cf. 12), and more specifically quantifiers embedded in relative clauses (29) are really able to bind variables in the matrix clause, although admittedly for some reason variable binding by nominative QPs embedded in object relatives is more natural than the reverse, i.e. by accusative QPs

20 Elena Anagnostopoulou points out to me that it cannot be the case that ‘every time you have coreference, logophoricity is at play’. Indeed, logophoricity should only be assumed with certain selecting predicates and when a de se thought/attitude is intended. This is when 3rd person DOs require [+participant] features.
embedded in subject relatives\textsuperscript{21}. What is particularly relevant for our purposes is that, while an operator-variable relationship can be established between the ‘deeply embedded’ DP and the direct object clitic, no binding restriction between these two elements emerges when the DO clitic is found in a clitic cluster, contrary to what Bhatt & Simik’s generalization would predict; our PCC-like restriction still applies, but it rather affects the potential binding relationship between the matrix subject and the DO clitic (30).

(29) a. (3)O kathijitis\textsubscript{p} pu epileji ton kathe fititi, ine ipochreomenos ke na ton, aksioloji (Greek)\textsuperscript{22}
   The professor that selects the each student.ACC is obliged and Subj.
   him.ACC.CL assesses.PFV
   ‘The professor who selects each student\textsubscript{i} is obliged to assess him\textsubscript{i} as well’

b. ?O kathijitis\textsubscript{p} ton opio epileji kathe/ekastos fititis\textsubscript{i} ine ipochreomenos na ton, aksioloji\textsuperscript{23}
   The professor the whom selects every/each student.NOM is obliged NA him.ACC.CL assesses.PFV
   ‘?The professor\textsubscript{p} that each student\textsubscript{i} selects is obliged to assess him\textsubscript{i},’

(30) a. O kathijitis pu epelekse ton Kosta ischiristike oti ali tu ton ichan sistisi (Greek)
   The professor that chose the Kostas.ACC claimed that others him.DAT.CL
   him.ACC.CL had recommended
   ‘The professor\textsubscript{p} that selected Kostas\textsubscript{k} claimed that others had recommended him\textsubscript{k/l}
   to him\textsubscript{p/j},’
   *‘The professor\textsubscript{p} that selected Kostas\textsubscript{k} claimed that others had recommended him\textsubscript{p}
   to him\textsubscript{k/j},’

b. O kathijitis pu katingile o Kostas ischiristike oti ali tu ton ichan sistisi (Greek)
   The professor that sued the Kostas. NOM claimed that others him.DAT.CL
   him.ACC.CL had recommended
   ‘The professor\textsubscript{p} that Kostas\textsubscript{k} sued claimed that others had recommended him\textsubscript{k/l}
   to him\textsubscript{p/j},’
   *‘The professor\textsubscript{p} that Kostas\textsubscript{k} sued claimed that others had recommended him\textsubscript{p}
   to him\textsubscript{k/j},’

\textsuperscript{21} Ian Roberts (p.c.) informs me that this asymmetry extends to English as well.
\textsuperscript{22} It is probably the past tense in Bhatt & Simik’s examples that disfavours the bound-variable reading, while the present tense in my examples makes it more salient due to its potentially repetitive/habitual interpretation.
\textsuperscript{23} The sentence becomes more natural if the DP [the professor that each student selects] bears contrastive focus.
Therefore, our PCC-like restriction does not arise when the antecedent of the DO clitic is not in the matrix subject position, and in general in a position not c-commanding the DO clitic, even though an operator-variable relation between them would be possible, thus contradicting Bhatt & Simik’s claim that the restriction is due to the (feature) makeup of bound pronouns in general, which should then be comparable to the makeup of 1st/2nd person pronouns. Instead, the contrast between the grammatical and the ungrammatical readings of (30) is straightforwardly explained if we assume that all the permissible co-indexations follow from Principle B, while the ungrammatical ones are banned because they presuppose co-indexation with the LOG operator of the complement clause, which can only be bound by the matrix subject, and this co-indexation in turn presupposes [+participant] matching with the DO clitic, which is ruled out by the PCC.

Another argument that Bhatt and Simik use to relate the restriction to the availability of binding is the alleged contrast between clitic clusters in restrictive and appositive relatives. In restrictive relatives, DO clitics (appearing alone) can be operator-bound variables (31a), but in appositives they cannot (31b); however, there appears to be no contrast between (32a) and (32b) in Greek, which can both be contrasted to (26) above, especially the readings on which the null subject is masculine24. Again, the contrasts actually observed corroborate the assumption that the restriction emerges when a logophoric interpretation is forced.

(31) a. Kathe ipopsifios didaktoras_i efcharisti ston prologho tis dhiatrivis aftus pu ton_i voithisan

Every candidate doctor thanks in-the preface the thesis.GEN those who him.ACC.CL helped.3PL

‘Every PhD candidate_i thanks those who helped him, in the preface of his thesis’

b. ?*Kathe ipopsifios didaktoras_i efcharisti ston prologho tis dhiatrivis ton Tsomski, o opios ton_i enepnefse

Every candidate doctor thanks in-the preface the thesis.GEN the Chomsky who.MASC him.ACC.CL inspired.3SG

‘?*Every PhD candidate_i thanks Chomsky, who inspired him_i, in the preface of his thesis’

24 Bhatt & Simik’s examples that structurally correspond to (30a) either (a) involve verbs of perception in the matrix clause, which may allow the event described in the relative to be interpreted as what the matrix subject perceives, thus possibly giving rise to a logophoric structure, leaving open the possibility that the distribution of LOG operators is subject to parametric variation and sensitive to lexical semantic factors, or (b) systematically involve clusters of clitics with identical person/number/gender features, which may cause further parsing difficulties due to processing reasons, rather than because of the restriction discussed here itself.
(32) a. I Dalia Hadjialexandru proselave ton Janij ke aftosj efcharistise tin kopela
        pu/i opia tisj tonj iche sistisi
        The Dalia Hadjialexandru hired the John and he thanked the girl that/who.FEM
        her.DAT.CL him.ACC.CL had recommended
        ‘Dalia Hadjialexandru hired John, so hej thanked the girl who had recommended
        himj to herj’

b. I Dalia Hadjialeksandru proselave ton Janij ke aftosj efcharistise ti Maria,
        i opia tisj tonj iche sistisi
        The Dalia Hadjialeksandru.FEM hired the John and he thanked Mary who.FEM
        her.DAT.CL him.ACC.CL had recommended
        ‘Dalia Hadjialeksandru hired John, so hej thanked Mary, who had recommended
        himj to herj’

To sum up, the parallel between the restriction governing bound direct object pronouns in
clausal complements of verbs of saying etc. and the PCC is such that one has to assume that
the former is just a sub-case of the latter, which leads us to a twofold conclusion: (a) the PCC
can be neither morphological nor a morphosyntactic constraint, conditioned by PF-
interpretable features that are introduced via Late Insertion; rather, it is sensitive to the
intrinsic LF-interpretable features of pronouns, [+participant] in particular when borne by the
direct object clitic, and PCC-violating constructions reflect some configuration which is illicit
for narrow-syntactic or LF-related reasons –however, given the possible grammatical
paraphrases of PCC-violating constructions, which involve identical semantic features, the
restriction cannot be LF-related; (b) it is hard to attribute the PCC to the inability of DO to
check [+participant] with a phi-probe. There is no evidence that phi-probes, i.e. agreement
heads, probe for such features, instead of/alongside [person] features. Instead, a more natural
explanation must involve some probe that probes exactly for such interpretable features,
rather than agreement features such as [person], which brings us to the discussion in the next
section.
2.4. The PCC reflects the licensing needs of the shifted dative

This section explores how the (strong) PCC is related to quirky Case and how this in turn is related to dative shift in Greek and elsewhere. The core proposal is that the strong PCC arises when the inherent Case feature of the dative is visible to Agree and A-movement, i.e. active, and consequently that strong PCC-effects reflect the failure of the dative to deactivate the structural part of its Case. We have already established that in illicit, i.e. PCC-violating, combinations of person-marked elements the element whose agreement is restricted must not carry a [+participant] feature. It follows then that the operation that licenses dative arguments with ‘active’ inherent Case must be such that it can be blocked by a [+participant] feature in the Agree domain of the head that licenses the dative, partly in the spirit of Adger & Harbour (2007). Contrary to Adger & Harbour, however, it is suggested the aforementioned licensing configuration of datives is a familiar Agree configuration, whereby the dative is c-commanded by its probe and any blocking effects arise as the result of the intervention, often the defective intervention, of another potential goal bearing [+participant]. Such a structural analysis is supported by empirical evidence from Romance causatives and so-called ‘repair strategies’ (Bonet 1991, 2008), i.e. constructions that escape the PCC despite involving feature combinations similar to the illicit ones, as well as some diachronic considerations. Given that in canonical double-object constructions, i.e. constructions where the indirect object DP asymmetrically c-commands the direct object, [+participant] gives rise to the PCC when borne by the direct object, we are led to the conclusion that a movement analysis of the double-object construction is needed, so that the direct object is the intervener between the dative and its probe, prior to the former’s movement into a higher position.

2.4.1. Strong PCC, [uCase] and dative shift

The diachrony of Greek suggests an interesting correlation between the availability of Person-Case effects and the structural position of the indirect object DP relative to the direct object, namely a weakening (or perhaps even the absence) of PCC effects when the indirect object DP can be asymmetrically c-commanded by DO, in other words the (strong) PCC correlates with the availability of dative shift.

In Hellenistic Greek, there is enough available evidence for us to apply Barss & Lasnik’s
(1986) diagnostics for asymmetric c-command (see more on this in chapter 5); the available data all indicate that the IO DP may be asymmetrically c-commanded by DO, while cases fitting the diagnostics for the reverse are not attested (33). Conversely, in Standard Modern Greek, when both internal arguments are realised as DPs, it is the IO DP that asymmetrically c-commands DO and not vice-versa, while only prepositional IOs may be asymmetrically c-commanded by DO (34) (see Anagnostopoulou 2001, 2003 among others).

(33) a. poːs oun he: theos […] tous agnooumenous; edeiksen alleːlois; leksoː:
how so the goddess […] the missing. ACC showed. 3SG each-other. DAT tell. 1S. FUT
‘So now I’ll tell you how the goddess (Venus) showed/revealed the two missing heroes to each other’ (Chariton, Callirhoe, 8.1.5.2, 1st/2nd cent. AD)
b. *heː theos edeiksen tois agnooumenois; alleːlous;
the goddess showed. 3SG the missing. DAT each-other. ACC

(34) a. Edhiksa tis Marias; ton eafto tis;
Showed. 1SG the Mary. DAT the self. ACC. her
‘I showed Mary herself’
b. Edhiksa ti Maria; ston eafto tis;/*tu eaftu tis;
Showed. 1SG the Mary. ACC to-the self. ACC her/the self. DAT her
‘I showed Mary to herself’

At the same time, Hellenistic Greek, i.e. Greek of Roman Times, as well as Classical Greek, provides ample evidence for clusters of weak pronominal elements (see chapter 5 for a defense of the view that they are actually clitics) that violate the strong PCC. Examples such as (35) below, which is taken from the same text as (33), would be compatible with the weak PCC, whereby combinations of 1st/2nd person clitics / agreement markers are allowed, but crucially not with the PCC as it applies in S( tandard) M(odern) G(reek) and most of the modern Greek dialects (36). Interestingly, only some Pontic Greek varieties appear to manifest the weak PCC (see also Chatzikyriakidis 2010), and these varieties too apparently feature low indirect object DPs (see Appendix C).

(35) Omoson […] teːn Aphroditeːn teːn deiksasan me soi (Hellenistic Greek)
Swear. IMP the Aphrodite. ACC the show. PAST. PTCP. FEM. ACC me. ACC. CL you. DAT. CL
‘Swear to Aphrodite, the one who revealed me to you’
Unfortunately, on the basis of the attested clitic clusters alone, we cannot argue with certainty either that Hellenistic Greek instatiates a weak PCC pattern or that it is not subject to any kind of PCC: 3rd person dative clitics hoi and sphi (and 3rd person clitics in general, for that matter) were extremely rare and in decline already in Classical Greek and they are virtually absent from any Hellenistic texts, so we cannot know how acceptable their co-occurrence with 1st/2nd person accusative clitics would be (I will come back to this issue in chapter 5). However, given the general definition in (1) and the fact that Greek features not only clitics with dative morphology but also full lexical dative DPs, one expects the latter too to be able to give rise to PCC effects.

This possibility has been somewhat glossed over in the relevant literature, probably because the languages that are most frequently used to exemplify the PCC, i.e. the Romance languages, have full lexical indirect objects realised as PPs (at least apparently). However, it turns out that in languages possessing both the strong PCC and a double object construction with (full) double DPs, person-case effects also arise when the I(ndirect) O(bject) is not realised as a clitic or an agreement affix, but as a full DP; while this may sound debatable, in fact there is a growing consensus that this broader view of the PCC (in one form or another) must be true: Riedel (2009), drawing on evidence from Swahili and Sambaa, points out that the (weak) PCC (which is operative in these languages) holds in double object constructions independent of status object marking (37a). Also, Baker, Safir & Sikuku (2012) observe asymmetries such as the one in (37b), and attribute them to the PCC, concluding that analyses of the PCC in terms of constraints on agreement or narrow morphological conditions on clitic clusters are not general enough to account for the full range of Lubukusu facts […]26, further conjecturing ‘that person restrictions on movement to particular positions may be a better way of thinking about some PCC effects in some languages’ (ibid. 2), which bears certain important similarities to the analysis proposed here. Such PCC effects have also already been observed by Adger & Harbour (2007), see e.g. (37c) from Kiowa,

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25 They tend to appear in more archaic texts and even there it appears that they cannot form clusters with other pronominal clitics.
26 Baker, Safir & Sikuku even observe PCC restrictions in passives, very similar to the ones observed and analysed in §3.4.6.
where the indirect object DP must be turned into a locative expression, although no IO agreement shows up, as there is “no morphological exponent in the agreement prefix” for 3rd person plural animate IOs (Adger & Harbour (2007:7), see also Ormazabal & Romero (2007) for evidence from Haitian Creole, via Michel Degraff (p.c.), and languages such as Zuni, Cherokee and Ojibwa, via Albizu (1997), that “PCC effects coexist with a general lack of overt agreement morphology” (ibid.: 330)).

(37) a. (i) *A- za- ni- mu- onyesha. (Saamba)
   SubjMarker-PERF-ObjMarker.1SG-ObjMarker.3SG-show
   Int: ‘He pointed me out to her.’
(ii) N- li- ku- onyesha Juma. (Swahili)
   SubjMarker1SG-PAST-ObjMarker2SG-show Juma
   OK ‘I showed Juma to you.’ *‘I showed you to Juma.’
   (from Riedel 2009:140,151)

b. (i) N-a-ky-okesya Wekesa. (Lubukusu)
   SubjMarker1SG-T-ObjMarker3SG-show Wekesa
   ‘I showed it Wekesa’ OR ‘I showed it to Wekesa’
(ii) Okesy ea ese Wekesa.
   SubjMarker3SG-show me Wekesa
   ‘He showed me Wekesa’ NOT ‘He showed me to Wekesa.’
(iii) A-nch-okesya Wekesa.
   SubjMarker3SG-ObjMerker1SG-show Wekesa
   ‘He showed me Wekesa’ NOT ‘He showed me to Wekesa’
   (from Baker, Safir & Sikuku 2012)

c. (i) *Kóígú em-poohiítoo (Kiowa)
   Kiowas I-you.SG-bring.FUT
   ‘I’ll take you to the Kiowas.’
(ii) Kóí-em em-poohiítoo
   Kiowa-LOC I-you.SG-bring.FUT
   ‘I’ll take you to the Kiowas.’
   (from Adger & Harbour 2007:7)

27 It is also clear that 3rd person agreement here could not be realised by some zero/null morpheme (Adger & Harbour, p.c.)
Likewise, in Modern Greek, all the feature combinations that are ruled out by (1) are indeed degraded even when there is no IO clitic, but a full lexical IO DP instead (38). For some speakers, in these constructions, mild ungrammaticality arises not only when the DO clitic is 1st/2nd person, but even when it refers to any animate entity (see also Anagnostopoulou 2003, who claims that the well-formedness of these constructions is sensitive to both animacy and gender (mis)matches); although I do not share these judgements (see also Panagiotidis 2005), assuming that this is an instance of dialectal split, a system within which all restrictions (regarding the feature specification of DO) are attributed to the licensing requirements of the dative may provide a more straightforward account even of this pattern, whether or not we choose to label the restriction in (38) and its variations as a sub-case of the strong PCC (see the discussion in 2.4.2.3 and 2.5, particularly fn. 31). More importantly, apparently the degraded examples in (38) can be said to ‘deviant but not sharply ungrammatical’\(^28\), but this appears to be a peculiarity of Standard Modern Greek, compared to other Greek varieties such as Cypriot Greek, in which the counterparts of (38) exhibit much sharper contrasts (38’).

In later sections, I will suggest that the weaker contrasts observed in SMG might in fact be due to the marginal availability of a residual DO>IO order, which lacks the applicative head that gives rise to animacy effects/person restrictions—as per the analysis proposed below, and is thus able to derive 1/2 ACC>DAT, but not clitic clusters (see §3.4.3 on how Appl interacts with the formation of clitic clusters).

(38) \{To/ton/?*me/?*se\} stilane tis Marias (Greek)  
[It/3SG.MASC.INANIM/%*him.ANIM/?*me/?*you.SG].ACC.CL sent.3PL the Mary.DAT  
‘They sent it/%him/*me/*you to Mary’

(38’) Epepsan/epepsasi \{to/ton/*me/*se\} tis koruas (Cypriot Greek)  
Sent.3PL \{it/him/me/you\}.ACC.CL the girl.DAT  
‘They sent \{it/him/me/you\} to the giral’

Interestingly enough, this restriction appears not to be operative in Hellenistic Greek, i.e. Greek of the Roman times: in (39) the second-position DO clitic can freely be 1st person

\(^28\) As Elena Anagnostopoulou also points out to me. Also, it would be good to have ‘more robust evidence’ like this ‘from clitic languages like Greek’ (as per E. Anagnostopoulou’s (p.c.) suggestion), but not many comparable languages seem to share the crucial properties needed for such a comparison, namely, (i) being a clitic language, (ii) having the double DP frame, and (iii) having the (strong) PCC; among Slavic and/or Balkan languages, you often get (i) and (ii) but not (iii) (e.g. Slovenian/Serbocroatian, and Romanian, see Savescu 2009) or (i) and (iii) but not (ii) (e.g. Bulgarian).
despite its co-occurrence with an indirect object DP, a co-occurrence which would be ruled out by either the strong or the weak PCC.

(39) Thales me.ti medio di:si (Hellenistic Greek)
Thales me.ACC.CL the watching-over (god).DAT Nileos.GEN state.GEN gives
‘Thales devoted me to the god that protects the people of Nileos’ (Callim. Th 52)

The equivalent of this in S(tandard) M(odern) G(reek) is clearly degraded, even though all 3rd person DO clitics, even those referring to [+animate] (40b) or [+human] (40c) entities, would be allowed:

(40) a. ?*Me/?*se edhikse tu Christu (SMG)
Me.ACC.CL/you.SG.ACC.CL showed.3SG the Christ.DAT
‘He showed me/you to Christ’

b. Ti jidha tin edhikse tu Christu
The goat.FEM her.ACC.CL showed.3SG the Christ.DAT
‘He showed the goat to Christ’
(from a Greek folktale: http://2tee-n-smyrn.att.sch.gr/politistikosite/politistikoK41b.htm)

c. Ton Vasilopoulos ton edhikse tu Kakomiridhi
The Vasilopoulos.ACC him.ACC.CL showed.3SG the Kakomiridhis.DAT
‘He showed Vasilopoulos to Kakomiridhis’
(from P. Delta’s novel A Tale with No Name)

Another interesting property of the PCC is the correlation between it (in its strong version again) and the availability of intervention effects, which indicate that the intervening dative is visible to Agree (a well-known property of Icelandic quirky datives which some researchers explicitly relate to the person restriction on nominative objects, e.g. Boeckx 2000, 2008, and Richards 2008). Therefore, the major empirical contribution of H(ellenistic) G(reek), which lacks the strong PCC, in this respect, is that it features DAT-above-NOM configurations in raising/unaccusative constructions, where the dative triggers no (defective) intervention effects, as in e.g. the agreement relationship between matrix T and the nominative subject of the embedded infinitival in (41). On the contrary, in Standard Modern Greek a bare dative experiencer DP intervening in such a configuration is illicit (42), unless it undergoes (i) clitic-movement, which is the same repair strategy observed in other languages with the strong
PCC in clitic clusters, e.g. French and Italian, or (ii) clitic doubling.

(41) *pro dokoumen men gar autoi haptesthai ekeino:n*
    pro.1PL seem.1PL therefore him.DAT touch.INF those.GEN
    ‘we therefore seem to him to be touching those’
    (Themistius, *Aristotelis de anima paraphrasis*, 5,3,75.8)

(42) *ta stichia, dhen *(tu) fanikan (?tu Papakonstandinu)* [SC t, ipopta] /
    [CP/TP t, na echun schesi me to Vatopedhi]
    the data not him.DAT.CL seemed.3PL (the Papakonstandinu.DAT) suspicious /
    to have relation to the Vatopedhi
    ‘The evidence did not seem to Papakonstandinou to be suspicious/related to the
    Vatopedi scandal’

Table 2 summarises the correlations that result from this cursory look at the diachrony of Greek and its varieties. HG datives uniformly bear purely theta-related, i.e. inactive, Case, which is invisible to Agree, while SMG datives uniformly bear active Case, i.e., a presumably partly unvalued/uninterpretable inherent Case feature.

<table>
<thead>
<tr>
<th></th>
<th>Ditransitives</th>
<th>DAT-above-NOM</th>
<th>PCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type I</td>
<td>IO_{DP}&gt;DO</td>
<td>Intervention effects in T-Agree across datives</td>
<td>Strong PCC effects</td>
</tr>
<tr>
<td>Type II</td>
<td>DO&gt;IO_{DP}</td>
<td>No intervention effects in T-Agree across datives</td>
<td>No (strong) PCC effects</td>
</tr>
</tbody>
</table>

Table 2: A diachronic typology of datives (a first approximation)

That said, it is not of course the case that all the properties listed above always cluster together, cross-linguistically. For instance, it is possible to have intra-linguistic variation across theta-roles, as in e.g. Icelandic, where both high (i.e., ‘active’) and low (i.e., ‘inactive’) inherently Case-marked IOs are available (see Anagnostopoulou 2003), like in Hebrew29, but

29 As a GLOW reviewer pointed out to me, Hebrew allows DOC nominalisations, of the sort presented in (110) in Chapter 4, despite having IO_{DAT}>DO. The idea is that DOC nominalisations imply/entail the existence of DO>IO_{DAT}, without necessarily excluding the availability of IO_{DAT}>DO (see Preminger 2010, who argues that in fact both hierarchical orders are available in Hebrew).
Dative experiencers have active Case only, causing blocking effects, and arguably linked to quirknness (Boeckx 2000 i.a.).

Also, in Modern Cypriot Greek, all goal arguments are ‘active’ (no low IO/goal DPs, intervention effects in motion unaccusatives), but dative experiencers are ‘inactive’ (no intervention effects with raising/psych predicates, see chapter 5).

(42’) a. To chartin pu tin eforian irten *(tis) tis Marias
   The notification.NOM from inland revenue came.3SG *(her.DAT.CL) the
   Mary.GEN/DAT
   ‘Mary got the notification from Inland Revenue’

b. O Janis areski (tis) tis Marias polla / fenete (tis) tis Marias na en kurazmenos
   The John.NOM appeals-to (her.DAT.CL) the Mary.GEN/DAT a lot / seems
   (her.DAT.CL) the Mary.DAT to be tired
   ‘Mary likes John a lot / John seems to Mary to be tired’

Nevertheless, despite these facts that prevent us from generalising the picture in Table II, the following two generalisations seem to hold cross-linguistically:

I. If a language has ‘active’ dative experiencers, it also has high IO DPs; in other words, dative experiencers give rise to intervention effects in raising/unaccusative constructions, if IOs with the same form/Case have to escape VP/√P.

II. The strong PCC in ditransitives presupposes the existence of high IOs.30

At this point, it is worth noting that the present approach challenges the universality of the PCC. This is indeed consistent with research done for languages such as Romanian (see e.g. Savescu’s work on person restrictions in Romanian). Savescu (2007, 2009) clearly demonstrates that the following generalisations hold for Romanian clitic clusters (among others): (i) clitic clusters are always found in the order dative>accusative; (ii) a 3rd person dative clitic can freely combine with a 2nd person accusative clitic, contrary to what the PCC states; and (iii) a 2nd person dative clitic cannot combine with a 1st person accusative clitic. This is entirely consistent with the view that neither the strong nor the weak PCC are operative in Romanian; instead, it seems to me that these restrictions (which are only partially

30 See also Cardinaletti (2007), on the (in)applicability of the PCC in DO-IO clitic clusters in Bantu languages.
reminiscent of the PCC) arise as the result of the synergy/interaction of person hierarchies (however these are to be captured syntactically or in terms of PF restrictions) with a strict ordering requirement (which I would rather treat as a PF constraint, given my later analysis of clitic clusters), without the PCC being relevant at all (therefore, on would not expect Romanian clitic clusters to reflect an underlying dative shift configuration). Savescu herself essentially captures her generalisations syntactically by assuming a hierarchy of (agreement) projections such as ‘Person1P >> Person 3P >> Person2P >> 3ReflP >> TP >> K_{IO} >> K_{DO} >> … >> V’ and a prohibition on nesting dependencies (see Savescu (2007, 2009) for many more details and discussion).
2.4.2. An overview of the proposal

2.4.2.1. Two types of Inherent Case

It seems that the most straightforward way to account for the above (*prima facie* two-way) distinction is to try to link these contrasting properties to the Case feature of dative arguments in each type of variety. More specifically, I will sketch a system in which (a) dative shift, (b) strong PCC effects and (c) defective intervention all reflect the properties and the formal requirements of an active inherent Case feature, in a way that the presence of such a feature necessitates all of (a-c), while the absence of such a feature does not necessitate any of (a-c).

The way in which these properties correlate and cluster together suggests a bi-partite syntactic distinction, in which the distinctive feature should be the accessibility/visibility of the ‘dative’ DP to Agree/Move. Following Chomsky (2000, 2001), I assume that it is the value and the ‘timing’ of the valuation of the (abstract) Case feature of a DP that determines whether or not it is an active goal, and consequently that minimality in φ-Agree must be relativised to Case features. This implies that Chomsky’s (2000) system should be construed as follows:

(i) DPs with unvalued, uninterpretable Case features are active goals;

(ii) DPs with uninterpretable Case features that have already been valued by a lower φ-head H₁ when probed by a higher φ-head H₂ are ‘defective interveners’, in the sense that they cannot value H₂’s [uφ] while preventing it from probing further down;

(iii) DPs with fully interpretable and lexically valued theta-related Case do not induce any minimality effects, as φ-heads only look for [uCase], i.e. only [uCase] can make a DP visible to a φ-probe.

What complicates the picture then, on such an assumption, is the fact that (putting aside exactly the variation in their intervention effects and possibly their A-movability) all Greek datives both diatopically and diachronically apparently carry inherent Case which cannot be
suppressed in either ECM or passivisation\textsuperscript{31}. This forces us to postulate (like in McGinnis 1998 and Rezac 2008a) two types of inherent Case, one that only allows a dative DP to behave as described in (iii) above, and a hybrid type that allows a dative to behave as in (i) or (ii), while retaining its PF- and LF-interpretable part intact. The latter may either be construed as a quirky Case feature in the sense of Chomsky (2000:127), i.e. as a “(theta-related) inherent Case with an additional structural Case feature”, or possibly as a cluster of theta-features (in the spirit of Reinhart 2002), a part of which is inserted valued in the derivation, while the rest of it is unvalued (or simply absent, making the theta-cluster incomplete) and awaits valuation (or supplementation) by some head carrying the corresponding LF-interpretable information (e.g. Appl, which may come in different semantic flavours). If the latter is on the right track, then inherent Case in its purest (i.e. inactive) form is a theta-cluster which is inserted fully valued/specified from the Lexicon.

I will not discuss here whether these two conceptions differ substantially in their predictions and their consequences, both empirical and theoretical, postponing this discussion until chapter 7. In any case, the basic assumption in the context of this chapter’s discussion is that active inherent Case has an uninterpretable/lexically unvalued part/component which is valued and/or deactivated via Agree with a φ-head. As such, the computational system recognises it as an instance of [uCase], while its fully interpretable counterpart is an instance of [iCase]. Configurations such as (43), then, are open to the possibilities described in (i)-(iii) above:

\begin{align*}
(43) \ H_{[u\phi]} \ldots \ DAT_{[i\phi, u\text{Case}/u\text{Case}]} \ldots \ DP_{[i\phi, u\text{Case}]} \\
\quad \quad (i) \quad (ii) \quad (iii)
\end{align*}

(i) If DAT carries an unvalued [uCase] feature, then it is an active goal that can match and fully Agree with H, as long as it is its closest potential goal, deactivating its own [uCase], and preventing H from probing further down;

(ii) If DAT is the most local goal for H but it has already valued its [uCase] via Agree with a closer phi-head H’, then DAT is a defective intervener, blocking Agree between H and any lower active goal. This defective intervention effect can be

\textsuperscript{31} But see Anagnostopoulou & Sevdali (2010) for datives becoming nominative in a restricted number of passive constructions in Classical Greek, which I will briefly discuss in chapter 5. Crucially, in all the other varieties we examine here, abstract dative (whatever its morphological exponent) is never absorbed.
obviated if DAT undergoes some (movement-related) process which puts the head of DAT’s chain outside H’s Agree domain, following Chomsky (2000, 2001);

(iii) If DAT carries [iCase], it is transparent/invisible for Agree purposes, and H can unproblematically Agree with the next closest DP with [uCase].

2.4.2.2. [uCase] and dative shift

Regarding the correlation between the availability of dative shift and the existence of minimality effects in DAT-above-NOM configurations (assuming of course that DAT in the latter is morphologically the same as DP\(_{IO}\)), the core assumption is that dative shift is forced by [uCase], while DO>IO is only possible when IO does not bear [uCase] as defined above.

In DO>IO, there is no evidence for any agreement probe or other case-licensing head c-commanding IO but not DO: (a) on the one hand, if DO is merged within the maximal projection of the predicate that selects it, as is standardly assumed, then no phi-head can intervene between DO and IO; (b) on the other hand, there is no cross-linguistic evidence for any special derivational heads such as Appl in constructions with low (goal/recipient etc.) indirect objects\(^{32}\) (see more on this in chapters 3 and 4). Therefore, the position of IO in this configuration is inaccessible to any head with Case-assigning capacity and consequently IO has to be either prepositional or marked with [iCase], which does not require any licensing operation in narrow syntax\(^{33}\). (44) is a first approximation of the structure of DO>IO

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\(^{32}\) By this I mean that, cross-linguistically, there are no overt applicative morphemes that correspond to arguments such as goals etc. that can be shown to be asymmetrically c-commanded by DO. On the contrary, there is ample evidence for overt applicative affixes corresponding to non-core datives asymmetrically c-commanding DO from e.g. Bantu languages, see Marantz (1993) among others. The reason behind treating the projections required to account for various syntactic effects of ‘high’ dative DPs in languages with no applicative morphology as categorially similar to these overt morphemes is of course a view implicit in most work in the principles and parameters framework, namely Chomsky’s idea that “if some phenomenon is observed overtly in certain languages, then it probably applies covertly (i.e. without overt expression at PF) in all languages in some manner; that is, if the [c?]overt expression is probably a consequence of requirements of UG, which must be satisfied at S-structure and LF, even if not overtly observed at the PF-level” (from Lasnik 2003:2, who adds: “Chomsky specifically mentions Case…”).

\(^{33}\) Another idea that has been put forward in the literature (cf. Rezac 2008) is that theta-related Case is always a PP shell, a suggestion that echoes older ideas about null P licensing IO-DPs/datives; on this approach, the variable visibility of theta-related Case for Agree boils down to the variable transparency of P as a phase head, due to the variation in the presence and the content of a φ-probe on P. Therefore, P is thought to mediate any Agree relation between the dative DP and a phi-head such as \(v\). To some extent, this looks like a notational variant of the proposal presented here; dative as [uCase] would simply be a P with an active phi-probe, while pure [iCase] would be P with no phi-probe. However, it is not clear how the PP-shell analysis captures cases of what we are referring here to as ‘defective intervention’, i.e. cases in which DAT does cause minimality effects but the phi-probe still Agrees with a lower DP, as long as DAT’s defective intervention is obviated by, say, clitic-doubling. It is worth pointing out that Rezac’s theory is mostly designed to fit the phenomena of so-called ‘dative displacement’ in Basque, i.e. cases in which DAT apparently agrees with the verb; however, even in Basque, which is one of the few languages claimed to have dative agreement morphology, these agreement
constructions, essentially in the spirit of Larson (1988) and Anagnostopoulou (2003), among many others, to be refined later on. This structure reflects quite closely what has often been claimed to be the universal first-merged configuration of ditransitives with goal/recipient/source arguments, in accordance e.g. with the thematic hierarchy Baker (1988, 1997) claimed to underlie his U(niversal) T(heta-) A(ssignment) H(ypothesis).

(44)

\[ \begin{array}{c}
  \text{v} \\
  \text{VP} \\
  \text{DO} \\
  \text{V} \\
  \text{IO}
\end{array} \]

On the other hand, in a system where IOs are marked with [uCase], i.e. either structural (accusative) Case, like e.g. in English, or active inherent Case, (44) cannot be (any close to) the surface representation of double DP constructions. IO needs to occupy a position accessible to a phi-head, neither blocking nor being blocked by DO’s own Agree with a phi-head for the valuation of DO’s structural [uCase] feature. For IO to establish an Agree relationship with a phi-head, without a DO intervening, it must be in a position which is c-commanded by a phi-head without being c-commanded by DO, which yields IO_{DP}>DO orders.

Turning to the requirement that DO too unproblematically Agree with a phi-probe, it must be remembered that in IO_{DP}>DO, IO_{DP} does not seem to give rise to any defective intervention effects that would e.g. necessitate its cliticisation/clitic doubling in Greek or elsewhere. The only way to maintain an analysis on which there is only one phi-probe for both internal arguments with no intervention effects would be to assume some kind of split phi-Agree mechanism along the lines of Anagnostopoulou (2003): on that analysis, which is also meant to derive the PCC, IO_{DP} checks v*’s [Person] only, which allows DO to check morphemes have been argued, on the basis of a series of diagnostics, to actually be instances of clitic doubling (see Preminger 2009).

34 The same reasoning as to why IO cannot bear [uCase] in (44) holds even if one adopts Chomsky’s (1995) and Collins’s (1997) ‘Equidistance Condition’, according to which DO and IO in the configuration in (44) are equidistant from v, by virtue of being the specifier and the complement (respectively) of the same head: even if DO is not structurally an intervener, v can still match only one of the two internal arguments (see also the arguments against split Agree below), and this has to be DO, because of its own [uCase].

35 Except possibly in a restricted number of contexts, namely the equivalents of the so-called “Oehrle constructions” in Greek, which I briefly discuss in chapter 4 (for intervention effects in these constructions, see also Pesetsky 1995; 2009, Anagnostopoulou 2001; 2006).
[Number], but forces it to have a default value for [Person], namely 3rd person, which is the only value that can match v*'s 'absorbed'/deleted [Person]. Nonetheless, as Chomsky (2001) notes, on the basis of multiple Agree configurations such as participial constructions, [Case] valuation is only possible under full phi-matching, i.e. matching of all the phi-features of the goal. Although this requirement can be said to be met by DO (albeit vacuously as far as [Person] is concerned) on the split Agree analysis, it is certainly not met by IO<sub>DP</sub>. However, shifted IO<sub>DP</sub>’s do need to value a [uCase] feature on the analysis proposed here and, assuming that [uCase] always requires full phi-matching, this cannot be done on the basis of Agree for [Person] only.

Therefore, the most reasonable alternative would be to postulate that dative-shifted configurations actually involve two separate phi-heads, e.g. two v’s, one for each internal argument, and consequently two vP-shells: recall that in Larson’s (1988) analysis too the idea about two V-heads was partly motivated by the need for two case assigning heads in the double object construction (see also McGinnis 1998), therefore postulating two vP-shells is probably nothing more than recasting Larson’s analysis in minimalist terms (see also Roberts 2007, 2010).

What has been attempted to be shown so far is that the DO>IO<sub>DP</sub> and, therefore, the configuration in (44) necessarily entails [iCase], while [uCase] necessarily entails an underlying configuration along the lines of (45). Given the above, neither of the two is a bi-conditional, i.e. in principle we could not exclude a system with double object constructions in which IO<sub>DP</sub>’s with [iCase] would occupy a position c-commanding DO and c-commanded by v*, without however causing any intervention effect, precisely because of the nature of their [Case] feature. Empirically, however, in no synchronic or historical variety of Greek do
we have evidence for such a state of affairs, i.e. a situation whereby no intervention effects triggered by datives in DAT-above-NOM configurations are observed, while $\text{IO}_{\text{DP}} > \text{DO}$ is the sole pattern of ditransitive constructions with two DPs. One apparent counterexample in this respect is Hebrew, which has $\text{IO} > \text{DO}$ and at the same time allows T-agreement with a postverbal nominative theme across e.g. a possessive dative with no evidence of minimal effects that need to be circumvented (see Preminger 2010). Nevertheless, it must be noted that Hebrew allows both $\text{IO} > \text{DO}$ and $\text{DO} > \text{IO}$, with IOs always being realised as dative DPs. I will return to the issue with data and discussion in later sections, especially the section about Medieval Cypriot Greek, in which a similar situation is observed. The next section explains on theoretical grounds why the correlations that were drawn in this section may in fact be bi-conditional.

2.4.2.3. PCC and dative shift

In section 2.3 we established that [+participant], rather than any other feature, is the most crucial and relevant for the PCC. This is the feature which is present on DO clitics in PCC-violating constructions and absent otherwise. Given that [+participant] is an LF-interpretable feature, no DP/clitic or combinations of DPs/clitics carrying such features can be illicit per se. In terms of a probe-goal system, there must be some probe sensitive to such a feature, giving rise to ungrammaticality whenever there is a mismatch or a failure to match. Agreement heads such as $\nu^\ast$ and T probably do not qualify as such, because [+participant] is not really an agreement feature as we saw; the phi-bundle of such heads probably comprises [uPerson] (and [uNumber] etc.) rather than [uParticipant]. Moreover, this sensitivity to [+participant] only emerges in (configurations deriving from) the D(ouble) O(bject) C(onstruction). Interestingly, the semantic entailments of [+participant] can easily be tied to some of the most well-known properties that distinguish DOCs from non-dative-shifted ditransitive constructions, most notably the animacy requirement on shifted IOs.

As Adger & Harbour (2007:21) note, indirect object DPs “are always interpreted as semantically animate (i.e., capable of experience)”. Due to this restriction, inanimate shifted IOs are odd and/or need to be interpreted as personified (46):

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36 Moreover, given the implicational relationship between [+participant] features and [person] (see 2.2), it would probably make little sense to have both kinds of feature simultaneously on the same head as probes.
I take this to extend to all possible realizations of IO (i.e., not necessarily DPs, see ex. (xx) in chapter 3) in the IO>DO configuration. The restriction is indeed ‘familiar from Indo-European languages’ (Adger & Harbour *ibid.*), well known since at least Fillmore (1968) and Pesetsky (1995), and in fact ought to be universal. Two questions then arise: how this requirement/restriction is encoded and at what level it applies. If the restriction held for all indirect objects, whatever their structural position and the configuration they are in, and/or their exponence, then one could reasonably assume that this is an s-selectional restriction, a lexical requirement of ditransitive predicates/roots. However, given its exclusive association with the IO>DO frame, one has to assume that it is specific to it, encoded by some head other than the Root, which is only to be found in this configuration. Cross-linguistic research on non-core arguments with similar semantic/interpretative requirements that occur above the direct complement (Marantz 1993) shows that such configurations indeed involve extra heads, often realised as derivational affixes, widely known as Applicatives; much subsequent work (Anagnostopoulou 2003, Cuervo 2003, Pylkkänen 2002/2008 among others) has argued, both on conceptual grounds and indirect empirical evidence (locality effects, morphological restrictions, e.g. on nominalisations, etc. —see chapter 3 and 4), that covert heads of the same sort are present in similar configurations in a wide range of languages. Hence, I will also assume that the extra head that appears in IO>DO and is responsible for its special semantic/interpretative properties is an applicative head (henceforth Appl).

Turning to the actual way the animacy/sentience restriction is encoded grammatically, one could assume that there is a probing feature on Appl whose role is to guarantee the animacy of the indirect object, i.e. a feature that can only be valued by such nominal expressions. Such a feature could be [uAnimate], or rather [+Animate], following Bejar’s (2003) “intriguing proposal that syntactic heads can also be generated with fully or partly specified uninterpretable features” (in McGinnis 2008:157), or even a feature that entails [+animate]. In terms of a set theoretic view of nominal features, any feature that defines a proper subset of [+animate] would do. Interestingly, [+participant], which we have already associated with the PCC, is such a feature. However, [+participant] cannot be a probe for IOs, as the head that licenses shifted IOs must also be able to probe 3rd person DPs and pronouns, i.e. expressions that are not [+participant]. Therefore, Appl must carry a probing feature such as [+Animate] or any feature that defines a proper subset of [+Animate] and a superset of...

There are indeed languages, like Spanish, at least some leista varieties, which feature a variation of the PCC (47), whereby DO clitics are illicit when carrying not only 1st/2nd person morphology, but even 3rd person morphology exclusively befitting animate arguments (see Ormazabal 2000, Ormazabal & Romero 2002, 2007).

(47) Me [*te / *le / lo / *les / los] entregaron (Spanish)

\[Me.DAT.CL \rightarrow \{you.ACC.CL / him.ANIM.ACC.CL / 3SG.MASC.ACC.CL / them.ANIM.ACC.CL / 3PL.MASC.ACC.CL\}\] handed-over.3PL

‘They handed [you / him / it / them.ANIM/them.INANIM] over to me’
(adapted from Ormazabal & Romero 2007:338)

In such systems, therefore, the feature responsible for the PCC is straightforwardly identified as the feature licensing datives, namely [+animate]. If we are to maintain the assumption that these two restrictions are consequences of one and the same thing, namely a probing feature on Appl, which DOs must not be able to match, then we need to postulate some feature halfway between [+animate] and [+participant], in order to account for more familiar cases of the PCC, where all 3rd person DOs are licit, whether animate or not. The definition of such a feature should be restrictive enough to always entail [+animate] (or at least able to be interpreted as a conscious/sentient participant of an event) and ample enough to include 3rd person datives, i.e. broader than [+participant].

This is indeed the description that Adger & Harbour (2007) give for what they refer to as [+participant]: given their assumptions, [-participant] is a feature specific to 3rd person arguments capable of mental/conscious experience (of the way they are affected by an event), while all 3rd person arguments about which no such entailment/assertion as to the way they are affected is intended (e.g. themes, patients etc.) are not specified for [+participant] at all. This yields the typology of phi-bundles in (48):

(48) a. \{participant:value, number:value\}=1st/2nd person pronominals

b. \{participant:, number:value\}="semantically animate 3rd person pronouns" [and, I assume, DPs in general –DM]
c. [number:value]=3\textsuperscript{rd} person pronouns/DPs, “no entailment as to semantic animacy”
(from Adger & Harbour 2007:16)

Similarly, Rivero (2008) refers to this feature as [+m], where [+m] stands for Reinhart’s (2002) [+mental state]\textsuperscript{37}, except Rivero attempts to treat it as a purely morphological feature, with some direct object pronominial forms being syncretic, i.e. able to denote both DOs that are [+m] and DOs that are not, in which case they are immune to the PCC. Interestingly, this might offer an elegant account for (47), unifying it with ‘standard’ PCC: le and les are ruled out because they are [+m], while lo and los are ruled in because they are not [+m] or because they are potentially syncretic. Other researchers, such as Boeckx (2000) and Rezác (2008a), refer to this same feature as [point of view] and/or [local], probably borrowing the latter term from Silverstein’s (1976) person hierarchy. The postulation of a special feature borne by 3\textsuperscript{rd} person datives but not by 3\textsuperscript{rd} person accusatives, no matter its label, seems necessary and is in fact common to most feature-checking/Agree-based analyses of the PCC (e.g. [Person/Participant] in Anagnostopoulou 2003, 2005, apart from the accounts already mentioned in this paragraph).

Although the precise label of this feature might not be of the utmost importance, I will assume that this feature is indeed a [+participant] feature, as this also ties in well with the theory of person developed in 2.2, in particular the mechanism of person assignment summarised in Table 1. (48’), then, which is a slight modification of (48), summarises what the LF content of each of the bundles in (48a-c) is within the system proposed here:

(48’) a. [+participant] = a pronoun referring to a discourse participant, can be further specified as [+author] and/or [hearer], also an event participant capable of conscious affectedness/mental experience, regardless of its actual theta-role

b. [-participant] = a DP/3\textsuperscript{rd} person pronoun not referring to a discourse participant,

\textsuperscript{37} Rivero treats [+m] as entirely equivalent to Adger & Harbour’s [+Participant], although for her it is a purely morphological feature, which is standardly borne by “dative experiencers” and “involuntary agents”; Adger & Harbour, like Reinhart (2002) treat [+m] as a theta-feature, more specifically as a semantic property that both [+participant] and [-participant] arguments can have, probably not as a necessary entailment of being [+participant]. The only necessary entailment of [+participant] for them is that such arguments get interpreted as ‘semantically animate’; in other words, the idea of unifying the animacy restriction and any person restrictions, which underlies this section, is also implicit in Adger & Harbour’s (2007) analysis.
but still able to be assigned a theta-role which requires that it be capable of conscious affectedness/mental experience.

c. no specification = any other DP/3\textsuperscript{rd} person pronoun

The advantage of the present proposal is that $[\pm \text{participant}]$ is a genuinely LF-interpretable, perhaps deictic, feature, which somehow links the notions of event- and discourse-participanthood, which is in no way the same as [person]; thus, while adhering to Benveniste’s (1966) and others’ intuition that 3\textsuperscript{rd} person is somehow unmarked and not a ‘real’ person, as it (usually) lacks any deictic content, we can still avoid the dubious assumption that 3\textsuperscript{rd} person DPs/pronouns have no [person] feature in their phi-bundle (especially when functioning as DOs, but not when they are IOs, which makes it even more suspicious); instead, all DPs/pronouns have a PF-interpretable [uPerson] feature, which is assigned a value as described in Table 1. The presence of 3\textsuperscript{rd} person features in the syntactic output has independently been shown to be necessary (see Nevins 2007) for a number of cases of person restrictions that make “reference to a set of features exclusively borne by third person” (ibid.:274), e.g. the *le lo > se lo dissimilation rule in Spanish, as well as possibly for the clitic restrictions involving 3\textsuperscript{rd} person clitics in a number of Italian dialects observed by Manzini & Savoia (2004, 2007): e.g. in the Gavoi dialect (49), in the presence of a dative clitic all 3\textsuperscript{rd} person accusative clitics are ruled out (49a) and only partitive clitics can appear instead (49b-c). In such a language, we can assume that Appl has indeed a [uPerson] probe, which excludes any elements marked for person intervening between Appl and the IO DP/clitic. Partitive clitics in this dialect probably lack a person feature (see Manzini & Savoia 2004; in their terms: partitives do not lexicalise P(person)), which is why they do not block the Agree relationship that I assume to be necessary for dative clitics.

(49) a. *li lu/la/lOr/lar 'daDa (Gavoi) him.DAT.CL [3SG.M.ACC/3SG.F.ACC/them.M.ACC/them.M.ACC].CL gives ‘He gives it/him/her/them to him’

b. nde li 'daDa 'duOs of.them.PART.CL him.DAT.CL gives two ‘He gives him two of them’

c. ti nde 'daDa 'duOs you.DAT.CL of.them gives two ‘He gives you two of them’

(from Manzini & Savoia 2004:40-41)
An empirical argument to strengthen the postulation of a [-participant] feature would come from pronominal forms which can only be specified as [-participant], but not [+participant] or as lacking [+participant] altogether, i.e. pronouns that always need to be interpreted as animate, regardless of their theta-role. It seems plausible that le and les in (47) above might correspond to this description. If this is indeed the case, then one might not need to assume that Appl in Spanish has a [+animate] probe, but a [uParticipant] one, as probably in every language. This would be empirically valid if, in all those languages where the PCC appears to be sensitive to animacy, non-pronominal animate DOs did not give rise to any PCC effects; however, this seems to be refuted by data such as (50) below from Haitian Creole.

(50) a. *Mwen pral bay li –l
   Will I give him her
   ‘I will give her to him’

   b. *Mwen pral bay Jan Mary
   Will I give Jan Mary
   ‘I will give Mary to Jan’

(from Ormazabal & Romero 2007:330, due to M. DeGraff, p.c.)

What possibly constitutes another example of [-participant] pronouns, i.e. 3rd person pronouns which obligatorily entail semantic animacy, is a series of (inherently emphatic) anaphoric expressions in Greek, which appear to behave as long-distance anaphors (see Iatridou 1986) that cannot take an inanimate DP as their antecedent (51):

(51) a. I Maria zitise na pro proslavume tin idhia (Greek)
   The Mary asked.3SG Subj. hire.1PL LD-anaphor.FEM
   ‘Mary, demanded that we hire her [i/*k]’

   b. *I Vivlos ghrafi oti prepi na dhjavazume tin idhia, (ochi tis paralajes ton eretikon)
   The Scripture.FEM writes that must.IMP Subj. read.1PL LD-anaphor.FEM, not
   the revised version the heretics.GEN
   ‘In the Bible, it is written that we must study the Bible itself, not the revised
   versions of the heretics’

Consequently, given the above, PCC effects obtain when a [+participant] DO blocks a
matching relationship between [uParticipant] on Appl and [+participant] on IO and no such effects obtain when DO is 3rd person, i.e. not specified for [+participant], given that DOs cannot be [-participant] given the definitions in (49). In terms of a probe-goal system, this implies that DO intervenes between Appl and IO, probably as a defective intervener, if DO’s [uCase] is already valued (by v2) when Appl is merged (see 52). Moreover, IO in IO>DO needs to be an active goal, visible for Agree; therefore, the [uCase] feature already postulated for IOs in this configuration plays exactly this role, to render them active for Agree with Appl. However, Appl itself cannot value/deactivate IO’s [uCase], given that the Agree operation between them does not involve full phi-matching. It then seems reasonable to assume that Appl necessarily attracts IO after Agreeing with it, thus enabling a full phi-matching relationship between v* and IO, thus yielding IO>DO and the configuration in (52).

A further advantage of this analysis, then, is that it provides a principled explanation of dative shift, compatible with the UTAH in its strictest form and with Baker’s own thematic hierarchy (agent/cause>theme/patient>goal/location/path etc.). Applicative heads do exist, and as we said they are overt sometimes, realised qua derivational affixes, but instead of introducing arguments, they simply attract them from their thematic positions, to enable them to participate in the agreement relations of the main clausal skeleton. We can then postulate that Appl (or more specifically [uParticipant]) comes with an EPP feature, or that Appl is a phase head (as has already been suggested by Pylkkanen and others), whose edge can therefore serve as an escape hatch (an issue that I will discuss in some detail in chapter 7).

(52) v*P
    EA
    v*
    ApplP
        [uφ]
        IO
        Appl
            [uParticipant]
                v2P
                VP
                DO
                V
                <IO>
What would add a non-trivial wrinkle to this analysis, and in particular the link between the animacy restriction in DOCs and the PCC, is the fact that 3rd person dative clitics can sometimes be used to denote inanimate indirect objects (53b-54b, 55).

(53)  a. ?*Eriksa tis portas, mia klotsia ya na tin, kliso
    Throw.1SG the door.DAT a kick.ACC to her.ACC.CL close.SUBJ
    ‘I kicked the door, to close it’
  b. √Tis, eriksa mia klotsia ya na tin, kliso
    Her.DAT.CL threw.1SG the door.DAT a kick.ACC to her.ACC.CL close.SUBJ
    ‘I kicked it (=the door), to close it’

(54)  a. ?*Erikse tu xorafiou tu lipasma
    Threw.3SG the field.DAT his fertilizer
    ‘He applied fertilizer to his field’
  b. Tu erikse lipasma ya na kalierjisi domates.
    It.DAT.CL threw-3SG fertilizer, to grow tomatoes
    ‘He applied fertilizer to it (=his field), to grow tomatoes’

(55)  perikiklonondas (…) ton kavo-Blum, pu tu, petame strakastrukes
    encircling the cape-Bloom that he.DAT.CL throw.1PL fireworks
    ‘encircling/surrounding Cape-Bloom, to/at which we throw fireworks’
    (from Lilipoupoli, a popular Greek children’s song cycle)

To the extent that such uses are grammatical, this calls for a further refinement of the theoretical assumptions about the entailments of [uParticipant] and the way it gets valued, which interestingly provides further indirect evidence for the claim that the animacy restriction obtains at a purely narrow-syntactic level. First of all, one can assume that in languages such as Modern Greek, all 3rd person dative clitics are lexically specified as [-participant], as a consequence of the set of theta-roles that they can fulfill (as opposed e.g. to Ancient Greek, where datives could also be used to denote instruments, or locative adverbials, and in general expressions with prototypically inanimate referents). However, 3rd person dative clitics, like all 3rd person pronouns in Greek, are in fact underspecified and/or syncretic as to their animacy, given also the fact that their grammatical gender does not unambiguously correspond to the natural gender of their referent, i.e. the fact that the same
masculine/feminine form can refer either to animates or inanimates (like e.g. in Italian or Spanish). Therefore, the only set of expressions that a [uParticipant] probe cannot match is DPs which are lexically valued as [–animate] (53a-54a). Having said that, not all inanimate goals\textsuperscript{38} can alternate with dative clitics; the latter always entail (or perhaps implicate) a kind of affectedness which is common to all dative-shifted indirect objects, while non-alternating PP-goals may in fact not be true indirect objects, especially if they can never have a recipient interpretation (ex. 56, see more on this in chapter 3).

(56) a. Estila etisis stin Aglia
    Sent.1SG applications to-the England
    ‘I sent applications to England’
    b. *Tis estila etisis
    3SG.FEM.DAT.CL sent.1SG applications

More generally, the above data also appear to have another important implication, as already implied: it is narrow syntax that determines the well-formedness of a DOC with respect to the animacy restriction. Since the actual referent of the dative clitic does not/cannot matter, this entails that these constructions are merely evaluated on the basis of the intrinsic features/values of lexical items, at a level that has access only to these, definitely before reference assignment. In other words, these examples constitute evidence in favour of our treating the animacy restriction as purely/mostly syntactic, rather than semantic/pragmatic.

This section attempted to show how the strong PCC always arises in the configuration in (52) and therefore holds the key to understanding its structure; the weak PCC is probably restricted to DO>IO orders and should therefore be derivable from different configurations, but always with reference to [±participant]. A tentative account of the weak PCC is proposed in later sections. The following section offers some empirical motivation, drawn from person restrictions in Greek and Romance, in favour of the analysis in this section, and especially for the movement component of it.

\textsuperscript{38} ‘Goal’ here refers to the theta-role ‘goal’, not ‘goal’ as in ‘probe-goal’
2.5. How active datives manifest their licensing requirements (the PCC beyond simple ditransitives and clitic clusters)

This section explores some little studied or ill-understood exceptional configurations in Standard Modern Greek and Romance, necessary for a fuller description of the paradigm of person restrictions with datives (at least in active constructions), which all favour the structural analysis outlined in the previous section.

As is well known, the PCC is not restricted to clusters with IO clitics; PCC effects also arise when the dative clitic fulfils other, related, non-core argumental functions, in other words the PCC also extends to benefactive, malefactive and possessive clitics. Cross-linguistically, it has been observed that only supposedly non-argumental datives, such as so-called ethical datives, exhibit an exceptional behaviour with respect to the PCC. However, interestingly, for reasons to be further discussed in chapter 3, ethical datives (EDs) in Standard Modern Greek are subject to the strong PCC just as any other dative clitic (ex. 57, see also Michelioudakis 2007, Chatzikyriakidis & Kempson 2010, Michelioudakis & Kapogianni 2010). What is particularly relevant for our purposes here is that strong PCC effects arise even in combinations of ethical clitics with other (non-ethical) dative clitics, in other words the fact that clusters of two dative clitics are possible, as long as the non-ethical one is 3rd person (58).

(57) a. Mu ton/*se pandreftike (ED-DO)
   Me.DAT.CL him.ACC.CL/you.ACC.CL married.3SG
   ‘She married him/you, to my disappointment’

   b. pro; thimoni pu dhen tis; ton/*se pandreftika
       pro resents that.FACTIVE not her.DAT.CL him.ACC.CL/you.ACC.CL
       married.1SG
       ‘She resents (the fact) that I did not marry him/you, to her disappointment’

(58) a. Tu zitisa na mi tu/tu/tus/*su fonazi (ED-dative complement)
       Him.DAT.CL asked.1SG Subj. not [me.DAT.CL her/him/them/you].DAT.CL
       yell.3SG
‘I asked him not to yell at her/him/them/you, for my sake’

b. Tu zitisa na mi mu tis/tu/tus/*su/*sas aghorazi paghota (ED-IO)
   Him.DAT.CL asked.1SG Subj. not me.DAT.CL
   [her/him/them/you.SG/you.PL].DAT.CL buy.3SG ice-creams
   ‘I asked him not to buy her/him/them/you.SG/you.PL ice-creams, for my sake’

c. Tin beba mu dhen tin pao sto kendro tis Athinas
   ja na mi mu tis kanun kako (ED-IO.malef)
   The baby my not 3SG.FEM.ACC.CL go/bring to-the center the Athens.GEN
   so that not me.DAT.CL 3SG.FEM.DAT.CL do harm
   ‘I never drive my baby [referring to his car, an Alfa Romeo –DM] in the center of
   Athens so that they do not do it/her any harm on me’

The data in (58) are problematic for a ‘multiple Agree’-based analysis of the PCC, i.e. for
accounts such as Anagnostopoulou’s (2003, 2005) and all other accounts in the same vein
(Bejar & Rezac 2003, Rezac 2008b etc.); recall that on the split phi-matching account, all
dative clitics, even 3rd person ones, have a real [+person/participant] feature which is able and
in fact needs\(^{39}\) to match and de-activate the respective probing feature on v*, unlike 3rd
person accusative clitics which lack such a feature and are the only forms that can match v*
after the deactivation of its [person] probe (see 59, adapted from Anagnostopoulou 2003:297,
which is the representation of a clitic cluster after clitic movement is completed).

\[(59)\]

\[
\begin{array}{c}
\text{IO-clitic} \\
\text{Cl-3SG} \\
\text{DO-clitic} \\
\text{v*} \\
\end{array}
\]

\[\text{step (I) = IO-clitic matches v*’s [person] and cliticises}\]
\[\text{step (II) = DO matches and values v*’s [Number] and has to match [Person:0], i.e. to lack [person], in order to cliticise}\]

\(^{39}\) The idea is that IO clitics, like all clitics, need to enter an Agree relationship with v*, since they cliticise to it.
If ethical datives were first merged outside the vP domain, and assuming like Anagnostopoulou (2003:302) that “only vP internal arguments can check their features against v-TR [\(\text{v}*\)]”, then the prediction would be that ethical clitics never trigger PCC effects, as indeed appears to be the case in many languages, but crucially not in unambiguous examples like (57) in Standard Modern Greek.

Alternatively, then, one could assume that ethical datives are indeed first merged vP-internally, though probably higher than canonical IOs, in Greek but not in other languages: in this case, (57) is amenable to the same analysis as any other clitic cluster. However, given the above assumptions about the [+person] specification of all datives, the examples in (58) are still left unaccounted for; v* can only match one [person] feature, but both clitics in each one of the clusters in (58) were assumed to have [+person] and on the analysis under discussion they both need to check their [person] against v* in order to cliticise (since they cannot check their number – see Anagnostopoulou’s independent evidence that IO clitics do not induce number object agreement, \textit{ibid.}:286). Therefore, clusters of two dative clitics should always be ruled out, at least in a language where EDs are subject to the strong PCC, contrary to fact. In fact, clusters of two dative clitics are more or less marginally acceptable, as long as the non-ethical clitic is 3rd person, a restriction which is strikingly reminiscent of the strong PCC.

The co-occurrence of ethical clitics with other clitics and the constraints to which it is subject is probably better captured by an analysis that attributes the distribution of dative clitics to the feature specification of the applicative head that licenses them. As already mentioned in §2.2, ethical datives in Greek are always +Participant, which indicates that the applicative that licenses them has a [+Participant] probe; this would entail that there must not be any [+participant] expression in the Agree domain of \text{Appl}_{ED}, other (and closer) than an ED, as shown in (60). Indirect objects can still occur in the Agree domain of \text{Appl}_{ED} as long as they are 3rd person, i.e. [-Participant], which cannot match \text{Appl}_{ED}’s [+Participant]. This structural analysis is compatible with either of the two following assumptions: (a) like in Adger & Harbour (2007), non-core arguments licensed by Appl heads are externally merged at the Spec of Appl and any PCC effects are due to the generalization that “the features which a functional head requires its specifier to bear cannot be used as probes in the head’s complement domain” (Adger & Harbour 2007:26)\(^{40}\), or (b) datives always originate low and

\(^{40}\) This generalisation is probably empirically wrong as well; consider, e.g. multiple wh-questions in English such as ‘who saw what’, in which both ‘who’ in Spec-C and ‘what’ in C’s complement domain bear a [Q]/wh-feature.
are in fact attracted, not introduced, by Appl heads, as suggested in §2.4, in a way such that DO always intervenes between an Appl and any dative in its first merged position; EDs in particular are first merged lower than IO, so that IO\_DP\_CL, either in its first merged position or its dative shifted one, always intervenes between ED and Appl\_ED, while ED in its first merged position does not intervene between IO and Appl\_IO (see MacDonald (2006) for a structural analysis along these lines, and chapter 7 below for an analysis of EDs as V-adjuncts attracted by Appl\_ED).

\[(60)\]

Therefore, this evidence from EDs demonstrates the advantages of linking the person restrictions triggered in the presence of a dative to the features of the head that licenses it, which is one of the two basic premises of our approach; furthermore, in chapter 4, in a more detailed discussion of some cross-linguistic properties of EDs, it is suggested that the diversity of their behaviour with respect to the PCC can be best explained by the parametrisation of the probe on Appl\_ED rather than by resorting to different, language-specific, structural analyses. More generally, the possibility of parameterising the feature content of applicative heads is one of the advantages of this analysis; thus, we can easily account for the variation of the constraint found in leista Spanish (see 47 above), by simply positing that Appl\_IO there has an uninterpretable [+Animate, (uAuthor)] probe\(^{41}\). What

\[^{41}\] Furthermore, we may even account for the animacy-related constraint on DO clitics in the presence of full lexical dative DPs that Anagnostopoulou (2003:200-203) reports (i-iii), although this is not part of my variety, by assuming that Appl there is [+Animate, uAuthor], like in Spanish: in order to match IO, there must be no
follows is an attempt to empirically motivate the second main tenet of the analysis as well, namely the idea that the PCC is explicable on the assumption that dative DPs are probed in a position lower than the argument whose person feature/agreement is affected.

The first argument comes from the so-called faire-infinitive (FI) causative construction in Romance. In these constructions, when the embedded predicate is transitive, its subject, i.e. the causee, is realised as an à-PP which can cliticise as a dative clitic attaching to the matrix verb, namely faire. However, clitic movement of a dative clitic into this same position is also possible for dative internal arguments of the embedded predicate: datives denoting inalienable possession with intransitive predicates (Kayne 1975:309ff.), but also canonical indirect objects (at least for a large number of speakers, see Postal 1980, de Kok 1985, Morin 1978, pace Kayne (1975)), apparently as long as the transitive causee cliticises too. As Kayne first pointed out, there are some very interesting asymmetries between the two kinds of dative. The one that is particularly interesting for our purposes is that the co-occurrence of the causee clitics with 1st/2nd person DOs gives rise to PCC effects (61-62), while the co-occurrence of two dative clitics, one corresponding to the causee and one corresponding to a dative internal argument, is apparently not subject to the PCC (63-64), at least for those speakers that accept the cliticisation of dative arguments in FI constructions.

(61) Maria [gliel’ / *gli m’ / *mi gli] ha fatto lavare (Italian)
   Mary[3SG.DAT.CL-3SG.ACC.CL/3SG.DAT.CL-me.ACC.CL] has-made wash.INF
   ‘Mary made/let him wash him/it/*me’
(62) *Il me lui a fait laver (French)
   He me.ACC.CL 3SG.DAT.CL has-made wash.INF

intervening DO clitic or DP marked as [+Animate]; 3rd person DPs with animate Ns are exempted (i) probably because (a) in accusative DPs D is not marked for [+animate], like it is not specified for [+participant] (b) [+animate] on N is not accessible outside the DP phase; on the contrary dative Ds (in lexical IO DPs) are by default marked as [-participant] (and, consequently, [+animate] in the variety in question).

(i) tha stilo tis Marias ton jo, mu ja tis dhjakopes tu kalokerju
   FUT send.1SG the Mary.DAT the son.ACC my for the vacations.ACC the summer.GEN
   ‘I will send Mary my son for the summer vacation’

(ii) %*tha ton, stilo tis Mariais
   FUT him.ACC.CL send.1SG the Mary.DAT
   ‘I will send him to Mary’

(iii) %*tha to stilo tis Marias
   FUT it.ACC.CL send.1SG the Marry.DAT
   ‘I will send it to Mary’

This account still does not enable us to explain why strong 1st/2nd person DO pronouns escape the PCC; although they are DPs as well, pronouns are Ds, therefore the [+participant/+animate] feature is borne by the phase head, thus being accessible for probing and able to act as an intervener. A different account of these constructions is proposed later on in this section.
‘He had him/her wash me’

(63) a. Mi gli hai fatto dare un libro (Italian)
   Me.DAT.CL-him.DAT.CL have-made.2SG give.INF a book
   ‘You made/let me give him/her a book’

b. Mi gli el’ hai fatto dare a Gianni
   Me.DAT.CL him.DAT.CL-it.ACC.CL have-let.2SG give.INF to John
   ‘You made/let me give it to John’

(from S. Cruschina p.c.)

(64) a. Il me lui a fait raconter l’ histoire  [causee-IO cluster] (French)
   He 1SG.DAT-3SG.DAT has made narrate.INF the story
   ‘He made me tell him the story’

   (from Bouchard 1995:443)

b. On me lui a fait salir cette nappe  [causee-inalienable possessor cluster]
   Impers. Me.DAT.CL him.DAT.CL made.3SG dirty that tablecloth
   ‘One had me dirty that tablecloth on him/her’

   (from Postal 1990:133)

c. Elle me la lui fera envoyer  [causee-DO-IO cluster]
   She me.DAT.CL 3SG.FEM.ACC.CL 3SG.DAT.CL will-make.3SG send
   ‘She will make me send it to him’

What is particularly puzzling is the grammaticality of clusters such as me lui in (63-64). On a feature competition scenario, i.e. on an analysis that derives the PCC from the fact that clitics in clusters compete for the phi-features of their host, there is no apparent reason why we should treat the clusters in (61-62) and (63-64) differently; thus, all of them should be ruled out. An obvious difference lies in the abstract Case feature of the 1st person clitics in each case (as long as clitics have abstract Case): in (61-62), 1st person clitics are accusative, while in (63-64) they are dative. Based on this difference, Rezac (2007) explains the contrast (in the above examples and between his own (65-66) below) in terms of the structural vs. inherent distinction: in (65), due to the intervention of the dative (lui), vous fails to match its [person], which is required in order to value and delete its structural [Case]; by contrast, in (66), both te and lui have inherent Case, so neither of them requires [person] matching, which is why they can freely co-occur.
The above analysis presupposes that in (65), at some point of the derivation there is a configuration \([\phi\text{-head…DAT…ACC}_{\text{[uCase]}}]\). However, it is not at all clear what the \(\phi\)-head would be: (a) it cannot be a \(v^*\) in the embedded infinitival, since it would only c-command ACC \((e_i)\) but not DAT, i.e. the transitive causee/external argument \(e_j\), and (b) \(v^*\) in the matrix clause would not qualify either: recall that in transitive FIs, the direct object is above the causee (67), probably by moving there, and there is no reason to assume that this movement has not yet taken place when the matrix \(v^*\) probes DO.

\[
(67) \text{Marie fera manger ce gâteau à Jean (French)}
\]
\[
\text{Mary will-make.3SG eat.INF this cake to John}
\]
\[
\text{‘Mary will have John eat this cake’}
\]

Therefore, Rezac’s analysis is not tenable, due to configurational reasons. Instead, in what follows I will argue that the contrast between the two types of clitic cluster, and in particular the absence of person restrictions in (63-64) and (66), is best accounted for if we assume that each dative has its own licensing head.

First of all, I will assume a structural analysis along the lines of Kayne (1975) and Roberts (2010), whereby some projection of the embedded V is preposed past its external argument. There seems to be some variation as to whether an indirect object of the embedded V can be part of this preposed projection: according to Kayne it cannot, which apparently reflects the judgements of some speakers, while Homer & Sportiche (2011) consider \([\text{Faire V O IO à EA}]\) to be a licit configuration. Therefore, I am going to assume that the first step of the derivation underlying (68), for those speakers that accept it, is (69):
(68) Faire envoyer une lettre au maire à Jean  

Make.INF send.INF a letter to-the mayor to John  

‘To make John send a letter to the mayor’  

(from Homer & Sportiche 2011)

(69) (a) [Faire [VP V DO IO] [vP EA v tVP]] or equivalently:  

(b) [Faire [vP V-v [VP DO <V> IO]] [VoiceP EA Voice tVP]]

I will also assume, following Homer & Sportiche (2011), that V and DO but not IO further move outside and above the preposed constituent; V precedes DO, and DO but not IO commands EA, since DO can bind (into) EA (70), while IO cannot (71).

(70) Le général a fait encercler la caserne, des mutins à son propre régiment d’ elite  
The general has made surround the mutineer’s barracks to its own regiment of elite

(71) *Le professeur a fait apporter un livre à [chaque enfant], à ses, parents  
The teacher has made bring a book to each child to his parents  

(from Homer & Sportiche 2011)

Therefore, the preposing in (69) is a ‘smuggling’ operation, as Roberts (2010) suggests; Roberts further assumes that the preposed constituent moves to Spec-Voice of the embedded VoiceP, while the EA argument externally merges and remains in a lower position, namely Spec-v*. Slighty departing from this analysis, I will assume that the smuggling constituent moves to a multiple specifier of VoiceP, triggered by the lower phase’s E(dge) F(eature), as my analysis is only consistent with the assumption that the external argument is externally merged in Spec-Voice, while Spec-v'(*) is needed to host other kinds of constituents –see the discussion and arguments in chapter 3 and 7.

Then, building on the idea that ditransitive constructions with dative clitics in Romance are the equivalent of the double object construction (Demonte 1995, Kayne 2004 among others), I will assume that for every dative clitic there is an Applicative head that attracts it42.

42 This yields the configuration: [v* ...[EA_{DAT,CL} Appl ...[ V ... [DO... ]]]]. In this configuration, it is apparently possible to apply Rezac’s analysis, which I rejected earlier, of the PCC as an intervention effect of a dative (here, the EA) between a phi-head and an argument with structural Case (the DO). However, if DO were Case-marked by the matrix v*, this could not explain the PCC in clusters of DO and IO clitics in these constructions.
Therefore, for those speakers who allow IO clitics alongside dative causee clitics, the preposed constituent can be as big as an ApplP (72). On the other hand, if there are speakers who do not generally accept preposed IOs (as Kayne argues), but marginally accept IO clitics climbing to the matrix verb, the configuration representing the derivational step that precedes clitic climbing of IO up to faire is (73).

\[(72) \text{[faire…[V}\ldots\text{DO...[ApplP IOCL [Appl t][v2P t][VP tDO t tIO-CL]][VoiceP/v*P EA v* tApplP]]]}\]

\[(73) \text{[faire…[V}\ldots\text{ DO...[v2P t][VP tDO t tIO-CL]][VoiceP/v*P EA v* [ApplP IOCL Appl t v2P]]]}\]

Assuming that an applicative head in the matrix clause probes the dative transitive causee (and perhaps faire is just the overt realization of such a head), in both (72) and (73) this probing has to be done across DO: faire c-commands DO and DO c-commands EA. Therefore, according to the analysis of the PCC in §2.4, when the DO is 1\textsuperscript{st}/2\textsuperscript{nd} person PCC effects arise. On the other hand, both (72) and (73) predict that the presence of an IO clitic does not have any effect on the Agree relationship between the matrix Appl and EA, even though IO clitics are by definition possible goals for [uParticipant]; in neither of (72) and (73) is IO the closest goal of the matrix applicative head: in (73) all occurrences of IO prior to its cliticisation\(^{43}\) are lower than EA, while in (72) IO still does not count as an intervener, even though it is moved above EA, because it does not c-command it (as shown by 71), if we follow definitions of intervention/minimality that require the intervener to c-command the element which needs to be probed/attracted (cf. Rizzi’s (1990) original definition of Relativised Minimality, and Chomsky’s (2000:123, 2001:27) formulation of the Minimal Link Condition (MLC)). Recent approaches to locality (see Rizzi 2001) do not consider c-command as a necessary ingredient of intervention; however, Rackowksi & Richards’s (2005) provide evidence and argue that c-command does play some role in specifying what counts as a probe’s closest goal:

\[(74) \text{A goal } \alpha \text{ is the closest one to a given probe if there is no distinct goal } \beta \text{ such that for}\]

(cf. ‘*Il fera me te lui présenter’ = ‘He will make me present you to him/her’): given either (72) or (73), IO does not intervene between v* and the higher copy of DO, which would give rise to the PCC, since it cannot move above/outside the preposed constituent.

\(^{43}\) As I argue in chapter 3, IO clitics cliticise to v*; therefore, in (73) IO cliticises/ incorporates to the embedded v*, which undergoes obligatory head movement up to the matrix T, possibly through successive cyclic head movement to every intermediate verbal head.
some X (X a head or maximal projection), X c-commands α but does not c-command β. (from Rackowski and Richards 2005:579)

In (72), IO in the preposed ApplP is not the closest goal, compared to the embedded EA, because there is a projection X, namely the embedded VoiceP, which c-commands IO but not EA. Therefore, the PCC arises only in the [Appl > DO > dative] configuration, just like what we assumed about double object constructions.\(^{44}\) It follows that in the embedded ApplP too, an Agree relationship between Appl and IO needs to be established, subject to the PCC, which explains why e.g. in (64c) the direct object clitic can only be 3\textsuperscript{rd} person.

Finally, the idea that [Appl > 1\textsuperscript{st}/2\textsuperscript{nd} person DP > dative] underlies all PCC environments may also provide an elegant account of some of the constructions used as repair/escape strategies, i.e. an explanation of why they are not subject to the PCC. In languages where the PCC arises in clitic clusters, there seem to be three different ways to paraphrase a PCC-violating configuration: (i) use of a phrasal counterpart of the IO, (ii) use of a phrasal counterpart of the DO, and (iii) use of a surrogate clitic form for the IO. Not all these strategies are available in all languages, and not all of them yield utterances with semantic and discourse properties identical to these of a clitic construction, therefore the term ‘repair strategies’ may be misleading: they all involve different derivations, rather than postsyntactic repair of an illicit syntactic or morphological arrangement. So, in French, where both DOs and IOs cliticise obligatorily when 1\textsuperscript{st}/2\textsuperscript{nd} person (in fact: pronominal), as Kayne

\(^{44}\) Interestingly, it seems that the matrix Appl head is needed to probe the transitive causee not only when it is realised as a dative clitic, which Appl attracts (like in double object constructions), but also when the transitive causee is an à-PP. Evidence for this comes from the fact that 1\textsuperscript{st}/2\textsuperscript{nd} person DO clitics are also quite bad when the transitive causee does not cliticise (ia). This provides further support to the idea that [Appl->DO->EA] is the relevant configuration, as well as the idea about the necessity of Appl for the licensing of datives. Note that no PCC effects arise when instead of a dative we have a da-phrase (ib). Kayne (1975) analyses the equivalents of such phrases in French, namely pur-PPs, as adjuncts, cf. e.g. the fact cannot bind into any of the internal arguments of the embedded predicate (Burzio 1986:250). Their non-argumental status probably entails that they do not require Agree in order to be licensed. On the other hand, the causee when realised as an a/à-PP arguably occupies the canonical thematic position of the external argument; but in that position it cannot be structurally Case-marked, and its ‘dativisation’ perhaps is precisely due to its Agree with Appl for [+participant], which encodes the interpretative restrictions that apply to transitive causees (the same as those applying to dative-shifted IOs) –i.e. perhaps Appl is reanalysed as an assigner of dative case, which in this case cannot be inherent/theta-related; otherwise, when a/à (case-)marks true dative arguments, recipients, inalienable possessors etc., no PCC effects arise in the presence of a theme argument above the dative (see the discussion on exceptions to the PCC that follows), which indicates that no Appl head is present there.

(i) a. *Ti faccio lavare a Maria (Italian)
   You.ACC.CL make.1SG wash.INF a Mary

   b. Ti faccio lavare da Maria
   You.ACC.CL make.1SG wash.INF by Mary
   ‘I have/let Mary wash you’

   (from S. Cruschina p.c.)
(1975:174ff.) observes, a 1\textsuperscript{st}/2\textsuperscript{nd} person DO can exceptionally be realised as an à-phrase in the presence of an IO clitic, but not vice versa (75). The reason why the obligatoriness of the cliticisation of pronominal IO can be compromised, while this does not hold for DOs, may be related to the fact that à-phrases with strong pronouns are otherwise perfectly grammatical when not realising IOs, e.g. as exponents of arguments with a locative interpretation (either literal or metaphorical, cf. ‘penser à toi’), or even when they realise IOs in “contrastive environments” (Kayne 1975:172). On the other hand, in Greek and Italian, it is also possible to employ strong pronouns for 1\textsuperscript{st}/2\textsuperscript{nd} person DOs, to form constructions with dative clitics that escape the PCC (76). Finally, in languages such as Catalan and some varieties of French, it is possible to replace a 3\textsuperscript{rd} person dative clitic in a clitic cluster with some surrogate form which usually realises locative/inanimate arguments (77)\textsuperscript{45}.

(75) a. Paul me présentera à lui (French)
   Paul me.ACC.CL present.FUT.3SG to him
   ‘Paul will present me to him’
   b.*Paul lui présentera moi
   Paul him.DAT.CL present.FUT.3SG me
   ‘Paul will present me to him’
   (from Kayne 1975:174)

(76) a. Gli presenteranno me (Italian)
   Him.DAT.CL present.FUT.3PL me
   ‘They will present me to him’
   (from Bianchi 2006:30)
   b. Tha tu parusiasun emena (Greek)
   (from the script of P. Almodovar’s film Hable con ella)

\textsuperscript{45} It is possible that there may also be a fourth kind of strategy employed to avoid PCC-violating clusters, namely the use of null datives: in languages with null objects, like Spanish and Brazilian Portuguese (BP), if the referent of the 3\textsuperscript{rd} person indirect object is contextually salient, it can remain unpronounced (cf. (i) from BP and (ii) from Spanish, which would violate the PCC should IO be phonologically realised). This strategy seems to be preferred over the use of a 1\textsuperscript{st}/2\textsuperscript{nd} person à-phrase, when no (new information/contrastive) focus on the IO is intended, which indicates that this is always the effect of the full phrasal realisation of 1\textsuperscript{st}/2\textsuperscript{nd} person arguments in these languages. Null datives do not give rise to the PCC because, being empty, they do not require Case licensing, hence they do not necessitate the presence of an Appl head.

(i) Un certo amigo tinha indicado a loja pro.DAT (BP)
   A certain friend had referred the store
   ‘A certain friend had referred him to the store’
   (from Galves e.a. 2006:10)

(ii) pro, preguntó por los mejores enfermeros y me recomendaron pro.DAT, (Spanish)
   Asked.3SG for the best nurses and me.ACC.CL recommended.3PL
   ‘He asked for the best nurses and they recommended me to him’
   (from the script of P. Almodovar’s film Hable con ella)
As for the strategies (i) (ex. 75) and (iii) (ex. 77), it can be claimed that the structure underlying them may not involve an Appl head, while in (ii) (ex. 76), the underlying structure is indeed [Appl > DO > IO], but it will be shown that the use of a strong DO pronoun obviates DO’s defective intervention effect.

To begin with, concerning the absence of PCC effects in (75) and (77), it would indeed be reasonable to link it to (a) the fact that the IO argument in both of them is realised in a way befitting locative arguments, and (b) the assumption that the exponents of locative arguments, PPs and the respective locative clitics, do not have [uCase] to value and therefore do not require an Appl head. As Kayne (1975:173) notes, the ungrammaticality of strong pronominal DOs is sharper than the ungrammaticality of phrasal pronominal IOs, even when the latter are not contrastively stressed. Therefore, the dispreference for full phrasal pronominal IOs (without clitic doubling) may not be as categorical as it is with DOs: in French even contrastive focus cannot license strong pronominal DOs –the only way to focalise 1st/2nd person DOs in French is via clefting. Instead, the unnaturalness of phrasal pronominal IOs, such as à moi, à toi, à lui etc., when not contrastively stressed, may in fact indicate a tendency to reserve à-PPs for locative arguments when a clitic realisation is also possible, which may ultimately reflect an extension of the animacy restriction on IOs: the prepositional realisation indicates that there is not an animacy requirement, and this is the case for locative and related arguments, but not for recipients, therefore the prepositional realisation is natural for the former but not for the latter, as long as an alternative realization
is also possible (which is why this restriction does not extend to other kinds of IOs, i.e., lexical IOs, proper names etc.). Consequently, it may be that in configurations potentially sensitive to the PCC it is this distinction between arguments with and without an animacy requirement that gets neutralised, like in contrastive environments –note that in cases like (75) the outcome is perfectly grammatical “even in the absence of heavy stress” (Kayne 1975:174). Likewise, in (77) it is this same distinction that is neutralized: the hi in (77) is generally considered a locative clitic, but Bonet (2008) following Rigau (1978, 1982) suggests that it is also an inanimate dative. It is then possible that in environments where the contrast between the two kinds of exponence is neutralised, the [+/-animate] contrast is neutralised too\(^{46}\). Whatever the actual feature makeup of these surrogate forms (see Rezac 2010 for a proposal that it may vary across different varieties), I will assume that they cannot and/or do not have to be matched and attracted by an Appl head, as they are pro-PPs with inherent or no Case; their cliticisation follows the same steps as canonical non-argumental (partitive/locative) clitics, probably via clitic-movement directly from their first-merged position, which is lower than that of DO (see e.g. Roberts (2010) on en/y-cliticisation and Kayne (2008) on y/ci), which is why they are not subject to the PCC.

Turning to (76), i.e. the constructions that escape the PCC despite involving genuine dative clitics, it must be made clear that in Greek and Italian the use of a phrasal counterpart instead of a clitic is not an unmarked option and not “perfectly grammatical in the absence of heavy stress”. As we saw, in French ditransitives, the use of phrasal pronominal IOs is made licit when they bear contrastive focus, except in potentially PCC violating configurations, where they are licit even when uttered with neutral intonation. Crucially, this does not extend to Greek and Italian 1\(^{st}/2\(^{nd}\) DO pronouns, when combined with dative clitics: strong pronominal DOs are not the unmarked option, but inherently focused, always bearing either contrastive or new information focus (see also Bianchi 2006), in simple monotransitive (78-79) and ditransitive configurations alike (80-81); otherwise, when uttered in vacuo and with no special intonation, they sound highly unnatural.

(78) a. Tin ora pu pijena spiti, me idhe o Janis (Greek)

The time that go.PAST.IMPVF.1SG home, me.ACC.CL saw.3SG the John.NOM

‘While I was going home, John saw me’

b.*tin ora pu pijena spiti, idhe emena o Janis

\(^{46}\) It is interesting to compare this to the way pronouns underspecified for [±animate] apparently loosen the animacy restriction in (53-55) above.
The time that go.PAST.IMPFV.1SG home, saw.3SG me.ACC the John.NOM
‘While I was going home, John saw me’
c. nomize oti itan monos sto dhomatio mexri pu idhe emena
thought.3SG that was.3SG alone in-the room until that saw.3SG me.ACC
‘He thought that he was alone in the room until he saw me’
d. idhe EMENA, oxi ton Kosta
saw.3SG me.ACC not the Kostas.ACC
‘He saw me, not Kostas’

(79) a. Gianni mi ha invitato (Italian)
John me.ACC.CL has invited
‘John has invited me’
b. Gianni ha invitato me
John has invited me (only when me is new information)
c. Gianni ha invitato ME, non mio fratello
John has invited me, not my brother
(from Bianchi 2006:12-13)

(80) a. *Miluse me ton Kosta ke molis me idhe tu sistise emena (Greek)
talk.PAST.IMPFV.1SG with the Kostas and when me.ACC.CL saw.3SG
him.DAT.CL introduced.3SG me.ACC
‘She was talking to Kostas and when she saw me she introduced me to him’
b. Epsachnan enan kalo dhikighoro, opote i Maria tus sistise emena
look-for.PAST.IMPFV.3PL a good lawyer hence the Mary them.DAT.CL
introduced me.ACC
‘They were looking for a good lawyer, hence Mary recommened me to them’
c. Tu sistisan EMENA, ochi ton adherfo mu
Him.DAT.CL introduced .3PL me.ACC not the brother.ACC my
‘It was me who they introduced to him, not my brother’

(81) a. Gli presenteranno me (Italian)
Him.DAT.CL introduce.FUT.3PL me
‘They will introduce me him’ (only when me is new information, e.g. as an answer
to an object-wh-question)
b. Gli presenteranno ME, non mio fratello
   Him.DAT.CL introduce.FUT.3PL me, not my brother
   ‘They will introduce me ton him, not my brother’

c. ??Presenteranno me a lui
   Introduce.FUT.3PL me to him
   ‘They will introduce me to him’ (unnatural, unless “in the context of a double wh-question”, according to Bianchi, or more generally in a context with a possible continuation such as ‘(me a lui) e te a lei’ = ‘(me to him) and you to her’ (R. Manzini, p.c.))
   (from Bianchi 2006:30)

To give a more complete picture of the paradigm of ‘escape strategies’ in Greek and Italian, it must also be pointed out that in both languages full PP realisations of IOs are possible, again under the condition that they bear some kind of focus (82-83); Greek also has strong/tonton dative pronominal forms (for the 1st and 2nd person); however these are always unnatural as IOs, unless in elictic doubling (some speakers are also more tolerant to them when they are heavily stressed and preposed in contrastive environments, but even in these environments many other speakers prefer elctic doubling) (84). Table 2 summarises the distribution of pronominal DOs and IOs in French and Greek.

(82)  
   a. thelo otan se dho [na su epistrepso] / [*na epistrepso s’esena] ta lefta pu su chrostao (Greek)
      want.1SG when you.ACC.CL see.PFV.1SG Subj. you.DAT.CL return.PFV.1SG/Subj. return.1SG to you.ACC the money that you.DAT.CL owe.1SG
      ‘I want to give you back the money that I owe you when I see you’
   b. se sistis s’emena
      you.ACC.CL introduced.3SG to me.ACC
      ‘He introduced you to me’ (as a reply to a question such as ‘Who did he introduce me to?’)
   c. se sistise s’EMENA, ochi ston Jani
      you.ACC.CL introduced.3SG to me.ACC not to-the John
      ‘He introduced you to me, not to John’
(83) mi presenteranno a lui / ?? presenteranno me a lui (=81c) (Italian)
me.ACC.CL introduce.FUT.3PL to him / introduce.FUT.3PL me to him
‘They will introduce me to him’
(from Bianchi 2006:30)

(84) a. *to edhosa esena (Greek) (%unless esena is heavily stressed)
   it.ACC.CL gave.1G you.DAT
   ‘I gave it to you’
b. (esena) su to edhosa (esena)
   (you.ACC) you.ACC.CL it.ACC.CL gave.1SG (you.ACC)
   ‘I gave it to you’

<table>
<thead>
<tr>
<th>Phrasal pronominal IO/DO\textsubscript{[person:1/2]}</th>
<th>French</th>
<th>Greek/Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phrasal pronominal IO otherwise</td>
<td>✓ (+focus/-focus)</td>
<td>*prn / ✓ PP (+focus)</td>
</tr>
<tr>
<td>Phrasal 1\textsuperscript{st}/2\textsuperscript{nd} person DO/IO\textsubscript{CL} otherwise</td>
<td>✓ +focus/ ?*-focus</td>
<td>*prn / ✓ PP (+focus)</td>
</tr>
<tr>
<td>Phrasal 1\textsuperscript{st}/2\textsuperscript{nd} person DO otherwise</td>
<td>✓ +focus / *-focus</td>
<td>✓ +focus / *-focus</td>
</tr>
</tbody>
</table>

Table 2: Phrasal counterparts of pronominal DOs/IOs

The explanation, then, why constructions with IO clitics and strong DO pronouns escape the PCC lies in the fact that focalized objects in Greek apparently have the option of undergoing (short) focus-movement to the edge of vP (possibly in Belletti’s (2001, 2004) ‘low/vP-periphery’); having assumed that DO in Spec-VP is a defective intervener between Appl and the IO DP in its first-merged position, such (A’-) movement can cancel its defective intervention effect, since the head of the chain is then outside Appl’s Agree domain, following Chomsky (2000, 2001).

As Roussou (2001) and Roussou & Tsimpli (2006) observe, a focus reading of the object is also possible in VOS orders in Greek (cf. 85), although Roussou & Tsimpli derive such orders by right adjunction of the postverbal subject, leaving the object in situ.

(85) efaje TO GLIKO o Janis
   ate.3SG the sweet.ACC the John.NOM
   ‘John ate the sweet’
   (from Roussou 2001:395)
Furthermore, although in their discussion it is implied that objects in such orders can only bear non-contrastive/new information focus, in fact it is possible to have contexts where the object is contrastively focused in that position (86a). In fact, focused objects, both contrastive and non-contrastive ones, are possible in postverbal position whether or not they precede S (86b).

(86) (paroti ithele na dhi ton Jani, ton stilane se lathos ghratio kai etsi…)
  although he wanted to see John, they referred him to the wrong office and thus…
  a. idhe EMENA o Kostas ke ochi ton Jani
     saw.3SG me.ACC.FOC the Kostas.NOM and not the John.ACC
  b. ?idhe o Kostas EMENA ke ochi ton Jani
     saw.3SG the Kostas me.ACC.FOC and not the John.ACC
     ‘Kostas saw me instead of John’

Alexiadou (1997, 1999), on the other hand, considers that VOS involves movement of the object in a functional position between VP and T, an operation which according to her has the properties of A-scrambling, assuming that the only possible reading of VOS is the one where the postverbal subject is focused, while the object, being “non-focal”, “is forced to move out of the focal [i.e. the VP-] domain” (Alexiadou 1999:59). Even if Alexiadou’s judgements about the possible binding relations between the two arguments in VOS are correct when S is focal (87a-b), it is certain that when O in VOS is focal, this kind of scrambling has the properties of A’-movement (88a-b), if one is to consider that all VOS orders uniformly involve leftward object movement.

(87) a. Sinandise [to kathe pedhi], o pateras tu; (new info focus on [o pateras tu])
    Met.3SG the each kid the father 3SG.GEN.CL
    ‘Every kid was met by her father’
  b. *Sinandise to pedhi tu; [kathe pateras], (new info focus on [kathe pateras])
    Met.3SG the kid 3SG.GEN.CL every father
    ‘Every father met his child’
    (from Alexiadou 1999:56, her judgements)
(88) a. *Sinandise [(TO) KATHE PEDHI], o pateras tu;
    Met.3SG the each kid the father 3SG.GEN.CL
‘Every kid was met by her father’

b. Sinandise TO PEDHI TU [kathe pateras],
    Met.3SG the kid 3SG.GEN.CL every father
    ‘Every father met his child’

Likewise, in constructions with dative IO DPs, a postverbal focal DO may follow IO (which is also the unmarked order anyway), or precede it (89a-b); interestingly, though, when a strong 1\textsuperscript{st}/2\textsuperscript{nd} person DO pronoun is used in the presence of an IO clitic, which doubled by a DP, there is a strong preference for the DO pronoun to precede the IO DP (for most of the speakers I consulted), whether it bears contrastive or informational focus (90a-b). If IO\textsubscript{DP} was simply right-dislocated/right-adjointed in V-DO\textsubscript{r,Foc}-IO\textsubscript{DP}, as Roussou & Tsimpi assume in relation to S in VOS, then V-IO\textsubscript{DP}-DO\textsubscript{r,Foc} should be equally acceptable, involving essentially the same derivation, the only difference being the IO DP’s right-adjunction. On the contrary, if we assume that DO can undergo focus-related movement to the edge/periphery of v*P/VoiceP, it is clear that in potentially PCC-violating contexts only in the moved position can DO appear, since in that position it ceases to count as a defective intervener. Moreover, no intonational break is really necessary between DO and an IO DP following it, while it is also possible to have more material following the IO DP, e.g. postverbal subjects, adverbs etc. Finally, it is clear that this kind of analysis is only possible if DO is considered to intervene between IO and its probe, as assumed here, rather than the reverse.

(89) (Epidhi o Kostas xriaotan epighondos enan dhikighoro ke o Likurezos dhen itan dhiathesimos…)

Since Kostas needed a lawyer urgently and Likurezos was not available

a. tu sistise EMENA o Janis
    him.DAT.CL recommended.3SG me.ACC.FOC the John.NOM

b. tu sistise o Janis EMENA
    him.DAT.CL recommended.3SG the John.NOM me.ACC.FOC
    ‘John recommended me to him’
(90) a. –Pjon tu sistisan tu Pavlu?
   Who.ACC him.DAT.CL introduced.3PL the Paul.DAT
   ‘Who did they introduce to Paul?’
–Tu sistisan emena tu Pavlu/?*Tu sistisan tu Pavlu emena (new information focus)
   Him.DAT.CL introduced.3PL me.ACC the Paul.DAT / Him.DAT.CL introduced.3PL the Paul.DAT me.ACC
   ‘They introduced me to Paul’

b. Tu sistisan (?* tu Pavlu) EMENA (tu Pavlou), ochi ton adherfo mu (contr. focus)
   Him.DAT.CL introduced.3PL the Paul.DAT me.ACC the Paul.DAT not the brother my
   ‘They introduced ME to him, not my brother’

In a nutshell, then, the examples in (90) need to be analysed as involving movement into a Focus position to the left of v*P/VoiceP, perhaps even if they qualify as cases of CL(itic) R(ight) D(islocation) (see Cecchetto 1999 for an analysis of Italian CLRD along these lines). Otherwise, one can assume that DO simply moves to the edge of the lower phase, attracted by its potentially undeletable E(dge) F(eature); what is unappealing about this assumption is that in general such A’-scrambling is assumed to serve defocusing purposes, rather than the opposite. In either case, however, we derive a configuration whereby the defective intervention of DO between Appl and the IO DP is cancelled:

\[(91) \begin{array}{l}
   \langle (\text{FocusP}) \rangle \\
   \text{DO}_{[-\text{Partnt}, \text{uCase}]} \ldots \text{Appl}_{[-\text{Partnt}]}
   \langle v_2P \text{ VP } <\text{DO}_{[-\text{Partnt}, \text{uCase}]}> \text{ V IO}_{[-\text{Partnt}, \text{uCase}]}, \rangle
\end{array}\]

To conclude this section, the two main claims of the proposed analysis of the PCC on the basis of a dative movement operation, namely (a) the idea that the configuration [Appl-intervener-dative] underlies every construction sensitive to the PCC and (b) the idea that the feature make-up of the Appl probe regulates the kind of restrictions to which intervening elements are subject, were shown to be empirically supported by phenomena such as: (i) person restrictions involving more than one dative clitic, (ii) PCC-restrictions and
exceptional clitic clusters in faire-infinive constructions, (iii) escape strategies, either with strong pronouns or with syncretic/suppletive clitic forms, which may both be amenable to a syntactic account, without necessarily making reference to PF-related operations, relying on the assumption that the former cancel any intervention effects of the first-merged configuration, while the latter have different licensing requirements, probably not requiring an Appl probe at all.

2.6. Interim conclusion

This chapter was an attempt to motivate a purely syntactic analysis of the PCC, such that it necessitates a movement analysis of double object constructions. First, it was argued that the PCC does not reflect a direct sensitivity to [person] features, but rather to LF-interpretable features that underlie [person], thus excluding theoretically a morphological account. In this context, the restriction on clitic clusters with bound DO clitics was argued to be related to features encoding the discourse/deictic properties of clitics, rather than features purportedly shared by bound pronouns and 1st/2nd person expressions. After sketching a preliminary parallel between the strong PCC, dative alternations, and the availability of minimality effects caused by inherently Case-marked arguments, I proposed a theoretical account that correlates all these properties and then I tested it against an array of constructions seemingly problematic for standard analyses of the PCC. I have not yet shown how this account may extend to similar restrictions in non-active environments, e.g. the strikingly similar Person Restriction on quirky datives and nominative themes in Icelandic (see Taraldsen 1995, Boeckx 2000, Anagnostopoulou 2003, among others); I will briefly discuss possible extensions of the analysis to capture the relevant data in subsequent chapters, particularly in §3.4.6, after some necessary refinements of the account sketched in §2.4. In the next two chapters, it is examined how a system that postulates active inherent Case features, along with some necessary refinements and adaptations, may derive the full typology of dative arguments and their A-/A’- behaviour in Standard Modern Greek and elsewhere.
Chapter 3. The syntax of indirect objects

3.1. Introduction

This chapter aims to offer a detailed analysis of some basic descriptive generalisations concerning indirect objects and related arguments with similar behaviour in a language with high oblique ‘dative’ DPs, such as Modern Greek, in the light of the dative movement approach advocated and sketched in the previous chapter, along with cross-linguistic evidence from other languages which can also be argued to have datives with active inherent Case features, such as French, Spanish and Italian. In this chapter I abstract away from variation in the syntactic properties of different (sub-) types of dative arguments, i.e. from differences which can be shown to be theta-role specific. This is why I mainly focus on prototypical indirect objects, namely goal/recipient DPs/PPs, while as far as A-dependencies are concerned, I mostly discuss cross-linguistic variation that can be attributed to the way datives value their active inherent Case feature in different languages, rather than construction/predicate-specific differences. The latter differences are explored in some detail in Chapter 4, which presents a more fine-grained typology of dative arguments and its syntactic implications. Hence, in what follows, after a detailed presentation of all the available patterns with goal-ditransitives and their structural representation (§3.2), which will also form a basis for comparison with other non-goal ‘datives’ in active contexts in chapter 4, I show how a dative movement analysis works (§3.3) and captures all these alternating patterns, as well the available cliticisation patterns in the aforementioned languages, the hybrid behaviour of ‘prepositional’ datives, and the overall behaviour of datives in different kinds of A-dependencies (§3.4) –again abstracting away for the moment from peculiarities of non-prototypical datives (such as benefactives etc.) in this respect.

3.2. Basic facts: linear and hierarchical order in goal-ditransitives

An elementary descriptive generalisation that does not seem to be challenged in any of the languages to be discussed in this chapter is the following:
(A) When a language has a double object construction (DOC), i.e. an active ditransitive construction whereby the indirect object (IO) asymmetrically c-commands the direct object (DO), it also has a construction where DO asymmetrically c-commands IO.

However, the implicational generalisation in (A) is certainly not bi-directional. There also exist languages with exclusively ‘low’ IOs; Anagnostopoulou (2003:2) mentions German as an example of this type and, following the discussion in 2.4.1, Hellenistic Greek also appears to qualify as such a language.

In this chapter, I will focus on the language type described in (A). To illustrate the hierarchical relations in each member of the dative alternation, I will employ Barss & Lasnik’s (1986) well-known diagnostics for asymmetric c-command, partly repeating Anagnostopoulou’s (2003:138-143) findings about Greek. However, some new findings will also emerge, due to a fact which has not previously been explored enough in the research on Greek ditransitives: Standard Modern Greek (SMG) presents us with an additional peculiarity, compared e.g. with English, due to its relatively free ordering of complements, as well as adverbial modifiers, in constructions involving double complements or constructions with complements and other, adverbial/non-(core-)argumental (locative, temporal etc.) expressions (like in e.g. Italian and Hebrew, see Belletti & Shlonsky 1995); thus, in both alternating constructions, i.e., in both the double DP frame and the prepositional IO construction, either surface order (IO-DO or DO-IO) is possible (2).

(1) a. Edhosa tis Marias ena vivlio (IODP-DO)
   Gave.1SG the Mary.DAT/GEN a book.ACC
   ‘I gave Mary a book’

b. Edhosa ena vivlio tis Marías (DO-IOdp)
   Gave.1SG a book.ACC the Mary.DAT/GEN
   ‘I gave Mary a book’

c. Edhosa sti Maria ena vivlio (IOPP-DO)
   Gave.1SG to-the Mary.ACC a book.ACC
   ‘I gave a book to Mary’

d. Edhosa ena vivlio sti Maria (DO-IOPP)
   Gave.1SG a book.ACC to-the Mary.ACC
   ‘I gave a book to Mary’
I will therefore apply Barss & Lasnik’s tests to all possible surface orders in SMG, as this will also uncover some previously unnoticed facts, especially when hierarchical order (i.e., c-command relations between A-positions) and surface order do not coincide.

Of the six diagnostics Barss & Lasnik (1986) introduced (namely, anaphoric binding, quantifier variable binding, the ‘each…the other’ construction, the distribution of negative polarity items, Weak Crossover, and Superiority effects in multiple wh-movement), the negative-polarity test is clearly not applicable to Greek, since in Greek there are no n-words morphologically distinct from NPIs as in English (on NPIs in Greek, see Giannakidou (1998 i.a.)), while also two other diagnostics, namely Weak Crossover (WCO) with wh-phrases and Superiority are controversial in Greek, as Anagnostopoulou (2003) correctly points out; more specifically, there seems to be a dialectal split among Greek speakers regarding the existence of WCO and Superiority in wh-movement in general (ibid.:330 fn.49 & 51, citing Catsimali 1990 and Horrocks 1994 for questioning the existence of WCO in Greek altogether), while it must also be borne in mind that Superiority effects disappear under D-linking (Anagnostopoulou, ibid.). On the other hand, I see no reason why anaphoric binding should not be regarded as a reliable diagnostic for asymmetric c-command in the case of dative alternations (pace Anagnostopoulou 2003). It is true that the Greek anaphoric NP o eaftos tu (‘the self possessive-clitic’) exhibits some exceptional properties with regards to its licensing conditions, with the possessive clitic inside the NP probably being the real anaphor (see Iatridou 1988, Anagnostopoulou & Everaert 1999); nevertheless, as Anagnostopoulou & Everaert (1999:102) note, the c-command requirement still applies, at least for object anaphors (on the distribution of nominative anaphors in Greek, see Anagnostopoulou & Everaert 1996). Therefore, anaphoric binding, quantifier variable binding and the ‘each…the other’ construction

---

1 I will return to WCO and Superiority in subsequent sections and chapters (especially chapter 6), where I discuss dialectal variation; in some non-standard varieties, these appear to be the only available and applicable diagnostics, with speakers’ judgements appearing to be more uniform, while inter- and intra-speaker variation with respect to WCO will be part of my argumentation in my speculations about micro-variation in Standard Modern Greek and a residual ‘low dative’ pattern surviving in a number of speakers alongside the standard pattern discussed in this section.

2 The ‘each…the other’ construction looks as if the reciprocal anaphor ‘each other’ has been split in two parts, each of which attaches to one of the two interacting/reciprocating arguments. As Anagnostopoulou (2003:331 fn. 53) notes, citing Theophanopoulou-Kontou (1989), the equivalent of ‘each other’ in Greek is the periphrasis o enas ton allo (lit. ‘the one the other’), which may either appear as a unit, functioning as a reciprocal anaphor, or split in the same way as its English
should all be considered reliable in Greek and in what follows, I will apply them to all
IO-DO and DO-IO orders with IOs realised either as ‘dative’ DPs (with ‘dative’ being
morphologically syncretic with genitive in Standard Modern Greek) or as se(‘to’)-
PPs.

To begin with, the data from anaphoric binding and quantifier variable binding in
Standard Modern Greek are as illustrated in (2-5) and (6-9) respectively: in (2) and
(6) I test IO-DO orders when IO is a ‘dative’ (morphologically genitive) DP, in (3)
and (7) I test DO-IO orders, again with IOs realised as DPs, in (4) and (8) I test IO-
DO orders when IO is realised as a se(‘to’)-PP, and finally in (5) and (9) I test DO-IO
orders, again with prepositional IOs.

**Anaphoric binding**

(For (2)-(5) to become pragmatically plausible, one must imagine the speaker
showing pictures of Mary, or Mary’s own reflection in a mirror, to Mary herself)

(2) a. Edhiksa tis Marias1 ton eafto tis1 (IODP-DO)

Showed.1SG the Mary.DAT/GEN the self.ACC. her.GEN.CL

‘I showed Maryi herself’3

b. *Edhiksa tu eaftu tis1 ti Maria

Showed.1SG the self.DAT/GEN her.GEN.CL the Mary.ACC

‘*I showed herselfi Maryi’

(3) a. ?*Edhiksa ti Maria1 tu eaftu tis1 (DO-IODP)

Showed.1SG the Mary.ACC the self.DAT/GEN her.GEN.CL

‘*I showed Maryi (=direct object) herselfi (=indirect object)’

b. *Edhiksa ton eafto tis1 tis Marias1

counterpart; in either case, *o enas has to agree in case with the hierarchically higher argument, while
the DP ton allo is marked with the case normally assigned to the position occupied by the anaphor. A
subcase of the split construction, namely when the reciprocal anaphor is a possessor, is the exact
equivalent of the construction proposed by Barss & Lasnik as an asymmetric e-command diagnostic:
the difference is that English also has the option of the whole non-split reciprocal anaphor appearing as
a genitive possessor (‘I gave the children, each other, ’s books’), while in Greek it is not possible to
mark the whole periphrasis with genitive, so it has to split. If these thoughts are on the right track, then
this diagnostic seems to be just a subcase of anaphor binding.

3 As R. Kayne points out to me, ‘[t]he Barss-Lasnik arguments are not all as clear as they seem. For
example, it is ot clear that They showed John himself in the mirror is possible if the reflexive is
unstressed, and similarly with reciprocals, unless the IO is a pronoun’. The reasons behind these effects
are not clear to me, but it seems that the relevant factor, with respect to which proper names and
pronouns differ, might be givenness.
Showed.1SG the self.ACC her.GEN.CL the Mary.DAT/GEN
‘*I showed herself$_i$ (=DO) Mary$_i$ (=IO)’

(4) a. Edhiksa sti Maria$_i$ ton eafto tis$_i$ (IO$_{pp}$-DO)
    Showed.1SG to-the Mary.ACC the self.ACC her.GEN.CL
    ‘*I showed to Mary$_i$ herself$_i$’

b. ?*Edhiksa ston eafto tis$_i$, ti Maria$_i$
    Showed.1SG to-the self.ACC her.GEN.CL the Mary.ACC
    ‘*I showed to herself$_i$, Mary$_i$’

(5) a. Edhiksa ti Maria$_i$, ston eafto tis$_i$ (DO-IO$_{pp}$)
    Showed.1SG the Mary.ACC to-the self.ACC her.GEN.CL
    ‘I showed Mary$_i$ to herself$_i$’

b. ?*Edhiksa ton eafto tis$_i$, sti Maria$_i$
    Showed.1SG the self.ACC her.GEN.CL to-the Mary.ACC
    ‘*I showed herself$_i$ to Mary$_i$’

Quantifier variable binding

(6) a. Edhiksa (tu) kathe dhaskalo$_i$ to mathiti tu$_i$ (IO$_{dp}$-DO)
    Showed.1SG (the) every/each teacher.DAT/GEN the pupil.ACC his.GEN.CL
    ‘I showed every teacher$_i$, his$_i$, pupil’

b. ?*Edhiksa tu mathiti tu$_i$ (ton) kathe dhaskalo$_i$’
    Showed.1SG the pupil.DAT/GEN his.GEN.CL (the) every/each teacher.ACC
    ‘?*I showed his$_i$, pupil every teacher$_i$’

(7) a. ?!?/?*Edhiksa (ton) kathe daskalo$_i$, tu mathiti tu$_i$ (DO-IO$_{dp}$)
    Showed.1SG (the) every/each teacher.ACC the pupil.DAT/GEN his.GEN.CL
    ‘*I showed every teacher$_i$, (=DO) his$_i$, pupil (=IO)’

b. (?)*Edhiksa ton mathiti tu (tu) kathe dhaskalu
    Showed.1SG the pupil.ACC his.GEN.CL (the) every/each teacher.DAT/GEN
    ‘*I showed his$_i$, pupil (=DO) every teacher$_i$, (=IO)’

(8) a. Edhiksa se/ston kathe dhaskalo$_i$, ton mathiti tu$_i$ (IO$_{pp}$-DO)
    Showed.1SG to/to-the every/each teacher.ACC the pupil.ACC his.GEN.CL

$^4$ (4b) and (5a) are pragmatically odd, but in my opinion perfectly grammatical if the subject has e.g. mistaken Mary’s reflection for Mary herself and vice-versa.
‘*I showed to every teacher, his pupil’

b. ?Edhiksa ston dhaskalo tu_i (ton) kathe mathiti_i

Showed.1SG to-the teacher.ACC his.GEN.CL (the) every/each pupil.ACC

‘*I showed to his, teacher every pupil,’

(9) a. Edhiksa (ton) kathe mathiti_i ston dhaskalo tu_i’ (DO-IO_{pp})

Showed.1SG (the) every/each pupil.ACC to-the teacher.ACC his.GEN.CL

‘I showed every pupil, to his teacher,’

b. ?*Edhiksa ton dhaskalo tu_i se/ston kathe mathiti_i

Showed.1SG the teacher.ACC his.GEN.CL to/to-the each/every teacher.ACC

‘?*I showed his teacher, to every pupil,’

While the findings resulting from the above two diagnostics are strikingly similar, despite the notable gradience and subtlety of some judgements, the ‘each…the other’ test yields some stronger contrasts, making clear which c-command relations are totally grammatical but yielding very negative judgements about constructions whose counterparts above are deemed more or less marginally acceptable.

The ‘each…the other’ construction

(10) a. Edhiksa tu enos mathiti ton dhaskalo tu alu (IO_{dp}-DO)

Showed.1SG the one pupil.DAT/GEN the teacher.ACC the other.GEN

‘I showed each student the other’s teacher’

b. *Edhiksa tu dhaskalu tu alu ton ena mathiti

Showed.1SG the teacher.DAT/GEN the other.GEN the one pupil.ACC

‘*I showed the other’s teacher each student’

(11) a. ?*Edhiksa ton ena dhaskalo tu mathiti tu alu (DO-IO_{dp})

Showed.1SG the one teacher.ACC the pupil.DAT/GEN the other.GEN

‘*I showed each teacher (=DO) the other’s pupil (=IO)’

b. *Edhiksa ton dhaskalo tu alu tu enos mathiti

Showed.1SG the teacher.ACC the other.GEN the one pupil.DAT/GEN

‘*I showed the other’s teacher (=DO) each pupil (=IO)’

(12) a. ?Edhiksa ston ena dhaskalo ton mathiti tu alu (IO_{pp}-DO)

Showed.1SG to-the one teacher.ACC the pupil.ACC the other.GEN
‘?*I showed to each teacher the other’s pupil’
b. *Edhiksa ston dhaskalo tu alu ton ena mathiti
   Showed.1SG to-the teacher.ACC the other.GEN the one pupil.ACC
   ‘*I showed to the other’s teacher each pupil’

(13) a. ?Edhiksa ton ena dhaskalo sto mathiti tu alu (DO-IO_{pp})
   Showed.1SG the one teacher.ACC to-the pupil.ACC the other.GEN
   ‘I showed each teacher to the other’s pupil’
b. *Edhiksa ton dhaskalo tu alu ston ena mathiti
   Showed.1SG the teacher.ACC the other.GEN to-the one pupil.ACC
   ‘*I showed the other’s teacher to each student’

Based on Barss & Lasnik’s (1986) reasoning, the most straightforward conclusions that these data lead us to are that (a) when the indirect object is realised as a DP it may only c-command DO, while (b) prepositional IOs may either c-command or be c-commanded by DO. To reach these conclusions, it is enough to look at these examples where the underlying hierarchical order fully corresponds to the surface order of the two internal arguments (2a-13a). However, as already implied, all surface orders are in fact possible, and this is in fact shown in the remaining grammatical/marginal examples (i.e., those (b) examples that are more or less acceptable); only the reciprocal construction fully disallows all surface orders in which the underlying c-command relations (between A-positions) are the reverse. After discussing the exceptional character of this construction, I will discuss how and why those cases where there is a mismatch between the hierarchical order of the internal arguments (in their A-positions) and their superficial order may provide us a key to their underlying representation. More specifically, it may give us some indications as to whether the syntactic split/alternation is (a) between IO>DO and DO>IO, whatever the morphological realization of IO in the former constructions, or (b) between prepositional and nominal constructions (DP-DP vs. PP-DP/DP-PP), in which case prepositional constructions are to be always kept distinct from the derivation of double object constructions (IO_{pp}>DO then might be some sort of A-scrambling, derivable directly from DO>IO_{pp}, or we may simply assume that both are base-generated, i.e. that in sum there are three distinct derivations available for ditransitives in SMG, as Anagnostopoulou (2003) concludes).
Anagnostopoulou (2003:141) notes that ‘the reciprocal test constitutes the most reliable diagnostic for the structural organization of Greek internal arguments, as it elicits extremely robust judgements’. However, it rather seems to me that the relative order of ‘each’ and ‘other’ in the reciprocal construction is lexically specified, perhaps like the order of discontinuous idioms, and this linear requirement is what always precludes reverse orders, even when the underlying hierarchical order is otherwise shown to be allowed: consider for instance the contrast between (12b) and (13a), i.e., between IOpp-DO with DO underlyingly c-commanding IOpp from an A-position and DO-IOpp with underlying DO>IOpp; similar pairs, e.g. (4b)-(5a) and (8b)-(9a) do not display such sharp contrasts of grammaticality, but instead (4b) and (8b) seem to indicate that in IOpp-DO surface orders IOpp can reconstruct in a position c-commanded by DOdp. I will attempt some further speculations about the underlying representation of prepositional and nominal indirect objects, building on this last observation, namely the fact that reconstruction of DO>IOpp for binding purposes is possible even when the surface order is the reverse (i.e., IOpp-DO), while DO can reconstruct neither below IOdp nor below IOpp when the surface order is DO-IOdp/pp.

I will assume that any surface orders not matching (what can be shown to be) the underlying order between A-positions (i.e. DO-IOdp, as well as prepositional constructions with apparently backward binding, see e.g. (4b), (8b)) are the result of some A’-movement operation. The precise nature of this operation is not crucial here: it is clear that none of the sentences in (1) involve heavy NPs/DPs, so permutations in double complements in SMG are not (all) cases of Heavy NP Shift; moreover, a

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5 The following data also confirm the assumption that ‘each’ unexceptionally precedes ‘the other’ because of some (perhaps lexical) requirement concerning their linear order, and not necessarily because this mirrors their hierarchical/c-command relationship: (i)-(iv) show that constructions with reciprocal anaphors can be paraphrased by shifting ‘each’ to the position of the binder and leaving ‘the other’ within the A-bound DP; however, this generalisation alone cannot account for the unavailability of similar paraphrases for cases of (apparent) backward binding such as (v) and (vii). See also Jackendoff (1990:435) for a contrast similar to the one between (v) and (vi).

(i) The men saw each other.
(ii) Each man saw the other.
(iii) The men saw each other’s friends.
(iv) Each man saw the other’s friend.
(v) Pictures of each other seem to them to be on sale. (from Manzini & Roussou 2000:436)
(vi) *Pictures of the other seem to each of them to be on sale.
(vii) (?)Sue showed each other’s friends to [John and Bill]. (from Pesetsky 1995)
(viii) *I showed the other’s friends to each of John and Mary.

Jackendoff also notes that the ‘each…the other’ construction is not always paraphrasable by a reciprocal anaphor because ‘its domain is in some respects broader than that of anaphora’ cf. ‘It surprised each man that I had seen the other’ vs. ‘*It surprised the men that I had seen each other’ (ibid.) (see also Lebeaux 1983).
tendency/preference for Heavy NP Shift is only observed for (heavy) DOs in the prepositional construction, so it might only be possible with these\(^6\) (like in English, see Larson 1988:354) –despite of course the apparent availability of DO-(heavy)IO\(_{DP/PP}\) orders. Therefore, in most cases, some (other) kind(s) of short A’-movement/scrambling is/are involved, arguably of the same kind(s) as what Belletti & Shlonsky (1995) proposed for similar cases in Italian & Hebrew\(^7\); for convenience, I will collectively refer to these permutations as A’-scrambling. What is crucial for our purposes is that, apparently, whatever prevents the A’-scrambled argument from reconstructing (see fn. 26 below for some speculations) is absent in IO\(_{PP/DO}\), while it is present in both DO-IO\(_{DP}\) and DO-IO\(_{PP}\), i.e., that DO>IO can be reconstructed, while reconstruction is not possible after A’-scrambling is applied to IO>DO, whatever the realisation of IO is\(^8\), as already illustrated by the surprising contrast between (4b) on the one hand and (3b, 5b) on the other, also repeated below:

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\(^6\) Another argument for the non-existence of Heavy NP Shift with heavy IOs comes from Baltin & Postal’s (1996) observation that Heavy NP Shift allows reconstruction effects for binding purposes:

(i) I described \_ to himself, [the victim whose sight had been impaired by the explosion]i

(B&P 1996)

It is hard to test this claim with ‘postposed’ heavy DOs, as DO>IO\(_{PP}\) can be reconstructed in IO\(_{PP/DO}\) anyway (see 4b, 8b). However, in DO-IO\(_{DP/PP}\), no matter how ‘heavy’ IO\(_{DP/PP}\) is, reconstruction of IO\(_{DP/PP}>DO\) for binding purposes is impossible:

(ii) *Edhiksa ton cafto tu, [tu fititi pu mu sistises], / [ston fititi pu mu sistises],

Showed.1SG the self.ACC his the student.DAT/GEN that me.DAT/GEN.CL introduced.2SG / to-the.student.ACC that me.DAT/GEN.CL introduced.2SG

‘I showed [the student you introduced to me], himself.’

\(^7\) Greek particularly seems to pattern with Italian in this respect, modulo ‘the adjacency requirement on postverbal subjects’ of Italian (Belletti & Shlonsky 1995:507). For instance, in VO\(_{IO/S}\) orders (where S carries some sort of focus, see Alexiadou 1999 for these constructions in Greek), the (subtle) contrast B&S observe between (the arguably base-generated) DO-IO and (the reordered/scrambled) IO-DO in Italian (i-ii) is replicated by the contrast between IO\(_{DP/DO}\) and DO-IO\(_{DP}\) in SMG (iii-iv).

(i) ? Ha dato un libro a Maria Gianni (Italian)

Has given a book to Maria Gianni

(ii) *Ha dato a Maria un libro Gianni

Has given to Maria a book Gianni

(iii) (?)*Edhose tis Marias ena vivlio o Janis (SMG)

Gave.3SG the Mary.DAT/GEN a book.ACC the John.NOM

(iv) *Edhose ena vivlio tis Marias o Janis

Gave.3SG a book.ACC the Mary.DAT/GEN the John.NOM

This might indicate that this kind of short scrambling in Greek is focus-related like in Italian, according to B&S (i.e., related to the focus interpretation of the rightmost element); however, unlike B&S, instead of hypothesising rightward focus-movement to a unique Focus position below IP (the competition for which derives the complementary distribution of postposed subjects and DOs), I will assume the following: (a) following Alexiadou (1999), the focalised S in VOS stays in-situ, VP-internally, (b) it is the non-focused element(s) that undergo(es) short movement, precisely for defocusing purposes, and (c) only one VP-internal position can carry focal stress, therefore perhaps in the presence of an in-situ S, both DO and IO have to move leftwards, in an order-preserving manner. Unlike Alexiadou, I won’t assume that this short movement has the properties of A-movement (given the fact that a preposed/scrambled DO still cannot bind an IO\(_{DP}\) left in situ –cf. 3a).

\(^8\) I will remain agnostic as to the precise reason behind these facts, but see fn. (29) below.
(4b) ἔδηκξα στὸν εα̂φτο τις ἀντιθέσιον της Μαρίας
Showed.1SG to-the self.ACC her.GEN.CL the Mary.ACC
‘I showed to herself, Mary’

(3b) ἔδηκξα τὸν εα̂φτο τις τις Μαρίας
Showed.1SG the self.ACC her.GEN.CL the Mary.DAT/GEN
‘I showed herself (=DO) Mary (=IO)’

(5b) (?) ἔδηκξα τὸν εα̂φτο τις ἀντιθέσιον της Μαρίας
Showed.1SG the self.ACC her.GEN.CL to-the Mary.ACC
‘I showed herself to Mary’

I will take this to be an indication that the three patterns previously presented (IO<sub>DP</sub>-DO, DO<sub>PP</sub>-IO<sub>PP</sub> and IO<sub>PP</sub>-DO) do not correspond to three different structural representations, and that IO<sub>DP</sub>-DO and IO<sub>PP</sub>-DO in particular need not be assigned distinct representations (which would be reasonable if the assumption that prepositional IOs, unlike IO DPs, need not occupy/raise to a Case position were correct –see an alternative proposal below). Instead, I will argue that high IOs, whether prepositional or nominal, always pattern together. In other words, both IO<sub>DP</sub>-DO and IO<sub>PP</sub>-DO qualify as double-object constructions, whereas DO-IO<sub>PP</sub> only is the equivalent of the English prepositional ditransitive construction.
### Asymmetric c-command in A-positions

| Possible surface orders |  
|--------------------------|---|
| **IO\(_{DP}\)\(>\)DO** | ✓ |
|  
| a. IO-DO |  
| b. \(\text{IO-DO}\) DO cannot reconstruct below IO for binding purposes |
|  
| **DO\(>\)IO\(_{DP}\)** | ✗ |
|  
| **IO\(_{PP}\)\(>\)DO** | ✓ |
|  
| c. IO-DO |  
| d. DO-IO? in principle derivable from IO\(_{PP}\)\(>\)DO via short scrambling, but like in (b) DO cannot reconstruct below IO for binding purposes |
|  
| **DO\(>\)IO\(_{PP}\)** | ✓ |
|  
| e. IO-DO IO\(_{PP}\) can reconstruct below DO for binding purposes |
|  
| f. DO-IO |  

**Table 1: Hierarchical and surface orders in SMG (goal-) ditransitives**

In terms of the analysis introduced in 2.4.2, then, both IO\(_{DP}\)\(>\)DO and IO\(_{PP}\)\(>\)DO in SMG are instances of ‘dative shift’, i.e., all their properties must be captured by the structural analysis put forward for DOCs, the relevant representation being (46) in 2.4.2, repeated below as (17). On the other hand, in SMG, DO\(>\)IO\(_{PP}\) (only) corresponds to the representation in (44) in 2.4.2, repeated in the following section as (18).

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9 But see Chapter 6 for the assumption that this might be a residual basic order for at least a number of SMG speakers.
3.3. The workings and the predictions of the dative-movement analysis: some preliminaries

Before proceeding to the predictions these structural analyses make for these two types of constructions, it is necessary to introduce some further technical assumptions, which I omitted earlier, as they were not relevant for the purposes of Chapter 2.

First of all, I assume that the lower phase head is (active/transitive) Voice (Kratzer 1994), which introduces the external argument, rather than v*. Voice takes a vP/v*P as its complement (Pylkkänen 2002/2008, Roberts 2010, among others) and I take v-heads such as v* to be just interpretable elements that determine the category of the root, i.e., verbalizers (as commonly assumed within e.g. Distributed Morphology and elsewhere, see Panagiotidis (forth.) and references therein). As such, v-heads inherently encode only information about the category of the root they select, as well as, possibly, related semantic entailments/components of verbal meaning, e.g. lexical aspect/Aktionsart/event structure (which implies that they may come in different flavours depending on their interpretable features of this sort), rather than properties such as agentivity etc., which are arguably extrinsic to being verbal/nominal/etc.; in other words, categorial features are arguably independent from transitivity/argument structure alternations. In the case of verbs, the latter follow from the feature make-up of Voice, i.e., the presence or absence of features such as [±agentive], [±transitive] etc. and the concomitant presence or absence of agreement features (probably along the lines of Burzio’s generalization). The presence or absence of these features may depend on/interfere with properties of the verbalizer or the root, e.g. event structure or lexical aspect, but certainly the former do not directly follow from the latter, so if a single head were to encode everything we would be led to an unnecessary proliferation of such heads in the lexicon, to capture all the possible combinations. Instead, separating Voice from v-heads, coupled with Chomsky’s proposals about feature inheritance, may yield a number of interesting predictions about the properties of ditransitives and (other) bi-eventive predicates.

Following Chomsky (2006, 2008), the formal features of a phase head are inherited by the head of its complement (in his terms, V inherits v*’s features); assuming that Voice is the real phase head, then it is Voice’s features that are inherited, while I will also further assume that its features are transmitted to every verbal head in its complement domain, up to any strong phase boundary, and that the relevant features...
are (a) Voice’s uninterpretable/unvalued phi-set, (b) the Case assigning capacity associated with these features (probably a [uCase] feature linked to the phi-probe), as well as (c) an EPP feature, similar to the one T inherits from C\textsuperscript{10}. In this context, then, v\* is a verbalizer that happens to be selected by a transitive Voice head, i.e. it is not listed as such (v\*=transitive v) in the Lexicon. Put more generally, the assumption made here is that the features of a phase head PH are spread/transmitted to all the heads below it, which share some critical properties with PH (such as [+V] perhaps, in the case of Voice), up to the next strong phase boundary. In the case of Voice, this predicts that Case can be transferred to up to two other heads/v’s, as will be discussed below (one has to account for bi-eventive predicates, while on the other hand no predicate admits more than three (structural) arguments, which means that the number of relevant hosts never has to exceed that of two v-heads –also allowing for v’s to appear packaged, in the spirit of Pylkkänen (2002) and Anagnostopoulou (2005) and in accordance with Rizzi’s (1997) Avoid Structure\textsuperscript{11}.

The assumption that all v-heads within a VoiceP inherit Voice’s features is particularly relevant for VoicePs that are analysed as bi-eventive, i.e., as consisting of two sub-events and hence as involving two v-heads (see e.g. Cuervo’s (2003) analysis of causatives and inchoatives). As far as ditransitives are concerned, analyses based on/inspired by lexical decomposition (Kayne 1984, Pesetsky 1995, Harley 2002, Beck & Johnson 2004, \textit{inter alios}) often treat them too as involving two meaning components, roughly a causative part and a part roughly meaning some kind of transfer (of possession/location/knowledge/perception/communicated propositions or messages etc.), while the actual meaning of what is transferred is determined by the root itself. It seems reasonable to assume that these two components are encoded by two distinguishable v-heads, especially if they can also be shown to be independently needed. Indeed, the absence or presence of a causal component (a v\textsubscript{CAUSE}, or Cuervo’s (2003) v\textsubscript{DO}) seems to be the property distinguishing between the causative and the

\textsuperscript{10} Chomsky (2006) assumes object-raising to Spec-V, despite the lack of any visible effects of such an operation, given that V moves to v\*, restoring the initial order, and refers to Postal’s (1974) and Lasnik’s (2003) arguments for ECM as raising to object as empirical motivation for this claim.

\textsuperscript{11} See Appendix C on how this mechanism may work in the case of transmission of featured (and Case) from C. Again, the crucial assumptions are that the modal/information-structure-related/inflectional heads below it may appear conflated, in accordance with Avoid Structure, in conjunction with Chomsky’s (2008) idea that (Agree) operations within the same phase may take place simultaneously/in parallel, in such a way that e.g. the Subject may unproblematically get involved in interweaving Agree operations with all the active inheritors of C at the same time (if they can independently be shown to be present).
anticausative version of certain ditransitive predicates such as pass (14). As far as the second component is concerned (what we could call a vTRANSFER), this seems harder to isolate, perhaps because most ditransitive predicates are stored in the Lexicon as amalgams of Root+vTRANSFER (and often amalgams of Root+vTRANSFER+vCAUSE). However, it can be argued that its presence/absence, along with the presence/absence of vCAUSE, is what allows the apparent polysemy in (15) below: the Greek verb matheno allows (a) a causative/ditransitive frame (IO>DO only), in which it means ‘I teach something to someone’ (i.e., ‘x causes a transfer of x’s knowledge of something to y’), (b) a non-causative/non-agentive monotransitive frame, in which it means ‘I learn something’ (i.e., ‘x comes to possess some knowledge’, involuntarily, perhaps as the result of someone else’s teaching x or letting x know, or even x’s accidentally finding out), and (c) a causative/agentive monotransitive frame, in which it roughly means ‘I teach myself something’ (i.e. ‘x causes some knowledge to be known by x’); it seems that (a) includes both vCAUSE and vTRANSFER, (b) contains a vTRANSFER but lacks vCAUSE, as this frame contains a presupposition about some pre-existing knowledge being ‘transferred’ to the learner, but no conscious causer of the event, while (c) contains vCAUSE but lacks vTRANSFER, as the subject in this case does not have some previous knowledge which (s)he can transfer and the aforementioned presupposition does not hold; the learner can actually discover something that was previously unknown (15c’).12.

(14) a. The king passed the ring to Mary.
    b. The ring passed to Mary. (from Baker 1995:8-10)

(15) a. Matheno ston Kosta/tu Kosta latinika. (SMG)
    Teach.1SG to-the Kostas.ACC/the Kostas.DAT/GEN Latin.ACC
    ‘I teach Kostas Latin.’

    b. O Kostas (*epitidhes) emathe latinika sto scholio (*ja na mas endiposiasi).
    The Kostas.NOM (on purpose) learned.3SG Latin at-the school.ACC (for to us.ACC.CL impress.PFV.3SG)
    ‘Kostas learned Latin at school (*on purpose/*to impress us).’

12 For the sake of completeness, it must be noted that ‘matheno’ also allows a fourth frame, with two apparently accusative objects, like ‘teach’ predicates tend to do cross-linguistically.
b’. O Kostas (*epitidhes) emathe ton chamo tu adherfu tu (apo tis idhisis)
   The Kostas.NOM (on purpose) learned the loss the brother.GEN his (from the news)
   ‘Kostas learned the loss of his brother on the news.’

c. O Kostas (epitidhes) emathe latinika monos tu/me methodho anef dhidhaskalu (ja na mas endiposiasi).
   The Kostas.NOM (on purpose) learned Latin alone he.GEN.CL/with method without teacher.GEN (for to us.ACC.CL impress.PFV.3SG)
   ‘Kostas studied Latin by himself (on purpose/to impress us).’

c’. O Janis istera apo chronja prospathion emathe na ftiachni rucha apo efimeridhes
   The John after from years attempts.GEN learned to make clothes from newspapers
   ‘After years of trying, John learned how to make clothes from newspapers’

The presence of two v-heads, which both inherit the phase head’s Case assigning capacity, straightforwardly accounts for the presence of two internal argument DPs that require Case checking in so-called double-object constructions (which is particularly evident in English DOCs, where both DO and IO are accusative); regarding DO>IO constructions, in which IO does not have an active Case feature (either because it is prepositional or because it is genuinely inherently Case-marked), my assumption would be that the two v-heads there may conflate/fuse into a single little v (see also Pylkkanen (2002), who argues that such heads may occur “packaged” into one syntactic head and that, as Anagnostopoulou (2005:23) puts it, this may be “a point of variation across […] constructions”). On the other hand, in IO>DO constructions, the two v-heads have to project two separate phrases, so that they allow an ApplP between them. Recall that in 2.4.2 it was argued that applicative heads are probably just ancillary elements that help/allow non-core arguments to become part of the Agree/agreement relations of the clause, by attracting DPs with [uCase] to positions visible/accessible to phi-probes. I will further propose the following conjecture and I will explore its (theoretical and empirical) consequences in this and the following sections, and particularly in chapter 4:
(16) If an argument $\alpha$ with a [uCase] feature is merged in a position inaccessible to any Case assigning head, then, Appl must merge as soon as possible.

More concretely, provided that the root selecting $\alpha$ can combine with Appl affixes (which is perhaps a lexical/idiosyncratic property of either Appl or specific roots), Appl must merge as soon as possible to create a configuration such that either (i) by attracting $\alpha$, $\alpha$ can Agree with a $\varphi$-probe and value its [uCase], or (ii) Appl itself values $\alpha$’s [uCase] (as in French and Italian, see below), without blocking the existing Agree relationships between any other DP in Appl’s complement domain and a $\varphi$-probe (i.e. those that would be created anyway, even if Appl was not there).

In (goal) double-object constructions, Appl must occupy a position such that it can render both internal arguments accessible to some agreement head/phi-probe, and the lowest position in which Appl can merge in this configuration in order to satisfy this requirement is precisely between $v_{\text{CAUSE}}$ and $v_{\text{TRANSFER}}$. Appl is distinguishable from both these heads, which are arguably (semantically) present in both IO>DO and DO>IO, i.e., regardless of the presence of Appl (see 3.3.1 for a discussion of the interpretive properties of each construction). Recall that Appl carries a special probe (which, in the case of Greek and all strong PCC languages, is arguably a [uParticipant] feature), which Agrees with IO$_{DP}$ as a precondition for attracting it to Spec-Appl$^{13}$. Therefore, if the above are on the right track, (17) is the representation of DO>IO (where IO is prepositional or genuinely inherently Case marked), while (18) is the representation of IO>DO (where IO is either entirely structurally Case marked, as in English, or bears an active inherent Case feature, as in SMG, which is deleted via (full) phi-Agree with $v^*/v_{\text{CAUSE}}$).

$^{13}$ Appl may or may not inherit Voice’s phi-set, depending on whether it is a verbal head or not. Nothing in its syntactic behaviour or its interpretive properties necessitates such an assumption, namely that it is verbal. However, even if Voice’s features are transmitted to Appl as well, this would not make any significant difference: while IO$_{DP:CL}$ would value its [uParticipant], its [up] would be valued by the $\varphi$-features of DO as these are copied onto $v_2$, which would then have to incorporate into Appl first, before Agree with IO.
At this point, it is worth noting that the above structures also seem to capture the distribution of particles in English DOCs (see Kayne 1985). As Myler (2010) argues, ‘[w]here American English speakers tend to accept only examples in which particles are medial in DOCs (see Den Dikken 1995), [(some) British English] speakers appear to allow all combinations (although the order in which the particle precedes both objects is less good than the others in [his] judgement)’ (Myler 2010:10). Given the v
heads that the verb moves through on its way to Voice, particle Vs in English (but not in Norwegian) can strand the particle/preposition in any of the intermediate positions (18’), except perhaps Appl for some speakers, possibly due to the affixal nature of Appl. Likewise, the position of IO in (17) explains why the particle can appear in any position except after IO (17’), which is base-generated (and probably left) below the particle V.

(17’) The secretary sent (?up) the stockholders (up) a schedule (up).
(18’) The secretary sent (up) a schedule (up) to the stockholders (*up).
(from Myler 2010:10)

3.4. The predictions of the analysis

In this section I will explore the implications of this structural analysis for the following empirical issues, along with some cross-linguistic considerations: (a) the possible binding relations in each of the alternating constructions, (b) the categorial nature of apparently prepositional elements introducing datives and its empirical implications, (c) the possible cliticisation patterns in ditransitives and the feature make-up of dative vs. accusative clitics, (d) the representation of dative XPs and clitics in languages apparently lacking dative DPs, (e) possible A-movement (or long distance Agree) dependencies across datives in passives, raising and unaccusative constructions (without getting into the details of the representation of the latter two types in this section) and the effects of clitic movement/clitic doubling, (f) person restrictions in the configurations considered in (e).
3.4.1 Binding relations

The representation in (17) predicts that DO may bind (into) IO, only when the latter lacks an active Case feature. (18), on the other hand, only derives structures in which IO can bind (into) DO, as long as IO bears an active Case feature. It is important to note that (and explain why) the trace/copy of IO below DO cannot reconstruct for binding purposes. We can account for this on the basis of McGinnis’s (2009) theory of ‘irreversible binding’. McGinnis (2009)\(^{14}\) provides convincing cross-linguistic evidence that binding theory applies at phase level and, more particularly, that only these (licit or illicit) binding dependencies that are established by the time a phase head is merged are visible by binding theory (conceived of as part of the Conceptual-Intentional (C-I) interface), without being able to be reversed. For example, as McGinnis notes, in (19a) the experiencer *himself* ‘does not occupy a phase edge’ (and no phase edges intervene between it and the matrix subject position) and, thus, ‘no binding dependency is established until the raised subject c-commands the anaphor’ (which takes place both soon and late enough for the moment when the structure is ‘read’/evaluated at C-I, i.e., when the minimal strong phase dominating the interacting arguments, namely the matrix CP, is completed); by contrast, in (19b) a binding relationship between an R-expression in the experiencer position and an anaphor in the embedded subject position cannot be saved/maintained if the latter moves below the minimal strong phase boundary dominating both the experiencer and the embedded subject (namely, the matrix CP, as above); the resulting configuration violates Principle C\(^{15}\).

\(^{14}\) Thanks to Neil Myler (p.c.) for pointing out to me the consequences of McGinnis’s conclusions for a movement analysis of double objects constructions. Myler (2010) uses McGinnis’s assumptions as the basis of his explanation of the absence of reconstruction effects in his own transformational analysis of DOCs.

\(^{15}\) Apparently, McGinnis does not assume that the experiencer DP does not c-command the embedded subject (by being inside a PP), to explain the absence of a binding relationship between them; if she did, she wouldn’t have appealed to the presence/absence of phase edges to explain the available and unavailable binding dependencies in (19a). Moreover, (19a) can be replicated in a language where the experiencer DP clearly c-commands the embedded subject, namely Classical Greek (furthermore, even if we follow McGinnis in assuming that ApplPs are phases of some sort, CG dative experiencers bear a purely inherent, i.e. inactive, Case feature, as already shown in 2.4.1, hence they cannot occupy a Spec-Aappl):

(i) \begin{quote} pro doko: emauto:i <pro> philotimoteron diatethe:nai tou deontos (CG) pro seem.ISG myself,DAT pro more-ambitiously be-disposed.INF the appropriate.GEN ‘I seem to myself to be somewhat more ambitiously disposed than I ought to be’ (Lysias, Pro Mantitheo, 16.20, from Sevdali 2009:11). \end{quote}
(19) a. John; seems to himself; \{t(John); to have talent\}¹⁶  
    b. *Himself; seems to John; \{t(himself); to have talent\}  

Likewise, in (18), assuming that VoiceP is the only relevant phase, IO cannot be an anaphoric pronoun, bound by DO in its first-merged position, since this would give rise to an irreversible violation of Principle C (if DO is an R-expression) or Principle B (if DO is a pronoun) by the time IO DP moves into Spec-Appl, and then Spec-v*. This does not imply that IO’s copy in Compl-V is never available for LF interpretation – see below for a construction (namely, datives with restitutive *ksana ‘again’) in which the dative DP must be interpreted in its external merge position.

3.4.2. The split identity of ‘prepositional’ datives

As already said, on the analysis proposed here, when IO asymmetrically c-commands DO, it must necessarily bear an active Case feature. This claim is apparently problematic for IOpp>DO constructions, since PPs are not considered to carry (active) Case, and the existence of DO>IOpp was considered to be possible exactly because of this fact.

Anagnostopoulou (2003), who also acknowledges the existence of the IOpp>DO pattern in SMG, postulates a distinct representation for this frame (namely, \[\mathbf{v^*P \; EA } \; v^* [\mathbf{VP \; IO_{pp} \; V \; DO}]\]), similar to the one she proposed for DO>IOpp \((\mathbf{l_vP \; EA } \; v^* [\mathbf{VP \; DO \; V \; IO_{pp}]})\) in that it does not involve an applicative head. The main motivation behind this proposal seems to be that, for Anagnostopoulou (2003), only XPs in Spec-Appl can block an A-dependency between DO and T in non-active/intransitive contexts, e.g. passives (because Spec-Appl is outside DO’s Minimal Domain, i.e. VP) (20b). Since indirect object PPs do not appear to cause such intervention effects (20c), she is led to the conclusion that all PPs occupy a VP-internal position, and that in Greek in particular they may either occupy the Compl position, c-commanded by DO in Spec, or the Spec position, c-commanding DO in Compl.

¹⁶ Notably, as R. Kayne points out to me, the reflexive in such examples need to be stressed (especially when the antecedent is a proper name rather than a pronoun; for instance, Postal, in his (1968) monograph on crossover, ‘took sentences like [this] to be unacceptable (with an unstressed reflexive)’ (R. Kayne, p.c.).
(20) a. Stilane ena fakelo ston Jani. (SMG)
   Sent.3PL a folder.ACC to-the John.ACC
   ‘They sent a folder to John.’

b. ?*Enas fakelos stalthike tu Jani <enas fakelos>.
   A folder.NOM was-sent.3SG the John.DAT/GEN
   ‘(?)*A folder was sent John.’

c. Enas fakelos stalthike ston Jani.
   A folder.NOM was-sent.3SG to-the John.ACC
   ‘A folder was sent to John.’

However, (20c) is predicted to be ruled in even if, alongside (21a), which unproblematically derives (20c), there also exists a configuration such as (21b), which may not derive (20c).

(21) a. T… [<enas fakelos> … [ston Jani]]

b. T… [ston Jani […] <enas fakelos>]]

Therefore, the grammaticalness of (20c) says nothing specific about the underlying representation of either DO>IO<pp or IO<pp>DO; it only says that at least one of them must not give rise to any intervention/minimality effects in the relationship between DO any higher phi-probe. It is obvious that DO>IO, as represented in (17) above, does not give rise to any such effects. Therefore, (21b), i.e., IO<pp>DO might or might not give rise to blocking effects.

SMG allows nominative DOs to stay in situ, which actually allows us to apply any of the familiar diagnostics for asymmetric c-command, to probe the structural relations between IO<pp> and the nominativised DO. Interestingly, there is a clear contrast between nominative DOs binding into prepositional IOs, in both reflexive (22) and passive (24) constructions, and prepositional IOs binding into nominative

17 Concerning the English counterpart of this (as given in the translation of the example), R. Kayne points out that ‘[a] sentence like ?*This folder was sent John by one of his students is somewhat acceptable for some speakers’, while ‘it becomes sharply unacceptable for at least some of them’ when ‘you make the IO a focus, as in *This folder was sent John, not Mary’, which admittedly suggests that ‘[u]sing examples with a sentence-final IO is to be avoided insofar as sentence-final position tends to go with focal stress’. Interestingly, this does not extend to the Greek examples cited here: adding some XP(s), e.g. an agent phrase, after the IO, if anything, reduces rather than improves their grammaticality –see also below about variation in the acceptability of goal passives in different dialects of English.
DOs (23, 25), with the latter being significantly degraded. This seems to be a significant piece of evidence that passives with nominative DOs and prepositional IOs are not derivable by the IO\textsubscript{pp}\textgreater DO frame, arguably because IO\textsubscript{pp} blocks a movement dependency or a long distance Agree relationship between T and DO.

(22) Efkola/diskola paradinete (i) kathe jineka\textsubscript{i} ston andra tis\textsubscript{j/k}

Easily/Hardly gives.REFL the each woman.NOM to-the man.ACC her.GEN.CL

‘Every wife gives/does not give herself to her husband easily’

(23) Efkola/diskola paradinete se kathe jineka\textsubscript{i} o andras tis\textsubscript{k/j}

Easily/hardly gives.REFL to every woman.ACC the man.NOM her.GEN.CL

‘Her husband gives/does not give himself to every woman (=succumbs to every woman’s charm) easily’

(24) Ghrighora paradhothike (to) kathe ghrama; ston paralipti tu\textsubscript{i/k}

Quickly was-handed-in.3SG the each letter.NOM to-the recipient.ACC its.CL

‘Every letter was handed in to its recipient promptly’

(25) Ghrighora paradhothike se kathe paralipti\textsubscript{k} to ghrama tu\textsubscript{i/k}\textsuperscript{18}

Quickly was-handed-in.3SG to each recipient.ACC the letter.NOM his

‘Every recipient was given his letter promptly’

Such contrasts are hard to detect in passivized ditransitives where DO moves to a subject position. Following the theory of ‘irreversible binding’ presented above, movement of DO into an A-position across no phase edges just below the matrix CP phase boundary results in DO\textsubscript{NOM}\textgreater IO\textsubscript{pp} being the only dependency visible to binding theory, thus accounting for Anagnostopoulou’s (2003:334, fn.70) observation about the absence of reconstruction effects in passives/unaccusatives with dative arguments:

(26) Kathe ghrama; paradhothike ston paralipti tu\textsubscript{i/k}

\textsuperscript{18} Co-indexation in such examples might be possible for those speakers who agree with Alexiadou’s (1999) intuition that, in VOS (or, more generally, V-XP-S) with S carrying some sort of focus (usually informational), the O/XP that precedes S exhibits properties of A-moved constituents (see the discussion in §2.5 above), thus allowing A-binding from its surface positions and contrasts such as those illustrated in (87) in Chapter 2—crucially I think I do not share this intuition. Under these assumptions, the reason why IO\textsubscript{pp} might apparently bind into DO would be its undergoing some sort of A-movement across S, i.e., the nominative DO.
Every letter.NOM was-handed-in.3SG to-the recipient.ACC its.CL
‘Every letter was handed in to its recipient’
(27) To ghrama tu_i^k paradhothike se kathe paralipti_k
The letter.NOM his.GEN.CL was-handed-in.3SG to every recipient.ACC
‘His letter was handed in to every recipient’
(28) (?)To aftokinito tis Marias, tis_i epistrafike chtes
The car.NOM the Maria.GEN her.DAT/GEN.CL was-returned.3SG yesterday
‘Mary’s car was returned to her yesterday’
(from Anagnostopoulou 2003:334, no principle C effects, hence no reconstruction)

So, there appear to be at least two significant similarities between IO_{PP}>DO and IO_{DP}>DO: they cannot feed passivisation of DO (with the latter allowing it only under clitic movement/doubling of IO_{DP} –see below) and, as we saw in 3.2.1 they both disallow reconstruction when DO A’-scrambles above IO (i.e., in DO-IO orders). Therefore, unlike Anagnostopoulou (2003) who assumes that ‘PP>DP orders and DP>PP orders are both prepositional ditransitives’ (ibid.:168) and that the ‘PP>DP order’ does not ‘[constitute] a second manifestation of the Greek double object construction’ (ibid.:167), I will argue precisely this, that in both IO_{DP}>DO and IO_{PP}>DO, IO occupies the same position, subject to the same locality conditions, and that both patterns are instances of the derivation illustrated in (18). Therefore, IO_{PP} too (in this configuration) must bear an active inherent Case that renders it active for attraction by Appl, and consequently what appears to be a preposition (s(e) ‘to’) may actually be ‘ambiguous between a preposition and a Case marker’ (Anagnostopoulou 2003:167, who adds ‘…similarly to ni in Japanese’). Another welcome result of this is that we can be consistent with a strict version of the UTAH, while also there is no need to resort to the notion of ‘minimal domain’ to derive the hypothetical absence of intervention effects caused by IO_{PP} e-commanding DO^{19}.

As far as the categorial status of se ‘to’ as a Case marker is concerned, its split identity is certainly not cross-linguistically unique. Presumably, se is in the middle of a grammaticalisation process (see also Theophanopoulou-Kontou (2000) for a similar

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^{19} Anagnostopoulou (2003:168-169) is led to a conclusion that does exactly this, i.e. weakening of the universality of linking conditions and a relativisation of minimality to minimal domains: ‘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’.
conclusion, on the basis of se-PPs alternating with dative clitics in the context of some (complex) locative prepositions and their diachronic evolution. One manifestation of this is arguably its fusion to accusative definite articles (se + ton/tin/to (‘the.M/F/N’) → ston/stin/sto, obligatorily, while a similar morphophonological alteration would not be possible with any other lexical item, cf. se topo (‘to (a) place’) vs. *stopo, se ticho (‘to (a) wall’) vs. *sticho). Nevertheless, it cannot be argued to have become a dative case affix yet: it attaches to whole DPs, rather than giving rise to distinct declensional forms of nouns/adjectives etc. and it clearly resists (dative) clitic doubling –except perhaps marginally, for a number of speakers, in left- or right-dislocation environments (cf. 29 – it is questionable whether 29b, in particular, should be analysed as a hanging topic (HT) construction, given that HT constructions are more susceptible to case mismatches: nominative, the par excellence case of hanging topics in SMG, is not good, while both dislocated DPs are interpreted as contrastive topics). However, this restriction might not be irrelevant to the fact that the dative in SMG is actually syncretic with the genitive in both DPs and clitics, i.e., in SMG clitic doubling with 3rd person DPs, though not necessarily in CLLD/CLRD, we have literal phonological doubling of the form that corresponds to both the clitic and the definite article; by contrast, se-datives are very clearly morphophonologically distinct, and therefore the restriction may be morphophonological rather than (morpho)syntactic (and certainly language-specific, since in languages subject to Kayne’s Generalisation that have clitic doubling, e.g. Spanish, such similarity requirements do not exist).

(29) a. Tu (to) edhose tu Jani/*sto Jani to vivlio

   Him.DAT.CL it.ACC.CL gave.3SG the John.DAT/GEN / to-the John.ACC the book.ACC

   ‘(S)he gave John the book’

b. Thelo oli i fili mu na ine efcharistimeni:

   Tu Jani/*sto Jani/*O Janis, tha tu aghoraso ena vivlio, sti Maria ena cd...

   Want.1SG all the friends.NOM my.CL to be.3PL pleased.PL

   The John.DAT-GEN/To-the John.ACC/the John.NOM, FUT him.DAT.CL buy.PFV.1SG a book.ACC to-the Mary.ACC a CD…

   ‘I want all my friends to be satisfied: I will buy John a book, (I will buy)

   Mary a disk…’

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A set of diagnostics for distinguishing between case markers and prepositions, when both categories are instantiated by homophonous elements, was established by Jaeggli (1982:28), and Anagnostopoulou (2005:48-51) applies these diagnostics to SMG. One criterion is about conjoined PPs/DPs; when the element in question is a P, then the preferred construction is the one in which P takes the conjoined DPs as its complement; if the element in question is a case marker, then it cannot take scope over more than one DP, and each DP must be introduced by its own case marker. So, this shows that *sur* in French is a P, while *à* with IOs is a true case marker.

(30) Ils se sont assis sur la table et *(sur)* les chaises (French)
   They REFL.CL are sat on the table and on the chairs
   ‘They sat on the table and the chairs’
(31) Ils ont parlé à Marie et au/*le directeur
   They have talked to Mary and to-the/the director
   ‘They talked to Mary and the director’
   (from Jaeggli 1982, via Anagnostopoulou 2003:28)

Predictably, *se*-IOs in SMG allow both options:

(32) Edhosa dhora ston Kosta ke *(?)*tin Maria (SMG)
   Gave.1SG presents.ACC to-the Kostas and (to-)the Mary.ACC
   ‘I gave presents to Kostas and Mary’
(33) O theos edhose ston Adham ke stin Eva ton paradhiso
   The God.NOM gave.3S to-the Adam and to-the Eva.ACC the paradise.ACC
   ‘God gave the paradise to Adam and Eve’

The reason is that *se* is really ambiguous: so, in (33) we have two dative DPs (perhaps

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20 The whole argument is weakened/undermined by the fact that, as R. Kayne points out to me, ‘French allows coordination of proper names following *à*’ (see also Miller 1992:161). Also, ‘[u]sing an example with a definite article brings in interference from the amalgamation-of-definite-article-with-preposition question’ (R. Kayne, p.c.); on the latter, Miller (*ibid.*) observes that ‘those cases where both conjuncts have a feminine singular definite article (i) are slightly more acceptable than the other possible combinations [that (should) involve amalgamation]’, but they are nevertheless still not fully grammatical:

(i) Je parlais à la fille et *(à)* la mère.
KPs) introduced by one case marker *se* each in a way reminiscent of (31) – and perhaps it is not a coincidence that we have an IO<sub>PP</sub>-DO order – while we also admittedly have *se* behaving as a true prepositional element; the reason for the latter possibility is arguably the fact that goal ditransitives retain a locative meaning component, which allows *se* with the respective meaning to appear. On the other hand, it is clear that *se* is also used to introduce a number of other arguments (benefactives, experiencers) which have no literal (and sometimes not even metaphorical) locative entailments; we predict that *se* in these cases should behave differently to some degree – I will return to the issue with data from the respective constructions in Chapter 4.

Admittedly, as Anagnostopoulou (2005) correctly points out, ‘conjoined *se*-datives resist a group interpretation’ (at least usually, and more particularly in the DO>IO<sub>PP</sub> frame):

(34) Estilan ghramata ston andra ke (??s)tin jineka pu zusan mazi

Sent.3PL letters.ACC to-the man and (to-)the woman who lived.3PL together
‘They sent letters to the man and the woman who lived together’
(from Anagnostopoulou 2005:51)

However, (33) above probably calls for a group reading; notably, in (33), IO precedes DO. Therefore, the overall situation in SMG IO<sub>PP</sub>-DO resembles that of *a* in Spanish double object constructions (i.e. when a dative clitic is also present alongside the *a*-phrase):

(35) Les han enviado una carta al chico y (a) la chica que se conocieron ayer (Sp.)

Them.DAT.CL have.3PL sent a letter to-the boy and (to) the girl that
REFL.CL met.3PL yesterday
‘They sent a letter to the boy and the girl who met yesterday’
(from Anagnostopoulou 2005:58, who attributes the example to Josep Quer (p.c.))

The possibility illustrated in (35), i.e., of omitting *a* on the second conjunct even when a group interpretation is forced, seems to also extend to benefactives in Spanish (see Anagnostopoulou (2005) for the relevant data), i.e. in cases where it would be hard to defend the prepositional character of *a*, given also the obligatory presence of the dative clitic; therefore, one may assume that SMG *se* and Spanish *a*, when not
used as prepositions, instantiate a special, intermediate category of case markers, one that attaches to whole phrases whatever their internal structure/complexity, in a way perhaps reminiscent of the English genitive marker ‘s (36). More specifically, we may assume that they bear (and realise) an active inherent Case feature, exactly like the one of genitive/dative DPs in SMG.

(36) a. Edhiksa se [kathe pedhju ti mitera]/s[tu kathe pedhju ti mitera], katanoiisi ja to provlima tis, (SMG)
    Showed.1SG to [each child.GEN the mother.ACC]/to-[the each child.GEN the mother.ACC] understanding.ACC for the problem.ACC her.GEN.CL
    ‘I showed every child’s mother, my empathy for her, problem.’

b. [The king of France]’s bike

Table 2, below, presents a summary of the properties that are indicative of the categorial status of the apparently prepositional elements that introduce IOs and other dative arguments, in SMG, French and Spanish.

<table>
<thead>
<tr>
<th>Properties of à/a/se</th>
<th>French</th>
<th>Spanish</th>
<th>SMG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scopes over co-ordinated DPs</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Can appear on each co-ordinated IO</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Can appear on all conjuncts when a group interpretation is intended</td>
<td>Obligatory</td>
<td>Yes, in both alternating patterns (clitic-doubled/DOC vs. clitic-less/low IO pattern)</td>
<td>Marginal, preferred in the IO&gt;DO pattern.</td>
</tr>
<tr>
<td>Blocking effects in A-dependencies across à/a/se-phrases</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes, when the se-phrase cannot be interpreted as locative (see Ch. 4)</td>
</tr>
<tr>
<td>Case marker/P (when marking IOs)</td>
<td>Case marker</td>
<td>Ambiguous, Case marker when a dative clitic is present²¹</td>
<td>Ambiguous</td>
</tr>
</tbody>
</table>

Table 2: the properties and categorial status of ‘prepositional’ datives

²¹ See also Cuervo (2003:39-43) for exactly the same conclusion.
3.4.3. Clitic movement and the properties of dative clitics

SMG allows cliticisation/clitic doubling of DO only, when IO is a *se*-phrase, and cliticisation/clitic doubling of either internal argument in the double DP frame (see e.g. (29a) above). When both objects cliticise, a clitic cluster is formed, with fixed IO-DO order in proclitic contexts and variable order in enclitic contexts, i.e., imperatives and *ondas* forms (the latter are conventionally known as ‘gerunds’, although the term is far from precise). This variability, also known as ‘clitic switch’, is notably absent from almost all other Greek varieties –see the discussion in chapter 6. All the above possibilities are grammatical as long as they do not give rise to any PCC-related violations as described in chapter 2.

Assuming a clitic movement approach to cliticisation, essentially along the lines of Roberts (2010) and Mavrogiorgos (2010), especially in line with their view that clitic movement/incorporation into v-heads is the result of a proper subset relation between the clitic’s and the host’s feature make-up, then it is desirable to postulate that a separate v-head incorporates each object clitic and that clitic clusters result from incorporation of one v-head into the other. In other words, the present proposal about two v’s with one phi-probe each within the ditransitive VoiceP is compatible with a head movement analysis of cliticisation (see also Rivero (1994), Terzi (1999) and Anagnostopoulou (2006) for arguments in favour of such an analysis for Greek and beyond) and in fact seems to be favoured by it.

More specifically, let us assume (with Roberts 2010) that clitics are bundles of the minimal interpretable features that any referring expression must bear, namely phi-features (i.e., person, number and gender); as such, they can count as both maximal projections (as they can be externally merged in the same positions as DPs) and minimal projections (since they are heads). If this is on the right track, then the feature content of a clitic is a proper subset of the features of a heads with uninterpretable phi-features, such as v*, T etc. Then, according to Roberts (2010), Agree between such an agreement head and a clitic, which amounts to copying of the values of the features of the latter onto the unvalued features of the former, results in the creation of two identical copies of the same feature bundle, which equals the clitic. Given standard assumptions about chain reduction (Nuñes 2004, Chomsky 2000 etc.), of the two copies the lower is marked for PF-deletion; i.e., when the probe’set of features is a superset of the goal (what Roberts calls a ‘defective goal’), Agree between them has
the PF effect of incorporation/head movement. Furthermore, assuming that chain reduction applies right after the creation of a copy, the EPP feature of a v-head (which is necessarily part of the features it inherits from Voice) attracts the deleted copy of the clitic (or, rather, the one which is marked for PF-deletion) to its Spec.

The processes described above straightforwardly account for direct object cliticisation in monotransitive and prepositional ditransitive contexts: v* incorporates V/Root, arguably through valuing its [uV] feature (following again Roberts 2010), and Cl\DO, through valuing its [uφ] as in (37) below. The ordering of the two head movement operations follows the Strict Cycle. In the case of a ditransitive Root, where DO is in Spec-Root, this is quite straightforward; the most deeply embedded head (i.e., V/Root) moves first, adjoining to the left of v*, followed by left adjunction of the more prominent head, namely Cl\DO, which derives the correct Cl-V-v* order. Assuming the strong version of the UTAH, DO is always in Spec-DO, i.e. more prominent than the head, even in the absence of an IO. However, presumably this is not entirely meaningful in terms of bare phrase structure; nevertheless, following again Roberts (2010), the label of the phrase is less prominent, which again predicts V/Root-movement preceding clitic-movement, as actually observed. Finally, v* incorporates into Voice, presumably to satisfy the latter’s [uV].

(37) v*P
    \<Cl\DO>


\<Cl\DO>

v*
RootP

Cl\DO
Root
v*<Cl\DO> <Root> (IOpp)
[uφ]

22 Following Chomsky (2006), feature inheritance is necessitated by Cyclic Spellout, so that uninterpretable and interpretable features are distinguishable by being in the same spellout domain. However, given that V-v, with its [iV] feature, is a defective goal, which guarantees that it always moves/incorporates into Voice, then Voice’s [uV] need not be inherited. Furthermore, strictly speaking, the phi-features copied onto v* are not properly included in the feature make-up of Voice (after feature inheritance); so, one has to assume that the only thing that counts in order to determine whether there is a subset relation between a probe and a goal is the label of the goal or, alternatively, its LF-interpretable features alone. Any other features x that happen to have been copied onto the goal are carried along and copied onto the probing head parasitically. Moreover, if the probing head also has [ux], these parasitic x features may value [ux], in the absence of a closer goal bearing [ix]; this last assumption will be particularly relevant for our discussion later in this section.
Moving on to double-object constructions, in terms of the representation in (18), the same steps of movement as described above take place when \( v_{\text{TRANSFER}} \) Agrees with \( \text{Cl}_{\text{DO}} \):

\[
(38) \quad v_2P \\
<\text{Cl}_{\text{DO}}> \\
\quad v_2 \quad \text{RootP} \\
\quad \text{Cl}_{\text{DO}} \quad <\text{Cl}_{\text{DO}}> \\
\quad \text{Root} \quad v_{\text{TRANSFER}} \quad <\text{Root}> \quad \text{IO}_{\text{PP}} \\
\quad [u_{\phi}] 
\]

Then, \( v_{\text{TRANSFER}} \) moves on to \( v_{\text{CAUSE}} \), carrying V and \( \text{Cl}_{\text{DO}} \) along, as a result of Agree between \( v_{\text{TRANSFER}} \) and \( v_{\text{CAUSE}} \) for the latter’s \([uV]\). The \([u_{\phi}]\) set of \( v_{\text{CAUSE}} \) matches \( \text{IO}_{[u_{\text{Case}}]} \) in Spec-Appl, by virtue of its being the closest goal with \([i_{\phi}]\), and in case IO is a defective goal, i.e., a dative clitic, it incorporates/adjoins to \( v_{\text{CAUSE}} \), to the left of \( v_{\text{TRANSFER}} \), in accordance with Strict Cycle (39). This yields the correct \( \text{Cl}_{\text{IO}}-\text{Cl}_{\text{DO}}-V-V \) order in proclitic clusters (see chapter 6 about the derivation of enclisis and clitic switch); then, as above, the whole complex moves to Voice and, eventually, to T, in Greek and in all languages with V-toT movement.

\[23\quad [u_{\text{Case}}] \text{ is arguably an indispensable feature of high IOs, both DPs and clitics, since this is what makes them active and visible for probing and attraction by Appl. In order to maintain the notion of 'defective goal', I will assume that what I called earlier a 'case assigning capacity' is actually a [u_{\text{Case}}] feature that v-heads inherit from the phase head along with [u_{\phi}]. Therefore both accusative and dative clitics bear a [u_{\text{Case}}] feature, which is also reflected in their distinct case morphology; dative clitics in particular, like the respective DPs, bear an active inherent Case feature, which explains their oblique case morphology, whatever their probe is.\]
A potential complication for this sort of analysis arises from evidence that the feature content of indirect object clitics may not entirely coincide with that of direct object clitics. For instance, while doubled direct object clitics are clearly incompatible with quantified antecedents, indirect object clitics can (at least marginally) take such antecedents/doubles (see also Daskalaki & Mavrogiorgos 2010):

(40) a. dhen (*ton) idha kanena mathiti (SMG)
    not him.ACC.CL saw.1SG no/any student
    ‘I did not see any student’

    b. den (??tu) dhino kanenos kerata to dikeoma na me koroidevi
    not him.DAT/GEN.CL give.1SG no asshole the right.ACC to me.ACC.CL
    make-fun-of.3SG
    ‘I don’t let anyone (lit. ‘I give no asshole the right to’) make fun of me’

Moreover, in a number of contexts, such as (a) obligatory IO/dative resumption in relatives in Greek (see Daskalaki 2008; Daskalaki and Mavrogiorgos 2010) and (b) constructions with nominative themes, which I will discuss in some detail below, dative clitics are obligatory, in the sense that the corresponding constructions without a dative clitic are degraded, while in the former cases (i.e., (a)), as well as in some cases of psych unaccusatives (see Anagnostopoulou 1999), the discourse effects/requirements of cliticisation are partially suspended\(^{24}\). SMG is certainly not
exceptional in this respect: it has also been observed that, cross-linguistically, indirect object clitics may lack certain discourse effects which are characteristic of accusative clitics; e.g., in Spanish, while only specific DOs can undergo clitic doubling, IOs are not subject to any specificity (or in fact any other discourse-related) restriction (Suñer 1988:394-395, via Anagnostopoulou 2006). This has led several researchers to a non-uniform treatment of accusative and dative clitics, with the latter often being treated as agreement markers, while the former are analysed as D(eterminer)s, hence their specificity/definiteness (or other related) effects.

In what follows I will attempt to argue that this does not necessarily challenge the analysis of clitics/clitic clusters presented above. IO clitics may indeed differ in their feature specification from DO clitics, without however having to modify our proposal of treating both classes as defective goals (with respect to their respective probes). What is perhaps needed is a more fine-grained approach to phi-features/probes, presumably one that acknowledges the existence of features like ±referentiality, ±specificity (which seems to be relevant for Spanish), ±definiteness (which seems to be relevant for SMG) etc., see in particular Manzini & Savoia (2004, 2007) for an analysis that acknowledges the distinct syntactic status of some of these features. Any difference between IO and DO clitics, then, could be captured in terms of these features.

One possibility is that DO clitics, which are completely incompatible with antecedents that are nonspecific (in Spanish) or indefinite (in Greek) may bear an additional interpretable feature of the respective kind, besides person/number etc., e.g., [+specific] in Spanish, or a [+definite] feature in Greek, which is still part of a referential expression’s φ-set; IO clitics, on the other hand, may lack such features, thus being underdetermined for these properties. Additionally, or alternatively, this underdeterminacy may be linked to some other feature of IO clitics themselves, the

effects are absent; rather, in such examples (see e.g. (78’a) below) the cliticised/clitic-doubled DP is normally understood as given/old information, like in any other case of cliticisation/clitic-doubling.

25 It must be noted, however, that, as R. Kayne points out to me, ‘[s]pecific DPs can undergo clitic doubling only in some Spanish’. Also, ‘Francisco Ordóñez once said that in (his) Spanish you can’t have dative clitic doubling if the dative DP/NP is a bare plural’ (R. Kayne, p.c.), therefore dative clitic doubling is not entirely unrestricted.

26 Also, in relation to Italian, as R. Kayne points out to me, ‘DO clitics are compatible with (nonspecific) indefinites in Italian CLLD, e.g. Un gelato, lo prendo volentieri. Also with idiom chunks - see Bianchi, V. (1993) “An empirical contribution to the study of idiomatic expressions,” Rivista di Linguistica, 5, 349-385’.
denotation of which may not be coextensive with that of (singular) definite/specific expressions, a notable candidate being Manzini & Savoia’s (2004, 2007) [Q]. Though not entirely co-extensive with the notion of ‘quantifier’, Manzini & Savoia hypothesise that there is an abstract/generic quantificational category/feature [Q], realized by dedicated morphemes (clitics or segments of clitics) with common distribution, which give rise to similar ordering/co-occurrence restrictions, while also enabling several related meanings, most notably distributivity. Indeed, clitics/pronouns that ‘lexicalise’ (i.e. morphologically realise) this feature/category in Italian (e.g. *loro, which happens to correspond to both a plural nominative and a dative weak pronoun) allow a distributive/pair-list interpretation in constructions like the following, while other clitics do not:

(41) a. Loro hanno visto un uomo ciascuno (Italian)
   They have seen a man each
   b. *Un uomo li ha visti ciascuno
   A man them has seen each
   ‘A man has seen them each’

(42) a. Assegnai loro un compito ciascuno
   assigned.1SG them.DAT an assignment each
   ‘I gave them an assignment each’
   b. *Li assegnai a uno studente ciascuno
   Them.ACC assigned.1SG to a student each
   ‘I assigned them to a student each’

In SMG too, there is a clear contrast between the equivalents of (42a-b):

(43) a. Tus anethesa ena arthro tu kathenos / ston kathena\textsuperscript{27}. (SMG)

\textsuperscript{27} Interestingly, here it is completely unproblematic for the (distributive) quantified phrase to be a se-phrase, despite its co-occurrence/co-indexation with a dative clitic. Another thing that must be noted is that the QP in these examples (even the se-phrase here) is not right-dislocated; there is no intonational break between \textit{ena arthro} and \textit{tu kathenos/ston kathena} and, actually, the whole sequence \textit{ena arthro tu kathenos/ston kathena} can be shown to be a constituent (it can be co-ordinated with similar sequences, it can undergo various types of fronting, it can serve as an answer to an object wh-question etc.); and
Them.DAT.CL assigned.1SG an article.ACC the each.GEN/DAT / to-the each.MASC.ACC
‘I assigned them an article each.’
b. ?*Ta anethesa enos fititi / s’ enan fititi to kathena28.
Them.ACC.CL assigned.1SG a student.DAT/GEN / to a student.ACC the each.NEUT.ACC

However, it seems that accusative clitics in SMG do allow the distributive reading needed here, as long as the two quantified phrases (‘a man’ and ‘each’) are adjacent to each other (44). This possibility is readily available in SMG, since it allows VSO orders; therefore, this adjacency requirement and the infelicity of VSO in Italian might be the reason for the ungrammaticality of (41b), and not necessarily the fact that accusative clitics lack the relevant feature –which the respective clitics in SMG clearly must have, if Manzini & Savoia are correct.

(44) a. (?)Tus idhe enas jatros ton kathena
   Them.MASC.ACC.CL saw.3SG a doctor.NOM the each.MASC.ACC
   ‘They were examined by a doctor each’
b. (?)Ta meletise ena fititis to kathena
   Them.NEUT.ACC.CL studied.3SG a student.NOM the each.NEUT.ACC
   ‘They were studied by a student each’

Examples with accusative clitics and pair-list readings involving objects and non-subjects are even better:

(45) Ta pulise ja pende evro to kathena
   Them.ACC.CL sold.3SG for five euros the each.NEUT.ACC
   ‘(S)he sold them for five euros each’

this whole sequence (perhaps a projection of the object DP) cannot be argued to be right-dislocated either.
28 The ungrammaticality of (42b, 43b) is arguably not due to some illicit hierarchical relation between the quantified constituents, i.e. the fact that the distributively interpreted argument is asymmetrically c-commanded by the indefinite expression, cf. also (i), which is considerably better, although we have a similar configuration, but crucially with no accusative clitic:

(i) ?Tus milise enas kathijitis tu kathena/kathe ena(?-os)/??ston kathena
   Him.DAT.CL/Them talked.3SG a professor.NOM the each.GEN/DAT / to-the each.ACC
   ‘One professor talked to each of them’.
In Manzini & Savoia’s system, there seems to exist a strict one-to-one correspondence between forms (morphophonological realisations) and categories, i.e., a category must be postulated if and only if a phonologically distinct exponent is spelt out. However, in our case, if [Q] is responsible for the distributive interpretation, then plural accusative clitics too must be able to bear [Q], though not always; on the other hand, singular accusative clitics never force a distributive reading the way plural and dative clitics do, so there is no need to postulate [Q] for singular accusatives. I will therefore assume a more standard generativist view of the connection between syntactic/semantic features and exponence, namely that a feature which is overt in one (part of the) grammar may be covert elsewhere.

So, in our case, dative clitics always bear [Q] (in (43a), the dative clitic could have been singular, enforcing a pair-list reading again) and are marked accordingly, while plural accusative clitics may or may not bear [Q], i.e. they come in two varieties, without carrying any special marking (as Manzini & Savoia (2004:18) note, “the syntactic Q category is compatible with plurality, but it does not imply it”). Finally, as already said, [Q] is also absent from singular accusative clitics, which never express distributivity (in (44-45) singular clitics instead of plural ones would be ungrammatical). Therefore, the presence/absence of a feature such as [Q] might be enough to distinguish between elements that are compatible with quantified antecedents and those that are not. While φ-clitics in general are interpreted as definite, given/old information, and/or specific (depending on language specific requirements on cliticisation, rather than their feature make-up), the presence of a feature such as the one described above may compromise/relax these definiteness/specificity requirements, in order to make the distributive interpretation possible, without however fully restoring the grammaticality of clitics with non-definite antecedents (notice that (40b) is still far from fully grammatical), or even of clitics with antecedents whose intended interpretation is not necessarily that of given/old information (see Anagnostopoulou (1999, 2003) and below for some patterns of obligatory cliticisation/clitic doubling/resumption of the dative argument). Crucially, plural accusatives too can be marginally doubled by (existential) quantifiers, when they have a clear distributive reading, i.e. when a [Q] feature must be postulated:
Consequently, the difference between DO clitics and IO clitics is probably not related to some feature(s) of the former that the latter lack, but instead due to some additional feature of IO clitics; interestingly, this is also consistent with the observation that cross-linguistically it is dative pronominal clitics that tend to be more marked (morphologically) than the respective accusative ones, rather than the opposite. So, Manzini & Savoia may be correct in concluding that their [Q] feature is a/the defining property of ‘dativity’. The opposite view, according to which accusative clitics are Ds while dative clitics are simply agreement markers (perhaps φPs), is faced with the additional problem that in many languages, including Greek, both accusative and dative clitics are homophones with (definite) determiners (see Anagnostopoulou 2006 and Mavrogiorgos 2010).

If the above are on the right track, then our analysis of both accusative and dative clitics as defective goals can be preserved as follows. As we saw, all dative clitics bear [Q], singular accusative clitics never bear [Q], while plural accusative clitics may bear [Q], but never in the presence of a dative (cf. 42b, 43b). Therefore, we may assume that v\text{CAUSE} has an intrinsic (perhaps optional) [uQ] probe, along with any phi-features it inherits from Voice: this guarantees that both dative clitics in DOCs and (distributive) plural accusative clitics in monotransitive constructions count as defective goals and can be incorporated (NB. in monotransitive constructions with singular/non-distributive accusatives, where there is no [iQ], [uQ] has to be vacuously valued/to take a default value –see Roberts (2010:143-146, 152) on vacuous Agree/valuation); on the other hand, it just appears that v\text{TRANSFER} cannot bear a [uQ] probe: as a result, accusative clitics in DOCs cannot bear [Q], because they would not count as defective goals and they would fail to incorporate\footnote{An example which is potentially problematic for this kind of analysis is the following, which many speakers find grammatical, and where apparently both a distributive plural accusative and a dative clitic co-occur, contrary to what this analysis would predict:  
(i) Tis ta pulise ( # ) ja ena evro to kathena (SMG)  
Her.DAT.CL them.NEUT.ACC.CL for a euro the each.NEUT.ACC  
‘(S)he sold them to her for 1 euro each’
One possibility is that these examples actually involve right-dislocated pairs of distributor-distributee, which allows what Beghelli & Stowell (1997) and Beghelli (1997) call the ‘P(seudo)-
for this comes from the fact that a distributive/pair-list construction with the verb *matheno* (see above) is only compatible with the volitional/agentive reading of the verb (where *v_*\text{CAUSE}* is present) and not with the involuntary/non-agentive reading, which only involves *v_*\text{TRANSFER}:

\[(47)\]

\[\begin{align*}
(47a) & \quad \text{ta traghudhja ta emathe se mia mera/me mia prova to kathena} \\
& \quad \text{the songs.ACC them.ACC.CL learned.3SG in one day/with one} \\
& \quad \text{rehearsal.ACC the each.NEUT.ACC} \\
& \quad '(S)he learned all the songs, in one day/with one rehearsal each' \\
(47b) & \quad ?*\text{ta nea ta emathe se mia stighmi/apo mia ekpombi to kathena} \\
& \quad \text{the news.PL them.ACC.CL learned.3SG in one moment/from a TV} \\
& \quad \text{programme the each.NEUT.ACC} \\
& \quad '(S)he learned all the things that had recently happened in one moment/on} \\
& \quad \text{one TV programme each}^{30}
\end{align*}\]

D(istributivity)' pattern. The main characteristic properties of this pattern are (a) its optionality, and (b) the fact that ‘pseudo-distributivity cannot arise under an inverse scope construal’ (Beghelli & Stowell 1997:94). Indeed, unlike (i) in fn. 18 above, an intonational break before the distributor-distributee sequence makes the pair-list reading impossible when the narrow scope indefinite (the ‘distributee’) is structurally higher than the ‘distributor’:

\[(ii)\]

\[\begin{align*}
\text{tus ta edhose ta chapia (*,) enas jatros to kathena} \\
& \text{them.DAT.CL them.ACC.CL the pillis.ACC a doctor.NOM the each.ACC} \\
& \quad 'A/One doctor gave each pill to them'
\end{align*}\]

Furthermore, when there is such an intonational break, the distributive interpretation of the plural accusative clitic is not forced (i.e., the collective construal –see Beghelli & Stowell (1997:87) –is possible despite the distributive phrase that follows), which means that the accusative clitic there need not bear a \{Q\} feature.

Similarly, an example like the following is predicted to be licit on this scenario, despite the presence of a dative (i.e. \{+Q\}) DP and a dative clitic:

\[(iii)\]

\[\begin{align*}
\text{tis ta pulise tis Marias ?(#) ja chilia evro to kathena} \\
& \text{Them.DAT.CL them.NEUT.ACC.CL sold.3SG the foreigners.DAT/GEN for 1000 euros} \\
& \text{the each.NEUT.ACC} \\
& \quad 'He sold them to the foreigners for 1000 euros each'
\end{align*}\]

If for some speakers, (i) need not involve any intonational break, then to make our analysis compatible with this kind of example, we probably need the following (non-trivial) complication: clitics with \{Q\} require some kind of licensing (which we may formalise as an uninterpretable feature accompanying \{Q\}), via Agree with a respective probe on *v_*\text{CAUSE}. This probe (let us call it \{uQ\}) may probe recursively (like EF, or possibly \{+interrogative/+wh\} on C\{+wh\}, subject to defective intervention restrictions: thus, it may not license both a dative in Spec-Appl and a distributive plural accusative clitic at once, due to the former’s intervention, but once the dative has undergone clitic movement/incorporation into *v_*\text{CAUSE}, then no intervention effect is incurred. Then, we probably do not need to appeal to the notion of defective goal: all phi-probes/full sets of uninterpretable phi-features include/can be valued by features such as \{Q\} and all clitics count as defective goals, which is a desirable conclusion, in order to derive clitic movement of the accusative clitic in (i) through *v_*\text{TRANSFER}. What *v_*\text{TRANSFER} lacks is not a probe which is a superset of a \{Q\}-clitic’s feature content, but that special probe which licenses such features and which is only present on *v_*\text{CAUSE}, hence the contrast between \[(47a)\] and \[(47b)\].

\[^{30}\text{The noun *to neo/ta nea* (‘the news.SG=one piece of news/the news.PL’) is clearly countable in SMG, cf. (i) (which allows, but crucially does not force, a distributive reading):}\]
Schematically, then, we may modify (39) as in (48) below:

(48)

\[ \begin{array}{c}
  \text{v*P} \\
  \text{<Cl_{IO}>} \\
  \text{v*} \\
  \text{ApplP} \\
  \text{Cl_{IO}} \\
  \text{<Cl_{IO}>} \\
  \text{v_{2} \text{CAUSE} \left[ \text{u\phi_{X_{CL-IO}}} \right]} \\
  \text{Appl} \\
  \text{v_{2}P...} \\
  \text{(Cl_{DO})} \\
  \text{*[Q]} \\
  \text{Root} \\
  \text{v_{TRANSFER} \left[ \text{u\phi_{Y_{CL-DO}}} \right]} \\
  \end{array} \]

3.4.4. The syntax of IO clitics and DOCs without IO DPs: cross-linguistic evidence

Another consequence of this sort of account is that all clitic clusters/dative clitic constructions that are subject to the PCC must involve the same derivation as double-object constructions, namely the derivation in (18); in other words, even languages such as e.g. French, which apparently lack the IO>DO pattern, must have an equivalent of the double-object construction. The general case in Romance, then, might be that only dative clitics have a [uCase] feature (given also their oblique case morphology which is unique to clitics), which makes them visible to Appl, hence they give rise to PCC effects and (usually) appear higher than DO clitics (when no person hierarchies apply to clitic ordering); a/à-phrases, then, are presumably just PPs or bear [iCase], thus being inappropriate candidates for Agree with Appl and attraction by it, which derives the fact that such phrases usually have to follow DO.

However, taking a closer look at French, Italian and Spanish, it may turn out that at

(i) (To) kathe neo to emathe apo mia ekpombi (every>a, a>every)
The each piece of news.ACC it.ACC.CL learned.3SG from one TV programme
‘He learned every piece of news by watching a TV programme’
least sometimes, *a/à*-phrases too may bear active Case features and participate in the derivation in (18) or similar derivations. To begin with, in much of his work on French (e.g. Kayne 1984, 2010), Richard Kayne draws a parallel between the English double-object construction and the ‘V-DO-à-IO’ construction in French, mainly on the basis of the parallelism of each of the two patterns with the English causative and the French *faire-infinitive* causative construction respectively:

(49) a. Jean a donné un livre à Paul. V DP₁ à DP₂  
   b. Jean a fait manger une tarte à Paul. V [V DP₁] à DP₂  

(50) a. John gave Paul a book. V DP₂ DP₁  
   b. John made Paul eat a pie. V DP₂ [V DP₁]  

Having already argued for the relevance of applicative-like heads for French *faire-* infinitive causatives (and their Italian counterparts), and given the clear semantic parallelism between (49b) and (50b), and also given some little noticed binding facts about prepositional IOs in Romance (see below), it seems reasonable to pursue a structural parallelism between the pattern in (49a), at least some of its instances, and (50a), i.e. the double-object construction.

As already noted in §2.5, DP₂ in (49b) arguably belongs with the embedded predicate; Kayne (2005:89-90) provides further compelling evidence that it is not in any way comparable to a matrix object DP in an object control construction, therefore it has to originate downstairs. On the other hand, Kayne also suggests that “this *à* seems clearly to be part of the matrix”, as no other matrix verbs allow it, apart from a restricted class of verbs. This leads him to assume that *à* is some sort of probe, perhaps an IO/dative-agreement head that attracts the ‘dative’ DP –before moving itself to a higher adverbial head, one from Cinque’s (1999) hierarchy, just above the moved DP, followed by massive movement of that head’s complement phrase (which contains *faire* and the remnant embedded vP/VoiceP) to its left. On the account proposed in §2.5, we can maintain Kayne’s intuition about the nature and the role of the agreement marker *à*, without postulating the aforementioned movement operations, but only refining the analysis given in (69) and (72-73) in §2.5, also in the light of some of the discussion above.

Recall that FI constructions with transitive infinitivals were analysed in §2.5 as involving movement of a verbal constituent of variable size into the edge of the embedded VoiceP, followed by movement of V and DO in positions c-commanding
the transitive causee:

(51) [faire...[V₁...[ DO... [v₂P/ApplP ... t₁ [VP tDO t₁]] [VoiceP EA ... t⁺v₂P/ApplP]]]]

It was not quite explained what motivates/triggers these last two steps of movement. Now, based on the parallelism under discussion, we can assume that the matrix vP/VoiceP is in fact a ditransitive predicate, involving all the projections represented in (18): thus, faire is in fact a Voice head which selects a v*P dominating a v₂P, which in turn selects the embedded VoiceP (the assumption that faire is a realization of Voice is in fact the equivalent –within the present framework –of Folli & Harley’s (2007) proposal that faire/ fare in FIs is the overt realization of an active/agentive/causative v₃). Therefore, movement of the preposed constituent into Spec-Voice serves as a ‘smuggling’ (see Collins 2005) operation that enables V and DO to match and delete any uninterpretable features of the matrix v-heads (and the latter’s [uCase]), with V undergoing head movement up to v* and DO Agreeing with v₂ and moving to its Spec (see also Roberts 2010 for a ‘smuggling’ analysis of these constructions):

(51’) [VoiceP faire...[v*P V₁-v* [v₂P DO <v₂> [smuggled-XP ... t₁ [VP tDO t₁]] [VoiceP EA ... t⁻smuggled-XP]]]]

So, turning to the properties of dativisation, if we are to follow our conjecture in (16) above, then given the Case-licensing needs of the embedded EA/the transitive causee, an Appl head must be merged at the lowest possible position. It seems, then, that in French Appl comes in two flavours: (i) the transitive causee may be realised as a dative clitic, i.e. as bearing [uCase], in which case Appl must merge between v* and v₂ as in canonical English-/Greek-style DOCs; in this case, Appl probes the dative clitic with its [uParticipant] probe, giving rise to the PCC in the familiar way, attracts it to Spec-Appl, and from that position it undergoes obligatory clitic-climbing up to the matrix T (52);

31 Then, the issue of the non-passivisability of faire may be linked to its being an agentive v; on the other hand, as R. Kayne points out, ‘[c]ausative faire is perfectly well passivisable in Italian, contrary to French faire’.
32 Alternatively, if we assume that v*'s EPP also has to be satisfied by attraction of DO, then we may assume that faire is first-merged in some T/Infl-node, while the embedded infinitive moves up to the Voice head of the matrix VoiceP.
(52) \[ \text{Cl}_{\text{EA}} = \text{faire} \ldots \left[ v^*P \ V_i - v^* \ [\text{Appl}_1 \text{P}\text{EA} \text{Appl}_2 \ V_2 \text{D} \ldots \left[ \text{smuggled-XP} \ [\text{VP} \ V_1 \text{D} \ldots \left[ \text{VoiceP}_1 \text{EA} \ldots \right] \right] \right] \]

(ii) Appl is realised as à and assigns Case itself, like prepositions in general assign Case, i.e. it bears a [uCase] feature (see below for some speculations on the precise feature make-up of [Appl à]); the probe’s and the goal’s [uCase] mutually match and delete each other. In this case, Appl does not need to attract its goal to its Spec, so in accordance with (16), it may merge as low as in a position immediately above the embedded VoiceP (53). In French, in particular, Appl’s Spec may serve as the position into which the preposed constituent is smuggled; thus, it gives rise neither to PCC effects, nor to animacy restrictions – see Kayne (2005:91-92) for a number of examples with non-agentive and even inanimate causees/embedded subject à-phrases:

(53) \[ \text{faire} \ldots \left[ v^*P \ V_i - v^* \ [\text{v}_2P \ D \ldots \left[ \text{Appl}_1 \text{P}\text{smuggled-XP} \ [\text{VP} \ V_1 \text{D} \ldots \left[ \text{Appl}_1 \text{à} \text{VoiceP}_1 \text{EA} \ldots \right] \right] \right] \]

On the other hand, there might also exist the option of smuggling the ‘smuggled XP’ of (53) into a multiple Spec of the embedded VoiceP, as in (52), in which case Appl must match EA across DO, which is part of that XP (54a). This possibility might be instantiated in Italian, in which PCC effects also arise with transitive causees realised as full à-phrases (54b)\(^{33}\) (see, however, Homer & Sportiche (2011) for evidence that similar PCC effects are observed in French as well); as already said, both DO and V eventually move outside the smuggled/preposed XP, which is what guarantees that à and EA are adjacent.

(54) a. \[ \text{faire} \ldots \left[ v^*P \ V_i - v^* \ [\text{v}_2P \ D \ldots \left[ \text{Appl}_1 \text{P}\text{smuggled-XP} \ [\text{VP} \ V_1 \text{D} \ldots \left[ \text{Appl}_1 \text{à} \text{VoiceP}_1 \text{EA} \ldots \right] \right] \right] \]

b. Lo/²*ti faccio lavare a Maria (Italian)

3SG.ACC.CL/You.ACC.CL make.1SG wash.INF a Mary

\(^{33}\) In this case, then, Appl bears a [uParticipant] probe as usual, which can probe datives across structurally Case-marked DPs, as long as the latter are not [+Participant].
‘I have/let Mary wash it/you’
(from S. Cruschina (p.c.), copied and adapted from fn. 33 in chapter 2)

Moving to ditransitives, the dative clitic construction may then be derived in a way parallel to (52):

\[
(55) [\text{VoiceP} \text{ EA Voice \{v_+ p \text{ CI}_O-v^* \} \text{ ApplC} <\text{CI}_O> \text{ Cl} \text{ IO} - v \{v_2 p \text{ DO} v_2 \{v_3 p <\text{DO}> <\text{V} > \text{ <CI}_O[u\text{Case}>]})]]]
\]

The representation in (55) derives clitic movement of the dative clitic to \(v^*\) from a position higher than that of DO, i.e. it captures the fact that, in clitic clusters in French, the dative clitic usually adjoins to the left of the accusative clitic, except when the dative clitic is 3\(^{rd}\) person. Evidence that the IO clitic moves through an intermediate position, between its thematic (low) position and its cliticisation site comes the following data that Kayne (1975:154-156) observed: in the presence of an IO clitic, a prepositionless floating quantifier modifying it may appear above DO.

\(56\) a. Elle leur offrira (?tous) des bonbons (*tous) (French)

She them.DAT.CL will-offer.3SG (all) some candies (all)

b. Elle offrira (*tous) des bonbons (*à tous)

She will-offer.3SG (all) some candies (to all)

‘She will offer some candies to all of them’

c. Je les leur ai (?tous) toutes (*tous) montrées

I them.ACC.CL them.DAT.CL have (all.MASC) all.FEM (all.MASC) shown

‘I showed them all all of them’

‘Tous’ is pied-piped along with the clitic to Spec-A ppl, presumably for Case reasons; it cannot be left low in (56a and c), since the presence of the dative clitic entails that Appl is merged high and cannot license IO in situ; in the absence of a dative clitic, the quantifier must stay low, and must be Case-licensed by an Appl merging low—which is why ‘tous’ cannot remain ‘prepositionless’ in (56b). Finally, (56c) clearly shows that, even when the IO clitic is 3\(^{rd}\) person, appearing to the right of the DO clitic, it moves through Spec-A ppl, as the floating quantifier has again the same distribution as in (56a); that is, one has to assume that even in the cases of apparent DO-IO clusters,
e.g. le-lui, syntax generates IO-DO as in (48), perhaps followed by some reversal for independent reasons, perhaps even through some postsyntactic/PF operation. Then, it is arguably not justified to consider that the default clitic ordering is DO-IO, potentially reversed due to the sensitivity to person hierarchies (as Anagnostopoulou (p.c.) suggests; on the contrary, it seems to me that in Romance in general the default order is IO-DO, as in all clusters involving 1st/2nd person clitics, while 3-3 clusters are the ones that tend to be (morphologically or otherwise) special across Romance, cf. glielo (<*le lo) in Italian or se lo (<*le lo) in Spanish etc.

It seems that in languages with inherent Case, manifested by the existence of oblique/dative case morphology, even if this is restricted to clitics, DPs with theta-roles assigned in Compl-V of ditransitive predicates, i.e., goals/recipients, necessarily correlate with this Case (given also that oblique case is in a way the morphological reflex of a series of theta-roles), i.e. they cannot bear a purely structural, i.e. unvalued/uninterpretable Case feature, like IO-DPs in English do, presumably due to the lack of any case morphology. This is why French too, like Greek, lacks the English-style double DP frame. However, due to the lack of case affixes for elements other than clitics, when IO is a non-clitic, case on DPs is marked by Appl itself, which is realised as à. This may also account for the behaviour of à as a genuine Case marker in French, as observed by Jaeggli (1982) – see (30-31) and Table 2 above.

As already said, when this kind of probe is employed, it checks the [uCase] feature of the IO-DP itself, and the presence of à, which cannot be absorbed/suppressed in passives/ECM etc., distinguishes IO from structurally-marked DPs. Being a Case assigner itself, with the properties already mentioned, it does not need to move IO to its Spec, since IO can now value its active inherent [uCase] in situ; therefore, the operation(s) triggered by Appl do(es) not alter the Agree domain of any agreement head immediately above it, and consequently, given (16), it can merge as low as just above VP/RootP (57). The adjacency between à and the IO DP is made possible by the fact that V undergoes head movement and DO moves to Spec-v* as usual (since Appl here does not intervene between the two heads, they need not be merged/projected as separate)34.

34 This gives rise to questions concerning the effects of DO’s intervention between Appl and IO; consider the following two possibilities: (a) Appl in this case bears a [uParticipant] probe, as in dative clitic contexts, which can access the IO DP, as long as not [+Participant], i.e. 1st/2nd person DO intervenes; given that the DO-à-IO construction is apparently not subject to the PCC, then one could assume that not all instances of à are instantiations of Appl, but some of them are just Ps heading PPs.
Alternatively, a more costly (given (16)) and hence less preferred option, although probably attested, given (59), is to merge Appl just above VoiceP; then, the edge of the phase serves as an escape hatch for the IO DP which would otherwise be left with an unvalued/active Case feature (58)\(^{35}\); this derives the order in (59), in which the IO DP precedes DO and clearly binds it\(^{36}\).

\[(59) \text{Jean a attribué [à chaque mot], son, symbole}
\]

‘?Jean attributed to each word its symbol’

(from McGinnis 1998:98-99)

These two options regarding the point where [Appl \(\tilde{\alpha}\)] is to be introduced are clearly both employed in Italian as well —alongside the null Appl that attracts dative clitics to its Spec. When [Appl \(\tilde{\alpha}\)] is merged low, between RootP and v*P, then DO-IO orders, with DO potentially binding (into) IO emerge, as in (60a). When [Appl \(\tilde{\alpha}\)] merges high, between VoiceP and TP, then the derivation proceeds as in (58), yielding IO-DO orders where IO can bind (into) DO (60b). And, finally, Italian also allows the sort of (discourse-related) A’-scrambling described by Belletti & Shlonsky (1995), which allows DO to A’-move above IO and ApplP in a structure such as (58), yielding a DO-IO order where DO reconstructs and can be bound by IO (60c).

\[\text{externally merged in Compl}\text{-V (i.e. they realise the equivalent of the prepositional ditransitive frame found in English and SMG); (b) [Appl \(\tilde{\alpha}\)] has a [uCase] feature only, which can only probe similar, i.e. Case features; DO’s [uCase] is visible to [Appl \(\tilde{\alpha}\)] but, being completely unvalued, it cannot value it; IO’s hybrid [uCase], on the other hand, is both active and capable of valuing Appl’s [uCase] thanks to its inherently (partially) valued content.}\]

\(^{35}\) This movement operation, if real/correct, looks like a sort of A-scrambling, since it feeds binding; this kind of movement of DPs with unvalued Case, triggered by Voice’s EF, is probably a property of Voice, which needs to be parameterized, as it is clearly absent from e.g. SMG.

\(^{36}\) Alternations of the relative ordering of postverbal complements/modifiers etc. do not seem to be as freely available in French as in e.g. Italian or Greek, with the exception of Heavy NP shift. See however the following example from Boneh & Nash (2011:61), which is essentially structurally identical to the Italian (60c):

(i) \(\text{La maîtresse a rendu son, cartable à chaque élève,}
\]

‘The teacher gave-back his schoolbag to every pupil’

Following Richards’s (1999) ‘tucking-in’, DP\(_{IO}\) occupies an intermediate specifier between EA and Voice; T’s Agree with EA and its subsequent movement to Spec-T cancel its (defective) intervention between Appl and DP\(_{IO}\).
(60) a. L’ infermiera ha dato ogni bambino alla propria mamma. (Italian)
   The nurse has given every infant to the own mother
   ‘The nurse gave every infant to his/her own mother.’
b. L’ infermiera ha dato ad ogni mamma il proprio bambino.
   The nurse has given to every mother the own infant
   ‘The nurse gave every mother her own infant’
c. L’ infermiera ha dato il proprio bambino ad ogni mamma.
   The nurse has given the own infant to every mother
   ‘?*The nurse gave her own infant to every mother’

(from Folli & Harley 2006:130)

Examples such as (59) and (60c) demonstrate why IO>DO constructions with à/a-IOS in French and Italian, on the one hand, and se-IOS in SMG, on the other, are not amenable to the same kind of analysis. First, while (59) shows that the à/a-IO>DO pattern in French (and possibly in Italian as well) is not subject to any animacy restrictions (given what we said about the feature content of [Appl à]), the se-IO>DO pattern in SMG clearly is:

(61) a. *apedhose se kath etiai ta apotelesmata tis, (SMG)
   attributed.3SG to every reason.ACC the results.ACC its
   ‘*(S)he attributed (to) every/each reason its results’
b. (?)apedhose kathe apotelesma, sta (praghmatika) etiai
   attributed.3SG every result.ACC to-the (real) reasons.ACC its
   ‘(S)he attributed every/each result to its (real) reasons/causes’

Second, (60c) shows that a scrambled DO can reconstruct below an a-IO in DO-a-IO in Italian; on the contrary, in Greek, which also allows this kind of short (A’)-scrambling, it is precisely this kind of reconstruction that is not possible, i.e., DO-se-IO patterns with DO-IODP in not allowing reconstruction of DO below IO for binding purposes, as already seen (cf. (9b), repeated below as (62)); I take this to indicate that high à/à-IOS and high se-IOS do not occupy the same position, assuming that the (im)possibility of reconstruction is due to configurational reasons38.

38 A speculation about what lies behind this contrast could be the following: when X c-commands Y, with X and Y being in their A-positions, A’-scrambling of Y below the edge of a phase has the effect of cancelling the relationship between X and Y for binding purposes, without really reversing it, since
(62) *Edhiksa ton dhaskalo tu; se/ston kathe mathiti (SMG)
    Showed.1SG the teacher.ACC his.GEN.CL to/to-the each/every teacher.ACC
    ‘I showed his teacher to every pupil’

Finally, moving to Spanish, Demonte (1995) shows that ditransitives have the (binding) properties of double-object constructions, i.e. there is evidence for IO asymmetrically c-commanding DO, only if a dative clitic is present—although, as she shows, this is not a bi-conditional, as far as goal-ditransitives are concerned (63). In other words, [Appl a] may not exist in Spanish, which would account for the differences of its syntactic behaviour from that of its counterpart in French (see previous section), or at least it may not merge higher than DO.

(63) a. *La profesora entregó su dibujo a cada niño (Spanish)
    The teacher.FEM gave.3SG 3SG.POSS drawing to each child
    ‘The teacher gave his/her drawing to each child’

b. La profesora entregó cada dibujo a su autor
    The teacher.FEM gave.3SG each drawing to 3SG.POSS author
    ‘The teacher gave each drawing to its author’

c. La profesora le pasó a limpio su dibujo a cada niño
    The teacher.FEM 3SG.DAT.CL gave back-cleared his drawing to each child
    ‘The teacher gave each child hack his/her cleared drawing’

d. *La profesora le pasó a limpio cada dibujo a su autor
    The teacher.FEM 3SG.DAT.CL gave cleared each drawing to its author
    ‘The teacher gave each cleared drawing to its author’

(from Demonte 1995:10-11)

Y now occupies an A’-position. More concretely, we may assume (with McGinnis 2001) that ApplP is a phase (in which case the various relations between Voice/v* and elements below ApplP that I have been assuming so far must be regulated by the ‘weak’ version of the PIC, as defined in Chomsky 2001); then, in [VoiceP EA Voice [v*P IO>PP v* [Appl <IO> Appl [v2P DO v2 [Root <DO> <Root> <IO>]]]], DO must obligatorily (A’-)move through the edge of Appl; if the phase level which is relevant for binding theory is VoiceP, then DO is ‘seen’ by LF in a position which can neither bind IO (being an A’-position) nor be bound by IO (not being c-commanded by it). On the contrary, in [VoiceP EA Voice [v*P IO>PP v* [Root <DO> <Root> IO>PP]], IO>PP can A’-scramble immediately above VoiceP; in that position, LF may not see it and the c-command/binding relationship between DO and IO within VoiceP may not be reversed. Similarly, in [ApplP [Appl a] [VoiceP DP>IO [VoiceP <EA> Voice [v*P DO v* [VP <DO> <V> <DP>]]]], DO may have to A’-move through Spec-Appl, when scrambled, but still higher than the VoiceP phase, thus not reversing the IO>DO relationship seen by LF. Certain aspects of this solution are admittedly quite stipulative, so I will not pursue it further; however, it does seem to capture these reconstruction facts correctly.
It seems then that the clitic is what signals the presence of Appl, which is always responsible for IO being able to bind (into) DO—assuming, as we have done so far, that DO asymmetrically c-commands IO, if no Appl is merged and if there is no A-scrambling. I will therefore suggest that the clitic is the spellout of Appl’s features, which must then be a full set of φ-features. Therefore, at least in Spanish, Appl does inherit a φ-set from Voice, the phase head; furthermore, even we suppose that Appl always inherits Voice’s features (as long as it is in its domain), in Spanish its inherited [uφ] features and its intrinsic [uParticipant] feature seem to form a bundle and probe together, as one probe—as opposed to the scenario in fn. 10 for Greek: thus, Appl can only match IO (and be realised as a dative clitic), as long as no [+Participant], i.e., 1st/2nd person DO intervenes. Therefore, if this is the right assumption, then the way uninterpretable/unvalued features may or may not bundle together, in order to form unique or separate probes, seems to be a point of parametric variation. In any case, since it is always obligatory in the presence of Appl, the dative clitic in Spanish is in fact the spellout of Appl’s [uφ] features which are valued by IO under Agree, rather than the result of incorporation/head-movement just in case IO is a defective goal; in other words, the dative clitic is an agreement affix, rather than the head of a (clitic) movement chain (64). Finally, having inherited Voice’s [uφ], Appl also possesses a Case assigning capacity, therefore it can value IO’s active inherent [uCase] in situ, without needing to attract it to its Spec (cf. 63c).

(64) [VoiceP EA Voice [ApplP Appl[uParticipant, uφ: CL.DAT] [v*P DO v* [VP <DO> <V> IO]]]]

It seems, then, that Spanish a is just like SMG se, in that it sometimes instantiates a P (when there is no Appl, and IO cannot and does not need to Agree) while other times it instantiates a Case marker, a possibility which straightforwardly accounts for the similarities in the syntactic behaviour of the two elements, observed in the previous section. The difference is that a, being able to assign Case itself, only optionally attracts IO (perhaps as an optional activation of its EF, if we assume that Appl is phasal); notice than only when a dative clitic is present, i.e. when Appl is spelt out, can IO precede DO. When IO is left in situ, then the apparent backward binding observed in (63c) arguably obtains in the same way as Weak crossover obviations when the quantified DP is lower than its variable but clitic-doubled (65). As
Alexiadou & Anagnostopoulou (2000) suggest, binding in this case ‘is computed on the basis of the derived position of the quantificational object – i.e. the clitic position [NB. on my account the clitic and the quantified DP in Spanish do not form a movement chain, but still they are co-indexed and hence LF interprets them as a ‘referential’ chain –DM] – and the VP-internal of the subject which contains the pronominal variable’ (Anagnostopoulou 2003:208); likewise, in (63c), also in accordance with the ‘irreversible binding’ theory, the two copies that are taken into account for binding purposes are the dative clitic, which carries the same index as the quantified phrase, and DO in its first-merged position.

(65) I mitera tu, *(tu,) edhose tu kathe pedhju, fajito (SMG)

The mother:NOM his him.DAT.CL gave.3SG the each child.DAT/GEN food.ACC

‘*His mother, gave each boy, food’ (from Anagnostopoulou 2003:208)

The following table summarises the syntactic properties of those ditransitive constructions in which an applicative head can be argued to be present, in SMG, French, Italian and Spanish.
<table>
<thead>
<tr>
<th>Clitic clusters</th>
<th>SMG</th>
<th>French</th>
<th>Italian</th>
<th>Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clitic clusters</td>
<td>IO-DO</td>
<td>IO-DO (except with 3rd person IOs)</td>
<td>IO-DO</td>
<td>IO-DO</td>
</tr>
<tr>
<td>IO binds DO (IO&gt;DO), with IO=XP</td>
<td>Yes (IO=DP/Se-phrase), only in IO-DO</td>
<td>Yes, in IO-DO, in those varieties that allow it (IO=à-phrase)</td>
<td>Yes, in both DO-IO and IO-DO (IO=a-phrase)</td>
<td>Yes, in both IO-DO and DO-IO, as long as IO is clitic-doubled (IO=a-phrase)</td>
</tr>
<tr>
<td>IO&gt;DO with inanimate IO XP</td>
<td>No</td>
<td>Yes</td>
<td>No (see Folli &amp; Harley 2006)</td>
<td>Yes, with clitic doubling, as long as DO denotes part of IO (see Ch.4)</td>
</tr>
<tr>
<td>Role of Appl</td>
<td>Attracts dative XPs and clitics higher than DO (Appl=e)</td>
<td>Attracts dative clitics above DO (and prepositionless datives, see Kayne 1975) (Appl=e), matches and licenses dative XPs in situ (Appl=à)</td>
<td>Attracts dative clitics (Appl=e), matches and licenses dative XPs in situ (Appl=à)</td>
<td>When present, it Agrees with the dative XP and is obligatorily spelt out as a dative clitic</td>
</tr>
</tbody>
</table>

Table 3: The ‘double-object’ (IO>DO) pattern cross-linguistically

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39 It must be noted that ‘Italian is substantially more generous than French as far as datives of the form a+DP are concerned. Conversely, the P-less dative *tous* that colloquial French allows is completely impossible in Italian’ (R. Kayne, p.c.). As already shown in Kayne (1975), French resists non-recipient/non-possessor datives, as opposed to Italian, which is probably related to the theta-related content of the Case feature that [Appl a/à] checks/assigns. Also, *tous* might itself bear oblique case, without the need/support of an extra marker, like dative clitics/weak pronouns, while this might not be the case with Italian tutti.
3.4.5. A-dependencies with and across dative DPs

Besides the other extensions of this structural analysis, the position of the dative argument also correlates with the availability of Agree and A-movement in constructions with such arguments.

To begin with, in languages in which indirect objects bear inherent Case (either ‘pure’/inactive, or active, of the sort discussed in this chapter), it is predicted that no passivisation of these DPs is possible, as such Case features cannot be absorbed/suppressed. Thus, no goal-passives can be derived from either the double object construction (i.e., IO>DO) with oblique IO DPs (66a), or the DO>IO configuration (66b). Passivisation of IO in the latter is also blocked by the intervention of a structurally Case-marked DP, namely DO, between T and IO.

\[(66)\] a. \([T \ldots [\ldots \text{IO}_{\text{DP}}[{u\text{Case}}]. [\ldots \text{DO}_{\text{[uCase]}]}] \]

\*[I Maria], dhothike t, ton charti (SMG)

The Mary.NOM was-given the map.ACC

\[(66)\] b. \([T \ldots [\ldots \text{v2P}_{\text{DO}}[{u\text{Case}}] \text{v2} \text{[RootP <DO> Root IO}_{\text{Case}}\text{]]}\]

\*[Marie, a été donnée la carte t, (French)

Mary has been given the map

‘Mary was given the map’

Double-object constructions, i.e. the derivation in (18) can feed passivisation only when the indirect object DP bears a (completely) unvalued/uninterpretable Case feature, i.e. accusative in the active, as in English (67).

\[(67)\] Mary was given t, the map

Having an unvalued [uCase] feature, IO\textsubscript{DP} is both visible and close enough for Agree with T and able to get valued as nominative in English (68), unlike active inherent IO\textsubscript{DP}’s in Greek and Romance.
However, for (68) to converge, apart from the assignment of nominative to IO and its A-movement, which was shown to be unproblematic, DO must value and delete its [uCase] as well. Most analyses of goal-passives in English are in fact faced with a difficulty to account for the Case of DO in DOCs in a principled way, often resorting to stipulative solutions, such as the assumption that for some reason DO in DOCs bears inherent Case, which is preserved in goal-passives (see e.g. Larson 1988); thus, theme arguments are assumed to be linked to a (morphologically non-distinguishable) inherent Case feature sometimes, while most of the time they are marked with structural Case –‘theme’ being quite an unusual theta-role to be associated with inherent Case. Thus, such analyses also seem to ignore the fact that, in a number of English dialects (including many British dialect), DOs in DOCs do passivise, which implies that the whole issue of passivisability of DO might be related primarily to configurational/locality considerations, rather than some construction-specific properties of Case (see Haddican 2010 and Myler 2010, where it is shown that at least partly theme passives in many dialects correlate with the availability of theme>goal-DP orders).

One of the consequences of the structural analysis advocated in this chapter is that, in active DOCs in English, both v-heads inherit [uφ] and a Case assigning capacity from Voice, given our view of feature inheritance/transmission, therefore both internal arguments are marked with structural Case, more specifically accusative –thus avoiding the aforementioned stipulative solution. Now, assuming a ‘smuggling’ analysis of participial passives (see Collins 2005), the same possibility arises for those v-heads that are contained in the ‘smuggled’ constituent in the edge of the VoiceP phase (69): in that position, v2/vTRANSFER, which is included in PartP, can inherit the same features (of C) that T does, following our earlier assumption that the features of a phase head are transmitted to all the relevant heads in its complement domain up to the next (strong) phase boundary (70).
Then this seems to account in an elegant way for the fact that DOs in goal-passives, i.e. passivised DOCs, can still have their [uCase] feature valued: \( v_2 \), as part of the smuggled PartP, can Agree with DO and value its Case\(^{40} \). On the contrary, since \( v_{\text{CAUSE}} \) is not part of the smuggled constituent, IO\(_{DP} \) can only Agree with T. Likewise, in passives of simple (mono-)transitive predicates, \( v \) is never part of the smuggled constituent, therefore the only head with an (inherited) Case assigning capability is T.

The mechanism of feature transmission assumed here relies on the assumption that a passive VoiceP is phasal, thus constituting a ‘barrier’ for further feature inheritance. Indeed, in what follows I will assume that passive VoiceP’s are phases –see Legate (2003) for some compelling empirical evidence from reconstruction effects–and that the possibility of establishing Agree/movement relations between T and internal arguments in such verbal phrases is not due to the absence of a phase boundary but, instead, due to the (relatively weaker/less restrictive definition of the) Phase Impenetrability Condition, as formulated in Chomsky (2001), and as already adopted in Chapter 2:

\[ (71) \text{PIC II (Chomsky 2001): The domain of a (phase head) H is not accessible to operations at ZP (the next [emphasis mine –DM] strong phase); only H and its edge are accessible to such operations.} \]

\(^{40} \) On the other hand, this also predicts that both DPs should be marked as nominative, if this is the Case inherited by C, a prediction which is relatively hard to test due to the lack of case morphology in nominal DPs, while those pronouns with telling (though sometimes misleading) case morphology, i.e., 1\(^{st}/2\(^{nd} \) person, and singular masculine/feminine 3\(^{rd} \) person pronouns, are probably always infelicitous in such contexts (i.e., as direct object of DOCs) for independent reasons. As Ian Roberts (p.c.) suggests, it might be that ‘nominative’ morphology on pronouns is felicitous only in preverbal subject positions, cf. e.g. ‘*It is I’ etc. Alternatively, as Elena Anagnostopoulou (p.c.) suggested to me, we may assume that the actual value of Case/case features is computed in accordance with some algorithm such as Marantz’s theory of ‘dependent case’ (without necessarily discarding Chomsky’s Activity Condition, see the discussion in Chapter 1), in which case DO’s C/case, being such a Case, must be valued as accusative (even) in passive contexts in the presence of another nominative subject.
Thus, only when the CP phase is completed does the complement of Voice become inaccessible to any operations\textsuperscript{41}.

Apart from the restricted possibilities of passivising/A-moving the dative argument (and putting aside quirky subjects in languages such as Icelandic for now), another issue with numerous empirical consequences is the possibility of agreement/movement dependencies across such arguments. To begin with, many English dialects, probably including standard American English, do not allow passivisation of the direct object when IO is a DP too (69). This can be straightforwardly accounted for by the blocking/minimality effects on A-movement of an intervening DP with identical features (interpretable $\varphi$-features and [uCase]), namely IO$_{DP}$, between T and DO (70); thus, T never gets to Agree with DO.

\textsuperscript{41} It must be noted that, while Agree (and Move) operations are sensitive to the formulation of the PIC in (71), feature inheritance/transmission can only go as far down as the first closest phase (a less restricted formulation of this mechanism would not seem to be motivated by any empirical or conceptual considerations –see in particular Richards’s (2007) and Chomsky’s (2006, 2008) arguments that link feature inheritance to the PIC).
So, what forces smuggling in English passives is the need to establish an Agree relationship between T and the object DP, which is otherwise blocked by the intervention of the external argument DP; Collins presents convincing evidence that the external argument is present in passives, occupying the position in which it is externally merged, also repeating familiar arguments (from Roberts (1987), Baker (1988) and Baker, Johnson & Roberts (1989)) which show that, even when it is implicit, the external argument can control into adjuncts, license depictive secondary predication or even bind (into) an internal argument, thus probably occupying an A-position.

(75) a. The boat was sunk PRO to collect the insurance money
(from Manzini 1983)

b. ??Testimony was given about himself, by the suspect.
(from Roberts 1987:101)

Nevertheless, in languages such as Greek, there is no evidence that the external argument is syntactically present, at least not in Spec-Voice/v* or any other A-position; instead, the equivalents of by-phrases in SMG (PPs headed by apo ‘from’) have all the properties of adjunct PPs. This is no surprise, if passive voice morphology (in languages with synthetic passives at least) is related to/realizes the subject theta-role, as often suggested (see e.g. Baker, Johnson & Roberts (1989), Manzini, Roussou & Savoia (2010) inter alios). Consider e.g. (76) below: in adjunct gerundival clauses in SMG, the null subject needs to be controlled by some argument of the matrix clause (see Sitaridou & Haidou (2002), Tsimpli (2000), Panagiotidis (2010), either a subject or a non-subject (76a); however, in (76b) the null subject of the gerund cannot be controlled by any XP coindexed with the implied external argument, either overt or covert. Similarly, (75b) cannot be translated in SMG and the equivalent of (75c) would be seriously degraded (77).
(76) a. PRO<sub>1</sub><sup>i/k</sup> vjendonas apo to peripoliko, pro<sub>i</sub> ton<sub>k</sub> pirovolisan i idhiki fruri<sub>i</sub>  
PRO getting-out of the patrol car, pro him.ACC.CL shot.3PL the policemen.NOM  
‘While getting out of the patrol car, the policemen shot him’

b. PRO<sub>k</sub><sup>i/*</sup> vjendonas apo to peripoliko, pro<sub>i</sub> pirovolithike (apo tus idhikus frurus<sub>k</sub>)  
PRO getting-out of the patrol car, pro was-shot.3SG (from the policemen)  
‘While getting out of the patrol car, he was shot (by the policemen)

(77) (Mia) katathesi dothike schetika me tis praksis tu<sub>i</sub>(?)*<sub>k</sub> apo kathe ypopto<sub>k</sub>  
One testimony was-given relevant to the actions his.POSS from each suspect  
‘??A testimony was given about his actions by every suspect’

Therefore, in passive constructions with such properties, smuggling is arguably not forced; EA is either not between T and the nominative internal argument or, even if it is, it is an adjunct PP, with no structural [uCase] feature visible for (φ-)Agree, unable to give rise to any minimality effect. Passivisation, then, in some languages, may proceed as traditionally described, i.e. as a standard instance of A-motion, although it is not clear what exactly the availability of this configuration correlates with; i.e., it is unclear if the availability of passivising A-motion (in one step), and consequently the (non-)intervention of the external argument, correlates with synthetic passives, i.e. the unavailability of a PartP (see however Collins 2005 for a smuggling analysis of Kiswahili, a language with synthetic passives), or perhaps with null subjects etc.

Assuming, as before, that the passive VoiceP is a phase, thus blocking feature transmission from C to any v-heads below Voice, then in all passives in languages like Greek, including passivized DOCs, the only head with unvalued φ-features and a Case assigning capacity is T. T can also probe below Voice, given (71). Thus, IO<sub>DP</sub> is the closest DP with interpretable φ-features and active Case to be probed; however, even if IO<sub>DP</sub> manages to value T’s unvalued features, despite the fact that it cannot value its [uCase] as nominative, as already noted, the derivation cannot converge because of DO’s [uCase]. This intervention of IO<sub>DP</sub> between T and DO blocks theme-passives in the presence of an IO<sub>DP</sub> (though not with an IO-clitic, see below), as Anagnostopoulou (2001, 2003) originally observed, and such passives are degraded in SMG (though see chapter 6 on micro-variation in this respect):
However, as already discussed in chapter 2, in SMG the presence of a dative clitic (whether or not doubled by the dative argument DP) can apparently obviate this minimality effect, not only in theme-passives, but in all DAT-above-NOM configurations (78’), as per Anagnostopoulou’s (2003) original generalisation. An account based on Chomsky’s (2000, 2001) notion of ‘defective intervention’ was alluded to in §2.4.2, on which I will now elaborate, also in the light of some of the conclusions of previous sections.

(78’) a. (I efkeria) ?*(tu) dhothike tu Jani (i efkeria) (passive)
   The opportunity.NOM him.DAT.CL was-given the John.GEN/DAT
   ‘The opportunity was given to John’

   b. O Janis *(tis) fenete tis Marias (na ine) kurasmenos (raising)
   The John.NOM her.DAT.CL the Mary.GEN/DAT Subj. is tired.NOM
   ‘John seems to Mary to be tired’

   c. (I musiki) dhen ?*(tis) aresi tis Marias (i musiki) (psych unaccusative)
   The music.NOM not her.DAT.CL appeals-to the Mary.GEN/DAT
   ‘Mary does not like music’

   d. Dhen *(tis) irthe akoma tis Marias oreksi ja dhulja (motion unaccusative)
   Not her.DAT.CL came.3SG yet the Mary.GEN/DAT appetite for work
   ‘Mary is still not in a mood to work’

In a configuration such as (73) above, repeated here as (79) (omitting irrelevant details), if DAT (here, IO_DAT) is (/is headed by) a φ-clitic (79b), then T has to incorporate it, following what we said earlier about defective goals (79c). However, it must be noted that T, apart from a uφ-set, is also endowed with a [uD] feature, at least in null subject languages, in which this [D] feature on T may satisfy the EPP (see Alexiadou & Anagnostopoulou 1998, among many others, for more or less similar implementations of this intuition). Also, according to Roberts (2010b) and Holmberg
(2010), *pro* in e.g. French can be shown to have the same properties/distribution as weak pronouns, i.e., elements that do contain a [D] feature; the deletion of the pronoun, i.e. the emergence of a null subject, is then due to the fact that, comprising only a set of φ-features and a D-feature, it is a defective goal with respect to T’s feature make-up, giving rise to (rich) subject agreement morphology and deletion of the pronoun in its theta-position (T’s EPP is satisfied by attraction of the deleted copy). Having such feature content, T in (79c) attracts the clitic without however valuing its own unvalued features with the values of the clitic’s interpretable features, following Chomsky’s (2001) “maximize matching effects”, which enables the probe to remain active after partial Agree (based on evidence from participial and expletive constructions): since the dative clitic lacks a [D] feature and, consequently, T cannot match all of its uninterpretable features, it has to probe again until it matches a goal that can value both its [uφ] and its [uD]. The theme argument, then, being such a goal, matches T and values the subject agreement affix accordingly, also valuing its own [uCase] feature as nominative.

\[ 42 \text{ This seems to contradict with the view presented earlier that clitic-movement/incorporation is the (PF-) effect of copying the values of a defective goal’s features on the probing head; I think that there are two kinds of possible technical solutions: (i) we may slightly revise this idea, by reversing the ordering of these operations, namely valuation and incorporation, adopting a version of Mavrogiorgos' (2010) mechanism of cliticisation: the clitic moves to the Spec of the probing head first, and then it incorporates, provided that its features are a subset of the probe (a process reminiscent of Matushansky’s (2006) ‘m-merger’); incorporation/head-movement may result in the valuation of the unvalued features of the probe, only as long as ‘maximize matching effects’ is observed; (ii) alternatively, we may assume that T in this case actually has two probes, i.e. two bundles of uninterpretable/unvalued features, namely a set of φ-features [uφ] and set comprising both φ-features and a [uD] (one of the two bundles is inherited from C, while the other is inherent, perhaps a lexical property of a distinct T head in the Lexicon, which is available in languages like Greek). An IO_{DP} would be able to value both probes at the same time, thus preventing T from probing further down, while a clitic only values the former probe, but not the former due to ‘maximize matching effects’, thus letting it probe again until it matches the theme DP/DO. A variation of (ii) would be to assume that there are more than one inflectional heads in the INFL/T-domain, all of which inherit [uφ] from C: when nothing forces them to project separate XPs (e.g. to serve as hosts of distinct elements, see Bobaljik (1997, 2002), Bobaljik & Thrainsson (1998) for a similar reasoning) they may be fused into one syncretic T/INFL head, while they may project distinct XPs when necessary, as in our case. Thus, one inflectional head, say Asp, Agrees with the dative φ-clitic and incorporates it, by copying its values on itself; then Asp undergoes head-movement to T, carrying along the clitic, which however cannot value T’s [uφuD] probe due to ‘maximize matching effects’; T is again free to probe lower than the thematic position of the dative clitic and match the theme DP. (Again, we have to assume that [uD] is an inherent/lexically specified –and perhaps even language-specific –feature of T, see the discussion above about null subjects.) This complication is something that any analysis has to deal with, as long as it relates the cliticisation of the dative in intransitive contexts to properties/features of T, especially those analyses that treat (obligatory) dative clitics in such configurations as (a sort of) agreement markers; then, T/INFL should somehow allow for two agreement affixes. \]
Turning to clitic doubling of the indirect object DP, which also licenses theme-pasives, the same reasoning can be applied. Adopting an approach to clitic doubling such as Uriagereka’s (1995) analysis, which is also taken up and adapted by Roberts (2010), the doubling DP originates in the same XP as the corresponding clitic; then the clitic undergoes head-movement, ‘stranding’ the doubling DP in situ. For the sake of simplicity, in (79d) below I am adopting a version of Uriagereka’s (1995) original representation (where it is irrelevant whether the DP double occupies a Spec or a Compl position) – see Roberts (2010) who argues for a slightly different representation, which does not affect the argument presented here, as well as Anagnostopoulou (2003, ch. 4) who also discusses the Uriagereka/‘big DP’ among others.

(79) d. \( \phi_{IO,CL} \cdot T_{[uφ,uD]} [ [ \phi_P [DP IO_{DP}] <\phi_{IO,CL}> ] [ DO_{[uC]eCase}] ] ]

Therefore, in (79d), T probes the indirect object \( \phi_P \), matches its head, and incorporates it in the way already described; this matching relation results in the valuation of \( \phi_P \)’s uninterpretable features, including those of the IO_{DP} (i.e., its [uCase]). Therefore, although in principle IO_{DP} is able to match T’s [uD], after Agree with \( \phi_{IO} \) has taken place, IO_{DP} – in fact the entire \( \phi_P \) – is a defective intervener. Since the head of \( \phi_P \) is incorporated into T, then \( \phi_P \) is part of a chain the head of which is outside T’s complement/Agree domain, therefore its defective intervention effect is cancelled and T is free to probe further down, i.e. to reach the theme argument/DO, to match both its [uφ] and its [uD].

An interesting implication of this analysis is that only clitic-movement/clitic-doubling can render dative DPs defective interveners in SMG – cancelling their defective intervention effect at the same time. Furthermore, note that this analysis of
SMG dative cliticisation and its effects in theme-passives can easily be extended to all DAT-above-NOM configurations, namely unaccusatives, both motion unaccusatives with dative (morphologically genitive) goals and psych unaccusatives with dative/genitive experiencers, and raising predicates with dative experiencers: all these configurations share the property of having a dative DP (either raised by Appl or not) intervening between T and the nominative theme (80).

(80) a. $[\varphi_{\text{DAT}}-T_{[\text{up}, \text{uD}]} [ [\varphi_{\text{P}} ([\text{DP}_{\text{DAT}}]) <\varphi_{\text{DAT}}>] (\text{Appl}) [\ldots \text{theme}_{[\text{uCase}]][\ldots]]] \text{ (unacc.)}$

b. $[\varphi_{\text{DAT}}-T_{[\text{up}, \text{uD}]} [ [\varphi_{\text{P}} ([\text{DP}_{\text{DAT}}]) <\varphi_{\text{DAT}}>] \ldots [\text{TP subject}_{[\text{uCase}]][\ldots]]] \text{ (raising)}$

Indeed, in SMG, dative DPs display a uniform behaviour in all three configurations (passives, unaccusatives, raising) – although this uniform behaviour of datives in DAT-above-NOM constructions is not necessarily the case cross-linguistically, see below for Spanish in particular. Thus, the presence of a dative clitic renders the structure fully grammatical, whether it is doubled by a dative DP in its thematic/A-position or not, while also the nominative argument may also A-move or stay in situ, controlling the matrix T’s agreement anyway (81), just like in passives.

However, the presence of the dative clitic is favoured or deemed necessary, even when the dative argument itself undergoes some (A’-)movement outside the complement domain of T (see also Daskalaki & Mavrogiorgos 2010) (82), as actually predicted by the assumption that only the dative clitic guarantees that the dative has been deactivated without deactivating T. This is probably what differentiates SMG from other languages, where other kinds of A-/A’-movement of the dative can also obviate its intervention effects in DAT-above-NOM configurations (see below). Turning to the data in (82), in particular, it must be noted that Daskalaki & Mavrogiorgos only cite examples with the genitive/dative interrogative pronoun ‘pju’, which gives rise to strong ungrammaticality in the absence of a corresponding dative clitic (see above on the compatibility of dative clitics with quantified expressions etc.); strangely, if ‘pju’ is replaced by ‘pjanu’, a more colloquial form, the wh-moved dative gives rise to milder ungrammaticality; however, again, the grammaticality of these examples is further restored only in the presence of a dative clitic (furthermore,
notice that (78) is not a case of sharp ungrammaticality either).

(81) a. (O Janis) dhen *(tis) aresi tis Marías (o Janis) (psych unaccusative)
    The John.NOM not her.DAT.CL appeals the Mary.DAT/GEN
    ‘Mary does not like John’

    b. (To ghrama) dhen *(tis) irthe tis Marías (to ghrama) akoma (motion unacc.)
    The letter.NOM not her.DAT.CL came.3SG the Mary.DAT/GEN yet
    ‘The letter has not come to him yet’

    c. (O Janis) dhen *(tis) fenete tis Marías na kurazete (o Janis) (raising)
    The John.NOM not her.DAT.CL seems the Mary.DAT/GEN Subj. gets-tired
    ‘John does not seem to Mary to get tired’

(82) a. Pju *(tu) aresi i ghlosolojía?

    a’. Pjanu ??(tu) aresi i ghlosolojía?
    Who.DAT/GEN him.DAT.CL appeals-to the linguistics.NOM
    ‘Who likes linguistics?’

43 Anagnostopoulou (2003:221) also cites the following two examples (i-ii), with the more formal
    style/archaic ‘tinos’ instead of ‘pju/pjanu’. Admittedly, her examples are more acceptable than (82c)
    and (82a) respectively in the absence of a dative clitic, for some speakers, including myself, however
    the presence of ‘tinos’ may trigger a different, more archaic representation (of the sort discussed in
    chapter 6), i.e. it might be an instance of a purely inherent dative, which is transparent/invisible to
    Agree/Move (thanks to Marios Mavrogiorgos for helping me clarify this issue). Interestingly, ‘tinos’
    does not seem to salvage the derivation (alone, without a co-occurring dative clitic) in interrogatives
    with raising predicates (iii), even for those speakers who have ‘tinos’ as part of their grammar (as
    Anagnostopoulou (ibid.) acknowledges, pace Boeckx 2000, crediting Terzi (p.c.).)

    i) Tinos dhothike to vivlio?
       Who.DAT/GEN was-given the book.NOM
       ‘Who was the book given to?’

    ii) Tinos aresun ta mathimatika?
        Who.GEN appeal.3PL the maths.NOM
        ‘Who likes maths?’

    iii) Tinos *(tu) fanike na ine kurasmeni i Maria?
        Who.GEN him.DAT.CL seemed.3SG Subj. is tired the Mary.NOM
        ‘To whom did Mary seem tired?’

Another type of A’-movement, namely focus-movement, displays a similar behaviour: again, the clitic
can co-occur with a co-indexed focused DP, which is generally prohibited, presumably because of the
salvaging effects of clitic-move/clitic-doubling. Given these two contradictory requirements (i.e.,
the cliticisation requirement in DAT-above-NOM and the incompatibility of cliticisation with foci), for
many speakers focalization of DAT in these configurations is always marginal or even impossible to
produce:

    iv) ?TU JANI ??(tu) [aresi i musiki]/[fenete kali i Maria]/[dothike to vivlio]/[pije to ghrama]
       The John.DAT/GEN him.DAT.CL appeals the music/seems nice the Mary/was-given the
       book/came the letter
       ‘It was John who [likes music]/[thinks Mary is nice]/[the book was given to]/[got the
       letter]’
b. Pju *(tu) fanike iopti i Maria?

Who.DAT/GEN him.DAT.CL seemed.3SG suspicious the Mary.NOM

‘To whom did Mary seem suspicious?’

c. P ju *(tu) dh othike i ipotrofia?

Who.DAT/GEN him.DAT.CL was-given the scholarship.NOM

‘Who was the scholarship given to?’

d. Pju *(tu) irthe o logharjasmos?

Who.DAT/GEN him.DAT.CL came.3SG the bill.NOM

‘Who received the bill?’

(from Daskalaki & Mavrogiorgos 2010, with my addition of a’-d’)

Therefore, the mechanism of defective intervention and its cancellation described above derives Anagnostopoulou’s (2003:7) generalization concerning dative arguments in SMG (83):

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

However, as already implied, similar intervention/minimality effects triggered by dative DPs in DAT-above-NOM configurations may be obviated not only via cliticisation/clitic-doubling of DAT, but also through A’-movement of DAT, in other languages, notably French, Italian and Spanish—in fact, cliticisation of the dative experiencer cannot salvage the derivation in raising constructions in Spanish. What follows is an attempt to account for this difference between Greek and Romance, as well as the variation across intransitive constructions and languages within Romance.

To begin with, I argued that in all these languages argumental à/a-datives are DPs with active inherent Case (licensed with the help of Appl), rather than PPs, especially when a locative meaning, either literal or metaphorical, is excluded: more specifically, à/a-datives are always DPs in French and Italian, while in Spanish the a can function as a preposition only when it introduces goals, essentially like in Greek, a picture largely confirmed by the behaviour of these à/a elements as
prepositions/case-markers in each language. Therefore, it is indeed anticipated that à/a-datives should give rise to minimality effects in DAT-above-NOM configurations, e.g. raising across dative experiencers, as actually observed.

(84) Jean semble (*à Marie) avoir du talent (French)
    John.NOM seems to Mary have.INF of-the talent
    ‘John seems (to Mary) to have talent’
(85) Gianni sembra (?)a Piero) fare il suo dovere (Italian)
    John.NOM seems to Piero do.INF the his duty
    ‘John seems (to Piero) to do his duty’
(86) Este taxista parece (*a Maria) estar cansado (Spanish)
    This taxi-driver seems (to Mary) be.INF tired
    ‘This taxi driver seems to Mary to be tired’
    (data adapted from Boeckx 2008, Anagnostopoulou 2003 e.a.)

The significance of the dative experiencer’s Case feature is shown exactly by the fact that such minimality effects can be relativized/parameterised with reference to it; thus, in languages where they either are clearly PP (like in English (87)) or bear inactive [iCase] (like in Hellenistic Greek (88)), dative experiencers give rise to no minimality effects:

(87) John seems to Mary to be nice
    (88) Dokoumen auto:i haptesthai ekeino:n (HG)
        Seem.1PL him.DAT touch.INF those
        ‘We seem to him to be touching those’

Interestingly, but not surprisingly, à/a-datives do not give rise to minimality effects in passives (89). In Spanish, this is trivially explained by the fact that goals introduced by a may in fact be prepositional and low, below the theme argument, thus not giving rise to any intervention effect (89a). But in Italian and French, all dative DPs are assigned Case by [Appl a/à] in situ; thus, if [Appl a/à] needs to inherit some phase head’s [uP] in order to be able to assign Case, this would not be possible within a passive VoiceP. However, recall that these languages have participial passives, therefore a smuggling derivation may be available: if this is the case, then [Appl a/à] is
also part of the smuggled constituent, in which position it can inherit C’s [uφ], like T, and license the IO-DP just like in active contexts.\textsuperscript{44}

\begin{enumerate}
\item a. El premio Nobel fue concedido a Cela (Spanish)

The prize Nobel was awarded to Cela

‘The Nobel prize was awarded to Cela’

(from Demonte 1995:12)

\item b. La carte a été donnée à Marie (French)

The map has been given to Mary

\item c. Il libro è stato donato a Maria (Italian)

The book has been given to Mary

(adapted from Folli & Harley 2006:128)
\end{enumerate}

All of the above examples are also licit if a dative clitic appears instead of the à/a-dative (90) –in Spanish, in particular, the clitic may be doubled by an à/a-dative as well (90c). As already explained, dative clitics in French and Italian are attracted from their thematic position by the same kind of Appl employed in SMG; therefore, their presence is expected to have precisely the same effects as that of their counterparts in SMG theme-passives: the incorporation of the dative clitic into T, via (partial) Agree, cancels the dative’s defective intervention, letting T probe below it and reach the theme, in the familiar way (90a-b). However, recall that in Spanish, it was argued that the dative clitic and the dative argument in the corresponding position (either a full à/a-dative, in cases of clitic doubling, or perhaps a dative pro, when only the clitic appears) do not form a movement chain, therefore the presence of the dative clitic cannot cancel itself the defective intervention of a DP with an active inherent Case feature; moreover Appl in Spanish always needs to inherit [uφ], to license the à/a-dative itself without moving it. This is again possible on a smuggling scenario, where Appl, being higher than the lower phase head, i.e. Voice, can inherit C’s [uφ].

\textsuperscript{44} Alternatively, in case ‘smuggling’ does not apply to (all/some of) the Romance languages, note that it was shown that a derivation such as (58) is also possible, where \([\text{Appl} \, à/â]\) is merged above Voice, and the IO-DP occupies the edge of VoiceP. Being higher than Voice, \([\text{Appl} \, à/â]\) can inherit C’s [uφ] in that position as well.
(90) a. La carte lui a été donnée (French)
   The map 3SG.DAT.CL has been given
   ‘The map has been given to him/her’

b. Il libro gli è stato donato (Italian)
   The book 3SG.DAT.CL is been given
   ‘The book was given to him/her’

   \[
   [\Phi_{IO} - T_{[up]} [\text{PartP} <\Phi_{IO}[\text{uCase}]] \text{ Appl} [\check{\text{vP}} <\text{DO}[\text{uCase}] > \sqrt{<\text{IO}>}]] \text{ VoiceP}…\]

   (applying a smuggling passivisation rule to (57))

c. El premio le fue concedido (a Cela) (Spanish)
   The prize 3SG.DAT.CL was awarded (to Cela)

   \[
   \text{[Appl}_{[up]:\text{DAT}} - T_{[up]} [\text{PartP} <\text{Appl}_{[up]:\text{DAT}}>] [\check{\text{vP}} <\text{DO}[\text{uCase}] > \sqrt{(<\text{IO}_\text{DP})}]] \text{ VoiceP}]\]

   Returning to unaccusatives, the major implication of the above assumptions about Romance, especially French and Italian, is that the dative argument in intransitive (DAT-above-NOM) contexts is a defective intervener by virtue of getting its [uCase] valued by Appl, rather than a structural Case assigner, regardless of the presence of a dative clitic. Therefore, apart from clitic-movement/clitic-doubling, any defective intervention effects triggered by the dative can also be cancelled by any other movement process that can create a chain, the head of which is outside T’s complement domain. This correctly predicts that the grammaticality of (84-85) may be restored by wh-movement, topicalisation or focalisation of the dative argument, without cliticisation, alongside of course dative clitic constructions:

(91) À qui est-ce que Jean semble <à qui> [Jean avoir du talent]? (French)
   To whom is-it that John seems have.INF of-the talent
   ‘To whom does John appear to have talent?’
   (from Anagnostopoulou 2003:221)

(92) a. A Maria, Gianni sembra <a Maria> [<Gianni> essere stanco] (Italian)
   To Mary, John seems be.INF tired
   ‘John seems to Mary to be tired’
b. A chi sembra <a chi> [Gianni essere stanco]?
To whom seems John be.INF tired
‘To whom does John seem to be tired?’

c. Gianni gli sembra [<Gianni> essere stanco]?
John 3SG.DAT.CL seems be.INF tired
‘John seems to him/her to be tired’
(from Boeckx 2009, via Boskovic 2011)

Finally, Spanish presents us with an apparent paradox: while cliticisation/clitic-doubling of the dative experiencer cannot cancel its blocking effect in raising constructions (93a), it is licit and in fact obligatory with gustar and, in general, psych unaccusatives of this type (93b). Assuming that both kinds of dative experiencers are first-merged above the embedded DP and the nominative theme respectively (see chapter 4 on the syntax of dative experiencers), and that they both bear an active inherent [uCase] feature, they should give rise to similar locality/minimality effects.

(93) a. Este taxista (*me) parece [<este taxista> estar cansado] (Spanish)
This taxi-driver me.DAT.CL seems be.INF tired
‘This taxi driver seems (to me) to be tired’

b. A los alumnos *(les) gusta el libro
To the students 3PL.DAT.CL appeals the book
‘The students like the book’
(from Torrego 1998, via Anagnostopoulou 2003:235)

I argued that what looks like a dative clitic in Spanish is actually a spellout of the φ-features of Appl; therefore, there is always some XP in the corresponding A-position, which Appl Agrees with, either an overt a-phrase doubling the clitic, or a dative pro; furthermore, [Appl a] assigns Case to the dative XP. This XP is therefore a defective intervener in both (93a) and (93b), the intervention of which is not cancelled by the dative clitic, which is not the head of a movement chain. This straightforwardly
accounts for the ungrammaticality of (93a): a dative pro intervenes between T and the embedded nominative (94a). The grammaticality of (93b), then, can be explained by the fact that the defective intervener, i.e., the dative experiencer has undergone movement above T, perhaps A-movement, as a quirky subject (94b): following Chomsky’s (2001) familiar reasoning, defective intervention effects are caused only when the head of the chain of the defective intervener occurs in the probe’s complement domain. Moreover, the cliticisation of the dative experiencer in (93b) is not just an option, it simply signals the presence of Appl, which is necessary in order to license the dative experiencer (which carries an active inherent [uCase] feature here, rather than being prepositional). It is unclear why the option of (A-)moving the dative experiencer is only available in gustar/piacere-type psych unaccusatives and not in raising constructions, but probably more empirical research is required before addressing this question.

(94) a. \[ ([TP \ T_{[uφ]} [Appl]\text{Appl}_{[uφ-DAT,CL]} [vP/V P \text{ dative-exp. V} [TP subject ...]])] \]

b. \[ ([TP dat-exp. T_{[uφ]} [Appl]\text{Appl}_{[uφ-DAT,CL]} [vP/V P <\text{dat-exp.}> V \text{ theme}]]] \]

The following table offers a partial overview of A-dependencies in the presence of a dative argument and of the various means of obviation of such arguments’ defective intervention effects.
### Theme-passives

<table>
<thead>
<tr>
<th></th>
<th>SMG</th>
<th>Spanish</th>
<th>French/Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>undoubled dative XPs in A-position</td>
<td>?* (IO=DP)</td>
<td>OK (IO=a*-phrase, merged low)</td>
<td>OK (IO=a/â€”phrase, merged low)</td>
</tr>
<tr>
<td>cliticised/clitic -doubled DAT</td>
<td>OK (obligatory)</td>
<td>OK (optional)</td>
<td>OK (optional cliticisation)</td>
</tr>
<tr>
<td>With A’- moved DAT</td>
<td>??</td>
<td>OK</td>
<td>OK</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>SMG</th>
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<tr>
<td>undoubled dative XPs in A-position</td>
<td>*</td>
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<td>*</td>
</tr>
<tr>
<td>cliticised/clitic -doubled DAT</td>
<td>OK (obligatory)</td>
<td>*</td>
<td>OK</td>
</tr>
<tr>
<td>With A’- moved DAT45</td>
<td>(?)*</td>
<td>*</td>
<td>OK</td>
</tr>
</tbody>
</table>

Table 4: A-dependencies across datives

#### 3.4.6. Person restrictions in intransitive/non-active constructions

I will conclude this chapter with some speculations on the behaviour of intransitive/non-active constructions with respect to the PCC. The picture is far from clear, blurred by seemingly arbitrary cross-linguistic variation, frequent inter-speaker variation, and some contrasts between related constructions that have largely been glossed over in the literature.

SMG, for instance, has been described (by Anagnostopoulou 2003) as lacking the PCC in intransitive/DAT-above-NOM contexts altogether. On this description, Greek appears to have the PCC in active contexts and to lack it in any other context, while languages such as Icelandic have it only in intransitive contexts but not in active ditransitive contexts, and some Romance languages are reported to have it in restricted intransitive configurations (alongside clitic clusters in active ditransitives), namely impersonal reflexives in Italian, where 1st/2nd person nominatives are excluded in the presence of a si (which is ‘dative’ on such an analysis), cf. Taraldsen

45 As already implied, another means of obviation of DAT’s intervention effects in some languages is A-movement of DAT: this strategy is systematically employed in Icelandic (see Boeckx 2000 and references therein), while it is also employed in a restricted number of constructions in Romance, notably psych-unaccusatives (see Belletti & Rizzi 1988, and Landau 2009, who argues that all experiencers of Class III predicates are quirky subjects); in SMG, even if A-movement of dative experiencers is available, it is not enough to cancel their blocking effects, for the reasons discussed above.
(1995) and Burzio (1992), as well as motion unaccusatives with goal dative clitics in Spanish, which do not allow the nominative theme to be 1st/2nd person (according to Anagnostopoulou 2003, citing Ormazabal & Romero 2001). Recall that Anagnostopoulou analyses PCC effects as arising from the competition of two internal arguments for the θ-features of a single agreement head, depending on the availability of this split θ-feature checking mechanism for a given head. Thus, v* in SMG and Romance allows split Agree, giving rise to PCC effects in double object pronouns/clitics, while T does not allow it, giving rise to minimality effects such as the ones discussed earlier in this section; in other languages, v* may not allow split/multiple Agree (e.g. in Icelandic), whereas it is T-heads (or other construction-specific agreement heads) that possess this mechanism. Thus, any parameterisation in this respect should be implemented as a rather arbitrary parameterisation of a syntactic operation such as Agree, rather than in terms of e.g. lexical properties/features of functional heads.

In what follows, I will attempt to show that the approach to the PCC advocated in Chapter 2 may allow a more principled explanation of the variation observed. Focusing our attention on Greek, it first has to be noted that it is not quite accurate that no non-active contexts give rise to PCC effects. Theme passives with dative clitics are considerably degraded when the theme is 1st/2nd person (95a): this has to be analysed as a PCC effect, given that genuinely passive, i.e., agentive, readings are otherwise possible, namely when (i) the theme is 1st/2nd person and the goal argument is realized as a PP (95b), or (ii) the goal argument is a dative clitic/DP and the theme is not [+Participant] (95c).

(95) a. *Tu pulithikame sa sklavi (tu vasilja) (apo tus kataktites) (ja na pro; mas dhjoksun apo ton topo mas)
   Him.DAT.CL were-sold.1PL as slaves (the king.DAT/GEN) (from the conquerors) (for Subj. us.ACC.CL exile.3PL from the place our)
   ‘We were sold (to) him (the king) as slaves (by the conquerors) (PRO to exile us from our country)’
b. Pulithikame sa sklavi sto vasilja (apo tus kataktitesi) (ja na proi mas dhjoksun apo ton topo mas)
We-re-sold.1PL as slaves to-the king (from the conquerors) (for Subj. us.ACC.CL exile.3PL from the place our)
‘We were sold to the king as slaves (by the conquerors) (PRO to exile us from our country’

c. Tu pulithikan (tu vasilja) san sklavi (?apo tus kataktitesi) (ja na proi apalaghun oristika apo aftus)
Him.DAT.CL were-sold.3PL (the king.DAT/GEN) as slaves (from the conquerors) (for Subj. get-rid-of:3PL for good from them)
‘They were sold to the king as slaves (by the conquerors) (PRO to get rid of them for good’

This contrast between (95a) and (95b-c) is expected given that Appl is also present in theme-passives with dative clitics/DPs and needs to establish an Agree relationship with the dative (for [±Participant]) in its first-merged position in Compl-\(\sqrt{\}\); therefore, a 1\(^{st}\)/2\(^{nd}\) theme argument (a 1\(^{st}\) person pro in 95a) in Spec-\(\sqrt{\}\) gives rise to blocking effects as usual (96).

\[(96) [TP [VoiceP Voice\[passive\] [\(\sqrt{V}\) [ApplP IO\[DP/CL\] Appl\[\[uParticipant\] [\(\sqrt{P}\) DO \(\sqrt{<IO>\}]\]}}]]]]

However, notably, 1\(^{st}\)/2\(^{nd}\) person nominative themes in the presence of a dative clitic are perfectly acceptable when a reflexive reading is intended (97).

(97) Tu pulithikame choris andalaghma (*apo tus kataktites)
Him.DAT.CL were-sold.1PL in exchange for nothing (from the conquerors)
‘We sold ourselves to him in exchange for nothing at all’

Adopting an unaccusative analysis of reflexives (see e.g. Embick (2004)), then arguably what differentiates the reflexive and the passive syntax of verbs with non-active morphology in SMG is the presence of a Voice head, which is probably what encodes the agentive reading, by assigning or absorbing the relevant external theta-role(s). Assuming that Voice is a phase head (the only phase head in the thematic
domain of the clause), then the difference lies in the fact that T-Agree and Appl-Agree take place within two separate phases in passives, whereas they may be part of the processes of the same cycle/phase in reflexives and unaccusatives. Following and adapting Chomsky (2008:150-154), then, operations of the same phase may be thought of as interweaving operations, allowing for some degree of counter-cyclicity. If this assumption is on the right track, then we may speculate that T-Agree in reflexives and passives renders the nominative theme/DO a defective intervener by valuing the theme’s/DO’s [uCase], and may cancel its defective intervention between Appl and the goal argument, by creating a subject chain between DO’s thematic position and Spec-T\(^{46}\) (98). This cannot happen in passives, where probing of T and Appl take place in distinct phases (96).

\[(98) [T \left[vP [\text{ApplP IO}_{\text{DP/CL}} \text{Appl} \left[vP \text{theme } \sqrt{<\text{IO}>}\right]\right]]]\]

The above approach implies that our system is derivational and cyclic across phases, with each phase constituting a distinct cycle, but it may be representational within the limits of a single phase—which is perhaps what forces phases to be as small as possible. As Chomsky (2006:6) notes, ‘[a] Merge-based system of derivation involves parallel operations’, which entails that ‘generation of an expression is not strictly “bottom-up”, because of the parallelism of operations’. So, although Chomsky (2005/2008) exemplifies this only with examples of parallel probing by different features of the same phase head PH, e.g. cases with A’-movement triggered by PH’s EF and Agree/A-movement triggered by PH’s Agree features that are inherited by some other head (see in particular Chomsky 2008:151), we may generalize the assumption of the parallelism of operations and extend it to all probing/matching/Move operations as long as these take place within the same phase. Thus, A-movement may cancel any defective intervention effects triggered by the moved element, as long as it does not cross a phase boundary. Similarly, in many of

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\(^{46}\) One could object that a similar cancellation of the DO clitic's defective intervention should then take place in active contexts as well, since the clitic incorporates into \(v_2/\text{TRANSFER}\), which in turn moves outside the complement domain of Appl. However, given Chomsky’s (2000, 2001) definition of chain as a set of occurrences, then the occurrence of the incorporated clitic is always the same (namely, the incorporating head), no matter where the incorporating head further moves; thus, the head of the chain of the DO clitic is probably the deleted copy occupying \(\text{Spec-v}_2/\text{TRANSFER}\), consequently its defective intervention between Appl and IO in \(\text{Compl}\sqrt{v}\) cannot be cancelled. So, for our purposes, an appropriate definition would be: ‘The head of a chain of copies of \(\alpha\) is the last occurrence of Internal Merge of \(\text{just}\) that element \(\alpha\).’
his minimalist papers of the last decade, Chomsky (e.g. Chomsky 2000, 2001, 2008) assumes that A-movement of a quirky dative in Icelandic in the configuration in (99) may make T-Nom agreement possible, while such agreement is blocked when DAT remains in situ. On our assumptions here, but also on Chomsky’s (2000, 2001) account, in order for DAT to be visible for attraction by T, it must carry some active (‘quirky’, in Chomsky’s terms) inherent Case feature47. This makes (99) entirely parallel to (98): The same head X (X=T in both (98) and (99)) that renders an intervening phrase ZP a defective intervener for a probing head Y (Y=Appl in (98), while Y=T in (99)), also moves it outside Y’s Agree/complement domain (100). If we do not assume this generalized parallelism of operations, one would expect that cancellable defective intervention should be restricted to cases in which a ZP intervening between Y and WP has its uninterpretable features/Case valued by some head below Y, with ZP potentially undergoing A’-movement above Y (101), which is how I accounted for PCC-obviation with focalized 1st/2nd person pronouns in §2.5. In the light of the discussion above, I would rather suggest that (100) and (101) are both the two basic configurations in which defective intervention can be obviated:

(99) C [T [DAT [v* NOM … ]]] (from Chomsky 2008:152)

(100) [X[uF:v(ZP)] … Y[uF:v(WP)] … [ ZP[iF:v(ZP), uF:v(X)] … [ … WP[iF:v(WP), uF:v(Y)]]]]

(all the phases that dominate X also dominate ZP)

(101) [X=PH[EF][Y[uF:v(WP)] … [U[uF:v(ZP)] … [ZP[iF:v(ZP), uF:v(Y)] … [WP[iF:v(WP), uF:v(Y)]]]]]

47 Moreover, given our account of Agree in DAT-above-NOM constructions above, we must also assume that T matches DAT for some, but not all its features, which forces it to probe further down, up to NOM, once DAT becomes a defective intervener and is moved above T. On this assumption, see Boeckx (2000) who argues that the obligatory 3rd person agreement in these dative constructions is actually a reflex of T-Agree with DAT; as to why the dative DP cannot value all of the uninterpretable features of T, see Sigurðsson & Holmberg (2008) who argue that [person] and [number] in Icelandic probe separately; so, it might be the case that [person], for some reason, probes before [number], thus valuing DAT and attracting it to Spec-T before [number] can be valued; the precise configuration underlying these processes is however still an open issue.
The hypothesised difference between passives and reflexives/unaccusatives, in terms of phasehood, seems to also be confirmed by the following examples, which replicate Legate’s (2003) diagnostic for phasehood. While the passive VoiceP in (102) creates, at least marginally, a reconstruction site for the wh-moved phrase in its edge, there is apparently no such edge available for reflexive (103) and (other) unaccusative (104) verbal phrases: due to the presence of an R-expression in the wh-moved phrase, which is co-indexed with a pronoun/clitic, the wh-phrase cannot reconstruct in a VoiceP/vP-internal position in the (b) examples, since this would give rise to a Principle C violation; therefore, the only position in which reconstruction is possible is in the edge of the lower phase, if available, which allows the embedded quantified subject to bind the variable pro, without any Principle C (or B) violation caused by the R-expression.

(102) a. Kathe fititis\_i\_ anatethike episima ston Jani\_j\_ ja tin dhiplomatiki tu\_i\_, mia evdhomadha meta ti mera pu pro\_i\_ ton\_j\_ sinandise proti fora.

Every student\_i\_ was officially assigned to John\_j\_ to supervise his\_i\_ dissertation, one week after the day that he\_i\_ first met him\_j\_.

b. ??[Poson kero meta ti mera pu pro\_i\_ sinandise ton Jani\_j\_ proti fora ja ti diplomatiki tu\_i\_], kathe fititis\_i\_ ✓ tu\_j\_ anatethike telika episima *?*

How long after the day that he\_i\_ first met John\_j\_, was every student\_i\_ officially assigned to him\_j\_?

(103) a. Kathe ithopios\_i\_ tis parusiastike tis Marias\_i\_ ston ipno tis\_j\_ mia vdhomadha meta ti mera pu pro\_i\_ tis\_j\_ edhose aftografo.

Every actor\_i\_ appeared (lit. ‘presented himself’) to Mary\_j\_ in her\_j\_ dream one week after he\_i\_ gave her\_j\_ an autograph.

b. *?[Poson kero meta ti mera pu pro\_i\_ edhose aftoggrafo sti Maria\_j\_], kathe ithopios\_i\_ * tis\_j\_ parusiastike ston ipno tis\_j\_ *?

How long after he\_i\_ gave Mary\_j\_ an autograph did every actor\_i\_ appear to her\_j\_ in her\_j\_ dream?
(104) a. Kathe skinothetis; pu emfanizete stighmiea stis tenies tu; tu j dhiafevji tu theati; stis skines opu pro; theli na travixi alu tin prosochi tu j.

Every director; who briefly appears in his; own films escapes the attention/notice/eye of the viewer; in those scenes where he; wants to distract him; (his; attention?).

b. *[Se pjes skines opu pro; theli na travixi alu tin prosochi tu theati;], kathe skinothetis; pu emfanizete stigmiea stis tenies tu; __ tu j dhiafevji __?*

In which scenes where he; wants to distract the viewer; does every director; who briefly appears in his; own films escape his; notice?

So, unaccusative predicates may or may not be phasal, e.g. they are not phasal in SMG, but they clearly are in English, as Legate (2003) shows, as well as presumably in Spanish, in which 1st/2nd person themes in motion unaccusatives are forbidden in the presence of a goal clitic:

(105) *Tú me llegaste tarde (Spanish)
You me.DAT.CL came.2SG late
‘You came to me late’
(from Anagnostopoulou 2003, citing Ormazabal & Romero 2001)

Another apparent exception is the grammaticality of 1st/2nd person nominative themes in the presence of a dative clitic in Romance passives, e.g. in Italian:

(106) Gli sono stata presentata (da Gianni) (Italian)
3SG.DAT.CL am been.FEM presented.FEM (by John)
‘I was/have been presented to him (by John)’
(from T. Guasti, p.c.)

Recall that in Italian, as well as possibly in all languages with participial passives, it can be assumed that passives are formed via smuggling. If this is the case, then Appl is part of the smuggled constituent in the edge of VoiceP and, consequently, any operations triggered by it probably count as operations of the next phase (namely, CP) (107), which derives the absence of PCC effects in the same way that we derived PCC-obviation in SMG reflexives/unaccusatives.
It is not entirely clear how this type of analysis may be extended to another famous case of person restrictions induced by datives in intransitive/non-active configurations, namely quirky dative constructions in Icelandic. An important peculiarity of these constructions is that person restrictions arise (even) in the presence of dative experiencers (108), which in other languages, e.g. SMG/Romance never give rise to similar effects, for reasons to be discussed in Chapter 4 (where it is suggested that dative experiencers are always first-merged higher than nominatives, therefore nominatives do not intervene between these datives and any head licensing them, i.e. Appl, unlike standard PCC configurations). In (108a) 1st person T-Agreement is blocked; in most Icelandic varieties, these constructions become grammatical if the verb bears a default 3rd singular agreement affix (108b) – see Sigurðsson & Holmberg (2008) for dialectal variation in this respect.

   Him.DAT would.1PL seem we.NOM be competent

b. Hónum mundi víðast við vera hæfir.
   Him.DAT would.3SG seem we.NOM be competent

   ‘We would seem to him to be competent’
   (from Sigurðsson & Holmberg 2008:255)

To make the present analysis work for the Icelandic restriction, it must be the case that the nominative is above the dative experiencer (when the latter is in its thematic position) at some stage of the derivation, perhaps due to some kind of object shift of the former, the effects of which are obscured by the dative’s A-movement. If DAT is in Spec-vP, and the nominative moves to the edge of vP before merger of the Appl licensing DAT, then the familiar intervention configuration that gives rise to the PCC

48 Especially raising configurations; there seems to be more variation with other dative verbs (Sigurðsson & Holmberg (ibid.)): default agreement improves the acceptability of 1st/2nd person nominatives with these verbs, but does not render them fully grammatical for everyone.
obtains: for Appl to match DAT, the intervening NOM must not be 1st/2nd person (109).

\[(109)\quad T \quad [\text{Appl}\_\text{P} \_\text{DAT} \_\text{VP} \_\text{NOM} \_\text{VP} <\text{DAT}> \_\text{VP} \_\text{NOM} \_\text{VP} \_\text{NOM} \_\text{VP} \_\text{NOM} \_\text{VP} \_\text{NOM} \_\text{VP} \_\text{NOM} \_\text{VP} \_\text{NOM} \_\text{VP} \_\text{NOM} \_\text{VP} \_\text{NOM} \_\text{VP} \_\text{NOM} \_\text{VP} \_\text{NOM} \_\text{VP} \_\text{NOM} \_\text{VP} \_\text{NOM} \_\text{VP} \] 

However, I will not pursue this analysis further here. Nonetheless, it is important to note that this sort of account is still plausible for data like (108), while an account that attributes the restriction on T’s split/multiple Agree with DAT and NOM, as commonly assumed (since Taraldsen 1995 and Anagnostopoulou 2003) clearly makes wrong predictions, as Boeckx (2003, 2008) has shown. Consider the following paradigm:

\[(110)\quad \begin{align*}
a. & \quad \text{Þeim hefur/*höfum/*hafa alltaf fundist} [\text{við viðna vel}] \quad \text{(Icelandic)} \\
& \quad \text{They.DAT have.3SG/1PL/3PL always found we.NOM work well} \\
& \quad \text{‘They have always thought that we worked well.’} \\
b. & \quad *\text{Jóni virtist [Bjarna hafa líkað} \text{ég/við/við]} \\
& \quad \text{John.DAT seemed.3SG Bjarni.DAT have liked I/we/you.NOM} \\
& \quad \text{‘It seems to John that Bjarni likes me/us/you.’} \\
c. & \quad \text{Mér fannst/fundust} [\text{þeir vera skemmtilegir}] \\
& \quad \text{I.DAT seemed.3SG/3PL they.NOM be interesting} \\
& \quad \text{‘I thought they were interesting.’} \\
d. & \quad \text{Mér fannst/*fundust [henni leiðast þeir]} \\
& \quad \text{I.DAT seemed.3SG/3PL she.DAT bore they.NOM} \\
& \quad \text{‘I thought she was bored with them.’} \\
\end{align*}
\]

(from Boeckx 2008:93-94)

In (100a), an embedded 1st person nominative can be grammatical in the presence of a dative in the matrix clause, forcing default agreement on the matrix D, as expected, which indicates that DAT does interact with T-Agree; nonetheless, in (110b) where a DAT and the [+Participant] NOM are clausemates, not even 3SG default agreement on the matrix T can salvage the derivation. This cannot be attributed to the (defective) intervention of the embedded DAT between the matrix T and NOM: as shown by the contrast between (110c) and (110d), the intervention of a dative can block canonical
agreement between the matrix T and the embedded NOM (realized as number matching in (110c)), but not default 3SG agreement. Therefore, the ungrammaticality of (110b) has nothing to do with the matrix T; instead, what seems to matter is the unresolvable PCC violation in the embedded clause\textsuperscript{49}. Under a split/multiple-Agree scenario, the violation should result from the competition of the two interacting DPs for the embedded T’s $\phi$-features; however, the embedded T here is infinitival, i.e. arguably defective and $\phi$-less. Interestingly, the tentative proposal sketched above (109), if correct, is compatible with these data: in (110a), the 1\textsuperscript{st} person NOM could not possibly intervene between the matrix DAT and its licenser, i.e., some Appl head, while also it is expected that such intervention effects should obtain regardless of the finiteness of the minimal clause that the two interacting arguments belong to (correctly predicting the ungrammaticality of (110b)).

3.5. Interim conclusion

In this chapter, it was discussed how a movement analysis of dative shift, and in general an approach to applicatives such as the one advocated in Chapter 2, can capture different patterns of ditransitives and related constructions, particularly in languages that can be argued to have the IO>DO (a.k.a. ‘double object construction’) pattern. Well-known locality/minimality effects caused by dative arguments were also extensively discussed, and the notion of ‘defective intervention’ and its cancellability was shown to be particularly relevant. In subsequent chapters, I will explore how the present approach to applicatives can derive a complete and fine-grained (both syntactically and semantically) typology of dative arguments, in both active and non-active contexts, as well as how the notion of defective intervention is relevant in order to parameterise/relativise the minimality effects caused by datives in a cross-linguistic, diachronic and cross-categorial perspective.

\textsuperscript{49} Furthermore, this may indicate that in the presence of default agreement, there might not be any syntactic dependency between NOM and the matrix T. If (109) is right, then the short NOM-raising illustrated there may take place to facilitate such a syntactic dependency; since this is not necessary when T displays default agreement (which may be a reflex of Agree with DAT, see Boeckx 2000 for such a proposal), then NOM may simply not raise in cases such as (108b), thus not giving rise to any intervention/PCC effects.
Chapter 4. Dative arguments and argument structure

4.1. Introduction

This chapter is an attempt to sketch a typology of dative arguments in a language with high oblique ‘dative’ DPs, such as Modern Greek (exploring some cross-linguistic evidence as well), and to explicate how and why this typology and the main descriptive generalizations associated with it are best captured and predicted by a movement analysis of ‘datives’ with active inherent Case features. Taking the mechanism of dative shift/movement (as described in the previous chapter) as a starting point, it will be examined how a limited number of variables, namely the position of the applicative head (which can be shown to be regulated by a principle already presented in Chapter 3), the first-merged position of the shifting argument (regulated by the UTAH), and the precise value of its [Case] feature, can derive all the variation observed across predicates, constructions and theta-roles with regards to the A-/A’- behaviour of dative arguments.

4.2. Beyond goal datives: some preliminaries

So far, we have only considered datives that are selected arguments, i.e. predicted by the lexical properties/entry of the predicate heading the verbal phrase, and, as far as active ditransitives are concerned, we have restricted our attention to indirect objects bearing a ‘goal’ 0-role. In fact, even restricting ourselves to active contexts, dative DPs and clitics can fulfill/realise 0-roles as diverse as ‘goal/recipient’, ‘source’, and highly optional roles such as different flavours of ‘benefactives/malefactives’, ‘external possessors’, so-called ethical datives etc. All these DPs participate in the DP_{DAT}>DO frame in languages such as Greek, which suggests that they are all attracted by some Appl head to a position higher than DO, irrespective of their precise theta-role. Thus, some benefactive DPs occupy the same (derived) position as canonical indirect object/goal DPs, although they may differ as to the kind of dative alternation they participate in, which is a notable fact as long as the alternant of each category is indicative of its first-merged/theta-position, as previously assumed; more
specifically, benefactive DPs often alternate with PPs that clearly occupy adjunct positions. On the other hand, arguably not all ‘optional’ dative DPs occupy the same position in the IO>DO frame either, as has already been pointed out by theories that assume different heights for the merger of different kinds of applicatives (see Pylkkänen 2002/2008, Cuervo 2003, among others). It will be argued that the height at which Appl is merged is regulated by the conjecture presented in (16) in Chapter 3, and that these two variables, namely the different E(xternal) M(erge) positions of dative arguments and the different heights of the Appl attracting them, derive the full typology of dative DPs in languages such as Greek and, possibly, Romance (modulo the availability of reflexive dative clitics in Romance, which do not exist in SMG).

At this point, it must be noted that the analysis put forward in this chapter clearly implies that low applicatives (cf. Pylkkänen 2002/2008, Cuervo 2003 among others), i.e. applicative heads/phrases below the root, cannot exist, in line with a number of researchers such as Nash (2006), Georgala et al. (2008), Grashchenkov & Markman (2008), Georgala (2010). For Pylkkänen, low applicatives usually introduce goals and sources, while high applicatives introduce benefactives and related arguments. The challenges that face low applicatives outweigh the arguments that motivate any analysis based on them. Putting aside the ubiquitous paucity of morphological evidence for distinct applicative affixes that could have originated in such a low position (see Georgala et al. (2008)\(^1\)), there are also significant arguments against the syntactic/semantic assumptions underpinning them.

First of all, as Larson (2010) convincingly shows, any compositional semantics based on a low ApplP (including the semantics that Pylkkänen herself proposes) ‘uncoupl[e] the indirect object argument from the event structure of the verb’ (ibid.:702), in a way that a sentence such as “John wrote that letter and Bill gave Mary that letter” is predicted to entail “John wrote Mary that letter” (see the logical proof in Larson (2010:702-703)). This follows precisely from the assumption that “(l)ow applied arguments bear no semantic relation to the verb whatsoever: they bear only a transfer-of-possession relation to the direct object (Pylkkänen 2008:14), which is opposed to the view supported here, namely that even ‘oblique/indirect’ arguments

\(^1\) Following Baker (1996), it can be concluded that “low” applicatives always look like preposition incorporation’ (Boneh & Nash 2010); as Federico Damonte (p.c.) also points out to me, in languages with distinct applicative morphology, this is usually employed for benefactives, not for goals.
are selected by the root itself (see also Boneh & Nash 2010 for more arguments against low applicatives, based on their inability to account for the contrast between prepositional and applicative ditransitives with respect to scope ambiguity/freezing, as well as the potential intervention of adverbial modifiers between IO_{DP} and DO in English, which suggests that the two arguments cannot be part of the same maximal projection—at least not throughout the derivation).

Furthermore, based on Pylkkanen’s diagnostics, SMG must have both low and high applicatives: given the parallel between English and SMG double-object constuctions, and the fact that, according to her, the goal/recipient interpretation is necessarily assigned by low Appl, such IOs must be low; nonetheless, SMG also allows benefactives with stative and unergative predicates (see 4.2.2 and 4.2.3), which must clearly be treated as high applicatives, according to Pylkkanen. However, goal DPs and (most) benefactives behave alike in all relevant respects in SMG, not supporting a high/low distinction, whereby the applicative hosting goals/sources should be contrasted to the one hosting benefactives (at least not all of them)\(^2\). Instead, rather than pursuing a syntactic analysis that derives their syntactic representation from their semantics, I will attempt a syntactic differentiation of these arguments only to the extent that this captures purely syntactic effects (e.g. locality effects) and I will then discuss how the various interpretive contrasts need not be all predicted and encoded syntactically, as many of them can be shown to be inferred (logically, and not derivationally), often on the basis of non-grammatical lexical or even contextual factors; thus, based on purely syntactic criteria, I will suggest that all applicatives are high, possibly calling only for a distinction between high and very high applicatives,

\(^2\) For instance, according to Pylkkanen, high but not low applicatives allow for secondary/depictive predication. In fact, dative DPs in SMG (very) marginally allow for depictives of this sort; what is interesting, is that both “low” and “high” applicatives do so, with the outcome being equally marginal in every case, i.e., without any suggestive contrast between datives that should be considered high and those that should be considered low. In fact, if anything, depictives modifying benefactives with statives are slightly worse, contrary to Pylkkanen’s predictions.

(i) ??Tu to edhosa methismenu (tu Alex) to vivlio (tu Alex) kai den to thimate. (goal)
Him.DAT.CL it.ACC.CL gave.1SG drunk.M.DAT the Alex.DAT the book and not it remembers
‘I gave it to Alex while he was drunk, which is why he does not remember’

(ii) ??Tis ton ediksa aguroksipnimenis tis Marias ton Niko kai den ton prosekse. (source)
Her.DAT.CL him.ACC.CL showed.1SG just-woken-up.F.DAT the Mary.DAT
‘I showed Mary Nick when she had just woken up, which is why she did not notice him’

(iii) ??Tis etiaksa tis Marias, methismenis, kafe. (benefactive)
Her.DAT.CL made.1SG the Mary.DAT drunk.F.DAT coffee.ACC
‘I made coffee for Mary when she was drunk’

(iv) ??Tis kratisa tis Marias, methismenis, tin tsanta tis. (benefactive with stative)
Her.DAT.CL held.1SG the Mary.DAT drunk.DAT the purse.ACC her
‘I held Mary’s purse for her while she was drunk’
with the former being higher than VP/\sqrt{P} but below VoiceP, while the latter are above VoiceP, thus extending a proposal by Boneh & Nash (2010).

4.2.1. Goal arguments, recipients and non-recipients

In this section I will argue that all and only those XPs that can be interpreted, either literally or metaphorically, as locative arguments of some specific sort(s), namely, as goals (or sources) of some motion/transfer event, are externally/first-merged in a √P-internal position below themes, which we may conveniently call Compl-\sqrt{.} Those arguments may or may not be able to be interpreted as intended recipients of the theme argument, depending on their own semantic properties and the properties of the predicate selecting them.

Thus, goal arguments can be non-recipients in the following cases. Firstly, there are predicates such as stelno ‘send’, petao ‘throw’ (and other predicates denoting manner of motion), epistrefo ‘return’ etc. –let us conventionally call them Class M predicates –that do not necessarily entail that the goal argument is the intended recipient or intended possessor of the entity denoted by the theme (regardless of any features of the goal, e.g. [±animate]/[±human]). Secondly, inanimate/non-human goals cannot be interpreted as intended recipients/possessors (unless they are somehow personified), since they are not capable of mental experience, which is probably one of the semantic ingredients of this notion/theta-role. In both cases, non-recipient (probably equivalently: non-affected) goals can only be realised as PPs, and importantly they can only be asymmetrically c-commanded by DO and not vice-versa (1, see also (61) in Chapter 3):

(1) a. (?)O dhiefthidis tu musiu estile kathe filaka_i stin ethusa tu_i (SMG)
   The director of-the museum sent every guard to-the room his
   ‘The museum director sent every guard to their respective room’
   b. ?*O dhiefthidis tu musiu estile se kathe ethusa, ton filaka tis_i
   The director of-the museum sent to every room the guard her
   ‘?*The museum director sent to every room its guard’

Folli & Harley (2006) report similar facts for Italian:
(2) a. La maestra ha mandato ogni bambino, al suo, posto (Italian)
   The teacher.FEM has sent every child to-the his desk
   ‘The teacher sent every child to their desk’
   b. *La maestra ha mandato il suo, bambino ad ogni posto
   The teacher.FEM has sent the its child to every desk
   ‘*The teacher sent its child to every desk’

The above contrasts are best captured by the assumption that only the theme>goal pattern can be base-generated, while goal>theme is always derived and due to the presence of Appl, whether the goal is a DP or (at least apparently) a PP, as argued at some length in Chapter 2. In (1-2), then, the goal_{pp}>theme pattern is impossible, because Appl cannot match and attract inanimate goals, and consequently it cannot be present at all. The assumption that both DO>se-PP and se-PP>DO constructions are base-generated (see Anagnostopoulou 2003) appears to be incompatible with these data, unless we assume that it does not apply to inanimate goals or goals with an exclusively locative interpretation.

If our account is on the right track, then the meaning linked to the Compl-√ position is a locative interpretation/theta-role, usually ‘goal’ (but also ‘source’ for other predicates); the intended recipient/possessor reading is not intrinsic to the Compl-√ position, but rather an inference associated with it, either obligatorily, when forced by the semantics of the selecting predicate (e.g. with verbs meaning ‘give’) (3a), or optionally, with Class M predicates, as long as the goal argument is animate (3b).

(3) a. Edhosa tin bala ston Michali (SMG)
   Gave.1SG the ball. ACC to-the Michalis.ACC
   ‘I gave the ball to Michalis’
   b. Estila tin bala ston Michali
   Sent.1SG the ball.ACC to-the Michalis.ACC
   (i) ‘I sent the ball to Michalis, because I wanted him to have it’
   (ii) ‘I kicked the ball so far that it reached Michalis’
Nonetheless, the aforementioned inference seems to be forced or at least strongly favoured in the goal-theme pattern, irrespective of the selecting predicate (3c).

(3) c. Estila tu Michali tin bala
   Sent.1SG the Michalis.GEN/DAT the ball.ACC
   ‘I sent Michalis the ball’ → (i):OK, (ii):*

Then this might be the basic interpretive effect/semantic contribution of Appl: as already alluded to in §2.4.2, Appl may encode an interpretable (thematic) feature such as Reinhart’s (2002) [+m(ental state)]. This feature is arguably presupposed by theta-roles such as ‘recipient’. Combined with the locative entailments of the Compl-√ position, [+m] may ultimately entail or at least strongly implicate these theta-roles. I will remain agnostic as to which is the precise semantic/pragmatic relation/process giving rise to these interpretations.

Another related but distinct issue is the observation that the double object construction tends to imply a successful change of possession, unlike/more than its DO-PP counterpart (see Oehrle 1967, Green 1974 and Jackendoff 1990), when both alternants are meant to convey an attempted transfer of possession (i.e., excluding purely locative uses of the DO-PP frame as in (1-2) and (3bii)); the alleged contrasts of this sort are most probably contextually cancellable (with the exception of predicates such as ‘teach’, on which see Appendix I), therefore they should not be considered as evidence for postulating different truth conditions (as in Pesetsky 1995, Beck & Johnson 2004) for the two members of the dative alternation (see Levin & Rappaport Hovav 2005, Rappaport Hovav & Levin 2008, and Ormazabal & Romero 2010 for arguments for the semantic uniformity of dative alternations). The present

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3 Or, in the case of source arguments, by a theta-role denoting an individual who is deprived of something, cf. (i):

(i) a. Pira to stilo apo tin Anna (DO>PP, no Appl)
   Took.1SG the pen.ACC from the Anna.ACC
   ‘I took the pen from Anna’ (does not necessarily imply that Anna owned the pen, it only happened to be with her when I took it)
   b. Tis (to) pira tis Annas to stilo (IO>DO, Appl)
   Her.DAT.CL (it.ACC.CL) took.1SG the Anna.GEN/DAT the pen.ACC
   → My act resulted in Anna not possessing the pen anymore.
analysis does attribute an additional LF-interpretable feature, namely [+m]\(^4\), to the representation of IO>DO; however, as far as goal arguments are concerned, it can only derive semantic contrasts of the sort illustrated in (3) above, i.e. probably only with Class M predicates; otherwise, its interpretive effect, namely the ‘conscious’/‘intended recipient’ reading, is usually duplicated by the semantic requirements of the ditransitive predicate (i.e., the usual selection/thematic properties of roots meaning ‘give’/‘say’/‘show’ or, alternatively: the intended recipient reading is due to \(v\)\textsubscript{TRANSFER}, which obligatorily combines with most ditransitive roots, but only optionally with Class M predicates).

Thus, on these assumptions, canonical (i.e., s-selected) indirect objects are all base-generated as locative arguments, goals or sources, and when necessary, i.e., when they have a [uCase] feature, they are attracted by an Appl between \(v^*\)\textsubscript{CAUSE} and \(v\)\textsubscript{TRANSFER}, as already assumed. The assumption that all [+m]/recipient IOs of canonical ditransitives are at the same time true locative arguments is confirmed by the fact that they can all be replaced by the same locative wh-/quantificational adverbs as pure/inanimate locative arguments/modifiers\(^5\):

\[(4)\]

\begin{align*}
a. Pu to edhoses? (SMG) \\
\text{Where it.ACC.CL gave.2SG} \\
\text{‘Who did you give it to?’} \\
b. Min to pis puthena! \\
\text{Not it.ACC.CL say.PFV.2SG nowhere} \\
\text{‘Don’t say it to anyone!’}
\end{align*}

As already suggested in Chapter 2, there is a necessary logical connection between [+m] and the [uParticipant] probe; [+m] seems to presuppose [±Participant], as defined in §2.4.2 (see in particular fn. 27). On the other hand, being [±Participant] entails the ability of being assigned [+m], but does not necessarily entail that such a theta-role is actually assigned, since [±Participant] expressions may also merge in

\(^4\)The question whether Appl bears any interpretable features, besides its [uParticipant] probe, is also important to the extent that we want to exclude (with Chomsky 1995) entirely contentless heads, such as Agr heads.

\(^5\)The fact that this possibility is not available in some languages, e.g. English (cf. ‘**Where did you give the bicycle?’), may be due to independent reasons, perhaps the incompatibility of such adverbs with animate referents.
positions which are incompatible with [+m], e.g. Spec-\(\sqrt{}\), insofar as this is the position associated with themes and related theta-roles (in accordance with the UTAH).

Appl’s [uParticipant] may be valued by anything occupying Compl-\(\sqrt{}\), except expressions lexically specified as [-animate]. As already noted, this does not preclude 3rd person pronouns (which are necessarily underspecified for [animacy] in SMG and Romance) with inanimate referents. In these exceptional cases, the 3rd person clitic does match Appl and raises, yielding a double-object construction, despite the apparent incompatibility of its referent with [+m]; we may either assume (a) that [+m] simply forces an ‘intended possessor/recipient’ reading, as is indeed the case in the relevant examples, despite failing to denote consciousness, which is why these uses are slightly marginal, or (b) that the relevant interpretable feature borne by Appl is not exactly Reinhart’s [+m], but some closely related feature with largely similar entailments, i.e. a generalised [intended affectedness/possession] interpretation. In either case, I will keep using [+m] as a convenient label. Examples of such exceptional cases were given in §2.4.2.c (examples (53)-(55)), where it was noted that clitic-doubling of IO, i.e. the presence of an (inanimate) DP double in Spec-Apll, is degraded for most speakers. Similar facts are reported in Spanish (5a-b), where however clitic doubling appears to be grammatical (but note that the doubling a-XP in Spanish need not move to Spec-Appl, see §3.4.4); as expected, (5b) ‘can only be interpreted as bearing an integral […] relation between the legs and the table, where the former are part of or belong to the latter’ (Ormazabal & Romero 2010:211).

(5) a. María puso las patas en la mesa. (Spanish)
   Mary put the legs on the table
b. María *(le) puso las patas a la mesa.
   Mary 3SG.DAT.CL put the legs to the table
   ‘Mary assembled/attached the legs to the table’, cf:
c. I María *(tu) evale (?*tu trapezju) ta podhja (, tu trapezju) (SMG)
   The Mary.NOM it.DAT.CL put.3SG the table.DAT/GEN the legs.ACC
   ‘Mary attached the legs to the table’
4.2.2. IO-like benefactives/malefactives

In this section I will consider datives that share most of the properties of canonical indirect objects in the IO>DO frame, despite the fact that they are optional and clearly cannot be analysed as goals, i.e. as selected locative arguments. It will be argued that datives of this kind, which coincide with part of the (fuzzy) class traditionally called ‘benefactives’, are (i) first-merged in an adjunct position within √P, and (ii) are attracted by an applicative head merged at the same height as applicatives in canonical ditransitive/double-object constructions, hence the similar inferences about the ‘intended affectedness’ of the dative argument. Of these two defining properties, (ii) accounts for all the similarities between these benefactives and indirect object datives, while (i) derives all their differences.

Predicates allowing such optional datives include verbs such as aghorazo ‘buy’, and verbs of creation/causative verbs with a theme/product direct object, which denotes something that can be consumed or used by the referent of the dative argument. These benefactives can appear in the following frames: (a) DP\textsubscript{dat} asymmetrically c-commands DO but not vice-versa, as in canonical ditransitives, (b) an (apparently prepositional) se-dative asymmetrically c-commands DO, as is also possible with goals, but not vice-versa, i.e. benefactive se-datives, unlike goals, cannot be c-commanded by DO (as originally observed by Anagnostopoulou 2005), while (a) and (b) may alternate with (c) benefactive PPs headed by ja ‘for’, clearly occupying an adjunct position, arguably asymmetrically c-commanding DO –to the extent that binding from such a position is possible, given that the most reliable

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6 According to Anagnostopoulou (2005:77), ‘[t]he se-construction is only permitted with a limited set of predicates (e.g. buy-verbs, verbs of creation) similarly to the genitive construction’; slightly departing from this, I believe we also need to include (all) causative verbs, even those that do not assign a ‘product’ internal theta-role, e.g. predicates such as ‘clean, open’ etc., as these too allow the ‘se-construction’ alternating with the DP\textsubscript{dat} construction, with the provisos already mentioned regarding DO:

(i) O Roth anikse ston Bradley tis portes ton studio tis Dunham (SMG)
The.NOM Roth opened to-the Bradley the doors the.GEN.PL studios the.GEN Dunham
‘Roth opened the door(s) of Dunham’s studios for Bradley’
(from www.avopolis.gr/international-album.../37406-no-time-for-dreaming?...pdf, via google)

(ii) Katharisa sti Maria/tis Marias ena milo
Cleaned.1SG to-the Mary/the Mary.DAT/GEN an apple
‘I cleaned/washed an apple for Mary’ (for her to eat).
diagnostics for asymmetric c-command in SMG are based on binding. (6) illustrates (a), (7) illustrates (b), and (8-9) illustrate (c), with (9) in particular showing that ja-benefactives (9a) pattern with VP/\(\sqrt{P}\)-adjuncts (9b), in that they may be excluded from the antecedent of ‘do so’-ellipsis in SMG, whereas internal arguments (9c) are obligatorily included (see Anagnostopoulou 2005:25-26).

Se afti tin ftochi jitonja, to KRATOS/ena TZINI...

‘In this poor neighbourhood, it is the state/a genie that…’

(6) a. aghorase/echtise/katharise (tu) kathe katiku, to spiti tu
  bought/built/cleaned the each resident.DAT/GEN the house.ACC his
  ‘bought/built/cleaned (for) every resident their house’

b. *aghorase/ecthise/katharise tu katiku tu (to) kathe spiti, tu katiku tu
  bought/built/cleaned the resident.DAT/GEN its the each house / the each house the resident.DAT/GEN its
  ‘*bought/built/cleaned (for) its resident every house’

(7) a. aghorase/echtise/katharise se kathe katiko, to spiti tu
  bought/built/cleaned to each resident the house.ACC his
  ‘bought/built/cleaned (for) every resident their house’

b. *aghorase/ecthise/katharise ston katiko tu (to) kathe spiti, tu katiko tu
  bought/built/cleaned to-the resident its the each house / the each house to-the resident its
  ‘*bought/built/cleaned (for) its resident every house’

7 Although the relevant data are rather marginal, they are probably not entirely exceptional, cf. locative/temporal (VP/\(\sqrt{P}\)) adverbials (see Cinque 1999) that can bind into an internal argument, as in (i) below:

(i) (?)[\text{TP} \text{Dhjavaze-T \text{[VoiceP ... prin apo kathe episodhio, \[\text{VP t_v tin perilipsi tu_{ij}\]}]} \text{(SMG)}] Read.3SG before from each episode the summary its
  ‘Before every episode, (s)he read its summary’
(8) a. ?aghorase/echtise/katharise ja kathe katiko to spiti tu
   bought/built/cleaned for each resident the house.ACC his
   ‘bought/built/cleaned (for) every resident their house’

b. *aghorase/echtise/katharise ja ton katiko tui (to) kathe spiti / (to) kathe spiti
   ja ton katiko tu;
   bought/built/cleaned for the resident its the each house / the each
   house for the resident its
   ‘*bought/built/cleaned (for) its; resident every house;’, cf:

c. (?)epestrepse kathe spiti, ston katiko tu (canonical IO/goal)
   returned.3SG each house to-the resident its
   ‘returned every house to their residents’

(9) a. aghorase/eftiakse/katharise ja tin Maria ena dhomatio ke o Superman ekane
   to idhjo ja ton Kosta
   bought/made/cleaned for the Mary a room and the Superman did the same
   for the Kostas
   ‘bought/made/cleaned a room for Mary and Superman did so for Kostas’

b. aghorase/eftiakse/katharise ena spiti se dhio meres ke o Superman ekane to
   idhjo se mia imera
   ‘bought/made/cleaned a house in two days and Superman did so in a
   day’

c. *aghorase/majirepse sti Maria ena keik ke o Kostas ekane to idhjo stin Eleni
   bought/cooked to-the Mary a cake and the Kostas did the same to-the Eleni
   ‘*bought/cooked Mary a cake and Kostas did so (to/for) Eleni’

These facts indicate that, when realized as DPs/se-phrases, benefactives of this sort
may occupy the same (or similar) position as ‘shifted’ goal DPs, but it is clear that
they do not correlate with/originate in the same low position as goal arguments.
Firstly, no se-PPs are licit in a position lower than DO (7b), which is arguably due to
the fact that the corresponding predicates cannot license a true locative argument,
either stative or directional, which in turn implies that the se introducing such
benefactives is purely a Case marker, and not a P, i.e. these se-phrases always bear an
active Case feature, which can only be valued in a Spec-Appl position. Secondly, if
we are to correlate them with a low/√P-internal position, the only plausible candidate
is the adjunct position occupied by \(ja\)-PPs which have (roughly) the same meaning; these have to be \(\sqrt{P}\)-adjuncts (10), as they clearly do not occupy an A-position, unlike DP\(_{dat}/se\)-phrases, and can marginally bind into DO, while still yielding DO–\(ja\)-PP as the unmarked order, probably as the result of DO’s moving to a Spec-\(ν\) position\(^8\).

\[(10) \quad \sqrt{P} \quad \frac{\text{Benef}}{\sqrt{P}} \quad \frac{\text{DO}}{\sqrt{}}\]

Therefore, it seems plausible to attempt an analysis along the following lines: these optional datives are all externally merged in a \(\sqrt{P}\)-adjunct position, and when they bear an active inherent Case feature they have to match (and be attracted by) an Appl head. As to the precise position of Appl in these benefactive constructions, this must really be similar to that of Appl in canonical/goal double object constructions, as both configurations share properties that are opposed to those of configurations with applicatives arguably attaching higher, as will be shown later on: apart from their possible binding relations, goal-DOCs and the benefactive constructions of this sections are also similar in that (i) clitic doubling of the dative DP is entirely optional in active contexts (11a) and that (ii) wh-fronting (11b) is not subject to any special restrictions (apart from general locality principles of course) or requirements, e.g. clitic resumption in both long- and short-distance \(A'\)-dependencies (see below).

Anticipating somewhat the discussion below, it can be shown that the opposite properties (displayed by other classes of benefactives/malefactives) correlate with a higher attachment site for Appl. Thus, (i) and (ii), alongside the fact that they can only bind into DO and not vice-versa, are the necessary distinctive properties of the class of benefactives considered in this section.

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\(^8\) DO’s (EPP-)movement does not reverse its binding relation with the \(ja\)-PP; even if adjuncts can marginally bind into A-positions, the reverse is probably still not possible (although adverbial adjuncts can bind into other, lower adverbial adjuncts, see Stroik 1990 and Pesetsky 1995). Moreover, clitic clusters with benefactive dative clitics are subject to the PCC in the same way as any other dat-acc cluster in SMG, which can be attributed to the fact that the DO clitic in Spec-\(v_2\) intervenes between Appl and the \(\sqrt{P}\)-adjunct and gives rise to a PCC violation when it is [+Participant], i.e., 1\(^st\)/2\(^nd\) person.
(11)  
a. I Maria (tu) aghorase/epsise/majirepse tu Jani mia tiropita (SMG)  
The Mary (him.DAT.CL) bought/cooked/made the John.DAT/GEN  
a cheese pie  
‘Mary bought/(cooked/made) John a cheese pie’

b. Tinos/Pjanu (?)tu) aghorase/epsise/majirepse i Maria tiropita?  
Who.DAT/GEN (him.DAT.CL) bought/cooked/made the Mary  
cheese pie  
‘Who did Mary buy/cook/make a cheese pie for?’

Recall that the attachment site of Appl is arguably regulated by the following  
conjecture, repeated from Chapter 3:

(12) If an argument \( \alpha \) with a \([u\text{Case}]\) feature is merged in a position inaccessible  
to any Case assigning head, then Appl must merge as soon as possible.

Also recall that all causative verbs, among others, allow benefactives exhibiting  
this syntactic behaviour. Causatives are commonly analysed as bi-eventive (Levin  
1999, Nash 2002, Cuervo 2003, among others), i.e. as involving a complex event  
structure with two subparts, namely an activity causing an achievement, i.e. a change  
of state, and the achievement itself. Given that the respective simple event structures  
involving each of these subparts, namely activities and achievements, are standardly  
alysed as each involving a \( v \)-head with encoded semantics related to the  
corresponding event structure, we may assume that complex event structures such as  
causatives can involve two \( v \)-heads, which we may call \( v_{CAUSE} \) and \( v_{STATE/BE(COME)} \)  
respectively (partly in the spirit of Cuervo 2003). Then, following (12), when a dative  
with an active Case feature is externally merged somewhere within \( \sqrt{P} \), an Appl head  
can and must be merged between these two \( v \)’s, i.e. no later/higher than is needed for  
(i) an Agree relationship between \( v_{STATE} \) and DO (i) an Agree relationship between \( v^*_{CAUSE} \) and \( DP_{dat} \) to be established:

(13) \[
[\text{VoiceP} \text{EA Voice} [v^*P \text{v}_{CAUSE}[u\phi] \text{[ApplP} \text{DP}_{dat} \text{Appl} [v_{2P} \text{v}_{BE[u\phi]} \text{[vP} \cdots <\text{DP}_{dat}> \cdots \text{]]]}]]
\]

Turning to apparently monoeventive verbs such as aghorazo ‘buy’ etc., their  
compatibility with an applicative head attaching below \( v^*/v_{CAUSE} \) is presumably due
to their compatibility with an optional/additional transfer entailment, which is encoded by an optional $v_{\text{TRANSFER}}$ above $\sqrt{P}$. This may turn a limited number of monoeventive predicates into bi-eventive, by adding a transfer event in their event structure, as long as the inferences associated with a transfer event are compatible with the semantics of both the predicate and the internal argument; in particular, the internal argument must be able to be interpreted in such a way that the beneficiary can come into possession of it (without already owning it); this transfer event does not presuppose actual directed motion, which is why it is possible even when no goal argument is licensed/selected, but it requires an agent controlling the transfer/change of ownership (Nash 2006)$^9$. Finally, after a bi-eventive structure is formed with the help of $v_{\text{TRANSFER}}$, then, Appl can merge between the optional $v_{\text{TRANSFER}}$ and $v^*/v_{\text{CAUSE}}$:

$$(14) [\text{VoiceP} \text{EA Voice} [v^*P v_{\text{CAUS}[u]} \text{ApplP} \text{DP}_{\text{dat}} \text{Appl} [v^2P v_{\text{TRAN}[u]} [\sqrt{P} \ldots <\text{DP}_{\text{dat}} \ldots ]])]$$

The presence of $v_{\text{TRANSFER}}$, which is (at most) optional with $ja$/$for-$benefactives but obligatory with benefactive DPs (and $se$-benefactives in SMG) also accounts for the well-known observation about the potential absence of a transfer entailment/inference with the former but not with the latter:

$$(15)$$

a. Aghorase ena kimono ja ti jineka tu ala to edhose sti gomena tu (SMG)
Bought a kimono for the wife his but it.CL gave to-the mistress his
‘He bought a kimono for his wife but gave it to his mistress’
b. $\#$Aghorase tis jinekas tu/sti jineka tu ena kimono ala to’dhose sti gomena tu
Bought the wife.DAT/GEN his/to-the wife his a kimono but it gave to-the mistress his
‘$\#$He bought his wife a kimono but gave it to his mistress’
(adapted from Jayaseelan 1988)

$^9$ Thus, transferees are not necessarily goals, but must be intended possessors/recipients, even though intended possessors are not necessarily transferees, i.e., a dative can be an intended possessor even when there is no transfer event. When there is no agent who can control the transfer, see Nash (2006) and the discussion of the so-called ‘Oehrle contexts’ below, while it may be possible that a ‘recipient/possessor’ interpretation can be obtained with benefactives in causatives, with no need to postulate an additional $v_{\text{TRANSFER}}$. 

As a matter of fact, benefactive DPs/se-datives with causatives/verbs of creation too are associated with an obligatory entailment that the beneficiary is to consciously benefit from using/consuming/possessing the direct object, an entailment potentially missing from the corresponding ja/for-benefactives. The ‘affected’ reading of benefactive DPs/se-datives with causatives/creation verbs is probably to be differentiated from the ‘intended recipient’ reading of e.g. IO-DPs, as the latter is due to Appl’s [+m] combined with a transfer event (encoded by vTRANSFER); the ‘affected’ interpretation of IO-like benefactives does not necessarily presuppose or entail transfer of ownership, even though this may still be one of its (optional) derivative inferences. For instance, (16a) below normally bears the additional entailment that ‘Mary cooked pasta for John to eat’, not ‘for John to have’ (and, as already noticed in the literature, see e.g. Beck & Johnson (2004:102) and Anagnostopoulou (2005:77), this inference is not obligatory for (16b) anyway).

(16) a. I Maria majirepse/evrase tu Jani/sto Jani makaronja
   The Mary cooked.3SG/boiled.3SG the John.DAT/GEN / to-the John pasta
   b. I Maria majirepse/evrase makaronja ja ton Jani
   The Mary cooked.3SG/boiled.3SG pasta for the John
   ‘Mary cooked/boiled pasta for John’

The entailment about the (intended) conscious affectedness of the beneficiary must still be related to Appl’s [+m]. But this is not enough to distinguish these benefactives from ‘freer’ non-IO benefactives that attach to mono-eventive predicates (or perhaps to mono-eventive and bi-eventive predicates alike) and lack the rest of IO-like benefactives’ entailments (see the class of benefactives discussed in the following section), given that this second type of benefactives too involves applicatives with [+m]. In what follows I will argue that this difference actually relates to the position Appl is attached to.

The contrast between (16a) and (16b) also indirectly points towards this connection: as Beck & Johnson (ibid.) note in relation to for-benefactives, ja/for-phrases in examples such as (16b) ‘ha[ve] a significantly wider range of roles’ than do the datives in (16a), being also able to describe a situation in which Mary ‘does the cooking in place of’ John, ‘who was supposed to do [it] but was not able to for some reason’ (Anagnostopoulou 2005:77). It is reasonable to assume that the two readings
under discussion correspond to different first-merged positions of the beneficiary adjunct, which have implications as to what exactly the beneficiary benefits from (what Bosse e.a. (2011) call the ‘source of the experience’): assuming that their interpretation follows from bottom-up compositionality and that it is therefore a function of their c-command domain, then (i) beneficiaries that adjoin to √P (17a) can only denote a relation to the (part of) the event that involves the internal argument(s), perhaps what corresponds to Ramchand’s (2008) ResultP; indeed, the benefactive DPs/se-datives considered so far benefit from the result, without really being affected by ingredients of the event such as its causer/agent etc.; (ii) on the contrary, the ‘on behalf of x/for x’s sake’ interpretation mentioned above involves a beneficiary x benefitting from the event as a whole, i.e., from someone else’s activity and its results, therefore it does seem to be computed on the basis of who caused the result, and not the result alone; this is possible if the ja/for-phrase in e.g. (16b) merges at a higher position, modifying a constituent including the agent, such as VoiceP (17b) (Anagnostopoulou 2005 also acknowledges the possibility that ja-adjuncts may be either VP- or vP-adjuncts). Therefore, benefactive DPs/se-datives attracted by an Appl below √P/√cause (i.e., IO-like benefactives/those that are perfectly grammatical without clitic doubling) are only associated with the more ‘restricted’ interpretation, since this Appl is compatible with (17a) but not with (17b), i.e., it can only attract datives below it, e.g. √P-adjuncts, but not VoiceP-adjuncts. The latter may be attracted by applicatives merging higher, but are associated with different syntactic properties, alongside their special interpretive effects.  

(17) a.  ... b.  VoiceP
    (Appl) √P ja-benef VoiceP
    Benef √P EA
    DO √

See also Bosse e.a. (2011) for a similar connection between attachment height and ‘what is taken to be the source of the experience’, although for them so-called ‘affected experiencers’, i.e. non-selected affected datives, are base-generated in the A-positions (Specs of specialised heads) where the corresponding XPs appear.
Further telling evidence for this sort of structural analysis comes from the scopal behaviour of the SMG adverb \textit{ksana} ‘again’, especially when incorporated into the verb. As Anagnostopoulou & Alexiadou (2009) note, the incorporated \textit{ksana} (cf. also Rivero 1992, Alexiadou 1997) is always ambiguous between the repetitive and the restitutive reading (see von Stechow 1996), regardless of word order/information structure issues etc. It will be shown that each of the different types of dative exhibit different scopal behaviour with respect to the two different readings of incorporated \textit{ksana}, thus supporting the present analysis, if we are to assume a syntactic explanation of these facts.

Von Stechow (1996) provides some good reasons to postulate a structural account of the ambiguity of such adverbs, since in e.g. German certain word orders (and, consequently, certain attachment positions of \textit{wieder} ‘again’) favour or exclude one of the possible meanings (see Anagnostopoulou & Alexiadou (2009) for similar arguments from SMG). Thus, unambiguously high attachment of the adverb gives rise to exclusively repetitive readings (18a), while restitutive readings require demonstrably low attachment (18b):

(18)a. Thilo again opened the door. \(\rightarrow\)repetitive only: he had done that before

\begin{align*}
\text{Thilo} \ [\text{VoiceP} \ \text{again} \ [\text{VoiceP} \ < \text{Thilo}> \ \text{opened,} \ \text{Voice} \ \ldots [\sqrt{\text{t, the door}}] ]]
\end{align*}

b. Thilo opened the door again.

\begin{align*}
\text{Thilo} \ [\text{VoiceP} [\text{VoiceP} \ < \text{Thilo}> \ \text{opened the door}] \ \text{again}] \rightarrow \text{repetitive} \\
\text{Thilo} \ [\text{VoiceP} < \text{Thilo}> \ \text{opened,} \ \text{Voice} \ \ldots [\sqrt{\text{p, t, the door}] \ \text{again}]]
\rightarrow \text{restitutive: the door had been open before}
\end{align*}

(adapted from Beck & Johnson 2004:109)

In other words, adverbs meaning ‘again’ denote a relation between the overall event \(e\) and the property/-ies of the event denoted by whatever is included in the adverb’s c-command domain (\(P\)), giving rise to a presupposition that “there [is] a previous event \([e']\) that has the property[/-ies], and asserts that the property is true of the event \([e]\)” (Beck & Johnson 2004:104):
The incorporated SMG *ksana* can have any of the two basic interpretations because it can reconstruct in any of the external- and internal-merge positions of the verb/root (Anagnostopoulou & Alexiadou (2009)). Therefore, any unavailable readings in the following examples cannot be attributed to word order facts putting restrictions on the possible attachment site of *ksana*, but exclusively to the position of the arguments that fall under or outside its scope. In this section, I will compare IO-like benefactive datives to canonical goal IO DPs. As shown in (20), the goal argument is necessarily part of the presupposition arising from the restitutive *ksana*, which may either indicate that (i) the smallest constituent to which *ksana* can adjoin in double-object constructions is ApplP\(^{12}\) or (ii) the restitutive *ksana* may adjoin to a smaller constituent, perhaps as small as √P, as in (18b), but there is always a copy of the goal argument below the restitutive *ksana*. Interestingly, however, benefactive datives, which occupy the same surface positions as goal DPs, may or may not be under the scope of restitutive *ksana* (21), thus contradicting the assumption in (i) above. Instead, this fact can be explained if *ksana* adjoins to √P, either below or above the first-merged position of the benefactive, which is also a √P-adjunct position.

(20) a. O Janis ksanadhose tis Marias/sti Maria ton charti (SMG)

The John again-gave.3SG the Mary.DAT/GEN/to-the Mary the map.ACC

   (i) John gave Mary the map, and that had happened before (repetitive, irrelevant here)

   (ii) John gave Mary the map, and Mary had had the map before (restitutive)

\(^{11}\) *P* is the denotation of the sister of *again*, and \(<i>\) is the semantic type of events (Beck & Johnson consider both VP/AP and vP, i.e. both the potential sisters of *again* depending on their height of attachment (equivalently: √P and VoiceP in our terms), predicates of events, i.e. constituents of type \(<i,t>\), thus probably departing from Kratzer’s (1994) view that v/Voice encodes the event argument).

\(^{12}\) This seems to be a necessary conclusion for those who assume that IO-DPs are base-generated in Spec-Appl.
(iii) *John gave Mary the map, and the map was owned before

b. O Janis ksanamathe tis Marias ghlosolojia
The John again-learned/taught the Mary.DAT/GEN linguistics

(i) John taught Mary linguistics, and that had happened before (in the meantime, Mary forgot everything she had learned/suffered a memory loss) (repetitive)

(ii) John taught Mary linguistics, and Mary used to know linguistics in the past (restitutive)

(iii) *John taught Mary linguistics, and linguistics used to be known before

13 Perhaps a more telling contrast is the one between the following examples, which demonstrates that ksanas can indeed modify a constituent only containing the root (which roughly means ‘know’, as argued in §3.3) and the theme, excluding the goal/learner, and that the contrast is due to configurational and not purely semantic/theta-related reasons:

(i) O Janis apofasise na ksanamathe ti nekri ghlosa ton proghonon tu ja na tin anaviosi
The John decided to again-learn the dead language the ancestors.GEN his to revive it
‘John decided to learn his ancestors’ dead language to revive it, and (a) he used to know it / ?(b) it used to be known/spoken a few decades ago’

(ii) O Janis apofasise na ksanamathe tu ju tu/sto jo tu ti nekri ghlosa ton proghonon tu
The John decided to again-teach the son.DAT/GEN his/to-the son his the dead language the ancestors.GEN his
‘John decided to teach his son his ancestors’ dead language, and (a) his son used to know it/ *(b) it used to be known/spoken a few centuries ago’.
The John (her.DAT.CL) again-heated the Mary.DAT/GEN the pizza because had gotten-cold

(i) ‘John cooked pizza for Mary, but Mary did not come home in time, the pizza got cold and John reheated it for Mary \(\rightarrow\) the pizza was hot before for Mary’ (restitutive, \(k\sigma\,\alpha\,\alpha\,\alpha\,\alpha\,\alpha\) > Mary)

(ii) ‘John cooked pizza for his friends; when Mary got home late in the night, she was hungry, so John had to reheat it for her \(\rightarrow\) the pizza was hot before; John acted in such a way that the pizza got hot again, this time for Mary’ (restitutive, Mary > \(k\sigma\,\alpha\,\alpha\,\alpha\,\alpha\) )

(iii) ‘John heated the pizza for Mary, and he had done that for Mary/*for someone else before’ (repetitive, \(k\sigma\,\alpha\,\alpha\,\alpha\,\alpha\) > Mary / *Mary > \(k\sigma\,\alpha\,\alpha\,\alpha\,\alpha\) )

(i):

\[
\text{ApplP} \\
\text{DP}\text{Benef} \\
\text{Appl} \\
\text{Appl} \\
\text{Appl} \\
\text{Appl} \\
v_2P \\
v_2P \\
\sqrt{\text{P}} \\
\sqrt{\text{P}} \\
k\sigma\,\alpha\,\alpha\,\alpha\,\alpha\,\alpha\,\alpha\text{restit.} \\
\sqrt{\text{P}} \\
<\text{DP}\text{Benef}> \\
\sqrt{\text{P}} \\
\text{DO} \\
\sqrt{\jmath}
\]

\(k\sigma\,\alpha\,\alpha\,\alpha\,\alpha\) >Benef
Therefore, the scopal behaviour of incorporated *ksana* really supports the assumptions of this chapter concerning the differences between goals and benefactives with respect to their first-merged position.

Another little-noticed contrast between goals and benefactives is that the former (cf. (4) above) – as already noted – but not the latter (22) may be replaced by locative wh-/quantificational adverbs in SMG, even if the latter have a ‘potential/intended
recipient’ reading. This fact is entirely consistent with the assumption about the obligatorily locative interpretation of Compl-√ (but not of √P-adjuncts).

(22) a. Pjanu/?se pjon/*pu aghorases/eftiakses turta?
   Who.DAT/to-whom/*where bought.2SG/made.2SG cake
   ‘Who did you buy/make a cake for?’

   b. Dhen to edhosa/ipa/edhiksa/*aghorasa/*eftiaksa puthena.
   Not it.ACC.CL gave/said/showed/bought/made.1SG nowhere
   ‘I did not give/say/show/buy/make it to/for anyone’

Finally, another point of interest is the passivisability of this class of benefactives. Benefactive constructions in general resist passivisation. Nonetheless, ‘buy’-verbs with benefactive DPs do allow theme-passives under cliticisation/clitic doubling of the dative (23a), due to familiar minimality considerations, as expected by the fact that they essentially share the same structure as goal DOCs. When the benefactive dative is realised as a se-phrase, theme passivisation is blocked (23b), which indeed supports the claim that all se-benefactives occupy Spec-Apl, as se in this case is a Case marker incompatible with a locative interpretation; being in Spec-Apl, se-benefactives cause a defective intervention effect in the relationship between T and the theme (and, given that se-datives cannot cliticise/undergo clitic doubling, unlike morphologically genitive DPs, this intervention effect cannot be resolved).

(23) a. Dhen *(tis) aghorastike tis Kuneva dhjamerisma sti Vulgharia
   Not her.DAT.CL was-bought the.GEN Kuneva apartment in-the Bulgaria
   ‘They did not buy Kuneva an apartment in Bulgaria’
   (from: http://www.hellenicparliament.gr/Praktika/Synedriaseis-Olomeleias?sessionRecord=2f224faf-7946-481f-92f3-c2408cd17c1d)

   b. *Den aghorastike stin Kuneva dhjamerisma sti Vulgharia
   Not was-bought to-the Kuneva apartment in-the Bulgaria

On the other hand, benefactive constructions with causatives/verbs of creation strongly resist agentive passives. For reasons that have been unclear so far, non-active forms of such verbs co-occurring with datives cannot be interpreted as canonical (agentive) passives (24b), but are instead forced to have a non-
agentive/middle/reflexive interpretation (24c), always supported by the presence of a
dative clitic, which again cancels DAT’s defective intervention effect between T and
NOM. One of the reasons behind this split in the class of IO-like benefactives
(between ‘buy’-predicates and causatives) is probably the fact that such
interpretations (i.e., middle/reflexive) are unavailable for ‘buy’-predicates anyway.
Thus, when a dative co-occurs with non-active forms of ‘buy’-predicates (22), only a
genuine (agentive) passive reading is possible, just like when no dative is there.
Instead, when a non-active causative/creation verb is combined with a
benefactive/malefactive dative, then the dative tends to be interpreted also as a
conscious causer of the change-of-state event, though not as one completely
controlling this change (24c, 26).

(24) a. To arni mas to epsian ethelontes
   The lamb us.DAT.CL it.ACC.CL baked.3PL volunteers
   ‘Volunteers baked the lamb for us’

b. To arni (?*mas) psithike apo ethelontes
   The lamb us.DAT.CL was-baked by volunteers

c. Dhen tis psithike kala (*epitidhes, *purpose clause, *by phrase)
   Not her.DAT.CL was-baked.3SG well (on purpose…)‘It was not cooked well on her’(normally implying that she was the cook)

More precisely, this ‘causer’ reading is only available when the result may
potentially be interpreted as unintentional and/or caused by (at least partial) lack of
control on the activity yielding this result; thus, verbs of creation such as chtizo
‘build’ that resist such interpretations also resist ‘dative causers’ (thus, their non-
active forms are either incompatible with dative DPs altogether or, for some speakers,
marginally give rise to a pure benefactive reading, (25)).

(25)%??Ghrighora tis chtistike tis Marias to spiti tis
   Quickly her.DAT.CL was-built the Mary.DAT/GEN the house her
   ‘Mary had her house built quickly, to her delight’
Having said that, it must be noted that ‘unintentional causers’ are still interpreted as positively or, usually, negatively affected arguments. Anagnostopoulou (2005) suggests that non-goal datives with non-active verbs can only be malefactives, potentially allowing a causer reading, but it is clear that positively affected causers, i.e. causers that are beneficiaries at the same time, are also possible in these constructions (26); the fact that these datives are usually interpreted as negatively affected is simply symptomatic of the fact that the causer does not completely control the achievement/change-of-state event.

(26) Ti omorfa pu tis psithike!
What nicely that her.DAT.CL was-baked.3SG
‘How nicely it was baked (to her delight/she was the cook)!’

The ‘conscious but unintentional causer’ interpretation is presumably associated with Appl’s [+m] feature. In light of these data, it seems tempting to further assume that this interpretation is not only possible, but actually the preferred one when a genuine agent theta-role is not present/assigned; in other words, since [+m] entails conscious involvement in the event, the ‘causer’ reading may be more salient than just a ‘beneficiary/maleficiary’ reading (which constitutes a more oblique kind of involvement), and it therefore has to arise unless an external theta-role is obligatorily present/assigned to some other argument, e.g. in active transitive contexts, where it is arguably assigned by Voice, or in non-active contexts where an agentive reading only is allowed, as with ‘buy’-verbs. If this assumption is on the right track, then a plausible scenario would be that, since non-active causative/creation verbs allow reflexive/middle readings, i.e. since the assignment of Agent is not obligatory, the presence of a [+m] argument pre-empts the assignment/insertion of a genuine implicit Agent theta-role.

These speculations derive a correlation between the availability of unintentional [+m] causers and the possible interpretations of non-active forms. The prediction is that the ‘causer’ reading (which blocks agentive passives) arises only in languages where non-active forms give rise to a variety of interpretations, e.g. middle, reflexive, anticausative, along with genuine passive. This is usually the case in languages with synthetic medio-passive forms, with dedicated non-active morphemes, like Greek or
Albanian (27)\(^{14}\), or in languages with se-passives\(^{15}\). Instead, participial passives, which can have no other interpretation besides that of canonical agentive passives, seem to be freely allowed even in the presence of benefactive/malefactive datives, as is really expected: as already said, the agentive reading is blocked by a dative only if no external theta-role is encoded syntactically\(^{16}\); instead, it appears that in participial

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\(^{14}\) Albanian in particular, like other Balkan languages (see Rivero 2009), also allows datives with so-called dispositional readings (i), which seem to require imperfective aspect (see Kallulli 2006:276, who also points out that these readings too, like involuntary causers, depend on the un-availability of overt agent by-phrases); it may be that the range of entailments/meanings of imperfective aspect also includes such involuntary states in some languages (in the same way that it encodes e.g. counterfactuality in a number of languages, cf. Iatridou (2000, 2009)); interestingly, similar interpretations obtain in some Modern Greek dialectal idiomatic expressions (ii); in Standard MG this appears to be lexicalized by the light verb construction DAT.CL+erchete(‘comes’)+na-clause, where DAT obligatorily controls the null subject of the na-clause (iii).

(i)
Beni i thy-hej dritarja (Albanian)
Ben.DAT 3SG.DAT.CL break-NACT.PAST.IMPFV.3SG window.NOM
‘Ben felt like breaking the window’

(ii)
Mu ksjete to cheri mu (Maniot Greek)
Me.DAT.CL scratch.NACT.PRS.IMPFV.3SG the hand.NOM my
‘I feel like scratching my hand’

(iii)
Mu erchete/irthe na ksiso to cheri mu (SMG)
Me.DAT.CL comes/came.3SG Subj. scratch.PVF.1SG the hand.ACC my
‘I feel/felt like scratching my hand’

\(^{15}\) I will not discuss here se-constructions in detail. The Spanish data (see Cuervo 2003:142-143, 186-189) seem to confirm our assumptions here: (a) the ‘unintentional responsibility/causation’ reading is favoured with verbs undergoing the causative alternation (i), i.e. (existential/generic/implicit) agentive readings of se+V, which are otherwise possible, are impossible when the dative is present; (b) the ‘unintentional causation’ reading is disfavoured or excluded with unaccusatives that “do not have a causative variant” (Cuervo 2003:187) (ii), i.e. when a genuine passive reading would be impossible anyway. The main structural difference between (i) and (ii) is presumably the presence of V\(_{\text{CAUSE}}\) in the former but not in the latter; then, the ‘unintentional causation’ reading is a function of the availability of both [+m] and V\(_{\text{CAUSE}}\).

(i) Al tintorero se le quemaron los pantalones de Carolina (Spanish)
a-the dry-cleaner.DAT se 3SG.DAT.CL burnt.3PL the trousers of Carolina
‘Carolina’s trousers got burnt on the dry-cleaner’/*‘The dry-cleaner (accidentally) burnt Carolina’s trousers’

(ii) A Carolina se le marchitaron las flores
A Carolina.DAT se 3SG.DAT.CL wilted.3PL the flowers
‘The flowers wilted on Carolina’/*‘Carolina unintentionally wilted the flowers’

(from Cuervo 2003:142,186)

Like Anagnostopoulou (2005), I do not consider the two readings, namely the unintentional causer interpretation and (usually negatively) affected reading, mutually excluded, let alone structurally distinguishable (pace Cuervo 2003, Kallulli 2006). In fact, they can both obtain at the same time, hence no (structural or even purely semantic) ambiguity should be postulated; instead, they are presumably both derivative of [+m], with the prominence/salience of each reading also depending on other contextual and structural factors (such as the presence/absence of V\(_{\text{CAUSE}}\), or the presence/absence of a possession relation between the dative and the theme –see below).

\(^{16}\) Therefore, in this case, the agentive reading is assigned optionally, at some post-syntactic, perhaps pragmatic level (and this really seems to be the case with multi-functional non-active forms in SMG, see also Roussou 2007 and Manzini, Roussou & Savoia 2009). See however Chapter 3, where it was argued that there is evidence for a Voice head in SMG passives, but not in reflexives/anticausatives (partly in the spirit of Alexiadou & Anagnostopoulou (2004), pace Manzini, Roussou & Savoia who acknowledge no syntactic difference between the different functions/“argument realisations” (in the sense of Levin & Rappaport Hovav 2005) of non-active forms); the difference between synthetic and
passives the external theta-role is obligatorily encoded/assigned syntactically (Baker, Johnson & Roberts 1989, Collins 2005, Roberts 2010), hence the dative cannot affect the interpretation of the construction and must have some other reading compatible with [+m]. Thus, in e.g. Italian, (participial) passives with purely benefactive/malefactive datives appear to be perfectly acceptable (28a), thus contrasting with the languages mentioned above, e.g. SMG (28b).

(27)a. Benit i-u thye dritarja (Albanian)
   Ben.DAT 3SG.DAT.CL-NACT break.AOR.3SG window.NOM
   ‘Ben unintentionally/involuntarily broke the window.’
   (from Kallulli 2006:276)

b. Tis Vasos *(tis) kaike i supa (SMG)
   The Vaso.DAT/GEN her.DAT.CL burnt.NACT(REFL).3SG the soup.NOM
   ‘The soup (Vaso was cooking) was burnt to her detriment’

(28)a. Gli è stata tagliata l’ erba (dal giardiniere) (Italian)
   Him.DAT.CL is been cut the grass (by-the gardener)
   ‘The grass was cut for him (by the gardener)’
   (from Folli & Harley 2006:126-127)

b. *Tu kopike to ghrasidhi apo ton kipuro (SMG)
   Him.DAT.CL was-cut.NACT.PAST.PFV the grass.NOM by the gardener
   ‘The grass was cut for him by the gardener’

As an aside point, it must be pointed out that this account of participial passives facilitating theme-passivisation of benefactive constructions does not extend to Spanish (28’), as Demonte (1995:11-12) shows, and as is also discussed in Anagnostopoulou (2005), but for independent reasons. Recall from Chapter 3, that the dative XP in Spanish does not form a chain with the dative clitic, the latter being the spellout of Appl, rather than moved from within the dative XP (as in Italian); thus, the configuration underlying (28a) is:

\[
[\phi_{IO} - T_{[u]}][PartP [\text{Appl} <\phi_{IO}[uCase]> \text{Appl} [\nuP \text{Benef} [\nu <\text{DO}[uCase]> \sqrt{\nu}] as VoiceP…],
\]

participial passives, then, is probably derived not by the presence/absence of Voice, but by the fact that no external theta-role is assigned in Spec-Voice in the former, as opposed to the latter.
with $\phi_{IO}$ cancelling the defective intervention of Benef between T and DO, while in the configuration underlying (28’), namely,

$$[\text{AppP}_{\left[v_P<\text{DO}_{\left[u_{\text{Case}}\right]}\right]}]\left[v_P<\text{Benef}_{\left[v_P<\text{DO}_{\left[u_{\text{Case}}\right]}\right]}\right]] \text{VoiceP}],$$

Benef’s intervention effect between T and DO cannot be circumvented, thus blocking the latter’s passivisation.

(28’) *La casa le fue pintada a Juan ante ayer (Spanish)

The house him.DAT.CL was painted a John before yesterday

‘The house was painted for John the day before yesterday’

(from Demonte 1995)

This correlation between the interpretation of datives in non-active contexts and the structure/exponence of passives is illustrated in the table below:

<table>
<thead>
<tr>
<th>NACT+DAT</th>
<th>IO (goal/source)</th>
<th>IO-like Benef/Malef</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>w/ ‘buy’-Vs</td>
</tr>
<tr>
<td>Participial passive (Romance)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Non-participial NACT (e.g. SMG/Albanian)</td>
<td>(agentive) passive</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>anti-causative or reflexive</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 1: datives in non-active contexts

Finally, Table 2 summarises the similarities between canonical IO datives and benefactives, which are all due to their occupying Spec-App, above DO and below Voice, and their differences, which are due to the fact that genuine/goal IOs, but not Benefs/Malefs (externally), merge in Compl-√:
<table>
<thead>
<tr>
<th></th>
<th>Canonical (e.g. goal-) IO</th>
<th>IO-like Benef/Malef</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP\textsubscript{DAT} &gt; DO</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>se-\textsubscript{ACC} &gt; DO</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>DO &gt; se-\textsubscript{ACC}</td>
<td>✓</td>
<td>*</td>
</tr>
<tr>
<td>\textit{ksana}\textsubscript{restitutive} &gt; DAT</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>DAT &gt; \textit{ksana}\textsubscript{restitutive}</td>
<td>*</td>
<td>✓</td>
</tr>
<tr>
<td>clitic doubling in active contexts</td>
<td>optional</td>
<td>optional</td>
</tr>
<tr>
<td>wh-movement</td>
<td>no special restrictions</td>
<td>no special restrictions</td>
</tr>
<tr>
<td>Substitution by \textit{wh-} /quantificational Advs</td>
<td>✓</td>
<td>*</td>
</tr>
<tr>
<td>theme-passives require clitic\textsubscript{DAT}</td>
<td>✓</td>
<td>✓ (if at all possible, see Table 1)</td>
</tr>
</tbody>
</table>

Table 2: IO-like benefactives vs. canonical IOs

4.2.3. Free(r) benefactives: other simple transitive predicates

The benefactive/malefactive DPs we have considered so far are predicted to exist in every language that has the double-object construction: (a) they are first-merged in an adjunct position which ought to be universally available and independently necessary for expressions such as for-adjuncts, (b) their derived position, namely Spec-Appl below Voice, is also the derived position of ‘shifted’ goals. Indeed, most of the (active/transitive) examples in the previous section are readily translatable into English\textsuperscript{17}, with the benefactive argument appearing as a DP following V and preceding DO. Nonetheless, there are also some further kinds of benefactive/malefactive constructions, which appear to be less selective as to the argument/event structure of the predicate they appear with, and which are probably more restricted cross-linguistically.

\textsuperscript{17} In other words ‘free’ benefactives/very high datives are normally ruled out in languages such as English. However, as R. Kayne points out to me, ‘there do seem to be high datives in (some) English, as in Webelhuth & Dannenberg (2006). The challenge is to show how the high position of those datives gives rise to avoidance of Condition B effects’. On the latter, see my explanation below as to why very high datives (particularly ethical daties) do not in fact belong to the same binding domain as other arguments, and why apparent Principle B effects are in fact logophoricity effects –the latter may just be absent in English high datives.
I will call these datives ‘free benefactives’, aiming to give a specific content to a term already used in the literature rather loosely. Optional datives of this particular type (29) appear (even) with mono-eventive predicates, e.g. transitive and unergative verbs with simple event structures, e.g. ‘activities’, ‘statives’ and ‘achievements’ following Levin’s (1999) distinction.

(29)a. Thelo na με μελετίση τι περιλήψη κε να μου πισ τι περιλήψη (activity)
   
   WANT.1SG Subj. me.DAT.CL study.PFV.2SG this the thesis and Subj. me.DAT.CL tell.PFV.2SG the summary
   ‘I want you to study this thesis for me and tell me the summary’

b. Τις κρατίσα τιν τσάντα τις Μαρίας. (stative)
   
   Her.DAT.CL held.1SG the bag.ACC the Mary.GEN
   ‘I held her bag for Mary’

c. Θα μου πετάξεις/τρέξεις/πας μετρεί το περιπτερό για τσιγάρα; (unergative)
   
   FUT me.DAT.CL throw-refl/run/go.2SG unto the kiosk for cigarettes
   ‘Will you please run up to the kiosk to buy me some cigarettes?’

d. I Katerina tu (chamo)jelase tu Tasu. (unergative)
   
   The Katerina.NOM him.DAT.CL smiled/loughed.3SG the Tasos.DAT/GEN
   ‘Katerina smiled/loughed for Tasos’

Therefore, such datives may appear with VoicePs comprising no more than one v-head, as opposed to causatives and ditransitives; given that there is not a potential Case assigner within VoiceP for their active inherent Case feature (if transitive, v’s Case must be checked by DO), they need to move into a higher position and, consequently, the applicative head that facilitates this needs to be merged above VoiceP:
Consequently, the [uCase] feature of free benefactive DPs needs to be valued and deleted via Agree with T, in the same way as the [uCase] feature of dative DPs gets valued in theme-passives in SMG and several other languages, see Chapter 2. Like in theme-passives, the dative is a defective intervener between T and the nominative: in passives, it is the theme/internal argument that needs to Agree with T for Case reasons, while here the benefactive DP may potentially block T’s Agree with the external argument. As in passives, this defective intervention effect is cancelled through clitic-movement/elitic-doubling of the dative DP: in both cases, the clitic that incorporates into T renders the dative in Spec-Aappl invisible/transparent, thus preventing it from valuing T’s [uD] feature (recall that (dative) clitics lack [D]), and letting T probe again and fully Agree with a lower DP\textsuperscript{18}. This captures the fact that benefactives/malefactives of this sort always require the support of a dative clitic even in active contexts.

(31) a. Boris na ?*(tu) lisis tu Jani mia askisi sta mathimatika pu ton dhiskolevi?
     Can.2SG Subj. him.DAT.CL solve.PFV.2SG the John.DAT/GEN an exercise in-the maths that.REL him.ACC.CL distresses
     ‘Can you solve a maths problem for John, because he finds it hard?’

b. Prepi na ?*(tis) kitakso/prosecho tis jitonisas afto to fito oso kero tha lipi.

\textsuperscript{18}Therefore, the configuration [Voice [v* [Benef Appl [√ DO]]]] is illicit precisely because the same mechanism of obviation of Benef’s intervention cannot be employed: even if a dative clitic incorporates into v*, the derivation still cannot be salvaged, since v* only has [uφ] and no [uD], i.e. it would still be forced to fully agree with Benef, leaving DO with an unvalued [uCase] feature.
Must.IMPERS Subj. him.DAT.CL watch.PFV/take-care-of.1SG the neighbour.FEM.DAT/GEN this the plant as-much time FUT misses
‘I must take care of this plant for my neighbour/on her behalf while she is away’

(32) I Maria *(tu) plirose tu Jani ta dhidhaktra tis scholis tu
The Mary.NOM him.DAT.CL paid the John.DAT/GEN the fees.ACC the school.GEN his
‘Mary paid John’s university fees for his sake/on his behalf’

The way Case is checked/deleted in these contexts and the role of the dative clitic in this entails that, unlike IOs and IO-like benefactives/malefactives, these datives cannot be realised as se(‘to’)-datives, i.e. as se+DP\textsubscript{ACC}, as these expressions cannot undergo clitic doubling even when they can be argued to realized dative Case (33). On the other hand, in languages where a-datives can arguably be licensed by Appl alone, either above or below VoiceP (see Chapter 3), e.g. Italian (34) or French, free benefactives/malefactives too can be realized as a-datives without the presence of a dative clitic being obligatory (by contrast, as expected, in Spanish these datives too need to be clitic-doubled, as all datives that can be shown to asymmetrically c-command DO –see Cuervo 2003 for examples semantically corresponding to the benefactive/malefactive constructions of this section).

(33) a. Ta pedhja *(tis) faghane tis Marias oli tin turta (SMG)
The children her.DAT.CL ate.3PL the Mary.DAT/GEN all the cake.ACC
b. *Ta pedhja faghane sti Maria oli tin turta
The children ate.3PL to-the Mary.ACC all the cake.ACC
‘The children ate all the cake on Mary’

(34) I bambini hanno mangiato tutta la torta alla mamma/alla nonna (Italian)

19 The pure ‘beneficiary/on behalf of’ reading in (32) obtains only if the dative clitic is present; without it, the referent of the dative DP (‘John’) can only be interpreted as the actual recipient of the fees (in which case a v\textsubscript{TRANSFER} probably has to be added, so that Appl can merge between it and v\textsubscript{CAUSE}, giving rise to an IO-like benefactive).

20 The unavailability of se+DP alternants is not restricted to ‘free’ malefactives, cf. (i):

(i) *(Prosecha sti jitonisa aflo to fito (‘free’ benefactive)
‘I took care of this plant for the neighbour’
The children have eaten all the cake to-the mom/to-the grandma
‘The children have eaten all the cake on mom/grandma’
(from Folli & Harley 2006:124)

The requirement that a dative clitic be present also extends to A’-dependencies involving such datives: the presence of a corresponding (resumptive) clitic is always deemed necessary, when A’-movement of free benefactives/malefactives is at all possible. In fact, it seems that, in terms of information structure, attaching above/outside VoiceP, these dative DPs somehow resist interpretations associated with VoiceP-internal positions, e.g. new information/focus in situ. Instead, they rather tend to be interpreted as belonging to the presupposed part of the sentence, a reading which is also reinforced by the strong preference for cliticisation/clitic doubling. Nevertheless, while the absence of a dative clitic in the examples above results in mild ungrammaticality, focalisation of a free benefactive/malefactive in situ (35a), as well as wh-questioning without clitic resumption (35b), gives rise to sharp ungrammaticality; this fact must be attributed to the information structure considerations discussed here, and not to the clitic requirement alone. Furthermore, wh-questioning of these datives is usually only meaningful to the extent that the wh-fronted dative can be understood as D-linked, or even echoic (35b).

(35)

(a) *Prepi na (tis) (to) prosecho TIS JITONISAS afto to fito
   Must.IMPERS Subj. her.DAT.CL it.ACC.CL take-care-of.1SG the
   neighbour.FEM.DAT/GEN this the plant.ACC
   ‘I must take care of this plant for THE NEIGBOUR’

(b) Pjanu, % lei, *(tu) proseches ena panakrivo fito oso kero elipe?
   Who.DAT/GEN, ‘they say’, him.DAT.CL took-care-of.2SG an expensive

21 The grammaticalness of (i) and (ii) and its contrast with (iii) show that dative DPs in Spec-Appl below Voice can unproblematically be focused in situ:

(i) ?Egho tha dhoso TIS MARIAS oli mu tin periusia (canonical IO)
    I         FUT give.PFV.1SG the Mary.DAT/GEN all my the belongings.ACC
    ‘I will give all my belongings to MARY’

(ii) ?Egho tha psiso TU KOSTA enan kafe, ama thes ki esi fijakse monos su (IO-like Benef)
    I         FUT make.PFV.1SG the Kostas.DAT/GEN a coffee, if want.2SF and you
    make.IMP.2SG alone you.GEN.CL
    ‘I will make a coffee for Kostas, you make yours yourself’

(iii) Egho tha *(tis) kratiso tis Marias/’TIS MARIAS dhomatio se kendriko ksenodhochio
    I         FUT her.DAT.CL book.PFV.1SG the Mary.DAT/GEN room in central hotel
    ‘I will book a room in a central hotel for Mary’
plant.ACC as-much time missed.3SG

‘For whom/on whose behalf did you (reportedly) take care of an expensive plant, while they were away?’

As noted earlier, the ‘on behalf of x/for x’s sake/to x’s detriment’ interpretation arguably involves an individual benefitting/being harmed from the whole event, including causers/agents, rather than a subevent including the result, as in IO-like benefactives/malefactices. On purely ‘on behalf of’ readings, the agent does matter, as it must be someone other than the beneficiary, while also in other variants of this reading, what is offered to the beneficiary is the whole process/activity yielding a result/product and not the result alone (cf. (31a), as well as (36) below). Furthermore, the agent demonstrably also plays a role in the computation of negative affectedness: for instance, in (33-34) the referent of the dative is negatively affected, because the agent/eater is different from the intended one\(^{22}\). All these interpretations obtain thanks to free benefactives’/malefactives’ occupying Spec-Appl above Voice, which lets them scope over the entire Voice\(^23\), combined with Appl’s [+m] feature. It must be pointed out here that perhaps even predicates that allow IO-like benefactives/malefactives also allow this high attachment; however, this departure from the default (which conforms with (12)) is only felicitous if it is contextually clear that a potential recipient/possessor/consumer etc. interpretation is not intended (36).

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\(^{22}\) which does not have to coincide with the dative, i.e., this is not a case of a deprivation/source reading, which would bring it closer to IO-like malefactives.

\(^{23}\) It must be noted that benefactives scoping over VoiceP, but not IO-like benefactives, may co-occur with canonical IOs (i), more or less marginally (see also Joseph & Philippaki-Warburton (1987) for examples, and (ii) below from French, where the benefactive clitic happens to be reflexive –see Boneh & Nash (2010, 2011) and their arguments that these datives occupy a position above Voice, and Campanini & Schaeffer (2011) for arguments that these datives are in fact truth-conditional, fulfilling an optional but truth-functional thematic role, which makes them comparable to free benefactives):

(i) %Boris se parakalo na mu tachidhromisis afo to ghrama ston Steljo? (SMG)
   Can.2SG you.ACC.CL please Subj. me.DAT.CL post.PVF.2SG this the letter to-the Stelios
   ‘Could you please post this letter to Stelios for me/on my behalf?’

(ii) Ce matin, j’ai juste à me repasser quelques chemises à toute ma petite famille. (French)
    This morning, I have only to 1.SE iron several shirts to all my small family
    ‘This morning, I only have to iron some shirts for my small family.’
    (from Boneh & Nash, 2011:63)
(36) Simera, aghapiti tiletheates, tha sas majirepsume musaka ja na sas dhiksume pos fjachnete i béchamel

Today dear viewers FUT you.PL.DAT.CL cook.PFV1PL moussaka for Subj. you.PL.DAT.CL how is-made the béchamel sauce
‘Today, ladies and gentlemen, we will cook moussaka for you, to show you how the béchamel sauce is prepared’ (uttered on a TV show)

Evidence that these datives may scope above the agent comes from the following scope facts: as opposed to IOs and IO-like benefactive/malefactives (see (21) above, especially (iii)), the datives in question can scope over repetitive ksana ‘again’, which clearly scopes over the agent:

(37) Mu to ksanamajirevis/ksanalinis, se parakalo, ja na dho pos jinete?

Me.DAT.CL it.ACC.CL again-cook.2SG/again-solve.2SG, please, for Subj. see.PFV.1SG how is-made
(i) ‘You’ve cooked/solved it for me before, but can you do it again?’ ksana>Benef
(ii) ‘I know you’ve cooked/solved it before, but can you do it again, this time for me?’ Benef>ksana

(i)       ApplP
          /            
     ksana_repet.  ApplP
          /                  
     DP_Benef        Appl
                    /            
         Appl           VoiceP
                     /                        
                    EA                         …

⇒ ksana>Benef
On the other hand, the obligatory presence of a dative clitic in SMG obscures the potential binding relationships between DAT and the agent, and more particularly our most reliable diagnostic, quantifier variable binding; as already discussed in Chapter 3 (see (65) there, repeated here as (38a), and the discussion preceding it), a quantifier can be lower than its variable if the quantificational DP is clitic-doubled; thus, (38b) essentially tells us nothing about the relative positions of DAT and the agent. Nevertheless, in languages where clitic doubling is not required or available, e.g. Italian, it appears that no benefactive dative can bind (into) the agent (as originally observed in Boneh & Nash 2010) (38c).

(38) a. I mitera tu; *(tu) edhose tu kathe pedhju; fajito (SMG)
   The mother.NOM his him.DAT.CL gave.3SG the every child.DAT/GEN food.ACC
   ‘?*His mother; gave each boy; food’

b. *(Tis kathe mamas; to pedhi tis; tis; troi (tis kathe mamas;)) ta ghlika pu ine ja tus kalesmenus
   The each mom.DAT/GEN the child.NOM her.GEN.CL her.DAT.CL eats (the each mom) the sweets.ACC that are for the guests
   ‘?*Her child eats the pastries (that were bought to treat any guests) on every mom’

c. *I suoi/i/propri; bambini mangiano ad ogni mamma; la torta (Italian)
   The her.POSS children eat.3PL to every mom the cake
   ‘?*Her children eat the cake on every mom’
Thus, it follows that these benefactives/malefactives too have a copy below VoiceP that gets LF-interpreted for binding purposes, arguably in a √P-adjunct position, as all benefactives malefactives indeed, it would be a welcome generalisation with respect to the UTAH to show that all optional internal arguments are first-merged in that position, and more generally that all internal arguments are not first-merged higher than √P.24 Following the ‘irreversible binding’ theory advocated in Chapter 2, the binding relationship between the agent and the benefactive is computed at phase-level, i.e., VoiceP, therefore potential movement of the benefactive outside/above VoiceP cannot reverse it (38c).

As expected, these benefactives/malefactives strongly resist passivisation and non-active morphology in general: as discussed in the previous section, the absence of an external argument in Spec-Voice in (synthetic) passives forces any other [+m] argument present to take up a related external theta-role, namely that of the (unintentional) causer. However, it appears that the predicates allowing ‘free’ benefactives/malefactives are not compatible with partial (lack of) control of the event, while also the ‘on behalf of/for x’s sake’ reading clearly disallows co-indexation of the person causing the event with the person benefitting/suffering from it. Furthermore, non-active forms of the monoeventive predicates that allow ‘free’ benefactives (usually) do not allow readings other than the passive, e.g. middle/reflexive/anticausative etc, unlike the predicates considered in the previous section.25

(39) a. O Janis (?)*(tis) kratise tis Marias tin sakoules ap’to supermarket

24 As noted in the previous section, there are also ju(‘for’)-phrases arguably adjoining directly to VoiceP; however, that this position cannot be the first-merged position of benefactive/malefactive argumental DPs, possibly because movement from a VoiceP-adjunct position to the Spec of a phrase immediately dominating VoiceP (namely, ApplP) would violate Antilocality (see Boskovic 1994, 1997, Grohmann 2003). Moreover, these datives too and the corresponding clitics are subject to the strong version of the PCC, which indicates that at the relevant stage of the derivation, DO in Spec-ν intervenes between Appl and the first-merged position of the dative. The fact that they may co-occur with IOs and IO-like benefactives suggests that VoiceP can take more than one adjuncts, and that they do not compete for the same (Case) position; on the other hand, the fact that an IO-like benefactive cannot co-occur with an IO or another IO-like benefactive suggests that these arguments do compete for the same applicative head.

25 On that scenario, then, such a passive would not crash at narrow syntax, but rather at LF. Alternatively, we may assume (almost along the lines of Anagnostopoulou 2005) that Appl simply cannot select a passive/defective VoiceP. However, the assumption that the narrow syntax in fact overgenerates, with LF/semantics filtering out certain structures, may offer a better account of the gradience characterising the grammaticality of such constructions.
The John.NOM him.DAT.CL held.3SG the Mary.DAT/GEN the bags from the supermarket

‘John held the supermarket bags for Mary’

b. *I sakules (tis) kratithikan tis Marias (apo ton Jani)

The bags her.DAT.CL were-held.3PL the Mary.DAT/GEN (from the John)

‘The bags were held for Mary (by John)’

Finally, the generalisation that applicatives which cannot be ‘sandwiched’ between two v’s within VoiceP have to merge above it also has another interesting consequence, as it seems to capture the role of clitic-doubling in following paradigm, due to Anagnostopoulou (1999b):

(40)a. I embiria tu ghamu ?*(tis) charise tis Marias statherotita

The experience.NOM the marriage.GEN her.DAT.CL offered

Mary.DAT/GEN stability.ACC

‘The experience of marriage offered Mary stability’

b. *I embiria tu ghamu charise statherotita tsi Maria

The experience.NOM the marriage.GEN offered stability.ACC to-the Mary.ACC

‘*The experience of marriage offered stability to Mary’

Earlier we distinguished three related but separable notions: goal, transferee and intended recipient/possessor. Transferees are not necessarily goals (see benefactives of ‘buy’-verbs), but goals of verbs such as give are necessarily transferees. In examples such as (40), the indirect object is an intended possessor/potential recipient, but not a transferee: as Nash (2006:15) also points out in relation to so-called ‘Oehrle contexts’ like the above, [w]hen the transfer, however abstract it may be, is not controlled, the only way to interpret the [indirect object] is as a possessor, not as a transferee’. Consequently, IOs here are neither transferees nor goals, i.e. these constructions lack the ability to license locative/directive PPs (hence the ungrammaticality of (40b)) as well as v\textsubscript{TRANSFER}; as a result, VoiceP comprises only one v-head and, following (12), Appl cannot merge within VoiceP. Thus, it is forced to merge above VoiceP, where the moved dative has to undergo clitic doubling just like ‘free’ benefactives/malefactives, due to familiar defective intervention
considerations. Comparing the typology of benefactives suggested here to other attempts of classification, it could be said that ‘free’ benefactives/malefactives roughly correspond to Bosse, Bruening & Yamada’s (2010) ‘affected experiencers’, which also form part of Boneh & Nash’s typology. While Bosse e.a. acknowledge two possible attachment sites, one above and one below $v^*$, based on their one diagnostics, for Boneh & Nash they are all below $v^*/\text{Voice}$; due to the availability of clitic doubling, SMG may be a more reliable source of evidence than languages that lack clitic doubling, which obscures the purely syntactic differences between different types of datives, while I take (obligatory) clitic doubling itself to be the defining (syntactic) property of ‘free’ benefactives/malefactives. On the other hand, Boneh & Nash acknowledge that all ‘affected experiencers’ are truth-conditional, while for Bosse e.a. some of those that attach high may not be truth-functional. However, some of their diagnostics, e.g. the (im)possibility of wh-questioning a dative, also seem to be affected by factors other than truth-functionality, as we saw; as a matter of fact, all the examples of this section would not have the same meaning if their datives were omitted. To sum up, the table below summarises the basic properties of all datives in active/transitive contexts predicted by the present analysis of applicatives.

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26 It seems to me that unergative psych predicates that optionally take dative arguments, such as the SMG verb *thimono* ‘get angry (at)’, must be analysed in a similar way. *Thimono* licenses a dative argument in Compl-$\sqrt{\cdot}$ with an abstract/metaphorical ‘Location’ theta-role (i) (then Pesetsky’s (1995) ‘subject matter’ might be a sub-case of the *proto*-role ‘Location’), which however cannot possibly be interpreted as a transferee, therefore $v_{\text{TRANSFER}}$ cannot be licensed and, when the optional argument is realised as a dative DP, Appl has no other choice but merge above VoiceP, thus necessitating clitic-movement/clitic-doubling of the dative (ii):

(i) O pateras thimose sti Maria
   The father.NOM got-angry.3SG to-the Mary.ACC

(ii) O pateras *(tis) thimose tis Marias
    The father her.DAT.CL got-angry.3SG the Mary.DAT/GEN
    ‘The father got angry at Mary’.
<table>
<thead>
<tr>
<th></th>
<th>Canonical</th>
<th>IO-like Benef/Malef</th>
<th>Free Benef/Malef</th>
</tr>
</thead>
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<td>✓</td>
<td>✓</td>
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<tr>
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<td>✓</td>
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<td>✓</td>
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<tr>
<td>$\text{DO} &gt; \text{se-DP_{ACC}}$</td>
<td>✓</td>
<td>*</td>
<td>*</td>
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<td>✓</td>
<td>✓</td>
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<td>*</td>
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<td>$\text{ksana}_{\text{repetitive}} &gt; \text{DAT}$</td>
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<tr>
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<td>*</td>
<td>*</td>
<td>✓</td>
</tr>
<tr>
<td>clitic doubling in active contexts</td>
<td>Optional</td>
<td></td>
<td>Obligatory</td>
</tr>
<tr>
<td>wh-movement</td>
<td>No special restrictions</td>
<td>Clitic resumption</td>
<td></td>
</tr>
<tr>
<td>Substitution by $wh$- /quantificational Advs</td>
<td>✓</td>
<td>*</td>
<td>*</td>
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<tr>
<td>theme-passives require clitic$\text{DAT}$</td>
<td>✓</td>
<td>✓ (if at all possible)</td>
<td>Always ungrammatical</td>
</tr>
</tbody>
</table>

Table 3: free benefactives vs. IO-like benefactives vs. canonical IOs

4.2.4. A note on so-called ‘possessive’ datives

Non-core dative arguments that (happen to) refer to the possessor of the internal argument do not really constitute a syntactically or semantically uniform class. The label ‘possessive dative’ is often given to every dative that expresses a seemingly obligatory possession relation between the theme/the direct complement of the root and the referent of the dative, when there is no overt possessor or any marking of possession within the internal argument DP. However, in fact there is considerable cross-categorial and cross-linguistic variation as to how obligatory this possessive interpretation really is, as well as cross-linguistic variation concerning the affectedness of so-called ‘possessive’ datives.
In SMG, a possession relation between a dative and the internal argument can be a preferred or even a forced interpretation, only as long as the referent of the dative is somehow affected by the event (41).

(41) a. Tus episkevasa/chalasa/espasa to kenurjo aftokinito (SMG)
   Them.DAT.CL repaired/broke.1SG the new car.ACC
   ‘I repaired/broke their new car (for/on them)’
   b. *Tus idha to kenurjo aftokinito
   Them.DAT.CL saw.1SG the new car.ACC
   ‘I saw their new car’
   (from Pancheva 2004:187)

In fact, it can be suggested that all such datives fall under one of the categories of benefactives/malefactives considered in this chapter: (i) IO-like benefactives, especially the ones occurring with causative predicates, are intrinsically interpreted as benefitting or suffering from the potential use/consumption of the theme/internal argument after the described (caused) change of state. This necessarily implicates some kind of possession relation between the affected individual and the internal argument; especially when the internal argument is definite and cannot be interpreted as a product, i.e. when the ‘intended possessor etc.’ reading is not accessible, it is strongly implicated that the referent of the dative is (already) the affected owner/possessor of the entity that undergoes some change of state (42) –thus, the contrast in (43) too (observed by Cuervo (2003)) can be attributed to these pragmatic considerations rather than to some syntactic constraint.

(42) Tis evapsa ton ticho/[enan ticho ?(tu spitju tis)] (SMG)
   Her.DAT.CL painted.1SG the wall.ACC/a wall.ACC (the house.GEN her)
   ‘I painted her the wall/a wall of her house’
(43)a. Pablo le lavó el auto a Valeria (Spanish)
   Pablo her.DAT.CL washed.3SG the car a Valeria
   ‘Pablo washed Valeria her car’
   b. *Pablo le lavó el auto de la vecina a Valeria
   Pablo her.DAT.CL washed.3SG the car of the neighbour.FEM a Valeria
   ‘?Pablo washed Valeria the car of her neighbour’ (Cuervo 2003:86)
(ii) ‘free’ benefactives, which denote a looser connection between the dative and the theme in terms of affectedness, may also give rise to similar implicatures (44a), but crucially in this case such implicatures seem to be more easily cancellable: not benefitting or suffering from the state of the theme itself, but rather from the overall event, the dative need not stand in a possession relation to the theme, either before or after the event (44b). Consequently, there might be some kind of semantic or rather pragmatic binding behind these cases, but certainly not some obligatory syntactic dependency: as a matter of fact, not only is this kind of co-indexation contextually cancellable, more or less easily, but also an overt co-indexed possessor (namely, a genitive clitic/bound variable) may or may not be present in the internal argument DP (45) in either of type (i) or type (ii) ‘possessive’ dative constructions, as opposed to the two cases of ‘possessive’ datives considered below.

(44) a. Tis prosecho to skili (SMG)
    Her.DAT.CL take-care-of.1SG the dog
    ‘I am taking care of the/her dog (for her sake)’

b. Tis prosecho (tis Marias) to skili tu Jani
    Her.DAT.CL take-care-of.1SG the Mary.DAT/GEN the dog the John.GEN
    ‘I am taking care of John’s dog, as a favour to Mary’ (felicitous usually on
    the assumption that John and Mary are somehow related)

(45) Tis pleno/prosecho to skili tis
    Her.DAT.CL wash.1SG/take-care-of.1SG the dog her
    ‘I wash/take care of her dog’

There seem to be only two constructions where co-indexation between the dative and the possessor of the internal argument is obligatory, with the possessor being obligatorily covert: (i) inalienably possessed DPs (referring e.g. to body parts), bound by datives as well as other higher DPs, in languages such as French (46), (ii) datives that are not affected in any way by the described event, obligatorily referring to the
possessor of the internal argument in a number of languages (47). Notably, the former may occur even in contexts where the dative is affected (46b)\(^27\).

\[(46)\]a. Le médecin leur a radiographié l’/*leur estomac (French)
   The doctor them.DAT.CL X-rayed the stomach
   ‘The doctor X-rayed their stomachs’
   (from Vergnaud & Zubizaretta 1992:597)
b. Jeanne lui a marché sur les/*ses pieds.
   Jeanne 3SG.DAT.CL walked on the feet
   ‘Jeanne stepped on her/his feet (affecting her/him)’
   (from Boneh & Nash 2011:60)

\[(47)\]a. Pablo le admira/mira/observa/estudia/envidia la campera a Valeria (Sp.)
   Pablo her.DAT.CL admires/looks/observes/studies/envies the jacket a V.
   ‘Pablo admires/looks/observes/studies/envies Valeria’s jacket’
   (from Cuervo 2003:104)
b. Le admira la/*su paciencia/campera
   Her.DAT.CL admires the/her patience/jacket
   ‘(S)he admires her patience/jacket’
c. Je lui croyais beaucoup d’ amis (French)
   I him/her.DAT thought many of friends
   ‘I thought (s)he had a lot of friends’
   (from Kayne 2010:3)

I will tentatively suggest that these possessors are always datives, which may or must (when the dative Case feature is active, as defined earlier) move outside the DP, along the lines of a ‘possessor raising’ analysis (see e.g. Landau 1999). The availability, then, of such datives in a given language depends on their ability to denote

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\(^{27}\) Instead, as Kayne (1975:169-170) observes, when the dative is both affected and an alienable possessor of the theme, then the theme DP can have an overt possessor marker. Kayne further observes that in those case, a dative clitic can appear but neither a pronominal nor a full lexical DPs is possible: this is arguably due to the fact that their presence would give rise to a Principle B and Principle C violation respectively (recall that \(\alpha\)-datives in French are licensed in situ and do not move to Spec-Appl above DO when the surface order is DO-dative):

\[(i)\] Elle lui a démoli sa maison
She him.DAT.CL has demolished her house

\[(ii)\] *Elle a démoli sa maison à lui/à Jean,
She has demolished her house to him/to John
possession, alongside (or instead of) the genitive, i.e., they are in complementary
distribution with other possession markers (possibly pointing towards the existence of
a universal specialised Poss position within DP); Indeed, ‘pure’/unaffected possessive
datives do seem to correlate with features such as (i) the availability of DP-internal
dative possessors with relational nouns (48), (ii) unaccusative existentials with
external dative possessors (49).

(48) un ami à moi (French)
a friend à me
‘a friend of mine’
(from Kayne 1975)

(49) A Laura le sobraron veinte pesos (Spanish)
A Laura her.DAT.CL were-extra twenty pesos
‘Laura had twenty pesos left’
(from Cuervo 2003:30)

More precisely, unaffected datives (type (ii) above) are dative DPs with an active
Case feature that needs to get valued and deleted, within the internal argument DP.
The case assigned to the internal argument DP does not percolate to the possessor,
while also the two DPs in a configuration such as [DP₁ …[DP₂]…] cannot compete for
the same Case assigner. Consequently, the possessor DP needs to be attracted by an
Applicative head, which can make it accessible to a structural Case assigner, possibly
moving through the edge of the DP containing it. As a result of this movement
operation, the possessor cannot appear DP-internally.

(50) $[TP/V^*p \ T/V^* [Applp \ DAT_{poss[uCase]} \ Appl [... [DP₁ ...[<DAT_{poss}>]...] \ \sqrt{\ \}]]]

In principle, this operation should also be available for argument structures where the
dative (which is perceived as the possessor) is an affected argument; however, the
effects of such an operation there would be obscured by the fact that in these cases the
operations described in earlier sections, i.e. the derivations of
benefactives/malefactives (which do not move from within the theme DP), are also
available, which is why affected ‘possessive’ datives can apparently be ‘doubled’ by
DP-internal possessors. As for affected dative possessors of inalienably possessed DPs, which appear to have similar properties (e.g. a ban on DP-internal possessive pronouns), I would tentatively suggest (essentially in the spirit of Vergnaud & Zubizaretta (1992), who discuss these and related constructions in more detail) that for some reason inalienably possessed nouns only license covert possessive variables, which require a higher DP licensing them (51), while all overt possessors are principle B pronouns, giving rise to principle B effects in the presence of a ‘doubling’/co-indexed dative.

(51) Il se lave [les/*ses, mains POSS.] (French)
   ‘He washes his hands’

Interestingly, as already said, SMG does not allow unaffected possessive datives (41b) or its correlates, e.g. dative existential constructions; I take this to indicate that, despite the morphological dative/genitive syncretism, genitive DP-internal possessors always bear a different Case feature from datives, either inherent or assigned structurally by some DP-internal Case assigning head (see Alexiadou, Haegeman & Stavrou 2007); as such, genuine genitives cannot be attracted by any applicative head. In other words, only genuine (non-dative) genitives can encode/denote possession, while whatever can be shown to be a dative in SMG cannot. In earlier stages of the history of Greek, in which the dative and the genitive where morphologically distinct, the dative did express possession and there were certain environments in which either of the two could occur; as a result, possessive dative constructions that are impossible in SMG were indeed possible in e.g. Classical Greek (52), as well as the structures found to correlate with these (dative external possessors with existentials (53a) and DP-internal dative possessors with relational nouns (53b))—see Chapter 5 on some speculations about the role of external possessors in the dative/genitive merger and the correlation between the morphological change and the loss of possession as one of the meanings of the dative.

28 Alongside genitive possessors, cf. (i):
   (i) tois eauto:n ksummachois
       the.DAT themselves.GEN allies.DAT
       ‘to their own allies’
       (from Smyth 1956:342)
(52)a. Ton agathon archonta bleponta nomon anthro:pois enomisen (CIG)
   The good ruler.ACC watching law.ACC men.DAT considered
   ‘(Cyrus) considered that a good ruler was a living law to man’

b. Tharrousi malista polemioi hotan tois enantiois pragmata punthano:ntai
   Be-courageous.3PL most enemies.NOM when the opponents.DAT
   troubles.ACC learn.3PL
   ‘The enemies are most courageous when they learn that the forces opposed
   to them are in trouble’ (lit. ‘that the forces opposed to them have troubles’)
   (from Smyth 1956:341)

(53)a. Allois men chre:mata esti, he:mi:n de ksummachoi agathoi
   Others.DAT prt. money.NOM is us.DAT but allies.NOM good
   ‘Others have riches, we have good allies’

b. to:n hekaterois ksummacho:n
   the.GEN.PL each-of-two.DAT allies.GEN
   ‘of each one’s allies’
   (from Smyth 1956:342)
4.3. Unaccusatives

As already mentioned, dative arguments may also occur in intransitive constructions other than passives. Such constructions fall under Baker’s (1996) generalisation that dative arguments with unaccusatives cannot undergo dative shift, at least in the languages he considers (54-55).

(54) a. John passed the ring to Mary/John passed Mary the ring
    b. Peter opened a beer for Max/Peter opened Max a beer
(55) a. The ring passed t to Mary/*The ring passed Mary t
    b. The beer opened t for Max/*The beer opened Max t

In fact, in the light of data that contradict this generalisation, from languages with datives morphologically distinct from the accusative, such as Spanish, Baker’s observation had to be refined as follows: ‘languages with a two-way case/agreement system have unaccusatives that do not license the double object construction while languages with a three-way case/agreement system have unaccusatives that license the double object construction’ (Anagnostopoulou (2002), citing Romero & Ormazabal (1999)).

In the context of the present analysis, this generalisation follows straightforwardly from the considerations regarding the valuation of the active Case feature of shifting dative arguments. More specifically, we must assume that these dative arguments too, as well as the respective PPs, are externally merged in their canonical thematic positions within √P: (i) predicates such as motion unaccusatives license goal or source arguments (56a) in Comp-√, while (ii) the anticausative counterparts of the causatives that take IO-like benefactives/malefactives (see section §4.2.2) can license benefactives/malefactives of the same type (57a) in a √P-adjunct position. If these non-core arguments happen to have an active Case feature (namely, accusative in languages such as English, or active inherent Case in languages such as SMG or Romance), they must be shifted (56b, 57b), i.e., matched/attracted by an applicative head so that this feature can be deleted.
(56)a. I ghata irthe se emena/efije apo emena (SMG)
   The cat.NOM came.3SG to me.ACC / left.3SG from me.ACC
   ‘The cat came to me/left me’

b. Oles i portes aniksan ja ton Jorgho me tin mia
   All the doors.NOM opened.3PL for the George.ACC with the one
   ‘All doors opened for George at once’

(57)a. I ghata *(mu) irthe/efije (emena)²⁹
   The cat.NOM me.DAT.CL came.3SG/left.3SG me.DAT/GEN
   ‘The cat came to me/left me’

b. Den *(tu) aniksan (tu Jorghu) oles i portes me tin mia
   Not him.DAT.CL opened.3PL the George.DAT/GEN all the doors.NOM
   with the one
   ‘Not all doors opened for George at once’

Then, the contrast between (54-55) and (56-57) can be derived as follows: assuming that all these predicates arguably comprise only one v-head (arguably a \textsc{vbecome} head [cf. Alexiadou & Anagnostopoulou 2004:122] that lacks \text{[uφ]} and no Voice (since these constructions lack any agentivity entailments), then Appl must be merged between T and v (58), to make the shifting XP visible to T (SMG, Spanish), or to license the XP’s Case feature itself in situ (Italian (59), French). Due to familiar defective intervention considerations, in SMG and Spanish cliticisation/clitic-doubling of the dative XP is required (57), so that T can also Agree with the nominative theme for \text{[uφ]} and \text{[uD]}. By contrast, in languages such as English, the

²⁹ Tsakali (2004, 2006) argues that the singular strong pronouns \textit{emena} ‘me’ and \textit{esena} ‘you’ are not syncretic for case; rather, according to her, they are accusative forms, since they are not grammatical with verbs or prepositions taking a genitive complement. Putting aside prepositions (which are really quite rare and probably remains of more archaic stages of Greek), \textit{emena/esena} are really ungrammatical as complements of such genitive verbs, unless when doubling a clitic (in which case Tsakali argues that they are simply Caseless), even when these same predicates would not force cliticisation/clitic doubling of a lexical dative DP. Although I agree that these forms have a somewhat exceptional syntactic status, I do not agree that they are not/cannot be considered genitives; consider the following example, where \textit{emena/esena} can clearly license a genitive (i.e. dative, in terms of abstract Case) apposition, but not an accusative one:

(i) Na ?*(mu/su) dhosun ki [emena/esena (tu flochu/*ton flocho)] kati
    Subj. me/you.DAT.CL give.PFV.3PL and me/you.DAT/GEN the poor.DAT/GEN / *the
    poor.ACC something.ACC
    ‘…that they also give something to me/you, the poor guy’
Case feature of the shifting argument requires a structural Case assigner (i.e., T) but the option of clitic doubling (or any other operation that would cancel a defective intervention effect) is not available; therefore, an Agree relation between T and the shifted dative would always leave the nominative with its Case feature unvalued.

\[
\text{(58) TP} \\
T \quad \text{App} \text{P} \\
\text{DAT}_{\text{Benef/goal/source}} \quad \text{App} \text{l} \\
\text{App} \text{l} \quad vP \\
v \quad \text{P} \\
(<\text{Benef/Malef}>) \quad \text{P} \\
\text{theme} \quad \text{P} \\
\text{P} \quad (<\text{goal}>/\text{source})
\]

\[
\text{(59) (Il papà) è morto (il papà) a Maria (il papà) (Italian)}^{30}
\]

The father is died the father a Mary
‘Mary’s father died on her’
(from Folli & Harley 2006:125)

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\[^{30}\text{In Italian, like in SMG, themes and datives may appear either preverbally or postverbally. In Italian in particular, in all intransitive contexts there is a preference for postverbal subjects with non-goal datives, which Folli & Harley (2006) attribute to a ban on A-movement across the dative (in the context of the present analysis, (a) goals/sources, staying in situ, below the theme, do not prevent the theme from moving to T, (b) benefactives/malefactives and themes occupy multiple Specs of } \text{P}, \text{ therefore they are equidistant for Agree with T, though EPP-movement does seem to be sensitive to the (defective) intervention of the dative). In SMG, where the dative’s defective intervention in Spec-AppL is always cancelled via cliticisation, there is no such contrast between goal- and non-goal- datives. Datives may also appear preverbally, but there is no evidence that they occupy an A-position (as opposed to dative experiencers, see §4.4).}\]
Depending on certain semantic properties of the predicate, datives in these constructions too may have an additional ‘unintentional causer’ reading; as in (morphologically) non-active constructions (§4.2.2), this reading may arise whenever the predicate is compatible with the existence of a [+m] individual able to exert (at least partial) control over the event (60). Furthermore, for pragmatic reasons, precisely due the fact that the affected dative is usually unable to (completely) control the event, the referent of the dative is interpreted as negatively affected (61a) more often than the opposite (61b, see also 56b-57b above).

(60)a. Mu epese to vazo apo ta cherja (SMG)
   Me.DAT.CL fell.3SG the vase.NOM from the hands
   ‘I dropped the vase’

b. Mu epese to i ghlastra apo to balkoni
   Me.DAT.CL fell.3SG the flowerpot.NOM from the balcony
   ‘The flowerpot fell off the balcony on me/to my detriment’

(61)a. Mu espase/chalase/eklise to kinito
   Me.DAT.CL broke/got-damaged/switched off the mobile phone.NOM
   ‘My cell phone broke/got switched off by itself’

b. Mu petiche to kokinisto
   Me.DAT.CL succeeded.3SG the meat-in-tomato-sauce.NOM
   ‘I successfully cooked beef in tomato sauce’

Finally, benefactive/malefactive datives occurring with de-adjectival unaccusatives (see Alexiadou & Anagnostopoulou 2004:121) can also occur in the respective adjectival constructions (in which case, these datives are often called ‘estimative datives’, see Georgala 2011). The present analysis seems to offer a principled account of the distribution of datives in this respect: the same roots that select optional datives, due to their semantic properties, are predicted to be compatible with these datives regardless of the categorising head that selects √P (modulo independent syntactic constraints, see §4.6 for the restriction regarding datives in nominalisations)31. Thus, (62a) and (62b) receive a more or less uniform account: Appl is merged just below T,

31 The alternative scenario (i.e., on the assumption that datives are externally merged with/selected by Appl) seems to be a less economical analysis whereby either (a) Appl selects certain √Ps and v/A selects either the respective √Ps or ApplPs selecting these √Ps, or (b) Appl selects certain APs. Unless we admit these complications, a traditional applicative analysis would necessarily be less constrained.
attracting the dative, regardless of the presence or absence of \(v_{\text{BECOME}}\) (63).

(62)a. (To pandeloni) mu mikrine/kondine/stenepse (to pandeloni)
   The trousers.NOM.SG me.DAT.CL got-small/shortened/got-narrow.3SG
   ‘The trousers became too small/short/narrow for me’

b. (To pandeloni) mu ine mikro/kondo/steno (to pandeloni)
   The trousers.NOM.SG me.DAT.CL is small/short/narrow
   ‘The trousers are too small/short/narrow for me’

(63)[T [\text{ApplP} DAT Appl [ be/\ldots [\text{AP} \ldots A [\lambda p & <\text{DAT}> [\lambda p \ \text{theme}_{\text{nom}} \sqrt{\ }]]]]]]

4.4. Ethical datives

All the types of datives considered so far, no matter how obligatory or optional they are, are truth-functional ingredients of the minimal proposition they belong to, i.e., the truth of the sentence is evaluated also on the basis of the relation of the described event to the referent of the dative. However, besides these datives, many languages also allow so-called ‘ethical datives’, pronominal datives with a much looser relation to the event. The defining properties of ethical datives are as follows (see also Michelioudakis (2007), Michelioudakis & Sitaridou (2009, forth.) and Michelioudakis & Kapogianni (2010)):

(i) they are practically compatible with any type of predicate/argument structure, except passives;

(64) Ematha oti mu pandreftikes/kurazese/arostises/trechis apo dho ki apo ki/evrises pali ti dhaskala su/*timorithikes (ap’ti dhaskala su) (SMG)
   Learnt.1SG that me.DAT.CL got-married.2SG/get-tired.2SG/fell-ill.2SG/run.2SG from here and from there/cursed.2SG the teacher.FEM.ACC your/were-punished.2SG from the teacher.FEM.ACC your
   ‘I learnt that you got married/tire yourself/fell ill/wander around for no reason/swore at your teacher/got punished by your teacher on me/to my disappointment’
(ii) they cannot be interpreted as affected participants and therefore do not
form part of the truth-conditional meaning of the event; instead, they
express a (detached) evaluative attitude of a discourse participant;

(65) Mu (a) dhini/(b) katharizi/(c) kratai/(d) onirevete mja tsanda
   Me.DAT.CL (a) is giving/(b) is cleaning/(c) is holding/(d) is dreaming a bag
   (a) ‘She is giving a bag to me’ (goal IO)
   (b) ‘She is cleaning a bag for me’ (IO-like benefactive)
   (c) ‘She is holding a bag for me’ (‘free’ benefactive)
   (d) ‘She is dreaming of a bag (to my surprise/disappointment/delight etc.)’
      (ethical dative)

If (65a-c) express true propositions, then (66a-c) below have to be false, assuming
that the subject and the direct object of (66a-c) are coreferential with the respective
XPs in (65a-c). However, (65d) and (66d) can both be uttered felicitously to describe
the same situation/event without contradicting each other.

(66) Su (a) dhini/(b) katharizi/(c) kratai/(d) onirevete mja tsanda
    You.DAT.CL (a) is giving/(b) is cleaning/(c) is holding/(d) is dreaming a bag
    (a) ‘She is giving a bag to you’
    (b) ‘She is cleaning a bag for you’
    (c) ‘She is holding a bag for you’
    (d) ‘She is dreaming of a bag (which you might find
        remarkable/disappointing/surprising/interesting etc.)’

(iii) they are always pronominal; in particular, in SMG and Romance they are
exclusively realised as clitics and no (co-indexed) XP can appear in an
A-position, although Clitic Left/Right Dislocation is more or less marginally
acceptable in SMG. As Anagnostopoulou (2006:546-547) shows, SMG
“productively employs clitic-doubling” and an unambiguous clitic
doubling configuration is Cl-V-XP-S, in contexts where S(subject) is
demonstrably not presupposed and bears main sentence stress; using this
observation as a diagnostic for true clitic doubling, it can indeed be shown
that DPs doubling the ethical clitic can be found left- or right-dislocated, but never in a true clitic doubling configuration (*pace* Chatzikyriakidis 2010);

(67)a. Okei, o Janis ine stenachorimenos epidhi ton apelisan. Ala i Maria?
Okay, the John is sad because him.ACC.CL fired.3PL. But the Mary?
‘So, John is sad because he was fired. But why is Mary sad too?’
b. (%Tis Marias, ) dhên *(tis) meletai (*tis Marias) enas mathitis tis (%, tis Marias)
The Mary.DAT/GEN not her.DAT.CL studies the Mary.DAT/GEN a student.NOM her (the Mary.DAT/GEN)
‘A student of hers does not study enough, to her disappointment’

(iv) they do not favour a possession relation between the dative and the internal argument;

(68) Me ensucias tu pantalón! (Peruvian Spanish, from Neil Myler, p.c.)
Me.DAT.CL dirt.2S your trousers
‘You are dirtying your trousers, to my disappointment’

(69) Mu foras strava to pandeloni su/*mu!
Me.DAT.CL wear-2SG wrongly the trousers.ACC your/my
‘Your are wearing your trousers wrongly, to my surprise/disappointment!’

(v) they cannot undergo wh-questioning (see also Catsimali 1989, 1990) and in fact any kind of A’-movement;

(70)a. *Pjanu (tu) pandreftike i Maria ena vlaka?
Who.DAT/GEN (him.DAT.CL) got-married the Mary.NOM an idiot.ACC
‘To whose disappointment did Mary marry an idiot?’
b. *O filos mu pu (tu) pandreftike i Maria ena vlaka
The friend my that him.DAT.CL married the Mary.NOM an idiot.ACC
‘That friend of mine to whose disappointment Mary married an idiot’
(vi) they cannot bind (into) the internal argument, i.e. they do not conform to Principle A;

(71) Mi mu katighoris ton eafto su/*mu adhika!
    Not me.DAT.CL blame.2SG the self your/my with no reason
    ‘Do not blame yourself/*myself with no reason! (I find it sad)’

(vii) they are (more or less marginally) compatible with shifted IO datives and IO-like benefactives/malefactives in active transitive contexts (but not with ‘free’ benefactives/malefactives).

(72) Juan me le arruinó la vida a esa chica (Spanish)
    Juan me.DAT.CL her.DAT.CL ruined.3SG the life a that girl
    ‘To my disappointment, Juan ruined that girl’s life’ (IO-like Malef) (see also the discussion below in relation to multiple dative clitics and the PCC, as well as Cuervo (2003:194-199) for examples of ethical datives co-occurring with IO datives)

In structural terms, ethical datives can be analysed as √P-adjuncts that are attracted by a very high Appl just below T and above the highest argument-structure-related projection, i.e., Appl’s attachment site in e.g. transitive constructions is the same as that of applicatives that introduce ‘free’ benefactives/malefactives. In what follows I will argue that what differentiates ethical datives from these truth-functional datives is the kind of Appl licensing them and, more specifically, that the difference lies in Appl’s probe in each case, i.e., its uninterpretable features.

I will assume, as already implied in Chapter 2, that Appl’s probe mirrors the interpretation it assigns to the XP it attracts. All the applicatives involved in the types of datives discussed so far arguably bear a [uParticipant] probe, as is evident from the fact that they are all subject to the strong PCC (at least in transitive contexts), i.e., amenable to the kind of analysis advocated in Chapter 2. Moreover, what all these datives have in common is a [+m] and [+affected] interpretation. Linking, then, Appl’s probe to its interpretive effects, we may assume that this kind of Appl bears [uParticipant] because it must be able to probe both 1st/2nd person, i.e. [+Participant], and [-Participant] goals, so that it can license even 3rd person XPs, under the condition
that these are [+m] and [+affected] (see the discussion in §4.2.1); thus, somewhat revising the definition given in Chapter 2, I will assume that [-Participant] corresponds to [+m] and [+affected] 3rd person XPs. Nevertheless, ethical datives are \( \sqrt{P} \)-adjuncts that cannot/must not be interpreted as [+affected]. Thus, their attraction by an Appl that can admit [-Participant] goals would give rise to the wrong (affected) interpretation and the derivation would crash at LF. Instead, ethical datives can only encode a detached evaluative attitude of a discourse participant; arguably, for this interpretation to arise, it suffices for Appl to have a [+Participant] probe. Thus, we can conclude that ethical datives are attracted by a special variety of Appl, Appl\(_{ED}\), which bears a [+Participant] probe, i.e. a partly specified set of uninterpretable features\(^{32}\), which can be valued by [+Author] and [-Author, Hearer] pronouns, assigning a [+m] (and [-affected]) interpretation. The defining properties of the ethical dative, then, as listed above (i-vii) must be shown to follow from Appl’s feature make-up, in conjunction with its structural position.

The [+Participant] specification guarantees that ethical datives are always realized as pronouns; no descriptions or (other) quantified phrases qualify as [+Participant], which excludes all non-pronominal DPs, as well as wh-phrases. Thus, wh-movement is unavailable, simply because wh-phrases cannot be merged in Spec-Appl\(_{ED}\) in the first place. Moreover, the generalisation that pronominal datives cliticise obligatorily in SMG and Romance explains the clitic-only realization of ethical datives in these languages.

In fact, Appl\(_{ED}\)’s probe may be further parameterised, depending on the actual discourse orientation of ethical datives in a given language, e.g. Brazilian Portuguese (see Bastos 2007) and (many varieties) of Spanish (e.g. Peruvian Spanish, Neil Myler p.c.) seem to have only speaker-oriented ethical datives (73a), hence Appl\(_{ED}\) may bear [+Author], while certain varieties of French, perhaps including Standard French, seem to favour hearer-oriented ethical clitics (73b), hence there may also be an Appl\(_{ED}\) specified as [(u)Hearer]. Languages with a [+Participant, uAuthor] probe, such as SMG and Italian, allow both 1st and 2nd person. Languages allowing 1st person ethical datives often allow 3rd person ethical clitics too (74), as long as the latter are strictly interpreted as logophoric (75); recall that on our analysis (see Chapter 2), logophors are [+Author] pronouns, bound by a LOG operator and may be realised by special

\(^{32}\) This assumption is essentially in the spirit of Bejar’s (2003) “intriguing proposal that syntactic heads can also be generated with fully or partly specified uninterpretable features” (in McGinnis 2008:157).
logophoric 3rd person morphology, or by pronouns indistinguishable from other 3rd person pronouns.

(73) a. Não. O João não me/*te tava vendendo a casa da Marta pra Maria! (BP)
    No. The John not me/you.DAT.CL was selling the house of Martha to Mary
    ‘No. John wasn’t selling Martha’s house to Mary on me!’

b. Paul te/*me fabrique une table en vingt minutes (French)
    Paul you/me.DAT.CL makes a table in twenty minutes
    ‘Paul can make a table in 20 mins for anyone’
    (Leclère 1976, in Jouitteau & Rezac 2008:106)

(74) Ya me/le camina (Argentinean Spanish)
    Already me/you/3SG.DAT.CL walks
    ‘She already walks to my/your/his/her delight’
    (adapted from Cuervo 2003:194)

(75) pro, thimoni [CP pu LOG, dhen tiši/*k pandréftika akoma] (SMG)
    pro.3SG resents.3SG that.FACTIVE not her.DAT.CL married.1S yet
    ‘She resents (the fact) that I haven’t yet gotten married’
    (repeated from Chapter 2, ex. (24))

Finally, their potential co-occurrence with IO- and IO-like benefactive/malefactive clitics is due to their occupying structurally distinct Appl heads. Notice, however, that all dative clitics are specified for [±Participant], i.e. that the co-occurrence of any two dative clitics would be ruled out if ApplED bore [uParticipant]: the intervention of the IO(-like) clitic in Spec-Aappl, below Voice, between ApplED and the ethical clitic in its first-merged (√P-adjunct) position, should always have a (PCC-like) blocking effect. Instead, the specification of ApplED as [+Participant] guarantees that only 3rd person, i.e. [-Participant] IO-clitics can co-occur with ethical clitics, otherwise a PCC violation would arise.

33 Their relative ordering also derives the fact that the ethical clitic normally precedes both accusative and (other) dative clitics (e.g. in SMG), unless clitic ordering is independently subject to person hierarchies (e.g. in Spanish). Furthermore, ApplED’s placement above VoiceP derives the fact that any inferences about the (emotional or other) involvement of the individual referred to by the ED is computed on the basis of the whole event, including the external argument (see Michelioudakis & Kapogianni 2010 for evidence and discussion).
Interestingly, the ethical dative is often described as exempt from the PCC, which is certainly not the case in SMG (77a-b), as well as for most speakers of Standard Italian (78). Nevertheless, (strong) PCC-violating clitic clusters with ethical clitics are indeed acceptable in certain varieties, but it appears that we need to distinguish between two cases where this is possible: (a) varieties where a weaker version of the PCC is operative anyway, even with non-ethical clitics (such as some Peninsular Spanish varieties); (b) varieties where the strong PCC is operative (79b), but the actual feature specification of Appl$_{ED}$ may be specific enough (e.g. [+Author] or [Hearer]) to allow for another [+Participant] clitic below it; i.e., a [+Author] Appl$_{ED}$ may unproblematically Agree with and attract a 1$^{st}$ person ethical dative from its first-merged position, even if there is a 2$^{nd}$ person clitic below it (79), and, similarly, a 1$^{st}$ person dative clitic in Spec-Appl (or a 1$^{st}$ person accusative clitic in Spec-$_{v2}$ for that
matter) below Voice cannot block Agree between a 2nd person ethical clitic and a [Hearer]-oriented Appl_{ED} (80).

(77) a. Mu ton/*se pandreftike (ED-DO) (SMG)
    Me.DAT.CL him/you.ACC.CL married.3SG
    ‘She married him/you on me’

b. %Na mi mu tis/?tu/*su aghorazun paghota (ED-IO)
    Subj. not me.DAT.CL her/him/you.DAT.CL buy.3PL ice-creams
    ‘…that they do not buy her/him/you ice creams on me’

(78) a. Me/te lo vizia (Italian)
    Me/you.DAT.CL him.ACC.CL spoils
    ‘She spoils him on me/you’

b. *[M(i/e) ti]/*[T(i/e) mi] vizia
    Me.DAT.CL you.ACC.CL/you.DAT.CL me.ACC.CL spoils
    ‘She spoils you on me/me on you’
    (from Silvio Cruschina p.c.)

(79) a. Te me van a desnucar (Spanish)
    You.ACC.CL me.DAT.CL to break-the-neck
    ‘They will break your neck on me’ (*my neck on you)

b. *Te me van a vender
    You.ACC.CL me.DAT.CL will to sell
    ‘They will sell you to me/me to you’
    (from Ormazabal & Romero 2007:331)

(80) Il te nous a passé un de ces savons! (French)
    He you.DAT.CL nous.DAT.CL has passed one of these soaps
    ‘He gave us an incredible telling-off!’
    (from Bonami & Boyé (2006:21))

34 Of the properties listed above, (vi), namely ED’s inability to bind (into) the internal argument remains unaccounted for. In other work (see e.g. Michelioudakis 2007) I have suggested that the ED realises a CP-related pragmatic function/role, namely evaluativity (cf. Michelioudakis & Kapogianni 2010 for a detailed comparison and parallels with evaluative adverbs); if the parallels in the distribution of EDs and (other) evaluative expressions are on the right track, then there might by a null operator/argument in the specifier of Cinque’s (1999) EvalP, which heads the ED chain. Since all occurrences of the ED would then be outside VoiceP (except its first-merged position, which is an adjunct position anyway, i.e. unable to host an A-binder), ED and DO are not in an irreversible binding relation, and since ED’s head is in the left periphery, i.e. outside DO’s binding domain (no matter how one defines it), anaphoric binding is indeed predicted to be impossible. Alternatively, if the binding
4.5. Experiencers

In Standard Modern Greek, dative experiencers too, i.e. experiencer arguments of so-called *piacere*-type/Class III psychological predicates (following Belletti & Rizzi’s (1988) typology), can be realised in two ways, i.e. as either *se* (‘to’) -PPs or dative (morphologically genitive) DPs, always accompanied by a co-indexed dative clitic. Nonetheless, this does not constitute a dative alternation, as the realization of the experiencer does not correlate with the relative ordering and the possible c-command relations between the experiencer and the theme: both experiencer > theme (81) and theme > experiencer (82) orders are available irrespective of the phrasal category of the experiencer.

(81) a. *Se kathe pedhi_ i aresi i dhaskala tu_i*
   To every child appeals the teacher.FEM.NOM its
   b. *Kathe pedhju_ ?*(tu_i) aresi i dhaskala tu_i*
   Every child.DAT/GEN him.DAT.CL appeals the teacher.FEM.NOM its
   ‘Every child likes their teacher’

(82) a. *Kathe dhaskala_ i aresi sto mathiti tis_i*
   Every teacher.FEM.NOM appeals to the pupil her
   b. *?Kathe dhaskala_ ?*(tu) aresi tu mathiti tis_i*
   Every teacher.FEM.NOM him.DAT.CL appeals the pupil.DAT/GEN her
   ‘Every teacher appeals to her pupil’

In the context of the present analysis, and essentially in the spirit of Belletti & Rizzi’s original analysis, we may analyse all dative experiencer constructions as unaccusative...
constructions in which, regardless of their categorical status, experiencers are first merged above the first-merged position of the theme/internal argument; the theme argument may either move to a subject position (82) or stay in situ (81): since CP is the closest phase boundary, then according to our irreversible binding theory, binding relations are computed on the basis of the surface positions of the two arguments, yielding the patterns in (81-82).

The theme argument has to Agree with T across the dative experiencer (as is evident from its nominative case and its controlling verb agreement), whether it subsequently undergoes A-movement or not. When the experiencer is realised as a dative, i.e. as a DP with an active inherent Case feature, then its intervention effect can only be cancelled via clitic-movement/clitic-doubling, as in all cases of DAT-above-NOM, i.e., T-Agree across a dative. On the other hand, when the experiencer is a se-phrase, no intervention/blocking effects arise: this supports the assumption that these experiencer se-phrases are always real PPs, without an (active) Case feature (since minimality for Agree purposes is relativized to Case features), unlike say se-phrases realising benefactive/malefactive arguments in transitive and unaccusative contexts, which are always an alternative realisation of active inherent Case, as we suggested earlier. Furthermore, this conclusion is compatible with the idea that (at least Class III) experiencers are locative expressions, corresponding to mental locations (see Landau 2009 for extensive argumentation), and therefore se here is a true locative preposition.

A well-known observation regarding oblique experiencers is their potential behaviour as quirky subjects (see Belletti & Rizzi 1988 and Anagnostopoulou 1999 for Greek). Interestingly, in SMG only dative (morphologically genitive) experiencer DPs can serve as quirky subjects (always under clitic doubling), while preverbal experiencer PPs clearly cannot occupy an A-position. Thus, in (83), a dative/genitive experiencer may have a completely parallel, subject-like, interpretation to that of preverbal subjects, while a preverbal prepositional experiencer is less acceptable (and necessarily interpreted as a sort of contrastive topic, hence its acceptability and its acceptability conditions are the same as that of embedded preverbal topics). Moreover, using another convincing diagnostic suggested by Anagnostopoulou (1999), preverbal dative/genitive experiencers may control PRO in absolutive adjunct clauses just like other preverbal subjects, while prepositional experiencers behave like (other) preverbal non-subjects in this respect (84)
(83) a. Jati anisichun i ghonis tu Jani?
   Why are John’s parents worried?

b. (i) Epidhi o Janis theli na spudhasi ghlosolojia
   Because the John.NOM wants Subj. studies.PFV linguistics.ACC
   ‘Because John wants to study linguistics’

(ii) Epidhi tu Jani *(tu) aresi i ghlosolojia
   Because the John.DAT/GEN him.DAT.CL appeals the linguistics.NOM
   ‘Because John likes linguistics’

(iii) ??Epidhi sto Jani aresi i ghlosolojia
   Because to-the John.ACC appeals the linguistics.NOM
   ‘Because John likes linguistics’

(iv) ??Epidhi tu Jani *(tu) evalan kako vathmo/sto Jani evalan kako vathmo
   Because the John.DAT/GEN him.DAT.CL put.PAST.3PL bad grade/to-the John.ACC put.PAST.3PL bad grade
   ‘Because John was given a poor grade’

(adapting the diagnostic in Belletti & Rizzi 1988:337)

(84)a. Akughondas PRO_{\sim} tin istoria, i Maria, archise na simbathi ton Kostak
   Listening the story, the Mary.NOM started Subj. likes the Kostas.ACC

b. Akughondas PRO_{\sim} tin istoria, tis Marias; archise na tis aresi o Kostas
   Listening the story, the Mary.DAT/GEN started.3SG Subj. her.DAT.CL appeals the Kostas.NOM

c. ?*Akughondas PRO_{\sim} tin istoria, sti Maria archise na aresi o Kostas
   Listening the story, to-the Mary started Subj. appeals the Kostas.NOM
   ‘Listening to the story, Mary started liking Kostas’

Given our considerations above about the role of Agree, this contrast constitutes a counterargument against dissociating A-movement from Agree. In the dative/genitive construction, T Agrees not only with the nominative theme but also with the dative itself, thanks to its active Case, with this Agree being reflected in the dative clitic; therefore, at least in the case of SMG quirky subjects, T does attract something it
Agrees with. Instead, PP-experiencers, lacking an active Case feature are not visible for Agree, which is arguably also why they cannot A-move\(^{35}\).

A closely related construction in SMG is the dative experiencer construction with raising *fenome* ‘seem’, which may select either a small clause or a complement clause: the same cliticisation/clitic doubling requirement on dative experiencers applies here too (85a), as already discussed in earlier sections regarding minimality effects in these DAT-above-NOM constructions in SMG and Romance, while also preverbal dative experiencers DPs in these constructions too may potentially exhibit subject-like behaviour. An important difference from Class III psych constructions is that apparently even PP experiencers seem to have a blocking in T-Agree with the nominative of the embedded small/complement clause, as noticed by Anagnostopoulou (2003) (85b).

(85)a. O Janis \(^{7}\)* (tis) fenotan tis Marias (?na ine) kurazmenos
   The John.NOM her.DAT.CL seemed.3SG the Mary.DAT/GEN (Subj. is)
   tired

b. O Janis fenotan \(^{7}\) *(sti Maria) na ine kurazmenos
   The John.NOM seemed.3SG to-the Mary Subj. is tired
   ‘John seemed to Mary (to be) tired’

In terms of Anagnostopoulou’s (2003) analysis, this contrast between (85b) and, say, (82a) can be attributed to the fact that in (82a) PP-experiencers are actually in Spec-VP (as opposed to dative experiencer DPs, which are in Spec-App) the PP-experiencer and the nominative theme in their base positions belong to the same VP, i.e., to the same minimal domain, thus being equidistant from T, while in (85b) the PP-experiencer is in Spec-VP but the nominative belongs to the embedded clause, i.e. to a distinct XP, yielding a non-repairable intervention configuration (NB. Dative experiencer DPs, by being in Spec-App, are always in a different minimal domain from the nominative).

\(^{35}\) It is also interesting to note that in fact dative experiencer DPs not only can, but probably have to A-move when the nominative theme does not, probably due to a requirement such as Alexiadou & Anagnostopoulou’s (2001) ‘subject-in-situ generalisation’ (‘By Spell-Out vP can contain no more than one argument with an unchecked Case feature’).
Nevertheless, it appears that there are certain contexts in which the intervention of a PP-experiencer across a raising matrix T and an embedded clause is not ungrammatical:

(86) Poso kali fanike sti Natalia Germanu (?na ine) i nea ekpombi <poso kali>?
How good seemed.3SG to-the Natalia Germanu (Subj. is) the new show
‘How good did Natalia Germanu think the new show was?’
(adapting a real example from Google)

I would tentatively suggest that what PP-experiencers really block is not a relation between T and the embedded theme, but rather the predication relation (however we define it, e.g. as an Agree relation or in some other way) between the raised nominative and the predicative phrase, cf. also (86’), where the predicative AP appears somehow higher than the experiencer PP; this is not because of the experiencer’s Case feature, but rather the fact that PPs too can serve as predicatives in SMG (when having a stative locative meaning) and therefore minimality in this case is relativised to some feature that both the PP experiencer and the embedded predicative XP share.

(86’) ?I ekpombi fanike kali sti Natalia
The show.NOM seemed.3SG good to-the Natalia
‘The show seemed to Natalia to be good’

Given the above, there is no reason to assume that PP experiencers and dative experiencer DPs are merged (either externally or internally) in distinct positions (or to resort to the notion of minimal domains). Having compelling evidence that their thematic position is always higher that that of themes, I will adapt Belletti & Rizzi’s (1988) structural analysis, suggesting that Class III constructions are unaccusatives headed by an phi-less v (with no VoiceP present), with the experiencer argument being merged either as a √P-adjunct or in Spec-v (88). Notice that in this way we differentiate dative experiencers from other datives in unaccusative constructions (and elsewhere), by assuming that the theme does not intervene between T and the experiencer at any stage of the derivation. This is arguably why (at least in SMG and Romance) dative experiencer construction are never subject to the PCC, even in those
languages/varieties where PCC effects arise in motion unaccusative constructions with 1\textsuperscript{st}/2\textsuperscript{nd} person themes and goal clitics. Also, due to the absence of this intervention, there is not reason to assume that an applicative head is present in Class III psych unaccusatives: it would only be necessary if the dative was not already the closest goal for T to probe; this conclusion is particularly relevant for the discussion in the next section in relation to the presence of Appl in NPs/APs and the contrast in the grammaticality of goals and experiencers in APs.

(87) 

\[
\begin{array}{c}
\text{TP} \\
\text{T} \quad \text{vP} \\
\text{(experiencer)} \quad \text{v'} \\
\text{v} \quad \sqrt{P} \\
\text{(experiencer)} \quad \sqrt{P} \\
\text{theme} \quad \sqrt{}
\end{array}
\]
4.6. The split identity of genitive in Modern Greek: evidence from ‘datives’ in APs/NPs

It is a well-known generalisation, dating back at least to Kayne (1984), that nominalisations of the double object/double DP construction are not possible; to be more precise, the IO DP cannot survive in an NP headed by a ditransitive predicate either under the form it would have in the corresponding verbal construction\textsuperscript{36} or as a genitive DP (or an of-PP in English). IOs with deverbal nouns can only occur as PPs, like in the corresponding prepositional ditransitive VP.

(88) I anathesi mias dhiskolis sonatas sti Maria
    The assignment a hard sonata.GEN to-the Mary
    ‘The assignment of a hard sonata to Mary’

(89) I anathesi (*tis Marias) mias dhiskolis sonatas (*tis Marias)
    The assignment (the Mary.GEN) a hard sonata.GEN (the Mary.GEN)
    ‘*The assignment (of) Mary (of) a hard sonata’

( from Anagnostopoulou 2005)

As already said, Anagnostopoulou’s (2003, 2005) proposal regarding the above paradigm (as well as about ditransitives in general) is to assume that what differentiates the double object construction from its prepositional counterpart is the presence of an applicative head: IO DPs are introduced and licensed by vAPPL (in its Spec), to which V moves, while PP IOs are generated within VP and vAPPL is not necessary and therefore absent. V-movement to vAPPL on this analysis constitutes zero-derivation, therefore the ban on IO DPs in nominalisations is derived from Myers’ (1984) generalization: no nominalisation (or any kind of further affixation) is allowed once zero-derivation has taken place. This is illustrated schematically in (90):

\textsuperscript{36}This part of the generalization is in fact challenged by the Ancient Greek data presented below.
At first sight, it seems reasonable to extend the assumptions regarding the presence/absence of (v)APPL in prepositional/double-DP constructions to experiencer constructions—although we concluded that there is no (other) reason to differentiate PP- and DP-experiencers with respect to their position: prepositional experiencers contrast with dative DP experiencers in precisely the same way, assuming, as seems reasonable, that (91), (92), (93) and (94) derive from (95), (96), (97) and (98) respectively:

(91) a. I chrisimotita tu neru ston anthropo
   The usefulness/necessity the water.GEN to-the man
   ‘The usefulness of water to mankind’

   b. I chrisimotita (*tu anthropu) tu neru (*tu anthropu)
   The usefulness the man.GEN the water.GEN the man.GEN
   ‘*The usefulness of mankind of water / of water of mankind’

(92) a. I elipsi tu ipnu ston anthropo
   The lack the sleep.GEN to-the man
   ‘Humans’ lack of sleep’

   b. I elipsi (*tu anthropu) tu ipnu (*tu anthropu)
   The lack the man.GEN the sleep.GEN the man.GEN
   ‘Humans’ lack of sleep’
(93)a. Αναλογίζομε την ελίψη στην κυρία Θεώνη τώρα που θα μενείς στο έξωτερο
Think.1S the lack your.CL to-the Mrs Theoni now that FUT live.2S to-the abroad
‘I am thinking of how much Mrs Theoni will miss you now that you will live abroad’

b. Αναλογίζομε την ελίψη (tis κυριας Θεωνης)…
Think.1S the lack your.CL the Mrs Theoni.GEN

(94)a. Το τερμάτισμα της γλωσσολογίας στη Μαρία ήταν εμφανές από τότε ήταν μικρή
The appropriateness the linguistics.GEN to-the Mary was obvious since was.3SG young
‘The appropriateness of linguistics for Mary was obvious since she was young’

b. *Το τερμάτισμα της γλωσσολογίας της Μαρίας
The appropriateness the linguistics.GEN the Mary.GEN

(95)a. Το νερό είναι χρήσιμο/χρειάζεται στον ανθρώπο
The water is-useful/needed to-the man
‘Water is useful to mankind’

b. Το νερό *(το) είναι χρήσιμο/χρειάζεται τον ανθρώπο
The water (him.GEN.CL) is-useful/needed the man.GEN
‘Water is useful to mankind’

(96)a. Στον σύγχρονο ανθρώπο λιπί ο καλός ιπνός
To-the modern man lack.3S the good sleep
‘Modern man lacks good/restful sleep’

b. Το σύγχρονο ανθρώπου *(το) λιπί ο καλός ιπνός
The modern man.GEN him.GEN.CL lack.3S the good sleep

(97)a. Θα λίπεις στην κυρία Θεώνη
FUT lack.2S to-the Mrs Theoni
‘Mrs Theoni will miss you’

b. Θα *(της) λίπεις της κυρίας Θεώνης
FUT her.GEN.CL lack.2S the Mrs Theoni.GEN
(98) a. I glosolojia terjazi sti Maria
   The linguistics suit.3S to-the Mary
   ‘Linguistics is suitable for Mary’

b. I glosolojia ?*(tis) terjazi tis Marias
   The linguistics her.GEN.CL suit.3S the Mary.GEN

However, the picture gets significantly more complicated when one considers deverbal adjectives deriving from ditransitives and psych predicates.

(i) Adjectives deriving from ditransitives

Double objects in APs headed by (the very few) adjectives deriving from ditransitive roots replicate the behaviour of the respective nominalisations.

   (99) ena dhema/neo paradhoteo/anakinosimo se kathe endhiaferomeno
        a parcel/news deliverable/communicable to the interested part.ACC
   (100) *ena dhema/neo paradhoteo/anakinosimo tu kathe endhiaferomenu
        a parcel/news deliverable/communicable the interested part.GEN

Likewise, in predicational constructions:

   (101) afto (dhen) ine paradhoteo/anakinosimo se kathe endhiaferomeno
        this (not) is deliverable/communicable to the interested part.ACC
   (102) *afto (dhen) (tu) ine paradhoteo/anakinosimo tu kathe endhiaferomenu
        this (not) (him.GEN.CL) is deliverable/communicable the interested part.GEN
        ‘this is not deliverable/communicable to the interested part’

(ii) Dative arguments with psych adjectives

APs with adjectives deriving from psych predicates replicate the paradigm in (91-94), when embedded in DPs.

   (103) ena zoo chrisimo/aresto ston anthropo/sti Maria
        an animal useful/likeable to-the man.ACC/to-the Mary.ACC
However, surprisingly enough, both dative/genitive and PP experiencers are licit in predicative constructions.

(105) Afto to vivlio ine chrisimo/achriasto/aresto sti Maria
This the book is useful/unneeded/likeable to-the Mary.ACC
(106) Afto to vivlio *(tis) ine chrisimo/achriasto/aresto tis Marias
This the book (her.GEN.CL) is useful/unneeded/likeable the Mary.GEN
‘Mary finds this book useful/unnecessary/likeable’

Assuming that (a) the dative experiencer is an argument of the adjective, (b) adjectives with such meanings must be derived from the same roots as the corresponding derived nominals in a more or less similar way (i.e. by syntactic incorporation of the root into a categorizer, N/n or A/a), then (at least) (106) appears to violate Myers’ generalisation. Therefore, either Myers’ generalisation is wrong/does not apply to these constructions or we must question vAPPL, the presence of which is what leads to a violation of the generalization, as a necessary precondition/licenser for dative arguments.

It indeed seems reasonable to assume that vAPPL is absent from all derived nominals and the corresponding adjectives; this may be due either to Myers’ generalisation or simply to the fact that vAPPL is a verbal head that cannot be merged in nominal projections. Then, why is (106) not ungrammatical? The only proposal that seems to be compatible with the above data is that ‘dative’ (morphologically genitive) DPs in MG indeed carry a hybrid/complex active inherent Case feature. The asymmetry then between (103)-(104) and (105)-(106) is due to the fact that the former examples involve indefinite DPs containing psych adjectives while the latter are examples of bare (predicative) APs: the dative DP in (104) is not allowed to value and delete the structural/uninterpretable part of its quirky Case feature via Agree with some structural Case assigner/agreement head (e.g. v/T) across the DP phase boundary (the DP itself Agrees with T and then Case percolates). Also, no Case can be assigned/checked by the adjective itself (it seems that only in a few cases of comparatives can adjectives check Case in Greek).
To keep things simple, for the sake of this exposition, let us assume with Chomsky (class notes), as quoted in Reinhart & Reuland (1993:683), following in fact a proposal of Huang (1993), that “a subject [of a predicative construction] is generated in the Spec of its predicate (AP) and raises to the Spec of IP position”, as also proposed by Sportiche (1988) and Koopman and Sportiche (1991).

On the contrary, in (105)-(106), the DP complement of the bare AP can be made accessible to T:

(107) *Aftos ine enas (ipopsifios) arestos (ipopsifios) tis Marias
This is a candidate likeable candidate the Mary.GEN
*[aftos ine-T […] [DP enas (ipopsifios) [AP ares-tos [RootP [tis Marias[uCase]]
<ares-> (<ipopsifios>)]]]

T in (108) first probes the dative experiencer (the adjective does not have interpretable features) and Agrees with it, valuing and deleting its active inherent Case; the dative DP then becomes a defective intervener; T can probe and Match the nominative theme and delete its structural Case feature only under cliticisation/clitic-doubling of the dative DP, which creates a chain the head of which is outside T’s Agree domain and thus cancels its defective intervention (see Chomsky 2001). This entails that the argument structure projected by piacere-type psych predicates should indeed should indeed be represented as in (87) above (although it is not clear that \( \nu \) is needed/possible in nominal projections; if it is not, then experiencers are in a \( \sqrt{P} \)-adjunct position, in line with the assumption that all (internal) arguments are externally merged within the maximal projection of the root). As for PP experiencers, they are always licit in any environment (DPs (91a-94a), APs), because they do not require Case checking.

Notice that one of the background assumptions so far was that adjectives do not
assign Case. However, nouns do assign (genitive) Case, e.g. to possessors, agents/direct complements of derived/relationa nouns etc. Then, why can they not assign genitive to ‘dative’ DPs too (which happen to carry the same case morphology) if vAPPL is not relevant for their licensing? Under standard assumptions (see e.g. Alexiadou, Stavrou and Haegeman 2007), N can only assign Case once. So, the fact that the ‘dative’ argument cannot be realised as a genitive DP even when no other genitive DP is present (or the result lacks a clear recipient/experiencer reading (109)) probably indicates that Case can only be checked on the DP occupying the complement position of the root (although it may ultimately be attracted to a higher position (ibid.)) and, perhaps, that we still need to assume in these cases that some empty element occupies this position. More importantly, we are forced to conclude that the morphological genitive borne by dative DPs and the genitive assigned NP-internally (to possessors and other DPs complementing or modifying N) do not correspond to the same syntactic Case, i.e. the same abstract Case feature; in other words, SMG has both abstract dative and abstract genitive, although they happen to coincide morphologically. This is also a necessary conclusion following from our earlier observation that dative/genitive curiously cannot express possession in constructions such as (41b): although it is not rare for datives in a language to convey possession alongside genitives, this gap in the distribution of dative/genitive necessarily means that it cannot originate NP-internally in SMG.

(109) a. i ipoptes dorees se ipurghus / ??ipurghon
    the suspicious donations to ministers / ministers.GEN
b. i chrisimotita stus fitites / *ton fititon prepi na ine to mono kritirio ja tin epiloji singhramaton
    the usefulness to-the students/*the students.GEN should be the only criterion
    ‘The usefulness to the students should be the only criterion for the
    choice of textbooks’

37 This explains why the theme argument (in genitive) normally precedes the experiencer PP in examples such as (91-94), despite the fact that the latter is first-merged higher, as shown in this section.
38 Ungrammatical on the recipient reading.
Having explained the asymmetry between (103)-(104) and (105)-(106), we are also in a position to account for the striking asymmetry between (101)-(102) and (105)-(106). We are really forced to resort to the movement analysis of DP-IOS advocated in this and the previous chapter. IOSs (both DPs and PPs) are uniformly generated in a low position (possibly as complements of the root). In a DP or an AP environment, both PP- and DP-goals are forced to stay in that low position, as Appl is unavailable, but only the former are licit, as they do not have an active Case feature to value; instead, DP-goals cannot be made accessible to a Case assigner in any way, due to the blocking effects of the theme argument above it.

Therefore, the observed asymmetry between ditransitives and psych predicates is simply due to the differences in their first-merged configurations/argument structures: genitive goals in deverbal NPs/APs are not accessible to any phi-probe for Case-marking due to the intervention of DO. This analysis predicts that in languages with non-active inherent Case, experiencer- and even IO-DPs are always licit in nominalizations or any other derived form. This prediction is indeed borne out in Ancient Greek:

(110) hopo:s aidios [he: tou elaiou dosis to:i gymnasio:i] diamine:i
    so-that permanent the.the GEN oil.GEN supply the.DAT
gymnasion.DAT remain.SUBJ

‘(an order) that the supply of oil to the gymnasium remains everlasting’
(inscription containing the regulations for a trust fund from 42 AD (IG V.1 1208; SEG 13.258))
(cf. also Smyth 1956:346)
4.7. Interim conclusions

In this chapter, I argued that a complete and comprehensive typology of dative arguments, able to capture all datives complementing/modifying predicates characterised by all sorts of argument structure/lexical aspect/other semantic properties, can be derived in an economic and constrained way, by postulating different √P-internal E(xternal) M(erge) positions for the dative, on the basis of some linking theory such as the UTAH, coupled with a (principled) distinction of two positions for high applicatives. Notably, in the discussion of the relevant diagnostics, among others, the √P-internal origin of goal DPs, i.e. a basic premise of the movement analysis put forward in this thesis, was shown to be independently necessary, in order to account for the scopal behaviour of restitutive ksana and the relevant contrasts between goals and benefactives. In this discussion, I did not include the reflexive dative clitic constructions found in many Romance languages, but hopefully their behaviour too can be captured in terms of the present analysis.
5. The evolution and variation of Inherent Case in the diachrony of Greek

5.1. Introduction

This chapter deals with a series of changes in the syntax of dative arguments in Greek and suggests that they constitute manifestations of a deeper syntactic change affecting the type of inherent Case involved in each period and each class of arguments, following the distinctions we drew earlier concerning active/inactive inherent Case; this change was arguably not directly driven by morphological change, despite being preceded by a major related change in the declensional system of Greek, namely the loss of morphological dative and its replacement by genitive or accusative in different varieties. Two significant questions arise in relation to the history of datives in Greek: (i) how and why inherent Case, i.e. abstract dative, was not lost in the diachrony of Greek, despite the loss of its morphologically distinct exponence; (ii) how and why the syntactic behaviour of the abstract dative Case changed, despite its remaining inherent, at least based on the traditional definitions and diagnostics for the 'structural vs. inherent' distinction. More specifically, the major changes in the syntactic behaviour of ‘datives’ include (a) the emergence of dative alternations and dative shifted constructions, (b) the transition from a grammar allowing for weak pronominal/clitic clusters subject to a weak version of the P(erson) C(ase) C(onstraint), or no PCC at all, to a system where only the strong PCC is operative, (c) the emergence of minimality/defective intervention effects in DAT-above-NOM configurations (in raising/unaccusative constructions), (d) the rise of dative experiencers with subject-like behaviour.

In what follows, in order to account for these changes, I will sketch a diachronic scenario mainly based on the diachrony of Cypriot Greek, which is arguably the best-documented Greek variety with respect to the phenomena in question, but data from other areas will also be discussed. The diachronic scenario advanced suggests that abstract dative changed from one type of inherent Case to another, becoming visible to Agree/Move, after a reanalysis in the syntax of ditransitives and the rise of dative shifted constructions; thus, the configuration underlying ditransitive constructions with indirect object DPs changed from ‘DP_{D(irect) O(bject)} > DP_{I(ndirect) O(bject)}’ (where ‘>’ indicates asymmetric c-command) to ‘DP_{IO}>DP_{DO}’ (1-2). It will be argued that this reanalysis was not triggered but simply facilitated by the morphological loss; this may explain the large discrepancy between the dates of these two changes. Moreover, if the observations of this chapter are on the right track, then they constitute a
diachronic argument in support of the movement analysis advocated in this thesis: the need for dative-shift, i.e. $\text{DP}_{\text{IO}} \rightarrow \text{DP}_{\text{DO}}$, arose as soon as the contrast between indirect object DPs and the respective PPs with regards to the animacy restriction governing the former but not the latter was generalised, i.e. as soon as IO DPs had to check some feature (more specifically, the absence of ‘high’ dative DPs that do not have to check animacy/[±participant] is what indicates that this position must be associated with Agree-based movement).

(1) …edeiksen tous agnooumenous, alle:lois, (Hellenistic Greek)
   …showed.3SG the missing.ACC.PL each-other.DAT
   ‘She revealed the missing heroes to each other’

(2) a. edhiksa tis Marias, ton eafto tis, (Modern Greek)
   showed.1SG the Mary.GEN the self.ACC her
   b.*edhiksa ti Maria, tu eaftu tis,
   showed.1SG the Mary.ACC the self.GEN her
   ‘I showed Mary herself’

5.2. Dative arguments in the diachrony of Greek: morphological and syntactic change do not coincide

Although the morphological substitution of the ancient Greek dative started as early as Hellenistic Greek or Koine, i.e. Greek of the Roman times, and was completed by the end of the 13th century, as far as Cypriot Greek is concerned (see also Markopoulos 2010), many syntactic properties of the ancient/Hellenistic dative were not lost until long after the morphological loss. In texts of the 15th and the 16th century we still find goal DPs in configurations befitting DPs with [iCase], i.e., purely interpretable/inactive inherent Case, although they are now realised by morphological genitive instead of dative.

A similar discrepancy is observed in dialects where the dative was replaced by the accusative, e.g. Pontic Greek, (on which, see Michelioudakis & Sitariidou (forth.)). Taking (defective) intervention effects of datives in T-Agree to be a tell-tale sign of active inherent Case, it is clear that accusative ‘datives’ in the varieties spoken nowadays in Northern
Greece, including Pontic, give rise to such intervention effects, making the (morphologically accusative) dative clitic obligatory (see also Appendix C, as well as Dimitriadis (1999:106)); however, there are clear signs that in Medieval Pontic Greek, in which the morphological substitution had already taken place, cliticisation/clitic doubling of the ‘dative’ argument in DAT-above-NOM configurations is optional, indicating that there is no minimality violation that needs to be obviated. This may be so only if the goal/experiencer argument of the unaccusative construction bears a genuine [iCase] feature, transparent/invisible to Agree, despite being morphologically indistinguishable from, say, (accusative) direct objects, which are clearly structurally Case-marked.

(3) a. (Ton Kosta) *(ton) arese/irthe i idhea na aniksume maghazi (Northern Greek)
   b. (??Tin Anastan) eghraften *(aten) to ghrama (Modern Pontic Greek)
(3’a). Sinevi aftin thanatos (Medieval Pontic Greek)
   Happened.3S her.ACC/DAT death.NOM
   ‘She happened to die’ (literally: ‘death happened to her’) (Vazelοn, 78,10,1291,
   13th-15th cent. AD)
   b. Eparadothi to milon aftin
   Was-given.3S the apple.NOM her.ACC/DAT
   ‘The apple was given to her’ (Vazelοn, 23,5,1260)
   (data due to Vagiakakos 1964)

Therefore, another important implication of a diachronic and dialectal investigation of Greek datives is that the precise nature of an abstract Case feature (although only inherent Case is discussed here) is largely independent from its morphological exponent.

Table 1 below presents an overview of the morphological exponent and the abstract Case features of dative arguments in Hellenistic Greek and the medieval and modern varieties that derive from it.

---

1 Pontic Greek does not allow clitic doubling and even CLLD is quite marginal.
Some notes on Classical Greek datives

The Classical Greek dative was a syncretic Case, doing duty for dative proper, and two lost cases, the locative and the instrumental (cf. Smyth 1956:337). Thus, the argumental uses of the dative include (a) indirect objects (recipients, but not sources, which were realised as genitives), (b) benefactives/malefactives, (c) unique complements of certain verb classes (e.g. ‘follow’, ‘help’, ‘fight’ and their synonyms, as well as P+V compounds, when P normally takes DP\textsubscript{dat} complements), (d) experiencers selected by piacere-type psych predicates or impersonal/raising predicates (see fn. 9 for an example), (e) locative arguments (with both stative verbs and unaccusative verbs of motion\textsuperscript{2}) etc. (the overview that follows certainly does not do justice to all the different configurations in which datives can occur in Ancient Greek; I will focus on configurations familiar from earlier chapters). None of these

\textsuperscript{2} Cf. the following illustrative Homeric examples from Smyth (1956:351):

(i) pedio:i pese
ground.DAT fell.3SG
‘He fell on the ground’

(ii) toisi d’ aneste:
them.DAT but rose.3SG
‘But he rose up among them/for them’

(iii) koleo:i aor theo
sheath.DAT sword.ACC put.IMP
‘Put thy sword into its sheath!’

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<thead>
<tr>
<th></th>
<th>Morphological case</th>
<th>Abstract Case</th>
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<tr>
<td>Koine</td>
<td>mDAT</td>
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<tr>
<td>Medieval Pontic</td>
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<td>iCase, emergence of IOs with uCase</td>
</tr>
<tr>
<td>Modern Pontic /Northern Greek</td>
<td>mACC</td>
<td>uCase (uniformly)</td>
</tr>
<tr>
<td>Modern Cypriot</td>
<td>mGEN</td>
<td>uCase for goals, iCase for experiencers</td>
</tr>
<tr>
<td>Standard Modern Greek</td>
<td>mGEN</td>
<td>uCase (uniformly)</td>
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Table 1: a typology of dative DPs in the history of Greek
semantic/syntactic argumental roles could be fulfilled by any PPs at this stage. Bare dative DPs could also be used adverbially, e.g. as locative or instrumental modifiers. What is particularly relevant for our discussion here is that dative DPs could be either animate or inanimate, when fulfilling (almost) any of their possible roles.

Although the dative is largely theta-related and often idiosyncratic at this stage, it is quite possible that Classical Greek possessed active dative Case too, though probably not of the same sort as active inherent Case in SMG. Anagnostopoulou & Sevdali (2010) provide good reasons to assume that at least certain types of dative arguments bear an active Case feature, which may even alternate with the nominative. More specifically, dative complements of certain classes of monotransitive verbs may become nominative in the respective passive constructions (4a), while also dative arguments of certain ditransitive verbs become nominative under passivisation (4b). In the context of the analysis pursued here, slightly modifying Anagnostopoulou and Sevdali’s (2010) proposal, I will assume that the respective predicates combine with a special v-head (possibly associated with [-change of state] and [partial/no affectedness]3), which assigns structural dative, when it is in the domain of an active/transitive Voice, instead of structural accusative (which is then restricted to really affected DOs). When Voice is [passive] or absent, this Case is absorbed and the dative argument can Agree with T and be valued as Nominative. Therefore, it might be the case that Classical Greek distinguishes between different types of v, varying with regards [±affectedness], [±change of state] and [±control/intentionality]. I will further assume that in cases like (4b), the accusative borne by the theme is actually inherent, which is why it is not absorbed when Voice is [passive]4. When DO bears lexical Case, then in principle it is not a potential intervener, and IO does not need to move above it to value its Case and applicatives need not be postulated. However, there are certain dative constructions, mostly with optional/unselected datives, e.g. free benefactives, which meet one of Pylkkänen’s (2002/2008) main diagnostics for high applicatives, namely the availability of secondary/depictive predication (5); nevertheless, these depictives may just be reduced participial clauses, of the sort that was common in Ancient Greek, i.e., adverbial participial

3 For a correlation between such features and case distinctions, see ibid.:27, as well as Lavidas (2007/2009, passim).
4 In Classical Greek, all three non-nominative cases, accusative, genitive or dative are sometimes lexical, i.e. they can be assigned to unique complements of monotransitive verbs, depending on idiosyncratic properties of the predicate, without being absorbed in passives etc., therefore it is reasonable to assume that accusative may be sometimes a lexical/inherent Case (notably, Ancient Greek grammarians call accusative too an ‘oblique’ case); however, as already said, in languages where accusative is clearly structural in every other context, as e.g. in English, the treatment of accusative as inherent in goal-passives is not justified.
clauses potentially (so-called ‘circumstantial participles’, cf. Smyth 1956:456-459), which adjoin to any DP, either argumental or not.

(4) a. Ho Odusseus ephthone:se Palame:dei dia sophian
The Ulysses.NOM envied.3SG Palamedes.DAT due-to wisdom.ACC
‘Ulysses was jealous of Palamedes because of his wisdom’

a’. Palame:de:s dia sophian ephthone:the: hupo tou Odusseo:s
Palamedes.NOM due-to wisdom.ACC envied.PASS.3SG by the Ulysses.GEN
‘Palamedes was envied by Ulysses because of his wisdom’

(4Xenophon, Memorabilia IV: 2.33, in Anagnostopoulou & Sevdali (2010:24))

b. Allo ti meizon humi:n epitaksousin
Something else.ACC bigger.ACC you.PL.DAT order.FUT.3PL
‘They will order you to do something else bigger/greater’

b’. Allo ti meizon humeis epitachthe:sesthe
Something else.ACC bigger.ACC you.PL.NOM order.PASS.2PL
‘You will be ordered to do something else, bigger.’

(Thucydides, Historia I:140.5, in Anagnostopoulou & Sevdali (2010:33))

(5) a. Ho:s sphi asmenoisi to pho:s epelampsen
When them.DAT happy.PL.DAT the light.NOM dawned
‘When to their comfort the day dawned’

(Herodotus, Historiae 8.14.1)

b. Tote men asmenois autois to ainigma elusen te:s Sphiggos
Then but happy.PL.DAT them.DAT the riddle.ACC solved.3SG the Sphinx.GEN
‘But then he (=Oedipus) solved the riddle of the Sphinx for them to their delight’

(from Paraliterary Papyri, CPP0098 - P.Würzb.1.75-76)

On the other hand, it is remarkable how restricted the passive constructions of the sort exemplified by (4b), i.e. goal passives of ditransitives, actually are, as opposed to
monotransitives with dative complements: all the examples quoted in the literature (and possibly all the existing cases in general, based on my own research) involve compound P+V verbs, in which P=epi('on'); notice that epi is one of the prepositions that take dative complements when heading a PP, and this is probably why P+V ditransitives too can combine with the v-head that assigns structural dative. (Crucially, this does not extend to monotransitives; As Anagnostopoulou (p.c.) points out, Conti (1998) provides a catalogue of verbs and many of them are non-compounds; for these an account such as the one put forth in Anagnostopoulou & Sevdali (2011) or the one sketched above along similar lines might be plausible.) So, normally, putting aside monotransitives, canonical ditransitives headed by verbs meaning ‘give’, ‘say’ or ‘show’ only allow theme-passivisation, which does not affect the dative argument (6); in these cases, then, the dative Case of IO is not absorbed, which entails that it is not active. Notice that dative assigning v cannot inherit its Case assigning capacity from passive Voice, therefore dative in (6) has to be inherent. In other words, I will assume that dative, when not assigned by a v bearing [-change of state/control etc.], is an inherent Case, thus adopting the view that the dative may have a mixed status in Classical Greek (as Anagnostopoulou & Sevdali also assume), being sometimes inactive/purely inherent, but active/structural in a few cases (what is absent, then, is the third type found in Modern Greek, namely active, partly unintepretable/unvalued, inherent Case). Having inherent Case, then, (canonical) dative goal DPs do not induce any minimality effects between T and the (nominative) DO; moreover, following our earlier assumptions, it is reasonable to assume that these goal dative DPs, not having/being able to Agree and value a [uCase] feature, can/have to stay below DO, i.e., that they are not even structurally interveners between T and DO.

5 In relation to this, it is also worth noting that in French too, as R. Kayne points out to me, ‘the verbs obéir, désobéir and pardonner allow dative to ‘change’ to nominative in passives (with all the relevant sentences having the property that they lack a DO)’, see Kayne (1975).

6 Notice also that the SMG equivalent of the verb in (4) behaves like spread/load predicates, the accusative theme arguments of which are arguably marked with inherent Case:

(i) Tus epifortise (me) tin efthini na…
    Them.CL assigned.3SG (with) the responsibility to…
    ‘He assigned them the responsibility of…’

(ii) Epifortistikian (me) tin efthini na…
    Were-assigned.3PL (with) the responsibility to…
    ‘They were assigned the responsibility of…’

7 As Anagnostopoulou & Sevdali point out, passivised datives becoming nominatives cease to exist as soon as dative theme/patient arguments of monotransitive verbs are lost, probably during the medieval era (or perhaps even earlier, given the lack of the former in Hellenistic Greek and the restricted use of the latter, especially in non-literary sources). This is indeed consistent with the idea of a special v that inherits [uφ] from Voice but assigns dative instead of accusative, due to its special feature make-up (namely [-change of state] etc.); then both losses correspond to the loss of this v.
(6) a. Ekeino:i taute:n te:n cho:ra:n edosan
   Him.DAT this.ACC the.ACC land.ACC gave.3PL
   ‘They gave him this land’

b. Ekeino:i haute: he: cho:ra: edothe:
   Him.DAT this.NOM the.NOM land.NOM was-given
   ‘This land was given to him’

(Xenophon, *Hellenica*, 3.1.6, in Smyth 1956:340)

b. *Ekeinos edothe: haute:n te:n cho:ra:n*
   He.NOM was-given this.ACC the.ACC land.ACC
   ‘He was given this land’

Admittedly, it is hard to establish the DO>IO pattern in Classical Greek, as constructions fitting Barss & Lasnik’s diagnostics (to prove or falsify either pattern) are extremely hard to find. Nevertheless, what might constitute a piece of evidence in favour of the DO>IO pattern in double-object constructions is the availability of (relatively few) clitic clusters with exclusively DO-IO ordering. In what follows, I will try to establish the existence and the status of such clitic clusters.

First of all, any discussion of the properties of clitic clusters in earlier stages of Greek presupposes the non-trivial task of establishing that there are clitic clusters in Classical and Hellenistic Greek, which in turn presupposes that weak pronominal forms are really clitics at these stages. Following Cardinaletti & Starke’s (1999) diagnostics for distinguishing between weak pronouns and clitics, which are based on the assumptions that the former are XPs while the latter are heads, Ancient Greek enclitic pronominal forms all meet the necessary conditions for being clitics and are also not problematic with regards to the respective sufficient conditions (the arguments presented here cover both Classical and Hellenistic Greek):

(i) Weak pronominal forms in HG are always accentless (and monosyllabic, except some dubious cases of accentless plural pronouns, see Probert 2006), requiring a phonological host (phonological enclitics), and they are phonologically reduced, compared to the corresponding strong pronouns. Consider, for instance, the paradigm of singular dative pronouns:
strong DAT pronouns: emoí (1SG), (e)soí (2SG), autô:i (3SG, New Testament Greek)
weak DAT pronouns: moi (1SG), soí (2SG), (hoi/sphi) (3SG, rare)

(ii) There is no evidence that the relevant pronominal forms in Classical/Hellenistic Greek may be maximal projections (XPs) occupying Spec-positions: (a) no complementary distribution effects with XPs are observed in any context; (b) as opposed to weak pronouns, they cannot display wide scope in conjunctions:

(7) a. Rhusai *(me) kai ekselou me
    Protect.2SG.IMP me.ACC.CL and exempt me
    ‘Protect me and exempt me’ (Psalms 70:2)

vs.

(7) b. [[Elee:son kai so:son] he:ma:s]
    Have-mercy.2SG.PFV.IMP and save.2SG.PFV.IMP us.ACC
    ‘Have mercy upon us and save us’

(iii) They appear to have the same distribution as various (equally accentless and phonologically enclitic) discourse particles, e.g. ge (‘of course’), toi (‘notably’) etc., which must be heads (cf. Haegeman & Hill 2010).

(iv) They cluster together already in Homeric Greek, i.e. in texts with (almost) exclusively 2\textsuperscript{nd} position/Wackernagel placement:

(7) c. Epei se moi e:gage daimo:n
    When/since you.ACC.CL me.DAT.CL brought.3SG god.NOM
    ‘When/since the god brought you to me’
    (\textit{Iliad}, 14.386)

Notice that if se were an XP, or even a distinct X\textsuperscript{0}, then moi would violate Wackernagel’s law; therefore, both clitics must adjoin to the same X\textsuperscript{0}-position.

Notice also that already in Classical Greek, 3\textsuperscript{rd} person singular personal pronouns were extremely rare: 3\textsuperscript{rd} person accusatives are practically absent in the extant texts (both prose and poetry), possibly due to the parallel use of 3\textsuperscript{rd} person null objects (see Luraghi 2010),
while Smyth (1956:92) also notes: “of the forms of the third personal pronoun only the
datives hoi [singular] and sphisin [plural] are commonly used Attic prose, and then only as
indirect reflexives⁸ (cf. sui/sibi/se in Latin). Moreover, my own search in Hellenistic/Koine
texts did not yield any weak forms of either type, probably because the paradigm of 3rd
personal pronominal forms at this stage has all been replaced by forms of the formerly
intensive/demonstrative pronoun autos (cf. the role of ille in the evolution of the 3rd
person pronominal system in Romance). Thus, as expected, we find no clusters involving 3rd
person accusative weak pronouns/clitics; clusters with 3rd person datives are not to be found either,
either (a) because of the rarity and the restricted distribution of 3rd person datives, or (b)
because, given the unavailability of 3rd person accusative, all other conceivable combinations
would involve 1st/2nd person accusatives, i.e. they would constitute violations of the PCC,
even in its weak form. Thus, we only find the following combinations of 1st and 2nd person,
which themselves violate the strong PCC, and of which (7e) is significantly more productive.

(7) d. …se moi…
    you.ACC.CL me.DAT.CL
    ‘you to me’

e. …me soi…
    me.ACC.CL you.DAT.CL
    ‘me to you’

Interestingly, these occur both in Classical and Hellenistic texts, both in 2nd-
position/Wackernagel environments and adverbal contexts (see Horrocks (1990) on the
gradual transition from the former placement rule to the latter), both in archaic/formal-style
and colloquial sources (see Appendix B for an indicative list of data). What is particularly
important for our purposes is the fact that they do not conform to the strong PCC, either
because they conform to a weaker PCC (however, having argued that they are clitics, I would
not attempt a parallel with the weak PCC governing weak pronouns in (Swiss) German, see
Anagnostopoulou 2008), or because they are not subject to the PCC at all. Moreover, since
both 2ACC-1DAT and 1ACC-2DAT clusters occur I would not argue that their ordering is
regulated by [person], i.e. some person hierarchy of the sort regulating clitic clusters in some
Romance languages; instead, I am more inclined to suggest that their order is derived

⁸ By this, Smyth simply means that they must behave as reflexive anaphors, locally bound within their minimal
clause.
syntactically, just like in later stages of Greek. In fact, I will suggest that their order reflects underlying DO>IO\textsubscript{DAT}, at least in Hellenistic Greek, where it is possible to find suggestive examples of anaphoric and variable binding (see next section); this is also compatible with our hypothesis that DO>IO\textsubscript{DAT} correlates with the absence of the strong PCC.

5.4. From Classical Greek to Koine

In Hellenistic Greek, the use of morphological dative is in decline: due to a series of phonological changes, especially in the vowel system, dative suffixes are becoming homophonous with genitive suffixes in some dialects, or indistinguishable from the accusative in others, see Horrocks (2010:114-117) about the emergence of morphological substitutes and its morphophonological triggers\(^9\).

However, as far as syntax is concerned, dative Case, whatever its morphological exponence, retains significant part of its classical distribution, especially its argumental uses,

\(^9\) Nevertheless, recent research (cf. Cooper & Georgala 2010 and Gianollo 2011) has also pointed to the role of external possessor clitics in the dative/genitive merger. Recall that the ancient dative, as opposed to SMG genitive/dative, also conveyed possession, see §4.2.4, particularly the examples (52-53). As argued in §4.2.4, these datives originate DP-internally. In languages such as French, these datives are attracted to the external possessor position via applicatives, thanks to their active inherent [uCase] feature; in Classical and Hellenistic Greek, however, where they lack such a feature, their movement to adverbal or 2\textsuperscript{nd} position is probably mediated by the relatively free (focus-related) movement independently available in these historical varieties, through the phase edge of both DP and VoiceP, which is responsible for the extensive hyperbaton/discontinuity observed. Similarly, genitive possessive clitics may end up to the same clitic positions, via the same steps of optional E(dge) F(eature)-induced movement.

\begin{itemize}
  \item[(i)] Ouk an mou apethanen-T [\textsubscript{DP} <mou> <apethanen> [\textsubscript{DP} <mou> ho adelphos <mou>]]
  \begin{flushleft}
  Not MOD I.GEN died.3SG the.NOM brother.NOM
  \end{flushleft}
  \begin{flushleft}
  ‘My brother would not have died’
  \end{flushleft}
  \begin{flushleft}
  (New Testament Greek, John 11.32)
  \end{flushleft}
  \item[(ii)] Po:s e:noiksen sou tous ophthalmous?
  \begin{flushleft}
  How opened.3SG you.GEN the.ACC eyes.ACC
  \end{flushleft}
  \begin{flushleft}
  ‘How did he open your eyes?’
  \end{flushleft}
  \begin{flushleft}
  (New Testament Greek, John 9.26)
  \end{flushleft}
\end{itemize}

Given, then, that the discourse effects of their stylistic fronting were gradually fading in Hellenistic Greek, according to Gianollo, genitive possessive clitics ended up having practically the same distribution as dative clitics, not only the pure (i.e., unaffected) possessive ones, but also unemphatic affected/argumental dative clitics, which arguably made it easy for these genitives to be reanalyzed as datives. Moreover, once the extensive stylistic movement of Ancient Greek got restricted (and eventually lost), genitive clitics could no longer be parsed as originating DP-internally, but rather they had to be interpreted exclusively as affected argumental clitics (Gianollo actually observes that, as the use of DP-external dative clitics is generalised, these genitives increasingly “convey an affectedness flavor, as the possessor receives an additional bene-/malefactive reading”). Eventually, the pure/unaffected possessive reading of genitive/dative clitics was lost altogether, as already argued in relation to SMG (seemingly) possessive datives.
for both animate and inanimate (8) arguments. In ditransitives, in particular, we still do not find any dative alternations. Having said that, the locative and other adverbial uses of the dative now subside considerably, i.e. the lost locative that survived in the dative of Classical Greek is now entirely lost, and PPs headed by appropriate Ps are taking on these syntactic functions (9) with increasing frequency.

(8) Ou dunatai de o ophthalmos eipein te:i cheiri ‘chreian sou ouk echo:’
    e: palin he: kephale: tois posin ‘chreian humo:n ouk echo:’
Not can.3SG the eye.NOM tell.INF the hand.DAT ‘need your.SG not have.1S’
or again the head.NOM the feet.DAT ‘need your.PL not have.1S’
‘And the eye cannot say to the hand: I need not thy help;
nor again the head to the feet: I have no need of you’ (Ad
Corinthios, 12.21.2, 1st cent. AD)

(9) dio paredo:ken autous ho theos en tais epithumiais to:n kardio:n auto:n
Hence abandoned them the god.NOM in the desires.DAT the hearts.GEN
their.GEN
‘That is why God abandoned them to the shameful desires of their hearts’
(Ad Romanos, 1.24.1, 1st cent. AD)

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<th>mDAT</th>
<th>Animate/human arguments of dative verbs</th>
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<tr>
<td>PP</td>
<td>–animate]/[–human] arguments of dative verbs</td>
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<td></td>
<td>Locatives (both argumental &amp; non-argumental)</td>
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Table 1: DP/PP competition in Hellenistic Greek

Significantly, at this stage datives do not induce any defective intervention effects in long distance agreement with nominative themes in raising (10)\(^\text{10}\) or passive (11) constructions.

\(^\text{10}\) There is indeed evidence from anaphoric/variable binding that dative experiencers with impersonal/raising verbs in ancient Greek could bind into (and therefore had to asymmetrically c-command) nominative themes (the possessive pronoun/adjective \textit{idios} in Ancient Greek is an anaphor, i.e. it is always locally bound by a clause-mate, like \textit{proprio} in Italian etc.):

(i) ekseinai tous idious, echthrous hubrisein auto:n hekasto:i,
    be-possible.IMPers.INF the own enemies.ACC oppress.INF them.GEN each.DAT
(10) *pro dokoumen men gar auto:i haptesthai ekeino:n*
pro.1PL seem.1P therefore him.DAT touch.INF those.GEN

'we therefore seem to him to be touching those'

(Themistius, *Aristotelis de anima paraphrasis*, 5.3.75.8)

(11) *he: basileia tou theou […] dothe:setai ethnei poiounti tous*

karpous aute:s
the kingdom.FEM the God.GEN […] will-be-given.3S
nation.DAT making.DAT the fruits.ACC her.GEN

‘God’s kingdom will be given to a nation producing [Kingdom] fruitage’ (*Matthew*, 21.43.2)

Furthermore, we can find evidence for indirect object DPs asymmetrically c-commanding direct objects, and no data indicating a reverse underlying configuration: in (12), where the same R-expression occurs as IO and as the embedded possessor of DO, an underlying representation such as IO>DO (in A-positions) would result in a Principle C violation, while [DO [Poss_i]]>IO_i does not give rise to any such violation; similarly, (13) is an example of variable binding and, finally, (14) clearly demonstrates that anaphoric binding of IO by DO is possible, thus lending support to a representation such as (15) below.

(12) *Toinun apodote ta Kaisaros Kaisari kai ta tou theou to:i theoi:i*

Therefore give/pay back the.ACC.PL Caesar.GEN Caesar.DAT and the.ACC.PL
the.GEN.SG God.GEN the.DAT.SG God.DAT

‘Therefore, render unto Caesar the things that are Caesar's, and unto God the things that are God's’ (*Marc*, 12.17.2)

(13)a. *Kai edo:ken auton, te:i me:tri autou,*

And gave.3S him the mother.DAT his

‘And (Jesus) gave him to his mother’ (*Luke*, 7.15.2)

b. *Edo:ken aute:i, ton uion aute:si,*

Gave.3SG her.DAT the son.ACC her.GEN

‘to be possible/the possibility/license for each one of them to oppress his private enemies’
(Demosthenes, *Against Midias*, 21.170)
‘He gave her her son’

(14)a. Po:s oun he: theos […] tous agnooumenous; edeiksen alle:lois; lekso:

How so the goddess […] the missing showed.3S each-other.DAT tell.1S.FUT

‘So now I will tell you how the goddess (Venus)

showed/revealed the two missing heroes to each other’

(Chariton, Callirhoe, 8.1.5.2)

b. *Tois agnooumenois; alle:lois; edeiksen

The missing.PL.DAT each-other showed.3SG

‘She showed the missing heroes each other’

(15)

VoiceP

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Finally, as already implied, this syntactic behaviour coexists with the apparent absence of strong PCC effects: (16a-c) are examples of clusters of 1st and 2nd person weak/clitic pronouns from the Hellenistic/Koine period. As already said, given the loss of 3rd person weak pronominal forms at this stage of the history of Greek, it is hard to tell whether a weak version of the PCC or no PCC at all is operative; however, recall that, interestingly, Hellenistic Greek also allows 1st/2nd person accusative clitics in the presence of full lexical indirect object DPs (16d), while the equivalent of this configuration in a strong PCC language like Modern Greek (either Standard or Cypriot) is considerably degraded.

(16)a. Omoson […] te:n Aphrodite:n te:n

Swear.IMP the Aphrodite.ACC the
show. PAST. PTCP. FEM. ACC me. ACC. CL
you. DAT. CL
‘Swear to Aphrodite, the one who revealed me to you’
(Chariton, Callirhoe, 3.2.5.4)

b. Kai gar aute: me soi diephulaksen
And because she me. ACC. CL you. DAT. CL saved
‘And because she saved me for you’
(Chariton, Callirhoe, 8.3.2.6)

c. O paradous me soi meizona hamartian echei
The deliver. PTCP. PAST me. ACC. CL you. DAT. CL bigger sin. ACC has
‘He who delivered me to you has greater sin’

d. Thale:s me to:i medeunti Neileo: de:mou dido:si
Thales me. ACC. CL the watching-over (god). dat Nileos. GEN
state. GEN gives
‘Thales devoted me to the god that protects the people of
Nileos’ (Callim. Th 52)

The absence of strong PCC effects is straightforwardly accounted for by the structure in (15),
which lacks an applicative phrase, if we assume that it is indeed Appl that bears
[uParticipant], which potentially gives rise to the PCC. Recall also that v* was argued to be
an amalgam/fusion of two v-heads, namely vCause and vTransfer, and that such heads do not
project as separate heads unless this can help the derivation to converge, e.g. by providing
space for an ApplP. In our case, the existence of two v-heads would create two targets of
clitic movement, as is indeed necessary; I will stipulate that each of the two v-heads inherits a
[uφ] set from Voice, which helps the two clitics to find a host, but they need not and may not
both inherit Voice’s EPP, i.e. the ability to project a Spec11. Therefore, each of the two object

11 Following recent suggestions by Chomsky, EPP-movement is only necessary to resolve labeling paradoxes:
i.e., when non-heads merge with other non-heads, e.g. a Voice-vP constituent with an external argument DP, 
EPP-movement lets the new constituent obtain a label, making it look like a head+non-head constituent, which
is unambiguous for the labeling algorithm (this, according to Chomsky, also accounts for Alexiadou &
Anagnostopoulou’s ‘subject-in-situ generalisation’); in constituents resulting from EPP-movement, e.g. TP, the
clitics is attracted by a separate \( \nu \), in accordance with the Strict Cycle (see chapter 3); the \( \text{CI}_\text{DO-}v_{\text{TRANSFER}} \) complex moves to \( v_{\text{CAUSE}} \) due to the latter’s [uV] feature, and the (deleted copy of the) DO clitic also moves to \( \text{Spec-}v_{\text{CAUSE}} \), thus cancelling DO’s defective intervention, and allowing the phi-probe of \( v_{\text{CAUSE}} \) to reach and attract \( \text{Cl}_\text{IO} \). As shown in the representation below, this derives the DO-IO ordering inside clitic clusters syntactically:

\[ (17) \]
\[
\begin{array}{c}
\text{v}_{\text{CAUSE}}^P \\
<\text{Cl}_\text{DO}> \\
\text{v}_{\text{TRANSFER}}^P \\
\text{Cl}_\text{IO} \\
\sqrt{\text{v}_{\text{TRANS}}} \\
\text{Cl}_\text{DO} \\
\sqrt{\text{v}_{\text{TRANS}}} \\
<\text{Cl}_\text{DO}> \\
<\sqrt{ }><\text{Cl}_\text{IO}> \\
\end{array}
\]

label is determined on the basis of the \( \varphi \)-features that the merging constituents share, according to Chomsky. In our case, in \([v^* [\text{DO} \sqrt{\text{IO}}]]\), EPP-movement of DO to \( v^* \) resolves the labeling paradox of \( \sqrt{P} \), while in \([v_{\text{CAUSE}} [\text{IO Appl} […] ]]\), EPP-movement of IO resolves the labeling issue of ApplP. However, when no Appl is present, as in (17), there is only one labeling paradox to be resolved, namely that of \( \sqrt{P} \). Consequently, in (17) there is no reason for both \( \nu \)-heads to inherit an EPP feature; it is enough (and necessary) for \( v_{\text{CAUSE}} \) only to have EPP, to attract DO into its Spec and thus resolve the labeling issue of \( \sqrt{P} \).

\[ \text{The fact that Cl}_\text{IO} \text{ probably lacks an active Case feature is compatible with Roberts’s (2010) notion of ‘defective goal’ (see chapter 3).} \]

\[ \text{Nonetheless, admittedly, some additional PF process/reordering (of V in particular) is still required, probably in T, as the result of inflectional morphology, while also in cases of } 2^{nd} \text{ position placement, the clitic cluster may have to excorporate (alternatively, see Roberts 2010 who treats } 2^{nd} \text{ position clitics in Slavic languages as D-clitics, which are attracted directly by C’s } [u\varphi] \text{ and } [uD]). \]
5.5. Medieval Cypriot Greek

5.5.1. Competing substitutes of the dative and the emergence of dative alternations

The use of locative PPs was probably spread to such an extent that they became the exclusive way to realise locatives (both arguments and adjuncts); moreover, given that locative expressions most often have inanimate referents, this expansion apparently resulted in such PPs becoming the exclusive exponent of all inanimate expressions formerly realised as datives, including inanimate goals/indirect objects. Meanwhile, morphological genitive had replaced dative completely.

<table>
<thead>
<tr>
<th>mGEN</th>
<th>Animate/human arguments of dative verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>PP</td>
<td>[–animate]/[–human] arguments of dative V's</td>
</tr>
<tr>
<td></td>
<td>Locatives (both argumental &amp; non-argumental)</td>
</tr>
</tbody>
</table>

Table 2: DP/PP competition in Medieval Cypriot Greek

In other words, in Medieval Cypriot Greek genitive argumental DPs can only have [+animate] (or rather [+human]) referents, while goal PPs can only have inanimate/non-human referents. At this stage, then, the animacy restriction on indirect object DPs may be treated as a purely lexical property, perhaps a selectional requirement in the lexical entry of all ditransitive verbs. PP-realisation of the indirect object is only chosen as a last resort for recipients/goals in the following cases: (a) when they are non-human, collective entities (18), (b) when other inanimate nouns are used metonymically in place of [+human] DPs (19) and, interestingly, in several cases where the direct object is a 1st/2nd person clitic, and the indirect object is 3rd person (20), i.e. prepositional indirect objects also seem to be employed as a strategy of avoidance of configurations with PCC-violating combinations of person features, such as (15d) above –of which no equivalent is attested.

(18) Na to ksighunde is ton kosmon

Subj. it.ACC.CL narrate.3PL to the people.ACC

‘To narrate it to the people’ (Machairas, 2.99.5, 15th cent.)

(19) oti to dhikon tou na dhothi […] is ta cherja tous pateres tu San Tomeniku
That his fortune be given to the hands of the fathers (monks) of St. Dominique’

(Machairas 1.56.1-2)

(20) kai rikoumantias’ mas is tin afentian tu
and recommend/present.IMP us.Cl.ACC to the majesty.ACC his
‘and recommend/present us to his majesty’

(Machairas, §275.29)

Furthermore, the use of PPs, which were originally restricted to purely locative uses, is often also extended to predicates such as “send”, “return” etc. (cf. 21), which are ambiguous between the “caused change of location” and the “caused change of possession” reading (see Ormazabal & Romero 2010). It then seems reasonable to assume that it was this ambiguity that led to a gradual rise and spread/diffusion of prepositional animate IOs; so, in ‘Cyprus’s Love Poems’ (22), a collection considered the first sample of (early) Modern Cypriot and compiled between 1560-70, i.e., one century later than the text where the data in (17-20) come from, we find uses of animate PP IOs in contexts where the chronicles of the 15th century would invariably use the genitive14.

(21) Kai esteilan ton eis ton rigan
And sent.3P him.Cl.ACC to the king.ACC
‘And they sent him to the king’ (Machairas, §360.11)

(22) Tote eis afton mou fernoun oi pikres egnais tin thlipsin
Then to self.ACC my bring.3P the bitter worries the sorrow.ACC
‘Then the bitter worries bring sorrow to myself’ (Love Poems, 84b)

Therefore, the distribution of prepositional and genitive substitutes of the ancient dative at this stage is as illustrated in table 3 below:

14 Note that ferno ‘bring’ in (21) is one of the ambiguous predicates mentioned earlier, but the collocation ‘bring sorrows’ certainly cannot have a literal locative reading.
animate/human arguments of dative Vs
mGEN

[-animate]/[–human] arguments of dative Vs
Locatives (argumental & non-argumental)

Table 3: DP/PP competition in Early Modern Cypriot Greek

More specifically, as far as the syntax of dative/ditransitive verbs is concerned, the emerging pattern is the following:

<table>
<thead>
<tr>
<th>Genitive (DPs/pronouns)</th>
<th>Animate IOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPs</td>
<td>Inanimate IOs / locatives</td>
</tr>
</tbody>
</table>

Table 4: The emergence of dative alternations

This pattern is, more or less, the standard pattern observed in systems with dative alternations. Now that PP IOs can freely be either animate or inanimate, the animacy requirement concerning IO DPs cannot be regarded as a selectional feature any more; it rather looks like a licensing requirement of inherently Case-marked DPs, i.e., [(abstract) dative Case] $\rightarrow$ [ +Animate/+human] but not vice-versa. In other words, the corresponding feature is now optional and may not have to be part of the lexical entry of every dative verb; instead, it would be reasonable to assume that it reanalyses as a probe that licenses ‘dative’ DPs; and ‘dative’ DPs in turn need to be active, i.e. to bear an active [uCase] feature, in order to be able to establish an Agree relationship with such a probe. If this is the case, then this might explain why the properties we associated with ‘active’ inherent Case (see the data in the next subsection) emerge as soon as dative alternations become productive. Finally, as I already argued, the additional probing head that we need to postulate for Greek (both Standard and Cypriot) is an Applicative bearing a [uParticipant] probe, which also derives the strong PCC.
5.5.2. Co-existing/competing inherent [Case] features

(a) Survival of (inactive) [iCase]

The properties of the Hellenistic dative still survive in MedCG, although as we said the ancient dative has now been replaced by the genitive. Firstly, we can still find examples where datives cause no defective intervention effects in raising, unaccusatives and passives (23-25).  

(23) Ekinon, [CP to [TP t, ef]anin-T tis vulis mu [TP t,’ ine kalon]], fenete mu ki emenan
That which seemed.3SG the senate/diet.GEN/DAT my be.INF good seems me.DAT.CL and me.GEN/DAT
‘What seemed to my senators/consultants to be good seems to me (to be good) too’
(Boustr. Chron. A 52.13-15)

15 It should be pointed out that in (23), Spec-T in the relative clause is occupied by the trace of the embedded subject rather than by pro_{expl}, since ‘efanin’ here is clearly not used as impersonal, taking into consideration that its other occurrence (‘fenete’), in the matrix clause, has an overt referential subject, arguably raised out of an elided complement-TP; note that in MG, in which ‘fenete’ appears to have the same usage, the embedded subject of an elided complement clause cannot be (A‘)-moved (i.e. topicalised) into the matrix CP, if ‘fenete’ does not agree with it, i.e. if it is used as impersonal. Consider, for instance, the following MG example, which is as close structurally to (6) as possible:

(i) Ekinos i lisis pus su fenonde.3PL esena na ine kales, mu fenonde.3PL ki emena (na ine kales)
(ii) ?*Ekinos i lisis pus su fenete.3SG esena na ine kales, mu fenonde.3PL ki emena (na ine kales)
(iii) *Ekinos i lisis pus su fenonde.3PL esena na ine kales, mu fenete.3SG ki emena (na ine kales)
(iv) *Ekinos i lisis pus su fenete.3SG esena na ine kales, mu fenete.3SG ki emena (na ine kales)
‘Those solutions that seem to you to be good, (they) seem good to me as well’. 

At any rate, in Med CG there are also quite a few other instances of raising predicates agreeing with embedded nominative DPs (regardless of their surface position) across genitive experiencers unproblematically, without evidence of any intervention effect, e.g. without obligatory cliticisation/clitic doubling (CD) of the genitive as in SMG (see below); interestingly, cliticisation/CD of the genitive is obligatory in SMG even when the raising predicate is impersonal, i.e. there still appears to be a need to establish some Agree relation with the embedded CP, for which the genitive/dative would act as an intervener.

As far as (24) is concerned, the plural marking on the matrix verb could not be the result of sympathetic agreement with the experiencer, as there is no indication of such a possibility in any other point of the text, or any other Greek text for that matter; in all other cases with plural experiencers, psych Vs display singular agreement. On another topic, it seems that raising/long distance Agree is possible out of subjunctive complements, probably because na-clauses at this stage serve mostly as substitutes of the infinitive (there still seems to be free variation among infinitival and na-clauses in this period) and arguably have not yet developed a full CP-structure (see Roussou 2000), i.e. they are not strong phases, which is why they are not subject to the Phase Impenetrability Condition (Chomsky 2000, 2001).

It is also worth pointing out that there is no evidence that dative arguments at this stage can undergo any kind of A-movement, i.e. there are no quirky subjects, nor indirect passives; all genitive experiencers in the extant medieval Cypriot texts occur postverbally and do not seem to pass any of Sigurðsson’s (1989) diagnostics for subjecthood (see also Svedali (2009), who makes the case for quirky datives in Classical Greek based on different sorts of evidence (case transmission, control, reflexive binding), which is also not to be found in Medieval Cypriot). Furthermore, if we follow Boeckx (2000:361), ‘[q]uirky elements always block raising of nominative ‘objects’ […] to the highest (‘subject’) position, irrespective of agreement pattern’, which is not the case in Med CG, as already shown.

245
(24) Den [areskun] tus archondes tus Genuvisus\textsuperscript{16} [na ine i las mas kai to dikon tus apokato is tin eksusian sas] Not appeal.3PL the masters.ACC the Genoans.ACC=GEN/DAT to be.3PL the people.NOM our and the fortune.NOM their under to the power your ‘The Genoan masters do not like the fact that our people and their fortunes are under your rule’ (Machairas, 3, 372)

(25) Pos estrafin to rigaton, ape tus Romeus ke proi edothin tus Latinus t, That was-returned.3SG the kingdom.NOM from the Romans and was given.3SG the Latins.ACC=GEN/DAT ‘That the kingdom was returned by the Greeks and was given to the Latins’ (Machairas, 2.99.1-2)

Secondly, ‘low’ IO DPs are still available. In her corpus of Medieval Cypriot Greek, Vassiliou (2002) observes 6 occurrences of V-DO-IO\textsubscript{DP} but no occurrences of V-IO\textsubscript{DP}-DO in paragraph-initial position, which she considers as the most pragmatically neutral context. This is also consistent with the fact that when both internal arguments are existentially quantified, i.e. when none of them is focused or presupposed, V-DO-IO\textsubscript{DP} is preferred (26). DO-IO\textsubscript{DP} order is statistically prevalent anyway (around 70% of all ditransitive constructions, excluding strings with dislocated arguments) but, apart from these observations about linear order, there are also examples in which we need to assume that DO necessarily asymmetrically c-commands IO, see e.g. (27), which presents us with a case of variable binding of a possessor embedded in the IO DP by the DO DP (note that its equivalent in present day (Cypriot) Greek would sound highly unnatural).

(26) Kai afinei kanenan pragman katinos
And leaves anything.ACC anyone.GEN ‘And (if) he leaves anything to anyone’ (Assises f137, 190)

\textsuperscript{16} In Medieval Cypriot Greek (as well as in Modern Cypriot, for many speakers), the plural genitive form of masculine nouns/determiners/adjectives is syncretic with the accusative (see Sitaridou & Terkourafi 2007, Markopoulos 2010).
(27) An thelete me to kalon na strepsete [to kastron], [tou afendi tou,]
If want.2P with the good Subj. return the castle the owner.GEN its
‘If you want to willingly return the castle to its owner’
(Machairas 3.472.10-11)

Crucially, if ‘low’ IO DPs exist, i.e. if the configuration in (15) is still available, the absence of defective intervention effects in direct passives (24) is simply due to the fact that the IO DP does not structurally intervene between T and DO –apart from the fact that, even if it did intervene, like in raising/psych unaccusatives, it would be transparent due to its [iCase].

(b) Reanalysis and emergence of active inherent (u)Case:

In the same texts as those containing the above data, especially the later ones, there is also considerable rise of the reverse, IO_{DP}-DO_{DP} order. This order might have started as the result of A’-scrambling of IO_{DP} over DO, which began to be extensively used as a disambiguation strategy, given that V-DP\_ACC-\_DP\_GEN can be ambiguous between V-DO_{DP}-IO_{DP} and V-[D \_NP N\_ACC POSS\_GEN]], especially when the accusative is definite (28). It is important to note that at this stage, NPs in Greek are consistently head initial, with [D \_NP N DP\_GEN]] being the unmarked configuration. [[DP\_GEN]] D \_NP N t]] also exists (but not [D \_DP\_GEN N], which was the canonical order in Classical Greek); however, this configuration is significantly less frequent, derived from [D \_NP N DP\_GEN]] (see Panagiotidis 2008), and highly marked; thus, in principle, V-DP\_GEN-DP\_ACC can also be ambiguous between V-IO\_DP-DO\_DP and V-[[POSS\_GEN] D \_NP N t]], but certainly not to the same extent as V-DP\_ACC-DP\_GEN: while in the latter it can be said that the two readings are equally accessible, in the former one of the two readings is very marked and would usually require special intonation.

(28)a. etaksen ta rigata tou rigos
promised the provinces-of-the kingdom the king GEN
‘he promised the provinces belonging to the kingdom to/of the king
–genitive ambiguous between ‘recipient’ and ‘possessor’
b. I avli prepei na pari ta pragmata tous egitades
   The court.NOM must Subj. take.3S the things.ACC the guarantors.ACC=GEN
   ‘The court must take the possessions of/from the
   guarantors’ (Assises, 58,73)
   –genitive ambiguous between ‘source’ and ‘possessor’

c. Opou raftei ta roucha tous ksenous
   He-who sews.3S the clothes.ACC the foreigners.ACC=GEN
   ‘The person who sews up the clothes of/for the foreigners’ (Assises 6,88)
   –genitive ambiguous between ‘beneficiary’ and ‘possessor’

Evidence that this permutation of the relative order of the internal arguments must have
started as A’-scrambling comes from the fact that several IO\textsubscript{DP}-DO\textsubscript{DP} examples still behave
as such, e.g. they are employed for defocusing purposes, cf. (29), where the DP ‘the
Genoans’ is old information and as such it has to be vP/VoiceP-external). However, there is
also evidence that ‘high’ IOs are being reanalyzed as occupying A-positions, already in texts
such as the Assises (13\textsuperscript{th}-14\textsuperscript{th} cent. with manuscripts dating from the 15\textsuperscript{th} cent.) and the
Chronicle of Machairas (15\textsuperscript{th} cent.), see e.g. (30), an example of quantifier variable binding
of DO by IO\textsubscript{DP}.

(29)Kai anen kai pepsoun oi Genouvisoi […] tote na dosoun tous Genouvisous 100
doukata
   And if and send.Subj.3P the Genoans […] then Subj.
give.Subj.3P the Genoans.ACC=GEN.DAT 100 ducats
   ‘And in case the Genoans send (someone)… then they
   (must) give the Genoans 100 ducats’ (Machairas, §353.17)

(30)Kai edoken pasanou, tin douleian toui,
   And gave.3SG everyone.GEN the job.ACC his
   ‘And (he) gave everyone, his, job’ (Machairas, §174.7)

It can be argued then that the trigger of the reanalysis proposed is the synergy of two facts,
the rise of V-IO\textsubscript{DP}-DO\textsubscript{DP} and the rise of [+animate] IO PPs, which both gave rise to what is
canonically found in languages with dative alternations: prepositional ditransitive
constructions with DO>IO and double object/double DP constructions with IO>DO. While IO\_DP-DO began as an A’-scrambled order, it soon lost its discourse-related effects, particularly as soon as it did not only serve information-structural (i.e., defocusing) purposes and it started being used extensively purely as a disambiguation strategy. This loss of its interpretive properties meant that the acquirers could no longer attribute to Voice an optional EPP/edge feature (cf. the discussion in Roberts 2007:275-277) and the latter had to be reinterpreted as an obligatory movement-triggering feature, not necessarily linked to Voice. As Roberts (2007:276) notes, “[e]xpressivity may cause EPP features to be introduced, while simplicity causes them to be eliminated. […] Furthermore, it is very likely that the ‘coalescence’ of EPP and φ-features […] is driven by the preference for simplicity. We can thus envisage a sequence of changes, starting from an optional EPP feature, to obligatory EPP combined with Agree […].” Taking the history of OV in English/Germanic as an example, he points out that “[f]or v, this would give rise to a sequence of changes from optional OV associated with a discourse effect, to obligatory OV associated with case marking and/or agreement.” Likewise, in our case, giving the impression that it can be the alternant of DO>IO\_PP, IO\_DP-DO was reanalyzed as such and Voice’s optional EF was reinterpreted as the EPP feature associated with Appl’s [uParticipant] probe, in a more articulate structure, such as the one suggested earlier for SMG double object constructions.

Therefore, this is how the high position of scrambled IOs was reanalyzed as the position in which the genitive/dative DP can check and delete the structural part of an active inherent Case feature; it is clear that, despite this change, dative did not become a fully structural Case, given e.g. the fact that it did not become absorbable in passives etc. Valuation of its hybrid [uCase] takes place via Agree with v*, i.e. it can only take place in the moved position, so that the intervention of DO is avoided (which is probably why Agree+Move triggered by Appl never changed into Agree only, as in the cases discussed in Roberts 2007:277).

There are two possible scenarios about the steps in which this reanalysis might have taken place:

(a) According to the first scenario, the [uParticipant] feature, which probes and attracts dative DPs, was first assigned to Voice, which often hosted scrambled IOs in its edge. For reasons already mentioned (cf. Richards (2007) and Chomsky (2006) who derive feature inheritance
from the PIC), [uParticipant] must be inherited by v*. This leftward movement of IO\textsuperscript{17} was then reinterpreted as a result of Agree for this [uParticipant] feature, i.e. as A-movement. The stages of the reanalysis, then, are as follows:

**Step I. A’-scrambling, (31) \(\rightarrow\) (32)**

\[
(31) \quad \ldots \sqrt{-v^*} - \text{Voice} - T [\text{Voice}_P \, \text{EA} <\sqrt{-v^*} - \text{Voice}> [\, {}_v^p \, \text{DO} \,[\text{uCase}] <\sqrt{\text{IO}_{\text{gen}[i\text{Case}]}}]]
\]

\[
(32) \quad \ldots \sqrt{-v^*} - \text{Voice} - T [\text{Voice}_P \, \text{IO}_{\text{gen}[i\text{Case}]} <\sqrt{-v^*} - \text{Voice}> [\, {}_v^p \, \text{DO} <\sqrt{\text{IO}_{\text{gen}}}>]]
\]

**Step II. A’-movement is reanalysed as Agree-based/A-movement, (32) \(\rightarrow\) (33): [\, v\, \phi\, ] Agrees with DO, and [uParticipant] Agrees with (and attracts) IO –and, therefore, active inherent Case ([uCase]) has to emerge.**

\[
(33) \quad [\text{Voice}_P \, \text{EA} \, \text{Voice} \, \{\, {}_v^p \, \text{DO} \, \sqrt{\text{IO}} \, \}][u\phi][u\text{Prt}][u\phi]^{18}
\]

**Step III. (33) is reanalysed as a more articulate structure (34), preferable to (33) probably because it involves fewer feature syncretisms, cf. Roberts & Roussou’s (2003) ‘simplicity metric’ (35):**

\[
(34) [\, v_P \, \text{EA} \, v^* \, [\text{App}_{P} \, \text{IO}_{\text{gen}} \, \text{uCase}] \, \text{App}_{I} \, v_2 \, v_2 \, [\, {}_v^p \, \text{DO} \, \text{V} \, \sqrt{\text{IO}_{\text{gen}[i\text{Case}]}}]]
\]

\textsuperscript{17} For the acquirer, it was arguably practically impossible to tell whether the landing site was Spec-Voice or Spec-v*, based on the input only; the change from Spec-Voice (in (32)) to Spec-v* (in (33)) is theoretically required, probably without having any empirical consequences.

\textsuperscript{18} Following Richards’s (1999) ‘tucking-in’ theory regarding movement to multiple specifiers, (33) derives DO>IO orders; otherwise, it might be able to derive both DO>IO and IO>DO.
(35) A structural representation R for a substring of input text S is simpler than an alternative representation R’ iff R contains fewer formal feature syncretisms than R’.
(from Roberts & Roussou (2003:201))

(b) The alternative scenario would be that (33) never really existed and that acquirers by default prefer (34) over (33), precisely due to Roberts & Roussou’s ‘simplicity metric’.

The hypothetical structure in (33) may be reflected in the considerable instability with respect to the relative ordering of clitics in the clitic clusters found in the earliest medieval text (Assises): as shown in (36), where the order is still unfixed, i.e., both IO-DO and DO-IO clusters are attested

(36) a. Oti to tou afikan ekino to zitai
    That it.Cl.ACC him.Cl.GEN left.3P that which asks.3S
    ‘That they left him what he asks’
    (Assises, f134,188)

b. Apai ta perpyra κ’ ta sou eparadoka
    As-for the perpers 20 them.NEUT.ACC.CL you.SG.GEN.CL handed-in.1SG
    ‘As for the perpers (=local currency) (that I owed to you), I did give you 20’ or:
    ‘As for the 20 perpers (that I owed to you), I gave them to you’
    (Assises, f74,103).

c. Oti ekeinos to tou epoulisen ekeinon to alogon
    That he.NOM it.Cl.ACC him.Cl.GEN sold that the horse
    ‘That he sold him that horse’
    (Assises, f191.30).

---

19 I believe that this variability in clitic clusters in the Assises cannot merely be attributed to the influence of the French original, in which all the corresponding 3-3 clusters are (consistently) 3ACC-3DAT (e.g. ‘ce li’, ‘la li’ etc.): firstly, the Greek text also has 3DAT-3ACC when the original has 3ACC-DAT clitic clusters, i.e. even when the Greek passage is an otherwise word-for-word translation, down to grammatical constructions (thanks to Thodoris Markopoulos for checking the original French text for me) –cf. also the contrast between (36c), which cannot be traced to an equivalent construction in the original, and (36d), although they are only two lines apart; secondly, we also come across examples such as (36b), with 1/2DAT following a 3ACC, the equivalent of which in French are always DAT-ACC (in 36b, in particular, the ta preceding sou cannot be considered a relative pronoun, which happens to be homophonous with the 3rd NEUT.PL.ACC clitic, given the overall context and the absence of a(nother) matrix clause preceding or following our example in the overall sentence).
d. Oti eteros tou to epoulsen
   That someone-else him.Cl.GEN it.Cl.ACC sold.3S
   ‘That someone else sold it to him’
   (Assises, f191.32)

If (34) is what actually underlies this paradigm, then based on the reasoning developed above, in the discussion with regards to (17) (see also fn. 7), the unfixed ordering is derived as follows. The requirement that both object clitics incorporate can be met if instead of \( v^* \), \( v_{\text{CAUSE}} \) and \( v_{\text{TRANSFER}} \) are projected separately (37), which means that they must both inherit \([uφ]\) and \([u\text{Participant}]\). However, if these features co-exist on a probing head, there might be some ambiguity as to the order in which they probe; thus, if \( v_{\text{TRANSFER}} \)’s \([u\text{Participant}]\) probes first, then, provided that there is no 1\(^{\text{st}}/2\(^{\text{nd}}\) person DO, the IO clitic will be matched first, and being a defective goal with respect to the feature make-up of \( v_{\text{TRANSFER}} \) it will incorporate first, letting the DO clitic match \( v_{\text{CAUSE}} \)’s \([uφ]\), which will result in a DO-IO clitic cluster; otherwise, if the respective features on both heads probe in the reverse order, IO-DO clusters obtain.

\[
(37)[\text{VoiceP} \ EA \ Voice \ [v_{\text{CAUSEP}} \ v_{\text{CAUSE}}[uφ, \text{uPart.}] \ [v_{\text{TRANSp}} \ v_{\text{TRANS}}[uφ, \text{uPart.}] \ [\sqrt{P} \text{DO} \sqrt{<\text{IO}>}]])]
\]

This highly stipulative analysis has the advantage of accounting for the observed pattern by resorting to a single underlying representation, rather than two competing representations corresponding to the initial state and the end state grammar, which presupposes that they are both accessible at the same time (as I argue below, the way the change was diffused across different types of predicates does not seem to favour a competing grammar scenario). On the other hand, if the simpler scenario in (b) is on the right track, this is precisely what we have to assume: DO-IO clusters are derived as in (17), while IO-DO clusters are derived from (34), as described in chapter 3, in the discussion regarding clitic clusters in languages with double object constructions.
5.6. Modern Cypriot Greek

In Modern Cypriot Greek\(^{20}\), all goal arguments bear active inherent Case and exhibit all the syntactic properties that this was assumed to entail: (i) they always undergo dative-shift (38), yielding $IO_{gen}>DO$, (ii) they display the strong version of the PCC (39), (iii) in direct passives (40), as well as in motion unaccusatives (41a) and reflexives with dative goal arguments (41b), dative DPs structurally intervene between $T$ and the nominative theme, and their presence in such a position is signalled by the blocking effects they induce if a dative clitic is not present.

(38)a. Edhiksa kathe jenekas; ton andran ti;
    Showed.1SG each woman.DAT/GEN the man.ACC her
    ‘I showed every woman her husband’
b. *Edhiksa kathe andran; tis jenekas tu;
    Showed.1SG each man.ACC the woman.DAT/GEN his
    ‘I showed every man to his wife’

(39) Edhoken (i) *[tu me] / (ii) *[me tis Marias]
    Gave.3SG [him.DAT.CL me.ACC.CL] [me.ACC.CL the Mary.GEN.DAT]
    ‘(S)he gave me to him / to Mary’

(40) To vivlion en *(tis) epistrafiken tis Marias
    The book.NOM not her.DAT.CL was-returned.3SG the Mary.DAT/GEN
    ‘The book was not returned to Mary’

(41)a. [To epidhoman], irte *(tis) tis Marias ti
    The allowance.NOM came.3SG her.GEN.CL the Mary.DAT/GEN
    ‘The allowance came to Mary’
b. Ekolithiken *(tu) tu muchtari ja na tis fikali adhia paramonis
    Glued.REFL.3SG him.DAT.CL the mayor.DAT.GEN for Subj. her.DAT.CL
    issues permit.ACC residence.GEN
    ‘She approached (literally: ‘glued herself to’) the mayor, so that he issues a
    permanent residence permit for her’

\(^{20}\)Most of the data in this section are due to Theoni Neokleous (p.c.), also confirmed by 3 other Cypriot speakers.
The paradigm in (38-41) is really reminiscent of the situation in SMG, except (a) some subtle differences in the (un)acceptability of the illicit configurations and, of course, (b) clitic placement.

Starting from (b), it must be noted that Modern Cypriot Greek exhibits a cliticisation pattern that is largely the continuation of the medieval pattern: clitics are always adverbal, enclitic in (affirmative) indicatives and all the enclitic contexts of SMG, imperatives and gerunds (although many Cypriot speakers do not have the gerund at all), and proclitic in the presence of preverbal elements such as negation, mood markers/certain complementisers, wh-/focus-fronted/clefted XPs (to the extent that these form a natural class, it is often said that proclisis is triggered by operator-like elements) –for a detailed discussion and analysis, see Terzi (1999), Aggouraki (1997, 2001), Philippaki-Warburton (1995), Condoravdi & Kiparsky (2002), Petinou & Terzi (2002) and Tsiplakou (2009).

As far as (a) is concerned, compared to SMG speakers, Cypriots appear to have more robust judgements and contrasts in relation to constructions with dative goal arguments: thus, they are more intolerant to constructions that would involve underlying DO>IOdp, as well as 1st/2nd person DO clitics in the presence of full indirect object DPs. Similarly, they appear to reject (more) uniformly all intransitive constructions with dative goal DPs without a dative clitic, and interestingly, Modern Cypriot Greek only allows IO-DO clitic clusters, in both proclitic and enclitic environments, while SMG allows DO-IO clusters alternating with IO-DO ones in enclisis (see Appendix D, on how these properties may correlate).

For the sake of completeness, then, (42) below illustrates the full paradigm of grammatical and ungrammatical passive ditransitives in Modern Cypriot Greek. In order of preference, the available alternatives to the ungrammatical theme passivisation across a genitive/dative IO DP are: (a) theme passives with prepositional IO; (b) (focus-)clefting of the IO DP, in which

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21 Although I agree with Anagnostopoulou (2003) that this is not a basic order in SMG, see chapter 3, there are certainly SMG speakers who apparently accept it to some extent, cf. Catsimali (1990), as well as Dimitriadis (1999) who quotes the following example (ibid.:101) as entirely grammatical:

(i) Edhosa tin kathe epitaghi, tu idhiokititi tis,
   Gave.1SG the each check.ACC the owner.GEN its
   'I gave each/every check to its owner'.

22 Stavroula Tsiplakou (p.c.) informs me that there is (at least) one reliable (i.e., not heavily influenced by SMG) Cypriot Greek speaker for whom there is no significant contrast between [DO NOM Vpass-CL IO IO DP DAT] and [DO NOM Vpass IO IO DP DAT], with the latter requiring focus on the verb:

(i) To spitin ekotziastiken (tis) tis Marias
   The house.NOM was-granted/bestowed (her.DAT.CL) the Mary.DAT/GEN
   Quite interestingly, this speaker belongs to a group of speakers who (more or less marginally) also accept clitic switch in some enclitic contexts (especially imperatives), under certain conditions (reportedly, when both object clitics have animate referents); this is indeed consistent with the correlation attempted above, between the availability of low/[iCase] goal datives and DO-IO clitic clusters.
case cliticisation/clitic resumption of IO is not required or even allowed; (c) cliticisation of IO, with right dislocation of the IO DP probably being preferred over clitic-doubling or CLLD.

(42) a. Ta rialja edhothikasin is ton muchtari tu chorku
   The money.PL.NOM were-given.3PL to the mayor.ACC the village.GEN
   ‘The money was given to the mayor of the village’

b. Ta rialja en tu muchtari pu (*tu) edhothikasin
   The money.NOM.PL is the mayor.GEN/DAT that (*him.DAT.CL) were-
   given.3PL
   ‘It was the mayor who was given the money’

c. Ta rialja edhothikasin ?*(tu), tu muchtari tu chorku
   The money.PL.NOM were-given.3PL him.DAT.CL the mayor.GEN/DAT the
   village.GEN

The grammaticality of (a) and (b) is straightforwardly accounted for in the same way as
the respective constructions in SMG: in (a) IO is structurally low and lacks an active Case
feature, i.e. it cannot cause a minimality effect, while in (b), as in SMG, the dative clitic
checks T’s φ-features only, but not its [uD], while also it heads the IO-chain; φ-Agree is
enough for the IO-DP to value its [uCase], which renders it a defective intervener, but since
the head of the IO-chain is outside T’s Agree-domain, T is forced to ignore IO’s [D] and its
defective intervention and fully Agree with DO. However, (c) is apparently trickier, given
our earlier assumption (developed especially in chapter 3) that, in languages where active
inherent Case is valued/deleted by structural Case assigners such as ν*/T, in the absence of a
dative clitic outside T’s complement domain, DAT in DAT-above-NOM has to fully Agree
with T both for [uφ] and [uD], thus blocking any probing of NOM; i.e., not only does the
dative clitic cancels DAT’s defective intervention, it also guarantees that it is a defective
intervener with respect to T’s [uD] in the first place. Recall that this derives the contrast
between languages such as SMG, in which the dative’s (defective) intervention can only be
obviated via clitic-doubling, and languages such as e.g. French, in which the active inherent
Case feature is checked/deactivated by Appl, before T’s merger, thus making it possible to
obviate the dative’s defective intervention via any kind of movement (e.g. wh-movement) of
the dative above T.
Given the above, (42b) looks like a striking exception. However, adopting a bi-clausal analysis of (focus-)clefting in Modern Cypriot Greek, following Tsiplakou, Panagiotidis & Grohmann (2006), we can straightforwardly account for the lack of an intervention effects and, consequently, for the absence of a dative clitic as follows. Clefted XPs move to the Spec-CP of the *pu*-clause, attracted by the edge feature (or some [focus] feature) of *puC*: clefted XPs usually have their Case valued/deleted prior to (A’-)movement into that position, which is why clefted XPs do not Agree with the matrix T and do not become nominative; however, dative XPs which happen to carry an unvalued Case feature have the opportunity to have it valued/deleted in that position, matched by the matrix T. In such a configuration, then, no Appl is required, in order to make the dative visible to a phi-probe, therefore we need not and should not postulated an ApplP in the embedded clause; consequently, when T probes and Agrees with the embedded nominative theme, the dative argument does not intervene structurally between them:

\[
(43)[...en-T [CP DAT puC [TP T [Voicep Voice_{pass} ... [\sqrt{\varphi \downarrow \text{DO}_{\text{NOM}} \downarrow \langle \text{DAT}\rangle}]\]]]
\]

What is particularly interesting, however, is that genitive/dative experiencer DPs in raising contexts (44-45), as well as with *piacere*-type psych unaccusatives (46), do not give rise to any intervention effects in Cypriot Greek.

(44) Efanin (tis) tis Marias (na en) eksipnos
    Seemed.3SG her.DAT.CL the Mary.GEN (Subj. is) smart.MASC.NOM
    ‘He seemed to Mary (to be) smart’

(45) Ta mora en (tis) fenonde tis Marias (na en) kurazmena

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23 As Tsiplakou e.a. also note, *pu*-clauses of this sort are not relative clauses. Notice that in (42b) the preverbal nominative theme *ta rialja* has undergone topic movement from within the embedded CP; if the *pu*-CP were a relative clause, this kind of extraction would constitute an island violation, although, as R. Kayne points out to me, ‘[r]elative clauses are not such strong islands. See Taraldsen, K.T. (1981) “The Theoretical Interpretation of a Class of ‘Marked’ Extractions,” in A. Belletti, L. Brandi and L. Rizzi (eds.) Theory of Markedness in Generative Grammar. Proceedings of the 1979 GLOW Conference, Scuola Normale Superiore, Pisa, 475-516, as well as Chung, S. and J. McCloskey (1983) “On the Interpretation of Certain Island Facts in GPSG,” Linguistic Inquiry, 14, 704-713’.

24 The fact that the matrix copular (or existential according to Tsiplakou e.a.) verb *en* exhibits default agreement does not necessarily imply that the matrix T is defective/non-finite; it might be a lexical property of *be* in Cypriot, when having this meaning, or it might be that datives always give rise to default agreement (see Boeckx 2000 on Icelandic).
The kids not her.DAT.CL seem.3PL the Mary.DAT/GEN (Subj. are.3PL) tired
‘The kids do not seem to Mary to be tired’

(46) O Janis areski tis Marias polla
The John.NOM appeals the Mary.GEN much
‘Mary likes John a lot’

Since it cannot be denied that dative experiencers occupy a structural position between T and the nominative, this absence of defective intervention effects can only be explained if dative experiencers in Modern Cypriot Greek (still) lack a [uCase] feature that would render them visible to T-Agree\(^\text{25}\). Similarly, the lack of such a feature allows other related dative arguments, such as ‘estimative datives’, to stay in situ, i.e., within the AP/√P they are associated with; more specifically, even dative clitics can remain within the AP, when they bear an [iCase] feature, as long as there is no proclisis trigger (adjectives can host (genitive) enclitics in SMG as well), while in SMG they must always escape AP due to their [uCase]:

(47) a. En mialo mu (Modern Cypriot Greek)
   Is big.NOM me.DAT.CL
   ‘It is big for me’

b. En (mu) en mialo (*mu)
   Not me.DAT.CL is big.NOM me.DAT.CL
   ‘It is not big for me’

c. (Dhen) (mu) ine meghalo (*mu) (SMG)
   Not me.DAT.CL is big.NOM me.DAT.CL
   ‘It is (not) big for me’

\(^{25}\) Interestingly, if we replace the dative DPs in the configurations in (44-45) with PP-experiencers, the resulting sentences are deemed considerably degraded (i). Given that the PP realization of Class III experiencers is perfectly possible (ii) in Modern Cypriot Greek (i.e. that they are not excluded due to some c-selection-related restriction, while also they cannot be argued to bear an active Case feature –recall that Agree-minimality is relativised to Case features), this fact confirms our assumption in §4.5 that the blocking effect of PP experiencers in raising in Greek is not to be attributed to their intervention between T and the nominative, but rather to some minimality effect in the predication relation between the (raised) nominative and the phrase denoting what it is predicated of.

(i) ??/!!*En fenete stin Maria(n) (na en) eksipnos
   Not seems.3SG to-the Mary.ACC (Subj. is) smart.NOM
   ‘He does not seem to Mary to be smart’

(ii) En areski ston meso Kipreο na pezi volei ston elefthero tu chrono
   Not appeals.3SG to-the average Cypriot to play volleyball in-the free his time.ACC
   ‘The average Cypriot does not like to play volleyball in his leisure time’

(from: forbiddenid.blogspot.com/2011/02/i-will-explode.html)
In the equivalents of (44-46) in Standard Modern Greek, cliticisation/clitic doubling of the genitive/dative DP would be obligatory, as already shown (chapter 3 and 4). This point of divergence between Cypriot and Standard Modern Greek indicates that the emergence of active inherent Case in Cypriot Greek was probably the result of a lexical diffusion that only affected predicates encoding ‘caused change of location’ and ‘caused change of possession’, but not (yet) constructions with dative experiencers and other related arguments/theta-roles, while in Standard Modern Greek, which presumably underwent a similar path of changes, the change was diffused to all verbs taking dative arguments. Furthermore, it seems reasonable, precisely because of this selectivity of the spread in terms of theta-roles in Cypriot Greek, to assume that the whole gradual change, and in particular the co-existence of the two patterns in Medieval Cypriot Greek, was the result of lexical diffusion rather than a change attributable to some competing grammars scenario, e.g. along the lines of Kroch (1989, 1994 and subsequent work), which should have resulted in a homogeneous state of affairs in all possible contexts in both/all Greek varieties.

5.7. Conclusions

To conclude, the evidence discussed in the previous sections corroborates the postulation of different types of Inherent Case, differing in their visibility to Agr (and Move). More particularly, it was shown how the loss of oblique case morphology did not result in the loss of the corresponding abstract Case feature and how instead the actual syntactic change was triggered by a syntactically-motivated reanalysis, merely facilitated by the morphological change. Finally, the diachronic data presented are consistent with and even point towards a movement analysis of dative alternations.
6. Conclusions and extensions

In the previous chapters, I discussed evidence and arguments, both conceptual and empirical, in support of the main claim of this thesis, namely the idea that all dative arguments (and in fact all internal arguments) originate within the maximal projection of the predicate/root they are associated with. The apparent diversity with respect to their structural positions and their potential A- and A’-relations, as well as their categorial status, can in fact be shown to be constrained by a limited number of variables, namely (a) their first-merged position within √P, which is itself regulated by some universal linking principle such as Baker’s UTAH, (b) their precise Case feature, and (c) the overall argument/event structure of the selecting predicate.

As far as (b) is concerned, it seems that one can discern between the following types: (i) purely theta-related inherent dative Case, lexically valued, not interfering with any Agree-relations, (ii) active inherent Case, i.e., theta-related Case with an unvalued/uninterpretable component, (iii) structural dative Case, morphologically distinct from accusative etc., but assigned by a special variety of ν and suppressible when not in the domain of Voice bearing [uφ], as in Japanese and probably Classical Greek (at least in some cases), (iv) genuinely structural accusative Case, assigned by ν*, as in English. Dative arguments marked with Case of one of the types in (ii)-(iv) need to escape √P, where they are inaccessible to any agreement heads (with few exceptions, e.g. dative experiencers with Class III psych unaccusatives). This is facilitated by applicative heads that attract them to higher positions, visible to phi-Agree. Applicatives, then, are necessary not to select/introduce arguments (pace Pylkkänan 2002), but to make non-core arguments part of the agreement relationships of the clause.

On the empirical side, it was attempted to show that some of the major phenomena associated with dative DPs, namely dative shift in ditransitives, the Person Case Constraint and (defective) intervention effects in DAT above NOM contexts (e.g., raising across dative experiencers etc.) are in fact subject to cross-linguistic (macro- and micro-) variation, allowing for their opposites in a number of cases, and I explored how these properties possibly correlate with one another. Thus, the (often attempted) cross-linguistic generalisation that the indirect object DP always asymmetrically c-commands the direct object DP, which is usually challenged only
by languages such as German\(^1\) is in fact seriously challenged by the unambiguous evidence from Hellenistic Greek for the reverse, DO>IO\(_{DP}\) pattern (exclusively). The same historical variety of Greek furnishes data of DAT-above-NOM configurations (in raising/unaccusative constructions) that nonetheless do not trigger defective intervention. Moreover, the same set of data also clearly indicates that the strong PCC was not operative. Although cross-linguistically it would be hard to establish unambiguous correlations/implicational generalisations involving all these properties, it is however reasonable to reach the following two conclusions:

1. If a language has intervention effects in dative experiencer constructions (which in our terms means dative experiencers with an active inherent Case feature), then it also has dative shift/the double object construction, i.e., the IO\(_{DP}\)>DO pattern (alone, or alongside DO>IO\(_{DP}\), as in Icelandic).

2. The strong PCC presupposes the existence of dative-shift.

The generalisation in (1), in particular, is also consistent with the observation that, diachronically, the emergence of active inherent Case on goal arguments/indirect objects of ditransitives precedes the emergence of active inherent Case on non-goals and non-IOs, e.g. dative experiencers. Recall that the emergence of active inherent Case on goals/ recipients implies the emergence of dative shift, which entails a differentiation between affected goals, which can undergo dative shift, and non-affected goals, which cannot. In other words, dative becomes active when it cannot mark every argument introduced in the Compl-√ position, which is generally associated with argumental locatives, but those Compl-√ arguments which have a necessary locative (directional) component in their meaning, but also an affected interpretation. If the UTAH is on the right track, then theta-related Case must also be position-related; therefore, what changes in the diachrony of ditransitives is that being externally merged in a specific position becomes a necessary but not sufficient condition for Case-marking. This is probably what gives rise to the development of a parasitic uninterpretable/unvalued component on inherent Case features and partly

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\(^1\) See Müller (1995); note, however, that there have been many attempts to show that even German is not an exception to the universal IO>DO base order of double object constructions, mainly based on evidence from scope, see Frey (1989), Haider (1989, 1993), Lechner (1998), Georgala (2011), Bobaljik & Wurmbrand (to appear) and others. As Elena Anagnostopoulou points out to me, some of Müller’s evidence (which all comes from binding) is taken to be controversial.
explains the mysterious hybrid nature of active inherent Case: since the dative can now mark only those goal/Compl-$\sqrt{}$ arguments which are guaranteed to be capable of receiving an affected/recipient interpretation, being in Compl-$\sqrt{}$ is not enough for the dative to be assigned, it also needs to be checked against the feature that guarantees the more specific entailments required, namely $\text{Appl'} [+m]$.

This thesis also attempted to take a position on the debate regarding the lexicalist vs. transformational/movement approach to dative alternations, as our main claim regarding the $\sqrt{P}$-internal origin of dative arguments obviously relies on the validity of the latter view, in order to account for the observed $\text{IO}_{dp}>\text{DO}$ pattern in a number of languages. It was suggested that there are indeed quite a few good reasons to adopt a movement analysis:

(i) In Chapter 2, it was argued that in PCC configurations, despite the apparent $\text{IO}>\text{DO}$ pattern, it is the theme/direct object that acts as a (defective) intervener, and that the dative is the goal of a probe-goal relation rather than an intervener in a phi-Agree configuration involving the theme; the empirical advantages of this account were shown by its application to less canonical PCC-violating configurations, involving datives other than indirect objects or non-clitic accusatives, such as Romance $\text{faire}$-infinitive causative, ethical dative constructions or DOCs with strong pronominal accusatives. The movement approach was also argued to be able to link the PCC to the animacy restriction on dative-shifted IO DPs in a principled fashion.

(ii) In Chapter 3, it was explored how and why a movement analysis makes correct or even better predictions with respect to indirect object DPs and clitics in SMG and cross-linguistically;

(iii) In Chapter 4, the movement analysis was applied to non-prototypical non-goal datives, and was argued to provide a more economical and constrained way to derive the observed typology of non-core dative arguments. Also, the $\sqrt{P}$-internal origin of prototypical IO DPs, i.e., goal DPs, was shown to be independently necessary, in order to account for the scopal behaviour of restitutive $\text{ksana}$ (‘again’) and the relevant contrasts between goals and benefactives;

(iv) Finally, in Chapter 5, a diachronic argument was advanced, in favour of the movement analysis, based on evidence from the diachrony of Cypriot
Greek, that discourse related A’-movement/scrambling of IO DPs over DO was reanalysed as Agree-based movement, once the interpretive effects (e.g. defocussing) faded out, in the spirit of Roberts’s (2007) account of the history of OV syntax.

Finally, much of the discussion in this thesis builds on Anagnostopoulou’s (2003) generalisation regarding the role of clitic-movement/clitic-doubling in obviating the intervention effects caused by dative DPs in DAT-above-NOM configurations, i.e. in configurations where T has to Agree with a (nominative) DP across a dative. Instead of an analysis based on minimality/locality relativized to minimal domains and the role of clitic-movement (into T) in rendering the distant goal and the intervener equidistant from T, I favoured an analysis based on Chomsky’s (2000, 2001) Activity Condition, and particularly the notion of defective intervention. I argued that the advantage of such an analysis is that it allows us to relativise minimality in phi-Agree to Case features and, thus, to parameterise intervention effects, as is indeed necessary, judging by the variation observed diachronically, cross-linguistically/cross-dialectically or even across theta-roles/types of datives.
Appendix A: Clitic clusters in Classical and Hellenistic Greek; some data

1. Ἀλλ’ οὖδ’ ἔγω μὴν πρόσθεν ἐκδόσω μὲ σοι
ekdo:so: me soi
will-give-away me.ACC.CL you.DAT.CL
‘I will surrender to thee’
Euripides Trag., Andromacha. 256

2. πέμπει μὲ σοι φέροντα τάσδ’ ἐπιστολὰς
pempei me soi
sends me.ACC.CL you.DAT.CL
‘He is sending me to you’
Sophocles Trag., Ajax. 781

3. διὰ τοῦτο ὁ παραδοὺς μὲ σοι μείζονα ἄμαρτίαν ἔχει.
Ho paradous me soi
The deliver.PTCP.PAST.MASC.SG.NOM me.ACC.CL you.DAT.CL
‘He who delivered me to you’
Novum Testamentum, Evangelium secundum Joannem

4. τὴν Ἀφροδίτην τὴν δείξασάν μὲ σοι
ten deiksasan me soi
the show.PTCP.PAST.FEM.SG.ACC me.ACC.CL you.DAT.CL
‘Her who showed me to you’
Chariton Scr. Erot., De Callirhoe narrationes amatoriae. 3.2.5.4

5. καὶ γὰρ αὕτη μὲ σοι διεφύλαξεν ὡς ἀδελφοῦ γυναῖκα παραλαβοῦσα.
me soi diephulaksen
me.ACC.CL you.DAT.CL guarded.3SG
‘She (has) guarded me for you’
Chariton Scr. Erot. De Callirhoe narrationes amatoriae. 8.3.2.6

6. ἔπει μὲ σοι θεοὶ ἔδοσαν Nicolaus Hist., Fragmenta. 68.111
me soi theoi edosan
me.ACC.CL you.DAT.CL gave.3PL
‘The gods gave me to you’

7. ὁ δὲ σοι ὁμοίως λαβὼν μὲ σοι παρέδωκεν, λέξας σοι ταύτα
labo:n me soi paredo:ken
take.PTCP.PAST.MASC.SG.NOM me.ACC.CL you.DAT.CL delivered.3SG
‘After he took me, he delivered me to you’
Acta Thomae. 57 line 18.
8. εἰς πρῶτον οὖν μᾶλλον μὲ σοι καθιστάσῃ ἐγὼ προσέξω
eis pro:ton oun ma:llon me soi kathistase:I ego: prosekso:
to former.ACC then more me.ACC.CL you.DAT.CL
put.PTCP.PAST.FEM.DAT I.NOM be-careful.FUT.1SG
‘If you put me back where I was before, I will be more careful’
Valerius Babrius Scr. Fab., Mythiambi Aesopi. 2.134.17
Appendix B: Deriving clitic switch in enclitic contexts in Standard Modern Greek

Introduction

Main aims:

1. To make the case that DO-IO clitic clusters in Greek reflect a (residual) underlying DO>>IO\textsubscript{gen} order (where >> means asymmetric c-command); more generally, a desirable conclusion would be that DO-IO clusters always reflect underlying DO>>IO, when no other, often PF-related, restrictions apply, e.g. person hierarchies.

2. To explain why this underlying order can only be reflected in enclitic contexts in SMG, imperatives and ‘–ondas’ gerunds –while also providing a novel account of enclisis, in imperatives at least.

1. The phenomenon:

Let’s describe it as ‘free ordering of object clitics when adjoining to non-finite/less finite verb forms’ (see Mavrogiorgos 2007, 2010).

(1) a. Dhos(e) mu to
    Give.imp.SG me.GEN.CL it.ACC.CL
    (SMG)
    b. Dhos(e) to mu
    Give.imp.SG it.ACC.CL me.GEN.CL
    ‘Give it to me’

(2) a. Dhinondas mu to
    Giving me.GEN.CL it.ACC.CL
    b. Dhinondas to mu
    Giving it.ACC.CL me.GEN.CL

(3) a. Mu to dhini
    Me.GEN.CL it.ACC.CL gives
    ‘(S)he gives it to me’
    b. *To mu dhini
    It.ACC.CL me.GEN.CL gives

Crucially, this pattern appears to be available only in SMG (see Ralli 2006).

(4) a. Dholes me to
    Give.imp.SG me.ACC.CL it.ACC.CL
    (Northern Modern Greek)
    b. *dhose to me
    Give.imp.SG it.ACC.CL me.ACC.CL
    ‘Give it to me’ (Mavrogiorgos 2010 fn.281, see also Joseph 1989)

(5) a. Pe mu to
    Say.imp me.GEN.CL it.ACC.CL
    (Modern Cypriot Greek)
b. *Pe to mu
Say.imp. it.ACC.CL me.GEN.CL

(6) a. dho mi tu
Give.imp.SG me.IO-CL it.DO-CL
‘Give it to me’
b. *Dho tu mi
Give.imp.SG it.DO-CL me.IO-CL (from Ralli 2006; to appear)

(7) a. Dizze tu to
Show.imp.SG him.GEN.CL it.ACC.CL
‘Show it to him’
b. *Dizze to tu
Show.imp.SG it.ACC.CL him.GEN.CL (from Rohlfs 1977)

• A variation of the phenomenon:

Clitic switch in finite contexts as well as in non-finite ones\(^1\).

(8) a. dhos to me
Give.imp.SG it.CL me.CL
‘Give it to me’ (D410)
b. pe me ta
Say.imp.SG me.CL them.NEUT. CL
‘Say them to me’ (D516, D536, D538)
c. ifares ta mas
Brought.2SG them.NEUT.CL us.CL
‘You brought them to us’ (D474)
d. ifara sis ta
Brought.1SG you.PL.CL them.NEUT.CL
‘I brought them to you’ (D474, all via Janse 1998:267-268)

\(^1\) Cf. also Medieval Cypriot, which has (apparently) proclitic clusters with unfixed ordering in the earlier texts:

a. oti to tu afikan ekino to zitai (Medieval Cypriot)
that it.ACC.CL him.CL.GEN left.3PL that rel-pron. asks.3SG
b. oti to tu afikan ekino to zitai (Medieval Cypriot)
that it.ACC.CL him.CL.GEN left.3PL that rel-pron. asks.3SG
‘that he left him what he asks’ (Assizae, f34,188)
b. Ape ta perpira \(k'\) (=20) ta \(su\) eparadoka.
As for the perpers (=local currency) (that I owed to you), I did give you 20’, or:
‘As for the 20 perpers, I gave them to you’ (Assizae, f74,103).
c. oti ekinos to tu epulisen ekinon to alogon
that he.NOM it.CL.ACC him.CL.GEN sold.3S that the horse
‘that he sold him that horse’ (Assizae, f191.30)
d. oti eteros tu to epulisen
that someone-else him.CL.GEN it.CL.ACC sold.3S
‘that someone else sold it to him’ (Assizae, f191.30)

However, given CG’s peculiarities with respect to clitic placement, I will not try to explain these data here.
2. Towards an analysis

2.1. Previous accounts

1. Terzi (1999)

A Kaynean/antisymmetric account that relies on the assumption that in proclitic contexts clitics only have the option of adjoining to each other in T, whereas in enclisis, more placeholders for clitic adjunction are available between between V and its final landing site, thus allowing for more orderings.


Every clitic adjoins to V immediately after V-movement to the head closest to that clitic. Enclisis is a PF requirement that deletes all but the highest copy of a clitic that follows V: Greek differs from Spanish in that the last step of V-movement, after adjunction of the dative clitic to V, is optional, allowing for either:

(9) a. F [H1P [H1 [Dat]+[<Acc>+V]] [H2P [H2 [Acc]+<V>] [VP [Dat...]]]]

or:

b. [FP [[Dat]+[<Acc>+V]] F] [H1P [H1 [Dat+[Acc+<V>]]] [H2P [<V>] [VP [[Dat...]]]]]

(underscored=spelt out at PF)

Mavrogiorgos (2010)

In DO-IO enclitic clusters, IO forms are actually weak pronouns, although identical to clitics. DO clitics incorporate into v*, like all clitics/clitic clusters in proclisis, but the IO weak pronoun is attracted by v* to its edge without having/being able to incorporate. It cliticises at PF, after the Cl_{DO-V-v*} complex moves to C, assuming that C and v* are adjacent (i.e. that any intervening null subjects and adverbials do not count). Among the analyses presented so far, only this can prosibly account for the cross-linguistic and cross-dialectal variation observed: all variation can be attributed to whether or not IO weak pronouns are available from the lexicon. It is not however clear why IO weak pronouns should only be available in enclisis.
2.2. A new analysis

Two basic premises:

1. SMG has DO>>IO\text{gen} as a **residual first-merged order** (i.e. not resulting from some sort of (A’-) scrambling), alongside IO\text{gen}>>DO (both in A-positions), which is more productive.
2. Only in **non-finite** contexts does the C-T system allow DO>>IO\text{gen} to be reflected in the order of clitic clusters.

3. DO>>IO\text{gen} in A-positions is marginally possible in SMG

- In Modern Greek, it is a well-established fact that in the so-called ‘double object’ or ‘genitive’ construction, i.e. with a DP\text{gen} as an IO, IO asymmetrically c-commands DO, as shown by the application of Barss & Lasnik’s (1986) diagnostics (see Anagnostopoulou 2003, i.a.).

- However, compared to speakers of other varieties, some SMG speakers are more tolerant to constructions incompatible with an IO>>DO base-generated order:

  (i) Constructions with quantified DOs binding variables in genitive IO-DPs, especially when DO precedes IO (see also Catsimali 1990 for the full range of Barss & Lasnik’s (1986) diagnostics):

  (10) %?Edhosa [(tin) kathe epitaghi], tu dikeuchu tis, (SMG)
  Gave.1SG the every cheque.ACC the endorsee.GEN its
  ‘I gave each cheque to its endorsee/rightful owner’

  (10’) O ekdhotis, epepsen [(to) kathe vivlion]_k tu singrafeia tu_i/*k (Mod CG)
  The editor sent.1SG (the) each book.ACC the author.GEN his/its
  ‘The editor sent each book to his/*/its author’

  (ii) Absence of Weak Crossover effects in wh-extraction of DO in the presence of a coindexed possessor inside an IO-DP (even for speakers with a subject-object asymmetry regarding WCO, i.e. regardless of the dialectal split w.r.t. WCO that possibly exists, based on Horrocks (1994) and Anagnostopoulou (2003):

  (11) a. ?/% Pjon_t edhikses tis miteras tu_i? (SMG)
    Whom.ACC showed.2SG the mother.GEN his.GEN
    ‘Who did you show to his/their mother?’

    b. Pjos_i t_i idhe ti mitera tu_i?
    Who.NOM saw.3SG the mother his.GEN
    ‘Who saw his mother?’

    c. ??Pjon_i idhe i mitera tu_i t_i?
    Whom.ACC saw.3SG the mother.NOM his.GEN
    ‘??Whom, did his, mother see’?
In Modern CG, co-indexation in the equivalent of (11a) is at least as hard as in (11c).

(iii) On a structural analysis with a rather articulate vP-structure (as in Anagnostopoulou 2003, or as in (16) below), passivisation of DO across IO is ruled out, unless some locality obviation mechanism is used, such as cliticisation/clitic doubling of IO (see Anagnostopoulou 2003, Michelioudakis 2010 for an alternative account). However, for many (though not all) speakers of SMG, direct passives without a dative clitic are reported to be perfectly acceptable (see Lascaratou & Georgiakentis 2003, Catsimali 1990, Georgala to appear)

\[(12) \% √ / \% *\]
\[
\text{To vravio (dhen) dhothike tis Marias (SMG)}
\]
\[
\text{The prize.NOM not was-given.3SG the Mary.GEN}
\]
\[
\text{‘The prize was (not) given to Mary’}
\]
\[
\text{(12')}\]
\[
\text{To vravion en (tis) edhothin tis Marias (Mod CG)}
\]
\[
\text{The prize.NOM not her.GEN.CL was-given.3SG the Mary.GEN}
\]
\[
\text{‘The prize was not given to Mary’}
\]

(iv) For some speakers, DO>IO\textsubscript{gen} constructions allow extraction out of DO-DPs (but also CPs) almost as easily as DO>PP and less marginally than IO\textsubscript{gen}>DO.

\[(13)\]
\[
a. (?) Pjanu_{i} edhoses [(ti) fotografia ti] stin Anna? \]
\[
\text{Whose.M.GEN gave.2SG (the) photograph to-the Anna?}
\]
\[
b. (?) Pjanu_{i} edhoses [(ti) fotografia ti] tis Annas? \]
\[
\text{Whose.M.GEN gave.2SG (the) photograph the Anna.GEN}
\]
\[
c. ?* Pjanu_{i} (tis) edhoses tis Annas [(ti) fotografia ti]? \]
\[
\text{Whose.M.GEN (Cl.3SG.F.GEN) gave.2SG the Anna.GEN (the) photo}
\]
\[
\text{‘Whose photo did you give to Anna?’}
\]  

(Under traditional CED/ECP considerations (Huang 1982, Lasnik & Saito 1992), (13a) and (13b) should indicate that DO occupies a complement position in DO>IO constructions; this may indeed be the case, if (at least low) IOs are merged with V by Pair Merge, in a third dimension, in the spirit of recent unpublished suggestions by Chomsky)

- Interestingly, in imperatives with DO-IO clitic clusters, DP doubles which are unambiguously DO>>IO (14c) are more tolerable (at least for the speakers that tolerate the above) than: (i) DO>>IO DPs with IO-DO clitic clusters (14b) and (ii) IO>>DO DPs with DO-IO clitic clusters (14d)\textsuperscript{2}.

\[(14)\]
\[
a. (√) dhos tu ti\textsubscript{(_)} (tu) kathe dhikeuchu\textsubscript{i} tin epitaghi tu\textsubscript{i} \]
\[
give.imp.SG him.GEN.CL her.ACC.CL (the) each endorse the cheque his
\]
\[
b. ?* dhos tu ti\textsubscript{(_)} (ti) kathe epitaghi\textsubscript{i} tu dikeuchu tis\textsubscript{i} \]
\[
give.imp.SG him.GEN.CL her.ACC.CL (the) each cheque the endorse her
\]
\[
c. ? dhos ti tu\textsubscript{(_)} (ti) kathe epitaghi\textsubscript{i} tu dikeuchu tis\textsubscript{i} \]
\[
give.imp.SG her.ACC.CL him.GEN.CL (the) each cheque the endorse her
\]
\[
d. ?? dhos ti tu\textsubscript{(_)} (tu) kathe dikeuchu\textsubscript{i} tin epitaghi tu\textsubscript{i} \]
\[
give.imp.SG her.ACC.CL him.GEN.CL (the) each cheque the endorse her
\]

\textsuperscript{2} Thanks to Marios Mavrogiorgos for pointing out this as a necessary diagnostic; the judgements for this set of data are very subtle and precarious, because of the difficulty of clitic doubling with quantified expressions anyway, as well as the fact that these examples perhaps involve right-dislocated DPs, rather than true clitic doubling.
give.imp.SG her.ACC.CL him.GEN.CL (the) each endorse the cheque his

- SMG is admittedly the variety that has been influenced by *katharevousa* and *diglossia* more than any other Greek variety; so, it might be reasonable to be more conservative in this respect as well and retain the DO>>IO_{gen} pattern, which was prevalent in earlier stages, e.g. in the *Koine* period (1), alongside the currently more productive IO_{gen}>>DO and DO>>IO_{pp} frames.

(15) po:s oun he: theos [...] tous agnooumenous edeiksen alle:lois lekso:
how so the goddess [...] the missing showed.3S each-other.DAT tell.1S.FUT 'So now I’ll tell you how the goddess (Venus) showed/revealed the two missing heroes to each other’ (Chariton, *Callirhoe*, 8.1.5.2)

This is reminiscent of Kroch’s (2000) suggestion that in diglossic situations 2 grammars may co-exist within the same speaker. If this is on the right track, it seems reasonable to assume that the conservative pattern may not be equally accessible to all speakers (with all possible different degrees of accessibility), while IO_{gen}>>DO is unequivocally the more accessible pattern for most speakers.

- More generally, beyond SMG, there seems to be quite a robust correlation between underlying DO>>IO and DO-IO clitic/pronoun/affix sequences, when these are not subject to person hierarchies or other PF restrictions, cf. Bantu (Cardinaletti 2008), Germanic (Anagnostopoulou 2008, see also data in Mavrogiorgos 2010), and Cappadocian (if the syntax of its ditransitives is like in Pontic, see Michelioudakis & Sitaridou forth.).

4. The formation of IO-DO clitic clusters

- I will assume the structural representation in (16) for the so-called ‘double-object’/‘genitive’ construction, which departs from Anagnostopoulou’s (2003) analysis in the following points:

(i) Voice is the real phase head, and its phi-features are inherited by the two v-heads, v* and v2, which Agree and delete the Case feature of IO and DO respectively. IO_{gen} is assumed to carry ‘quirky’ Case, i.e. inherent Case with a parasitic structural/uninterpretable part (Chomsky 2000:127, see also Anagnostopoulou 2003 on ‘hybrid’ genitives in SMG).

(ii) Appl hosts IO_{gen} in its Spec, possibly attracting it from a low position. Its [uParticipant] feature (see Adger & Harbour 2007) is the feature that predicts the ‘affectedness/consciousness/animacy restriction’ on shifted IOs, as well as the Person Case Constraint (Bonet 1991): if the DO, which is its closest goal, is [+Participant], i.e. 1st/2nd person, no relation between Appl and IO can be established and IO’s [uCase] will be left unvalued. (3rd person DOs are not specified for [+Participant], while 3rd person IO-DPs are [-Participant], as necessarily capable of mental experience, see also Anagnostopoulou 2003, 2005).
• Cliticisation to $v^*$ in DOCs then proceeds as follows (along the lines of Roberts 2010):

(i) $v_2$’s $[u\varphi]$ matches and attracts the DO clitic, while its $[uV]$ matches and attracts V/Root (both as instances of head movement/incorporation).

(ii) $v^*$’s $[u\varphi]$ causes incorporation of the IO clitic, while its $[uV]$ causes incorporation of $v_2$, along with its contents. Then $v^*$ may further move to Voice and eventually to T.
5. Enclisis in imperatives

- Basic assumptions:
  
  (i) Since imperatives make no Tense distinctions/are not marked for Tense, I will assume that the imperative verb form does not move to/through I/T, in the spirit of Kayne’s (1991) analysis of enclisis (see also Mavrogiorgos 2010 for further argumentation). We can formalize this by saying that non-finite T lacks a [uV] feature.
  
  
  (iii) C’s [uφ] is spread to/inherited by all C- and Infl-related heads in the CP phase. Those heads that carry LF- or PF-interpretable information for the verb form (C_{Force}, C_{mod}, Asp) also bear a [uV] feature.
  
  (iv) [uV] Agrees with the verb form and, unless the head is already occupied by an overt element, attracts it.
  
  (v) Chain reduction (‘delete the lower copy after Agree/Move’) takes place after every single instance of IM.
  
  (vi) Operations triggered by C and heads inheriting its features may interweave/proceed in parallel (following Chomsky 2008).

(18) CP

```
                     C
                    /    \
                  FocusP/TopicP
                   \     /    \[uV, uφ\]
                    Focus C_{Force/Op}P
                         \     /    \[uV, uφ\]
                          C_{Force/Op}P C_{mod}P
                             \     /    \[uV, uφ\]
                              C_{mod}P TP
                                 \     /    \[uφ\]
                                  T AspP
                                     \     \    \[uV, uφ\]
                                      Asp VoiceP
                                         \     \    \[uV, uφ\]
                                          EA Voice v*P
                                              \     \    \[uV, uφ\]
                                               v* Voice
                                                  \     \    \[uV, uφ\]
                                                   IO v*
                                                      \     \    \[uV, uφ\]
                                                       v* v2
                                                          \     \    \[uV, uφ\]
                                                           v* DO v2
                                                              \     \    \[uV, uφ\]
                                                               v* V v2
                                                                  \     \    \[uV, uφ\]
                                                                   v* v2
```
• Steps of the derivation:

1. Asp’s [uφ] matches EA, which is probably a 2nd person pro and the agreement affix is valued accordingly. Asp is then attracted directly by CMod.

2. T probes to value its own phi-set; the subject pro is not an active goal anymore, after its uCase is valued, i.e. it is a defective intervener between T and v*; however, the agreement affix in Asp/CMod is the head of the subject’s A-chain (see Alexiadou & Anagnostopoulou 1998), which cancels the subject’s defective intervention (following Chomsky 2001).

3. Therefore, T can Agree with the clitic (cluster) in v*-Voice-Asp, given that the edge of a minimal category is accessible (Roberts 2010). The clitic cluster, then, has to excorporate and (re-) incorporate into T, given that T, lacking [uV] cannot attract v*. If there are no clitics, T’s u-phi will take a default value, or will get valued by Asp’s phi-features when they are both incorporated into CForce.

4. CForce, finally, attracts and incorporates both CMod, which contains the V-v*-Voice-Asp complex (and a pair of deleted phi-features within v*), and T, which contains the clitic cluster. CMod matches CForce’s [uV] and T matches its [uφ]. Following Strict Cycle (again, as defined in Roberts 2010), T moves first and CMod moves above it:

(19) CP

\[ \text{C} \quad \text{CForceP} \]
\[ \quad \text{CForce} \]
\[ \quad \text{CModP} \quad \text{CForce} \]
\[ \quad \text{CMod} \quad \text{v*-Voice-Asp-M} \quad \text{TP} \]
\[ \quad \text{T} \quad \text{CForce} \quad \text{<CMod>} \quad \text{<T>} \quad \text{AspP} \]
\[ \quad \text{IO-DO cluster} \quad \text{<Asp>} \quad \text{VoiceP} \]

---

3. This is potentially compatible with alternative analyses of null subjects too (e.g. Spyropoulos & Philippaki-Warburton 2002), where the EPP position is projected, if all the inheritors of C’s features also inherit its EPP; the (null) subject should then move through all Specs in the C-T system, thus yielding again the cancellation of the subject’s defective intervention in Spec-Asp.

4. The reason why T can attract both clitics as a cluster is either the fact that they are adjoined as ‘Specs’ to the same minimal category and therefore are equidistant, or some ‘generalised absorption operation’ (Roberts 2010:148), similar to the one proposed by Higginbotham and May (1981) and Aoun, Hornstein, and Sportiche (1981) as a way of accounting for the fact that several wh-operators appear to act as a single complex quantifier in multiple wh-constructions.
6. The derivation of DO-IO clusters

(i) The simplest assumption concerning DO>>IO_{gen} would be to assign it the same structure as the one for DO>>IO_{PP} (essentially following Anagnostopoulou 2003):

\[
\text{(20) } \begin{array}{c}
\text{VoiceP} \\
\text{EA} \\
\text{Voice} \quad v^*p \\
v^* \quad \sqrt p \\
[\upsilon] \quad <DO> \\
\sqrt \quad <IO>
\end{array}
\]

(ii) If $v^*$ is the only phi-probe, it can only attract and incorporate the DO clitic. The IO clitic still has the option of moving to the edge of the phase (as a result of the phase head’s iterative EF) as in (21), in an inner Spec of Voice\(^5\).

\[
\text{(21) } \begin{array}{c}
\text{VoiceP} \\
\text{EA} \\
\text{IO} \\
\text{Voice} \quad v^*p \\
v^* \quad \sqrt p \\
\text{DO} \quad v^* \quad <DO> \\
\sqrt \quad <V> \quad <IO>
\end{array}
\]

(iii) Let us assume that Asp, as above, Agrees with EA and attracts Voice-$v^*$. The IO clitic in Spec-Voice and the DO clitic inside Asp thus become equidistant from T, if we follow Rackowski & Richards’s (2005) definition of ‘closest goal’:

\[
\text{(22) A goal } \alpha \text{ is the closest one to a given probe if there is no distinct goal } \beta \text{ such that for some X (X a head or maximal projection), X c-commands } \alpha \text{ but does not c-command } \beta. \quad (Rackowski and Richards 2005, 579).
\]

(iv) T matches and incorporates both clitics, either as a result of the ‘generalised absorption mechanism’ of Roberts (2010) (see fn. 4 above), or because T can optionally have 2 sets of phi-features, that can probe and match 2 separate goals as

\[\text{\footnote{In the outer Spec of VoiceP, it would block Agree between Asp and EA, thus leaving } pro’s [Case] unvalued.}\]

5 In the outer Spec of VoiceP, it would block Agree between Asp and EA, thus leaving pro’s [Case] unvalued.
long as these are equidistant/simultaneously available for Agree (otherwise, a problem of lethal ambiguity arises, as Marios Mavrogiorgos (p.c.) points out). The same must be true for e.g. dative clitics attracted by T in passives/unaccusatives with genitive goals/experiencers.

(v) Following Strict Cycle, the IO clitic is attracted first and the DO has to move above it, thus yielding a DO-IO clitic cluster.

• The IO clitic is forced to move to the edge of the phase, otherwise the derivation would crash at PF: being a clitic, it cannot be spelt out at PF unless it adjoins to a verb form. (This is reminiscent of Marc Richards’s (2006) account of OS with weak pronouns in Germanic).

• In finite contexts, where T has a [uV] feature, Asp (after it has Agreed with the subject) is incorporated into T, thus valuing its [up] with the subject’s values; therefore, T does not need to probe further down and the (low) IO clitic cannot be matched and incorporated. This explains why DO>>IO cannot surface in finite verb forms, i.e. why DO-IO proclitic clusters in SMG are ruled out.

7. Some welcome predictions

This analysis makes a number of more or less welcome predictions:

(i) In systems where DO always asymmetrically c-commands IO (and not the reverse), there should be no proclitic clusters: indeed, this seems the case in Of Pontic (see Micheloudakis & Sitarioudou 2010) and Ancient Greek (recall that there is evidence for DO>>IO at least in the Koine); given that imperatives probably involved a derivation different from the one presented here (cf. the fact that AG allowed negated imperatives), it is reasonable to assume that T in AG never lacks [uV] (although more research in this respect is needed for infinitives and participles).

(ii) Interestingly, this also predicts the weakening or even the absence of PCC effects in enclitic clusters, since these are not derived from DOCs; the proposed structure neither involves an Appl head (which is responsible for the PCC on my analysis), nor allows a split phi-feature checking mechanism like the one in Anagnostopoulou (2003, 2005). Indeed, PCC violations with enclitic clusters are reported to be tolerated by many SMG speakers (see Mavrogiorgos 2010, who attributes the original observation to Bonet (1991), due to Iatridou (p.c.)), as well as by L1 acquirers (Tsakali & Wexler 2009).

(23) a. ?Dhikse me tu Show.imp.SG me.ACC.CL him.GEN.CL ‘Show me to him!’
b. ??Dhikse/dhich tu me

Interestingly, as R. Kayne points out to me, ‘restrictions on enclitic clusters’ may disappear in Romanian too, though ‘in only certain imperatives, not generally’ as shown in Savescu’s (2009) work. The whole issue certainly deserves further research and more detailed discussion.
Show.imp.SG him.GEN.CL me.ACC.CL
‘Show me to him!’
c. Dhikse mas tus
Show.imp.SG us.ACC/GEN.CL them.ACC/GEN.CL
‘Show them to us!’ / %‘Show us to them!’

(iii) This analysis may be able to predict the patterns of endoclisis observed in a number of Greek dialects (Epirus, Old Athenian, Lesbian)

(23’) a. dho mi te tu vs. *dho tu te mi
   give.imp-me-you.PL-it vs. give.imp-it-you.PL-me
   ‘Give it to me’ (from Ralli 2006:148)
b. dhomute to cheri / ligho psomaki
   give-me-you.PL the hand little bread
   ‘Give me your hand / a little bread’
   (Epirus/Old Athenian)

We could treat the (2PL) subject agreement affix as a clitic, i.e. we could assume that a clitic instead of pro is merged in Spec-Voice. The IO clitic can then land either above or below EA, and both clitics (IO and EA) are incorporated into Asp. T finally attracts the two clitics in Asp and the DO clitic in Voice (the DO clitic and Asp are equidistant from T), thus yielding both attested orderings, i.e. IO-EA-DO and EA-IO-DO, the one in 24a (and b) and the one in (6) above.

And a problem...

If Roussou (2000) is right in arguing that gerunds only move up to C_Mod, then the present analysis does not straightforwardly extend to enclisis in gerunds.

8. Conclusions

- There seems to be a real correlation between (tolerance to) underlying DO>>IO_gen and the availability of DO-IO (en)clitic clusters, i.e. Greek diglossia may still be present in the syntax of genitive ditransitive constructions.
- The fact that this surfaces only in non-finite contexts results (fairly straightforwardly) from the properties of non-finite T. In fact, the syntax of the ditransitive vP and the Agree requirements/uninterpretable features of non-finite T conspire in such a way that the residual order is only reflected in enclitics.
- The derivation behind DO-IO clusters may also explain a series of other ill-understood phenomena.

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Appendix C: Dative constructions in three varieties of Pontic Greek

All the data and the classification presented here is the result of joint work with Ioanna Sitardou, reported in Michelioudakis, D. & I. Sitardou (2010). ‘Syntactic micro-variation in Pontic: Dative constructions’. In Karasimos, A. e.a. (eds.) Proceedings of the 4th International Conference of Modern Greek Dialects and Linguistic Theory (Chios, June 11-14 2009).

1. Pontic varieties of Northern Greece (TPG)

T(hessaloniki) PG datives largely pattern with SMG, modulo their morphological exponence.

1.1 Ditransitives

TPG employs morphologically accusative NPs for indirect objects, but those also alternate with PPs. What complicates the picture is the use of the fusional determiners son/sin/so [+ton/tin/to]=‘to+theMASC/FEM/NEUT’: these are used (exclusively) for definite dative DPs across the board, making the use of the bare accusative article for these arguments hardly acceptable, even in the IO>>DO pattern, while ‘se’ may be absent when this pattern is instantiated by quantified/wh- (bare accusative) IOs. This may mean that TPG has a specialised dative definite article. Also, TPG arguably has clitic clusters, with an IO-DO order (see 8c-d), subject to a weak version of the PCC (see the discussion for Romeyka).

(24) To peði eðoke fai son aðelfo
    The child.NOM gave.3S food.ACC to-the brother.ACC
    ‘The child gave food to the brother’

TPG patterns with SMG with respect to the hierarchical/c-command relations between IO and DO (25)-(27).

(i) Superiority effects:

(25) a. (Se) tinan pion ospit eðiksises? (IODP>DO, IOPP>DO)
    To whom.ACC which house.ACC showed.2S
    ‘Which house did you show to whom?’

b. Pion ospit *(se) tinan eðiksises? (*DO>IODP, DO>IOPP)
    Which house.ACC whom.ACC showed.2S
    ‘Which house did you show to whom?’

(ii) WCO:

(26) a. (Se) tinani eðiksises t’ ospitin-atî? (IODP>DO, IOPP>DO)
    To whom.ACC showed.2SG the house.ACC-his
    ‘(to) whom did you show his house?’

b. Pion ospiti eðiksises son kyrn-atî / *ton kyrn-atî? (DO>IOPP, *DO>IODP)
    Which house.ACC showed.2SG to-the owner.ACC-his / the owner.ACC-his
    ‘Which house did you show to his owner?’
(iii)  Quantifier variable binding:

(27) a. [Enan enan ta peðia]j eðiksan ton ðeskalon-atì (IODP>DO)
   One one the children.ACC showed.3PL the teacher.ACC-its
   ‘They showed every child (one by one) his/her teacher’

b. [Enan enan ta peðia]j eðiksan-atoi son ðeskalon-atì /*ton ðeskalon-atì
   (DO>IOPP/*DP)
   One one the children showed.3PL-Cl.3S.ACC to-the teacher-its/the teacher-its
   ‘They showed every child to his/her teacher’

<table>
<thead>
<tr>
<th>IO&gt;&gt;DO</th>
<th>DO&gt;&gt;IO</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPacc</td>
<td>√</td>
</tr>
<tr>
<td>se ‘to’-PP</td>
<td>√</td>
</tr>
</tbody>
</table>

Table 4: c-command relations in goal ditransitives (TPG)

1.2 Benefactives

Benefactives in TPG appear to pattern with ROf, which we present in some detail in section 5. One apparent difference is, as above, the realisation of definite benefactive arguments as se-PPs. This, in conjunction with the availability of ‘low’ recipient-benefactives as in ROf, which do not intervene between DO and its probe, yields constructions that are unique to TPG:

(28) a. Emairepsen pita son Jorikan
    Cooked.3S pie.ACC to-the Jorikas.ACC
    ‘(S)he baked a pie to/for Jorikas’

b. I pita emaireften son Jorikan
    The pie was-cooked.3S to-the Jorikas
    ‘The pie was baked for Jorikas’

1.3 Passives

TPG patterns with SMG with respect to the availability of direct passives (29): in the presence of hierarchically high IO DPs, direct passives are impossible unless the IO undergoes clitic-movement:

(29) a. *Para eðothén tin Anasta (PG)
    Money.NOM was-given.3SG the Anasta.ACC
    ‘The money was given (to) Anasta’

b. (??Tin Anasta) eyraften-aten to γraman1
    The Anasta.ACC was-written-Cl.ACC.3SG.FEM the letter.NOM

1.4 Unaccusatives (psych)

The use of unaccusatives with datives, especially piacere-type psych-predicates, is rather limited in Pontic, especially in the Romeyka varieties. To the extent that they are used, at least in TPG (and ROf), they involve the same thematic hierarchy as their

\[1\] Recall that bare definite IO-DPs are marginal anyway.
\[2\] The possible use of a bare definite article in the accusative, which is not expected here, is probably a sign that in this variety the periphrasis ‘ο enas ton alon’ is becoming a quasi one-word reciprocal
equivalents in SMG, Italian etc., as for instance they allow for backward binding of
the nominative theme by the dative experiencer (23).

(30) O eafonats ki ares sin/*tin Aishe
The self-her.NOM not appeal.3S to-the Ayshe.ACC
‘Ayshe does not like herself’

It is striking that PG is attrited due to the influence of SMG to such an extent that it
has lost morphologically accusative Class III experiencers (31); instead, it has
genitive (31) –as well as PP (30) –‘dative’ experiencers, just like SMG does.

(31) Ti Mexhmet ke ti Aishes aresi o enas son/ton2 alon
The.GEN Mehmet and the.GEN Ayshe.GEN appeal-to.3S the one.NOM (to-)the
other
‘Mehmet and Ayshe like each other’

2. Romeyka varieties of Pontus (Of and Sùrmene)

In the Romeyka varieties of Pontus, all datives are morphologically accusative DPs,
which however behave as bearing genuinely inherent Case, inactive and inert for
Agree/Move.

2.1 Ditransitives

IO DPs are accusative and do not alternate with PPs, unlike the varieties considered
so far:

(32) a. To peði eðotshe fai ton aðelfo/*son aðelfo (RSùr)
The child gave-3SG food the brother.ACC / *to-the brother
‘The child gave food to the brother’
b. To peði eðose fai tu aðelfu/ston aðelfo (SMG)
The child gave-3SG food to+the brother
‘The child gave food to the brother’

Like other varieties, both surface orders (IO-DO and DO-IO) are licit –despite the
morphological homonymy, although the most common order in our data was DO-V-
IO:

(33) a. To peði eðotshe fai ton aðelfo/ton aðelfo fai (RSùr)
The kid gave.3S food the brother / the brother food
‘The kid gave food to the brother’
b. Eyo ðoka ton Mehmeti ena kitap/ena kitap ton Mehmeti (ROf)
I gave.1S the Mehmet a letter / a letter the Mehmet
‘I gave Mehmet a letter’

PP-realisation is restricted to purely locative uses:

(34) Epije so kulin (ROf)
Went.3S to-the school.ACC
‘He went to the school’

2The possible use of a bare definite article in the accusative, which is not expected here, is
probably a sign that in this variety the periphrasis ‘o enas ton alon’ is becoming a quasi one-
word reciprocal pronoun.
Crucially, Barss & Lasnik’s (1986) diagnostics for c-command indicate that DPDO asymmetrically c-commands DPIO:

(i) Weak Crossover Effects:

(35) a. Πιόν ζών εκλάσες τον τσοπανονάτ; (RSür)
   ‘Which animal did you send to its shepherd?’
   Which animal sent.2S the shepherd-its?

b. *Τινάν τσοπάν(i) εκλάσες το ζονατ; (RSür)
   ‘Which shepherd sent.2S the animal-his?’
   Which shepherd sent.2S the animal-his?

(ii) Superiority effects (Romeyka has multiple wh-fronting which always obeys superiority, cf. the subject-object asymmetry in (13)):

(36) a. Do Τινάν εδίκσε; (ROf)
   What whom showed.2S

b. *Τινάν do εδίκσε (ROf)
   ‘What did you show to whom?’

(iii) Quantifier variable binding:

(37) Τα γαρδέλαι κορει εδίκσα τσι μαυλιμ’ατυν (ROf)
   ‘I showed all the children, one by one, to their teachers (each child to her own teacher)’
   The children every every showed.1SG the teachers-their

   *‘I showed every child his/her teacher’ (as reversal of the word-order in the example was deemed unacceptable)

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<th>IO&gt;&gt;DO</th>
<th>DO&gt;&gt;IO</th>
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<tbody>
<tr>
<td>DPacc</td>
<td>*</td>
<td>ü</td>
</tr>
<tr>
<td>se ‘to’-PP</td>
<td>*</td>
<td>*</td>
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Table 5: c-command relations in goal dit transitives (ROf, RSür)

This is quite an important finding, as it seems that underlying DO>>IO in the double DP construction is not non-existent or unique to German, in which the same diagnostics lead to the same conclusion (as in Müller 1995, 1999 and McGinnis 1999). In fact, the situation seems to be the same in some historical varieties of Greek as well, notably Medieval Cypriot Greek (as well as Hellenistic Greek, see Michelioudakis 2010b). This constitutes a serious challenge for the validity of any cross-linguistic generalization that IO DPs always merge higher than DOs. Furthermore, the observation that the IO is asymmetrically c-commanded by the DO also ties in well with the fact that direct passives are entirely unproblematic in such languages (section 5.3), since the low position of the IO cannot cause any locality effects.

2.2 Benefactives

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3 The speakers were presented with a context in which no more than one teacher corresponds to each pupil; therefore, the teachers necessarily co-vary with the children.
Like in the case of genuine (goal) ditransitives, both surface/linear orders (IO-DO and DO-IO) are attested in (almost) all varieties (38); additionally, benefactives may alternate with PPs headed by δα ‘for’ (in ROf) or ja ‘for’ (RSür and TPG. However, there is a dispreference for the DP_{DO}>DP_{Benef} structure, when the beneficiary is not the potential/intended recipient – we shall call this subcase of benefactives ‘on behalf of/for someone’s sake’-benefactives.

Although our data still do not give us conclusive indications, a first approximation about the c-command relations of benefactives would be to categorise them on the basis of two main factors: (i) the distinction mentioned above, between ‘(potential/intended) recipient’ benefactives (39) and ‘on behalf of’-benefactives (40); this distinction is relevant for ROf and TPG, where beneficiaries may appear as adjuncts c-commanding [V DO], in which case they can neither bind the DO (because they are not in an A-position) nor be bound by it (since it does not c-command them), which is why the Quantifier Variable diagnostic is not applicable; ‘recipient’-benefactives may either merge as adjuncts or in a low position (probably the one associated with goals/recipients), which is c-commanded by DO (39b-c), whereas ‘on behalf of’-benefactives can apparently only merge with VP as adjuncts (40a); (ii) the availability of an A-position above VP for benefactives, possibly the specifier of a High Applicative head (Pylkkänen 2002): it appears that in RSür, all benefactives are being reanalyzed as high applicative arguments c-commanding DO and not vice-versa (39a, 40b). This may also entail some change in the character/content of its [Case] feature, i.e. the emergence of an ‘active’ inherent Case feature like in SMG, which is able to cause intervention effects; this would explain the unavailability of direct passives with benefactives in this variety (see 5.3) as the impossibility of raising DO to T across the dative (especially in the absence of clitic doubling in Romeyka); direct passives are ruled out in ROf anyway, even when the dative is a genuine (low) IO, probably because of a general avoidance of passivisation, as mentioned in 2.5.

Figure 1: Benefactives in different Pontic varieties

(38) a. Aishe epitshen to Mehmet pide / pide to Mehmet (RSür)
   Ayshe made.3SG the Mehmet.ACC pie.ACC / pie.ACC the Mehmet.ACC
   ‘Ayshe baked Mehmet a pie’

b. I Aishe epitshen aton enan pita / ?enan pita aton (ROf)
   The Ayshe.NOM made.3SG him.ACC a pie.ACC / a pie.ACC him.ACC
‘Ayshe baked him a pie’

(39) a. (Ya) tinan d’ epitshe? / *Do tinan epitshen? (RSür)
   Whom.ACC what.ACC made.3SG / What.ACC whom.ACC made.3SG
b. Tinan tohna epitshen? / tohna tinan epitshen? (ROf)
   Whom.ACC what.ACC made.3SG / what.ACC whom.ACC made.3SG
c. Tinan ti epiken? / Ti tinan epiken? (TPG)
   Whom.ACC what.ACC made.3SG / What.ACC whom.ACC made.3SG
   ‘What did (s)he make for whom?’

(40) a. Tinan tshopani efaises to zon-atí?/*Pion zoni efaises ton tshopan-ati?
   Which shepherd fed.2SG his animal/which animal fed.3SG his shepherd.ACC
   (TPG/ROf)
   b. (Ya) tina tshopano ta provatat efaises? / *Pio provat efaises ton tshopan-at?
   (For) which shepherd the sheep-his fed.2SG/which sheep fed.2SG the
    shepherd- its
   ‘For which shepherd did you feed his sheep? / Which sheep did you feed for its
    shepherd?’
   (RSür)

According to Pylkkänen (2002), a tell-tale sign of high Applicatives is their compatibility with unergatives. In SMG, where a high A-position for benefactives is independently supported, Benefs are indeed compatible with unergatives; interestingly, this is also the case in RSür, but crucially not in ROf and TPG, which is in tandem with our assumptions above.

(41) a. *O Mehmet etrekse / jelase tin Aishe (ROf, TPG)
    The Mehmet ran.3SG / smiled.3SG the Ayshe.ACC
    ‘Mehmet ran for Ayshe / smiled for/at Ayshe’
b. O Janis *(tis) etrekse / *(tis) hamojelase tis Marias (SMG)
    The John Cl.GEN.3SG.F ran.3SG/Cl.GEN.3SG.F smiled.3SG the Mary.GEN
    John ran for Mary / smiled for/at Mary
c. O Mehmetis sin Aishe / *tin Aishe merea etrehse. (RSür)
    The Mehmet.NOM to-the Ayshe.ACC / the Ayshe.ACC towards ran.3SG
    ‘Mehmet ran to / *for Ayshe’
d. O Mehmetis tin Aishe examojelase. (RSür)
    The Mehmet.NOM the Ayshe.ACC smiled
    ‘Mehmet smiled for/at Ayshe’

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<tr>
<th>Benef&gt;&gt;DO</th>
<th>DO&gt;&gt;Benef</th>
</tr>
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<tbody>
<tr>
<td>DPacc</td>
<td>✓ (in all varieties, esp. with non-recipients)</td>
</tr>
<tr>
<td>se ‘to’-PP</td>
<td>✓ (RSür, ROF), ü (TPG)</td>
</tr>
<tr>
<td>ja/ðæ ‘for’-PP</td>
<td>✓ (RSür, ROf)</td>
</tr>
</tbody>
</table>

Table 6: c-command relations in benefactives (all varieties of Pontic)

2.3 Passives

In RSür passives, the theme Agrees with T and becomes nominative (and, possibly, moves to a subject-position), without the requirement that the dative argument
cliticise (42a), unlike SMG and TPG, as expected, given that IO DPs (and ‘recipient’-Benefs) were found to be lower than DO, i.e. in a position not intervening between it and T (42a, b). Passivisation of IO is again ruled out (42c). ROf, on the other hand, as already said, appears to lack passives altogether.

(42) a. I para tin Aishe eðoste (RSür)
   The money.NOM the Ayshe.ACC was-given.3S
   ‘The money was given (to) Ayshe’
b. To harti e γrafte tin Aishe (RSür)
   The letter.NOM was-written the Ayshe.ACC
   ‘The letter was written for (+sent to) Ayshe’
c. *I Aishe edoste tin paran (RSür)
   The Ayshe.NOM was-given the money.ACC
   *’Ayshe was given the money’

2.4 Unaccusatives (psych and motion)

In Romeyka, apart from direct passives, Agree of the (nominative) theme with T, possibly followed by its movement, is unproblematic with unaccusatives as well, both psych and motion ones. In motion unaccusatives, it can arguably be deduced that goal DPs are again merged below themes, thus not intervening (43). The availability of this pattern in psych constructions too, however, which arguably involve the same thematic hierarchy as their counterparts in all other varieties, i.e. an experiencer intervening between T and the nominative, suggests that what is crucial there is probably the Case feature of the experiencer which does not render it active/visible for Agree, i.e. its inactive inherent Case (44). Also, again unlike SMG, which allows PP- and DP-experiencers of such predicates to have subject-like behaviour, quirky experiencer subjects are clearly not possible in Romeyka (45).

(43) To xarti to Meme epiği. (RSür)
   The paper.NOM the Mehmet.ACC went.3SG
   ‘The letter came/arrived/went (to) Mehmet’
(44) a. I patshi to Hosni aresi (ROf)
   The girl.NOM the Hosni.ACC appeals-to.3S
   ‘The girl appeals to Hosni’
b. To Hosni ki ares to kendinatsi
   The Hosni.ACC not appal.3S the self-his.NOM
(45) O Abdulahi tin Aishen eghapenen (*/Ton Abdulahi i Aishe aresen), ama proi tin Eminen
   epiren (ROf)
   The Abdulah.NOM the Ayshe.ACC loved.3SG/The Abdulah.ACC the Ayshe.NOM
   appealed-to.3SG, but pro the Emine.ACC married.3SG
   ‘Abdulah liked Ayshe, but he married Emine’
2.5 Person restrictions

Interestingly enough, Person-Case effects are not absent from Romeyka, despite the lack of clitic clusters. Combinations of strong pronouns, or of clitics and strong pronouns, are subject to the PCC, though a weaker version of it: as is expected in both strong and weak PCC languages, a 1st/2nd person accusative pronoun cannot be interpreted as an indirect object in the presence of a third person pronoun (46) – irrespective of their relative order, since both orders are in principle acceptable; however, the sequences of a 1st person clitic and a 2nd person pronoun (cf. 47) are acceptable for most of the speakers, and surprisingly the same pattern (as in 47a-47b) is attested in some Pontic varieties of Northern Greece (Chatzikyriakidis, 2010). Recall that SMG has the strong version of the PCC (47c).

(46) a. Eðiksane m(e)/emenan atona (RSür)
   Showed.3PL me.ACC.CL/me.ACC him.ACC
   b. Eðiksan(e) æ /aton(a) emenan (RSür/ROf)
   Showed.3PL him.ACC.CL/him.ACC me.ACC
   ‘They showed him to me / *They showed me to him’

(47) a. Eðiksane-m’ ese / *eðiksane-s’ eme (RSür)
   Showed.3PL-me.ACC.CL you.ACC / showed.3PL-you.ACC.CL me.ACC
   b. Atos esena emen eðikse (ROf)
   He you.ACC me.ACC showed.3SG
   c. *Mu se/su me eðiksan (SMG)
   Me.GEN.CL you.ACC.CL/you.GEN.CL me.ACC.CL showed.3PL
   ‘They showed you to me’

It is worth noting that the equivalent of (46b) in SMG (48), with an IO-clitic and a strong pronominal 1st person DO, would be perfectly grammatical on the reading ‘They showed me to him’; this is probably attributable to the observation we made above (2.5), about the inherently emphatic use of the strong pronoun in this context, while in Romeyka this is the unmarked option.

(48) Tu eðiksan emena (SMG)
   him.GEN.CL showed.3PL me.ACC
   ‘They showed me to him’
Appendix D: On some properties of IOs outside the scope of this thesis

Emonds & Whitney (2006), in their overview of the state of affairs in the research of double object constructions, list the basic empirical facts/generalisations that any analysis of these constructions should address. Of these basic properties, in this thesis I did not touch upon: (a) the well-known facts about scope freezing in double object constructions (1a), as opposed to the availability of scope ambiguity in prepositional ditransitives (1b) (see also Aoun & Li 1989), and (b) the “restriction on A’-extraction” in languages such as English, i.e. the observation that “Further movement of a ‘promoted’ indirect object NP unmarked by a P or dative case to a non-argument position is ungrammatical” (ibid.:130) (2).

(1) a. I Maria edhose enos pedhju kathe keik
    Mary gave some child every cake
    (∃>>∀, *∀>>∃)

    b. I Maria edhose ena keik se kathe pedhi
    Mary gave some cake to every child.
    (∃>>∀, ∀>>∃),

(2) a. ??Which sister, shall we send to a present?

    a’. ??Who, did Carolyn bake that cake?

    b. *This is the friend, (that) {Mary sent to a present/Carolyn baked to that cake}.

    (from Emonds & Whitney 2006:94)

Both phenomena are largely orthogonal to the main proposals of this thesis: scope freezing, for instance, seems to invariably characterise all ‘dative-shifted’ configurations, regardless of any of the specific properties with respect to which these configurations may vary (pace Cuervo (2003) who predicts that benefactive constructions with causative verbs allow scope ambiguity; if we replace edhose ‘gave’ with epsise ‘baked’ or zestane ‘heated’ in (1a) no scope ambiguity arises). Similarly, we may leave open the possibility that the apparent restriction in (2) might be (at least partly) attributable to parsing difficulties (hence its sensitivity to the length of the dependency).

At this point, I will only briefly present some thoughts regarding (1): I believe that these scopal effects should probably be analysed along the lines of Bruening’s (2001)
assumption that ‘Q(uantifier) R(aising) obeys Superiority’. Then, scope freezing in (1a) is due to the fact that both quantified objects need to undergo QR to the closest constituent of type <t>, i.e. VoiceP in our case, and this (covert) movement must obey (and preserve) superiority. On the contrary, in (1b) the two objects must be somehow equidistant from the target of QR, which is why they can raise in either order; without resorting to the notion of minimal domains, for the reasons already mentioned, I would tentatively suggest that perhaps we need to revise and refine our view of the internal structure of √P. It might be that both objects are somehow merged at the same level/height with respect to the root: they may both be sisters of the root, as recently suggested by Chomsky (in talks given during 2010), with the direct object being merged by “set-merge”, while the indirect object is more of an adjunct merged via so-called “pair-merge”, possibly in a third dimension, or alternatively Kayne’s (2010) intuition that both objects originate within the same constituent may be on the right track. In the latter case, some additional assumption may also be needed involving multiple dominance, so that DO, but not IO, is also immediately dominated by a projection of V/the root, which guarantees the DO>IO pattern in cases like (1b). On Chomsky’s scenario, the asymmetries between DO and IO in relation to e.g. anaphoric binding should probably result from the fact that an adjunct position should not be able to bind a thematic/A-position.

Nevertheless, it appears that an adjunct position may (more or less marginally) bind into a thematic/A-position, as Pesetsky (1995) argues:

(3) ?Sue showed each other, ’s friends to [John and Mary].
(4) ?John threw each other, ’s newspapers at [John and Bill].
(5) ?Mary placed pictures of himself, on top of Bill, (e.g., at a funeral)
(from Pesetsky 1995:222)

Indeed, on either of the (probably three-dimensional) representations that the speculations above entail, the apparent paradox of DO binding the adjunct/PP and the adjunct/PP binding backwards into DO is resolved, as PP actually asymmetrically ccommands the daughters of DO, while being c-commanded by it:
Furthermore, if either of the above is the correct representation, then it might also be able to provide an account of the weak PCC that may be associated with the DO>IO\textsubscript{DP} pattern. If, instead of Appl, it is V/the root that bears a feature encoding the animacy requirement, such as [uParticipant], then the following possibilities arise: since both DO and IO are equidistant from V, then either (i) both internal arguments can be 3\textsuperscript{rd} person, in which case the uninterpretable [uParticipant] feature is matched by IO alone and is valued as [-Prt], while 3\textsuperscript{rd} person DOs are not specified for this feature at all, as already assumed; or (ii) 1\textsuperscript{st} and 2\textsuperscript{nd} person pronouns can co-occur, which suggests that they can both simultaneously match a positively valued [Participant] on V; or, finally, (iii) the two internal arguments are not allowed to have different/contradictory values of [±participant], consequently no 3\textsuperscript{rd} person ([−Prt]) datives can co-occur with [+Prt] DOs, which derives from the fact that there may not be a mismatch between [Participant] on V, whatever its value, and any of its
sisters/the internal arguments.

However, since the assumptions are far too speculative, lacking what would count as sufficient independent evidence and firm technical implementation, I will not pursue them further, leaving them open for future research.
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2007-2009, PI: Ioanna Sitaridou, Co-investigator: Marina Terkourafi) or directly from the original texts (and the editions) consulted for the purposes of the project.