

# DIFFERENTIAL OBJECT MARKING, DATIVES AND TYPES OF LICENSING

MONICA ALEXANDRINA IRIMIA<sup>1</sup>

**Abstract.** The presence of dative morphology on differential objects raises non-trivial puzzles under a variety of theoretical approaches. Using data from genetically unrelated languages, this paper puts forward a comprehensive account under which differential objects are equated with multiple Case configurations. The latter are flagged by the presence of more than one licensing operation on the same nominal. The oblique dative morphology is correlated with an additional licensing operation connected to a discourse linking strategy; thus, it can co-occur with other grammatical (uninterpretable Case) licensing operations. The analysis can also reconcile other recalcitrant aspects of differential objects, such as their syntactic differences from both accusatives and datives. These differences are problematic under both purely morphological accounts and under analyses which take differential objects and datives to have the same syntax.

**Keywords:** Romance, Basque, Gujarati, Differential Object Marking, agreement, accusative, dative.

## 1. INTRODUCTION

As initially observed by Bossong (1991, 1998), Differential Object Marking (DOM) is a widespread phenomenon cross-linguistically. At its core, it signals a split in the morpho-syntactic marking of direct objects. More specifically, certain classes of internal objects can or must receive dedicated morphology depending on the presence of (conjunctive sets of) features such as animacy, specificity, definiteness, topicality, etc. (see also Torrego 1998, Aissen 2003, Ródriguez-Mondoñedo 2007, López 2012, Ormazabal and Romero 2013a, a.o.). Differentially marked objects raise numerous puzzles, among which the fact that their morphological make-up is homophonous with the dative in numerous languages (Bossong 1991, 1998, Torrego 1998, López 2012, Manzini and Franco 2016, Bány 2018, Ormazabal and Romero 2019, a.o.).

It is precisely this latter aspect that we address here. On the basis of empirical evidence from less discussed, genetically-unrelated languages such as Neapolitan (Romance), Gujarati (Indo-Aryan) and southern Basque, we motivate several conclusions

---

<sup>1</sup> University of Modena and Reggio Emilia, [irimiamo@unimore.it](mailto:irimiamo@unimore.it).

I would like to thank the audience at the Datives in Discourse conference (Köln 2018), as well as Alina Tigău, Alexandra Cornilescu, András Bány and Mark Baker for very useful feedback on some of the issues discussed here. This work has been supported by a research grant offered by the University of Modena and Reggio Emilia. All errors are my own.

regarding the dative appearance of differential objects. First, we show that the DOM-dative homomorphism cannot simply be reduced to morphology (contra older and more recent formalizations by Halle and Marantz 1993, Keine and Müller 2008, Keine 2010, Bárány 2018, a.o.). DOM and non-DOM structural objects do present syntactic differences, making plausible the hypothesis that the dative morphology on DOM could be attributed to a syntactic source. Second, we demonstrate that differential objects and datives do not strictly share an identical syntactic source either; we present various counterexamples to DOM-dative syntactic unification theories of the type put forward, for example, by Manzini and Franco (2016). And third, we propose that dative morphology on DOM can be derived as the result of a secondary licensing operation on certain relevant classes of direct objects, as triggered by the presence of more than one feature on the same nominal that requires valuation in the syntax. This aligns DOM to other classes of objects where (Case) licensing operations apply more than once, without presupposing (overt) raising out of the local case domain (Richards 2013, Pesetsky 2014, Chen 2018, a.o.). Crucially, we further connect one of the multiple case assignment/licensing operations to a discourse licensing strategy, building on Givón (1984) and following recent observations about discourse licensing in Miyagawa (2017).

The structure of the paper is as follows. In Section 2 we introduce the relevant data – patterns from the three genetically unrelated languages mentioned above (Neapolitan, Gujarati, southern Basque). Here, the dative marking of differential objects is problematic in that it can co-occur with other types of structural marking, such as (absolute) object agreement and/or accusative clitic doubling. In Section 3 we present various diagnostics challenging a morphological source for the dative appearance of these objects. Section 4, in turn, takes up the co-occurrence with object agreement as well as other properties which are not easy to accommodate under accounts which unify differential objects with datives syntactically. Section 5 presents the details of a proposal meant to accommodate these special properties of differential objects, under the assumption that the dative marking is the result of multiple case assignment operations affecting the same nominal. The focus is on a [+PERSON] feature, connected to a discourse specification, which requires additional licensing, without overt raising. Section 6 contains the conclusions.

## 2. ‘REDUNDANT’ DIFFERENTIAL OBJECT MARKING

The surprising fact that differential objects are signaled by dative morphology is clear in well studied languages like standard Spanish. Here, the morphological shape of direct objects appears to be dictated by some semantic specifications traditionally included in the so-called Scales, of the types studied more recently by Aissen (2003). In standard Spanish, DOM has been connected to animacy, specificity/definiteness, as well as topicality, as illustrated by the three *Scales* below:

- (1) Scales for DOM (Silverstein 1976, Comrie 1989, Aissen 2003, a.o.)
  - (a) *Animacy/person*: 1/2 > 3 > proper name > human > animate > inanimate
  - (b) *Definiteness/specificity*: personal pronoun > proper name > definite > specific  
indefinite > non specific (Aissen 2003: 437)

- (c) *Topic accessibility scale*: active > accessible > unused > brand-new anchored > brand-new unanchored (Dalrymple and Nikolaeva 2011, a.o.)

The general idea behind these approaches is that nominals can contain features such as animacy, specificity, topicality, either intrinsically or extrinsically. Some of these features are more canonical to subjects than objects, for example subjects are more likely to be animate than objects, etc. These specifications are assumed to be relevant for language processing in that they can lead to ambiguities when both the subject and the object are present in a structure. Thus, non-canonical specifications (i.e., animacy) get signaled overtly on the direct object so that the correct interpretation is disambiguated (see especially the discussion in Comrie 1989). *Scales* are thus hierarchical generalizations about which features are more prominent with respect to how the discourse participants are specified. Higher prominence entails higher likelihood of DOM, as indicated by Aissen's (2003) rule in (2).

- (2) The higher in prominence a direct object, the more likely it is to be overtly case-marked.

Turning now to concrete examples from standard Spanish, as in (3), where the above mentioned *Scales* are active, we notice the following about nominals in direct object position: a) a personal pronoun must be differentially marked ((3)(a) and (3)(b)) and can also be clitic-doubled by an accusative clitic ((3)(b)); b) definite animate nouns must equally be differentially marked ((3)(c)); c) inanimates cannot take this marking, irrespective of definiteness ((3)(d)). In standard Spanish differential marking is signaled by the element *a*, which is homophonous with the dative/locative preposition (see also (24)(a)):

(3) DOM in standard Spanish

- (a) Has encontrado **\*(a)** mi.  
 have.2SG<sup>2</sup> found DAT=DOM I.DAT=DOM  
 'You have found me.'
- (b) **Lo/\*le** has encontrado **\*(a)** el.  
 CL.3SG.ACC.M/DAT have.2SG found DAT=DOM he  
 'You have found him.'
- (c) Has encontrado **\*(a)** la niña.  
 have.2SG found DAT=DOM DEF.F.SG girl  
 'You have found the girl.' (Ormazabal and Romero 2013a, ex. 1a)
- (d) Has encontrado **\*(a)** el libro.  
 have.2SG found DAT=DOM DEF.M.SG book  
 'You have found the book.' (Ormazabal and Romero 2013a, ex. 1b)

<sup>2</sup> Abbreviations: ABS = absolutive, ACC = accusative, AUX = auxiliary, CL = clitic, DAT = dative, DEF = definite, DESID = desiderative, DOM = differential object marking, ERG = ergative, F = feminine, M = masculine, N = neuter, OBL = oblique, PL = plural, PFV = perfective, PST = past, SG = singular.

Examples of this type have given rise to an important debate about whether differential objects are dative or accusative syntactically. The observation that in this language the special objects are only possible with accusative morphology on the clitic double, as well as the fact that they tend to behave like other direct objects under a variety of tests (as seen later in this paper in Table 1) has led one research camp to the conclusion that they must be types of accusatives. Hence the traditional label of ‘prepositional accusatives’. A second research camp has correctly noticed, however, that an answer will still have to be given as to why it is precisely dative morphology that is used for this purpose.

What we will be doing in this paper is examine some lesser discussed diagnostics which can further illuminate the nature of such objects. We particularly focus on two aspects which are rarely addressed in formal or typological studies: i) DOM can or in fact must co-occur with verbal agreement which uncontroversially signals the accusative/absolute (next subsection); ii) differential objects can also be set aside from other accusatives by syntactic configurations such as the PCC (Section 3). Thus, despite their base generated accusative nature, differential objects can be syntactically distinct from both accusatives and datives.

## 2.1. Differential objects and verbal agreement

Staying within Romance, we notice languages of the Neapolitan<sup>3</sup> type. This language exhibits an animacy-based type of DOM, which uses a preposition strategy, once again, homophonous with the dative. As we see in the sentences under (4), animate definite objects tend<sup>4</sup> to be differentially marked via the dative preposition. Inanimates, on the other hand, are ungrammatical<sup>5</sup> with DOM in similar contexts. The examples below have been modeled after contexts initially provided in Loporcuro (1998, 2010):

### (4) Direct objects in Neapolitan

- |   |                               |                                       |      |                                  |
|---|-------------------------------|---------------------------------------|------|----------------------------------|
| (a)   | (L')addɔə<br>CL.SG.ACC-have.1 | *kwottə/ √ kɔttə<br>cooked.M.SG/F.SG  | (a)  | l'aragostə.<br>the.F.SG -lobster |
| ‘I have cooked the lobster.’                                      |                               |                                       |      |                                  |
| (b)   | addɔə<br>have.1               | √ kwottə/ * kɔttə<br>cooked.M.SG/F.SG | (*a) | ll'ove.<br>the.M.SG-egg          |
| ‘I have cooked the egg.’ (Adam Ledgeway, Roberto Petrosino, p.c.) |                               |                                       |      |                                  |

<sup>3</sup> Neapolitan is an Italo-Romance variety spoken in the south of Italy in an area that covers Naples.

<sup>4</sup> DOM in Neapolitan is subject to less strict rules which give rise to its more wide-spread optionality.

<sup>5</sup> DOM is however necessary on some types of inanimates in certain contexts (just like in Spanish or other Romance languages). For lack of space we do not address such contexts here.

A more detailed look at these data reveals important problems. First, irrespective of DOM, the language signals the direct object function via past participle agreement (PPA)<sup>6,7</sup>, which tracks the gender and number features of the nominal. As can be seen in (4)(a) and (4)(b), PPA affects both inanimates and animates. The subject function is indicated by agreement on the auxiliary. Indirect objects never trigger PPA, as demonstrated by examples like (5). Here PPA is never possible, and the past participle carries default (masculine) inflection instead.

- (5) addʒə    √kwottə/ \*kottə    a    la    guaglia.  
 have.1    cooked.M.SG/F.SG    DAT    the.F.SG    girl  
 ‘I have cooked for the girl.’

*Neapolitan*

The questions are as follows. First, given that the direct object function is signaled by the PPA, we can conclude this marking has a similar function to the accusative Case. But then why is DOM also needed? The animacy marker must be something independent of (accusative) Case per se. Second, DOM shows up with dative morphology on the DP. However, differential objects are clearly not like indirect objects. For one, they agree like other direct objects, as we just saw in (4). Even if implemented in the morphology, overt agreement is the result of a process with clear syntactic correlates. Direct object agreement is thus a serious problem to the assumption that differential objects could be syntactically dative. DOM is also different from other prepositional objects, which never trigger verbal agreement. We are left here with a non-trivial puzzle. What type of analysis can reconcile this special behavior of dative prepositional morphology with accusative agreement?

These facts are not just a quirk of Neapolitan. Going beyond Romance, we see a very similar pattern in several Indo-Aryan varieties. We illustrate here with Gujarati, a language with an aspectually-based ergative-absolutive system; in the perfective, agents are marked with the ergative postposition, while direct objects show the so-called absolutive form (see especially Mistry 1976, 1997, as well as Woolford 2006). Just like in Neapolitan, in the perfective compound temporal forms<sup>8</sup>, the direct object function can be signaled by

<sup>6</sup> PPA is seen overtly only with those predicates that exhibit a root-internal change referred to as *metaphony* (see Loporcaro 1998, 2010, Ledgeway 2010, a.o.).

<sup>7</sup> The hypothesis that the masculine singular inflection in examples like (4)(b) is a type of default marking can be easily dismissed through examples where the object has feminine gender. As we note below, in these instances the past participle must be marked as feminine singular. Note that the definite determiner of feminine nouns that begin in a consonant has the form ‘a’. Despite its homophony with the dative preposition, this is not a differential marker (as it appears with inanimates like ‘pasta’); however, given its feminine gender, it triggers feminine PPA.

(i)    addʒə    \*kwottə/ √kottə    a    pastə.    *Neapolitan*  
       have.1    cooked.M.SG/F.SG    the.F.SG    pasta

‘I have cooked the pasta.’ (Adam Ledgeway, Roberto Petrosino, p.c.)

<sup>8</sup> These verbal complexes are formed from a perfective participle and the auxiliary, the latter being normally omitted (although see example (7) below, where both the participle and the auxiliary are present). Agreement in gender and number is seen on the perfective participle and on the auxiliary, if present.

PPA<sup>9</sup>; the presence of the latter is not conditioned by animacy, as can be seen in the contrasts below:

(6) Gujarati object agreeing absolutes

- |     |                         |                   |                                     |
|-----|-------------------------|-------------------|-------------------------------------|
| (a) | Sudha-e                 | radio             | khəridy- <i>o</i> .                 |
|     | Sudha(F)-ERG            | radio(M)-ABS      | buy.PFV-M.SG                        |
|     | ‘Sudha bought a radio.’ |                   | (Mistry 1976: 10a, glosses adapted) |
| (b) | Sita-e                  | kāgal             | vacy- <i>o</i> .                    |
|     | Sita(F)-ERG             | letter(M)-ABS     | read.PFV-M.SG                       |
|     | ‘Sita read the letter.’ |                   | (Wunderlich 2012: 4a, adapted)      |
| (c) | Ramesh-e                | Sudha- <b>ne</b>  | dhəmkawy- <i>i</i> .                |
|     | Ramesh(M)-ERG           | Sudha(F)-DAT=DOM  | scold.PFV-F.SG                      |
|     | ‘Ramesh scolded Sudha.’ |                   | (Mistry 1976: 14a, glosses adapted) |
| (d) | Sudha-e                 | Ramesh- <b>ne</b> | dhəmkawy- <i>o</i> .                |
|     | Sudha(F)-ERG            | Ramesh(M)-DAT=DOM | scold.PFV-M.SG                      |
|     | ‘Sudha scolded Ramesh.’ |                   | (Mistry 1976: 14b, glosses adapted) |
| (e) | Sita-e                  | Raj- <b>ne</b>    | pajavy- <i>o</i> .                  |
|     | Sita(F)-ERG             | Raj(M)-DAT=DOM    | harass.PFV-M.SG                     |
|     | ‘Sita harasses Raj.’    |                   | (Wunderlich 2012: 4b)               |

Similarly to Neapolitan, animate objects also receive a special differential marker which is homophonous with the dative, as we see in ((6)(c), (d), (e)). But once again, these ‘dative marked’ objects agree just like regular direct objects and not like indirect objects. The latter cannot surface with gender and number agreement; in the example below we illustrate a lexical dative, selected by the semantics of the main predicate, and which can only occur with default neuter marking. Thus, the complex questions raised above for Neapolitan are also valid for Gujarati.

(7) Gujarati: non-agreeing datives

- |                                      |                  |                                      |                 |
|--------------------------------------|------------------|--------------------------------------|-----------------|
| Kiṣor-(n)e                           | kāgaḷ- <b>ne</b> | aḍ-v-ū                               | hat- <i>u</i> . |
| Kiṣor(M)-ERG                         | letter-(M)DAT    | touch-DESID-N                        | be.PST-N        |
| ‘Kishor wanted to touch the letter.’ |                  | (Mistry 1997: 6c; Woolford 2006: 41) |                 |

We introduce a third language here, which poses the same type of problems with respect to the nature of dative morphology on differentially marked objects. As recently discussed by contributions such as Fernández and Rezac (2016) or Odria (2017, 2019), a.o., southern varieties of Basque show animacy based DOM. Direct objects at the higher end of the Animacy/Person hierarchy (especially 1<sup>st</sup>/2<sup>nd</sup> person pronouns) must or can carry a special marker, which is homophonous with the dative. Interestingly, such objects also trigger dative agreement on the auxiliary. Examine the example below from Odria (2019):

<sup>9</sup> In Gujarati there can also be objects which do not trigger agreement; these appear to belong to number-neutral interpretations that are characteristic to incorporation, and we leave them aside here.

## (8) Southern Basque differential objects

Zu-k ni-ri ikusi didazu.  
 you-ERG I-DAT=DOM see AUX[1SG.DAT-2SG.ERG]  
 ‘You have seen me.’ (Odria 2019: 1b, glosses adapted)

Similarly to Gujarati and Neapolitan, Basque also shows other types of direct objects. For some speakers, direct objects at the higher end of Scales can also be used without differential marking. In this case, they trigger absolutive agreement on the verb, which is otherwise independent of features that are characteristic to differential marking. In (9)a we see a 1<sup>st</sup> person pronoun used without DOM but with absolutive agreement. We also illustrate an inanimate direct object, used in a context which triggers absolutive agreement (9)b. Thus, differential objects are flagged by agreement on the verb, just like other structural objects. Moreover, as Odria (2017, 209) conclusively shows, dative agreement with differential objects sets them apart from indirect object datives, where dative agreement on the verb is either impossible or optional. Therefore, a similar puzzle to Neapolitan and Gujarati one: dative marking on the DP but behavior rather characteristic to structural direct objects.

## (9) Southern Basque direct objects with absolutive agreement

(a) Zu-k ni ikusi **nauzu**.  
 you-ERG I-ABS see AUX[1SG.ABS-2SG.ERG]  
 ‘You have seen me.’ (Odria 2019: 1a, glosses adapted)

(b) Ordenagailua ikusi **dut**.  
 computer-ABS see AUX[3SG.ABS-1SG.ERG]  
 ‘I have seen the computer.’ (Odria 2017: 3a, p.11)

To summarize the data we have seen so far, we need to answer at least three important questions related to dative DOM: i) why dative marking? ii) if DOM is simply a means to indicate the accusative Case (as in many accounts), and thus differentiate subjects from objects, why can/must DOM co-occur with object agreement or other means of independently indicating the accusative? iii) what is the structural distinction between DOM and other types of structural objects (i.e., the agreeing ones)? In the next section we examine one possible answer to the dative puzzle, namely that (the dative morphology on) DOM has a superficial morphological nature. We show that it faces several problems.

### 3. DATIVE DOM IN MORPHOLOGY

#### 3.1. The background

We need to observe that the patterns introduced above are also problematic for ‘DOM as accusative Case’ theories. Some accounts have proposed to solve this two-way conundrum (DOM different from both datives and accusatives) by equating DOM to a simple morphological means of indicating certain superficial features at PF. This permits

dative DOM to co-occur with other direct object licensing strategies (such as agreement), as nothing blocks morphological marking from co-occurring with various types of structural licensing operations, theory-internally. We will briefly summarize three morphological approaches.

### 3.2.1. Halle and Marantz (1993)

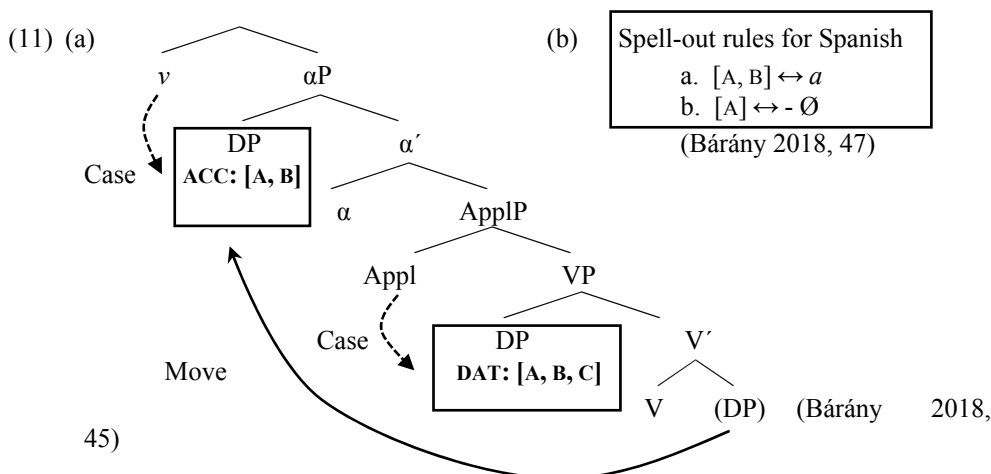
In a well-known morphological contribution, Halle and Marantz (1993) discuss cases that are similar to the DOM contexts examined in this paper. More precisely, they address the presence of unexpected oblique morphology on certain types of objects that otherwise seem to be structural accusatives. The answer the two authors propose is that the only difference between DOM and other structural objects is purely morphological. Certain features like animacy trigger the deletion of relevant structural direct object features at PF, such as the accusative case morphology; thus, inherently accusative objects end up being marked by oblique (dative) morphology. This process is part of a large class of phenomena known as Impoverishment; note that this is conceived as only a morphological process – i.e., differential objects might preserve their structurally-relevant features checked in the syntax. (10) Differential object marking as Impoverishment (based on Halle and Marantz 1993)

[ACC] → [-ACC] ([+OBL])/\_animate

### 3.2.2. Bárány (2018)

A morphological explanation has also been put forward by Bárány (2018), who connects the presence of dative morphology on both indirect objects as well as DOM to the fact that they are both Case marked categories. More simply said, for Bárány (2018) this similarity reduces to an instantiation of Case syncretism. This system works best for languages of the Spanish type, where there is DOM-DAT homomorphism (recall the examples in (3)), but where direct objects only show the DOM split, without other (overt) morphological means for indicating the accusative (leaving the clitics aside).

In order for his reasoning to go through, Bárány (2018) must make the assumption that differential objects are the only types of direct objects that receive Case. Bárány (2018) builds on López' (2012) assumption that DOM receives accusative case (abstractly labeled [A, B]) when the object raises to a position above VP. This position is the specifier of  $\alpha$ , as illustrated in the tree in (11)a below, reproduced from Bárány (2018). Crucially, for Bárány (2018), non-DOM arguments must be left caseless; they are analyzed as undergoing (pseudo) incorporation into V. IOs, on the other hand, are assigned dative case (abstractly labeled [A, B, C]) by Appl, as also seen in (11)a. From this representation it becomes clear that ACC and DAT are the only internal argument categories that carry case features. Thus, a single spell-out rule applies to both, as illustrated explicitly in (11)b.



### 3.2.3. Non differential marking as Impoverishment

Yet a third morphological model for the DOM-DAT homomorphism has been worked out in contributions by Keine and Müller (2008), as well as Keine (2010). Keeping to the data at hand here, the working hypothesis is that both differentially marked objects as well as the agreeing ones are structurally accusative (have been assigned accusative Case). The surface differences between the two classes are attributed to an impoverishment rule that deletes the accusative case features on the non differentially marked objects. Thus, under these accounts dative morphology on certain types of direct objects is taken to signal the presence of structural case, as a result of a Case assignment operation in the syntax.

### 3.3. DOM in morphology: some questions

These three lines of morphological investigation into the nature of the DAT-DOM syncretism raise several questions. On the one hand, with respect to accounts where oblique DOM is correlated with accusative feature deletion, it is not clear why an Impoverishment operation of this type should affect animates. Then, there is also the problem that such objects do behave as if accusative features are still present *beyond narrow syntax*. Under morphological approaches to case and agreement (Bobaljik 2008), the overt presence of object agreement cannot be straightforwardly derived under the assumption that such objects lack accusative features at spell-out. The issue is that if we want to assume Impoverishment, we cannot derive the *surface* accusative agreement on languages like Neapolitan and Gujarati. Under Impoverishment, this should be replaced with oblique morphology (or at least lack of agreement), contrary to what the data show.

Turning now to Bárány's (2018) account, the contexts we are looking at prove problematic from at least two points of view. First, this account can only be implemented under the assumption that datives and DOM are the *only* nominal categories in the language that carry Case features that must be checked under the appropriate structural conditions. Obviously, Neapolitan, Gujarati and southern Basque are difficult to fit into this mold. Object agreement patterns where DOM is absent but where DO agreement is present

(i.e., inanimates) cannot be assumed to result from (pseudo)incorporation and lack of Case features. Second, both Gujarati as well as southern Basque present robust case morphology. The question is why DOM has to show homomorphism with the dative, as opposed to some other oblique case morphology that is equally characteristic to internal arguments.

Turning to Keine and Müller (2008) and Keine (2010), it is not clear how patterns that contain both object agreement and DOM can be reconciled. Object agreement contexts with no DOM (as with inanimates) are taken to indicate lack of accusative Case features as a result of Impoverishment. DOM, on the other hand, signals the presence of accusative case features, but it co-occurs with object agreement, which should signal lack of accusative Case. A solution must be found so a situation in which the same object ends up both having and lacking ACC is avoided. Another prediction made by some of these accounts is that non-differentially marked objects as well as DOM have the same syntax. This latter prediction can be tested. We show below that it does not go through in that there seem to be syntactic configurations where the two classes behave differently.

### 3.3.1. DOM and PCC effects

The main syntactic context we will be addressing here comes from P(erson) C(ase) C(onstraint) effects<sup>10</sup>. Starting with Bonet's seminal work, this class of constraints has been shown to regulate clusters of phonetically weak elements (clitics). As can be observed from the Spanish data in (13), when an accusative and a dative clitic are both present, their ordering has to respect a strict person hierarchy in the sense that the accusative clitic can only be third person (12). Thus, the example in (13)(a) is grammatical as the ACC clitic is 3<sup>rd</sup> person, while the example in (13)(b) is not; in the latter the ACC clitic is 1<sup>st</sup> person.

(12) Person Case Constraint

If DAT, then ACC/ABS = 3<sup>rd</sup> (Bonet 1994: 36)

(13) Spanish PCC

(a) Me lo manda.  
I.DAT CL.3SG.ACC.M sends  
'He sends it/him to me.' (DAT 1 > ACC 3)

(b) \*Me le manda.  
I.ACC CL.3SG.DAT sends  
Intended: 'He sends me to him.' (\*ACC 1 > DAT 3)

Although initial research has attributed the PCC to a morphological constraint, Rezac (2008) has convincingly demonstrated that it is instead a matter of syntax. Given its syntactic nature, it can be used as a good diagnostic for probing the nature of the dative morphology on DOM. Another crucial observation comes from Ormazabal and Romero (2007, ex. 15a, b), who have shown that similar effects also hold with objects that are differentially marked. The two authors have examined data from léista varieties of Spanish, where animate clitics with direct object function must carry dative morphology, as a result of differential marking. This is seen in the contexts in (14) – the accusative clitic in (14)(a) can be interpreted as either animate or inanimate, while restriction to animacy requires obligatory dative morphology, as illustrated in (14)(b).

<sup>10</sup> Configurations under the broad PCC umbrella have been shown to have a refined typology (e.g., *Strong*, *Weak*, etc.). We do not address such differentiations here.

## (14) Differential object marking and dative morphology in leísta Spanish

- |     |                                 |          |     |                                   |          |
|-----|---------------------------------|----------|-----|-----------------------------------|----------|
| (a) | Lo                              | vi.      | (b) | <b>Le</b>                         | vi.      |
|     | CL.3SG.M.ACC <sub>[-ANIM]</sub> | saw.1PST |     | CL.3SG.DAT=DOM <sub>[+ANIM]</sub> | saw.1PST |
|     | 'I saw it/him.'                 |          |     | 'I saw him.'                      |          |

The fundamental observation Ormazabal and Romero (2007) made was that a dative, i.e. differentially marked, animate direct object clitic blocks the presence of any other clitic, irrespective of person. The contrast in (15) is relevant, and its similarity to canonical PCC contexts of the type in (13) is also clear. In both instances a person or animacy hierarchy produces co-occurrence restrictions.

## (15) Differential object marking and the PCC in leísta Spanish

- |     |   |                                   |           |
|-----|---|-----------------------------------|-----------|
| (a) | Te  | lo                                | di.       |
|     | CL.2SG.DAT  | CL.3SG.M.ACC                      | give.1PST |
|     | 'I gave it/him to you.'   |                                   |           |
| (b) | <b>*Te</b>  | <b>le</b>                         | di.       |
|     | CL.2SG.DAT  | CL.3SG.DAT=DOM <sub>[+ANIM]</sub> | give.1PST |
|     | Intended: 'I gave him to you.' (Ormazabal and Romero 2007: 15/16) |                                   |           |

In a later paper, Ormazabal and Romero (2013a) have further shown that animacy-based co-occurrence bans also extend to full nominals that are differentially marked via the dative preposition, although the conditions are somehow stricter. A salient context is in (16); the crucial factor here is that dative DOM on the animate direct object renders ungrammatical the co-occurrence of an indirect object which is doubled by a dative clitic:

## (16) Prepositional DOM and the PCC in standard Spanish

- |  |              |         |     |             |     |     |          |
|--|--------------|---------|-----|-------------|-----|-----|----------|
| Le   | enviaron     | (*a)    | los | enfermos    | a   | la  | doctora. |
| IO.CL.3SG.DAT=DOM                                    | send.3PL.PST | DAT=DOM | DEF | sick people | DOM | DEF | doctor   |
| Intended: 'They sent the sick people to the doctor.' |              |         |     |             |     |     |          |

(Ormazabal and Romero 2013b: 8)

In their 2007 paper, Ormazabal and Romero attributed clashes of the type in (15)(b) to a specific syntactic condition imposed by DOM. More specifically, grammaticalized animacy requires an Agree relation with a relevant functional category in the verbal domain. Ormazabal and Romero (2007) further hypothesize that only one Object Agree relation is possible in the verbal domain, as specified in the Object Agreement Constraint (17). Assuming that an indirect object dative clitic might also require Agree, its impossibility to co-occur with DOM is predicted.

## (17) Object Agreement Constraint (OAC, Ormazabal and Romero 2007: 50)

- If the verbal complex contains object agreement, no other argument can be licensed through verbal agreement.

Note that for the data at hand the OAC is clearly too strong. Without further refinements, it predicts ungrammaticality in the case of Neapolitan, Gujarati and Basque, as DOM should not co-occur with independent verbal agreement (a result of Agree). But remember that this is precisely what we see in these languages. In section 5 we will propose

a different analysis to accommodate these facts. For now, it is important to mention that ‘PCC effects’, although rarely studied, also appear to hold in Neapolitan and Basque, at least. Odria (2017, 2019) has clearly demonstrated that a dative differentially marked direct object cannot co-occur with a dative indirect object, irrespective of the latter’s person specification. As demonstrated by example (18), this is the exact same picture as in Ieista Spanish:

(18) Southern Basque DOM and PCC

- (a) \*Traidore-ek **ni-ri** etsaia-ri saldu didaote  
 traitors-ERG I-DAT=DOM enemy-DAT sell AUX[1SG.DAT-3SG.DAT-3PL.ERG]  
 Intended: ‘The traitors have sold me to the enemy.’ (Odria 2019: 10)
- (b) \*Jon-i **ni-ri** harroa iruditzen zaiot.  
 Jon-DAT I-DAT=DOM arrogant look like AUX[3SG.DAT-1SG.DAT]  
 Intended: ‘I look arrogant to Jon.’ (Odria 2019: 11b)

Similar facts are salient in Neapolitan, at least for those speakers who can construct predicates like ‘cook’ with an indirect object with dative morphology (as opposed to using the preposition ‘for’). The ungrammatical sentence in (19) below indicates that the differentially marked animate direct object is not possible with dative indirect object clitic.

(19) Neapolitan DOM and the PCC

- Tʃə (l')addɔə \*kwottə/√kottə (\*a) l'aragostə.  
 CL.3DAT CL.3F.SG.ACC-have.1 cooked.M.SG/F.SG DAT=DOM the.F.SG -lobster  
 Intended: ‘I have cooked the lobster for him.’

Although the PCC facts are harder to examine in Gujarati, the language offers other types of evidence that the dative morphology on differential marking has a syntactic nature. For example, the interaction with the ergative, in the sense that dative DOM is only possible with agents that are marked ergative, cannot be easily explained under a purely morphological account.

To conclude this section, the PCC effects and other diagnostics point toward a syntactic explanation of dative marking in its use as a differential marker for direct objects. The complicated question is how precisely this has to be modeled in the syntax. In the next section we review the predictions of a recent syntactic account, namely Manzini and Franco (2016) who derive the differential object morphology as an inherent dative syntactically.

#### 4. DOM AS DATIVES SYNTACTICALLY: MANZINI AND FRANCO (2016)

A tenet of Manzini and Franco’s (2016) theory of the dative/oblique case is that this category has a dedicated syntactic make-up flagged by the presence of an elementary predicate/operator, whose semantics is specified for possession/inclusion. The two authors annotate this operator as Q ( $\subseteq$ ). One explicit representation the two authors provide is that of the Romanian dative case (an inflectional category which is also homophonous with the

genitive). An example containing a Romanian indirect object marked with dative case, adapted after Manzini and Franco (2016) is given below:

(20) Romanian indirect object marked with dative case

I I-am dat băiat-u-l-*ui*.  
 CL.3SG.DAT CL.3.SG.M/N.ACC-have.1 given boy-M.SG-DEF.M.SG-DAT.M.SG  
 ‘I gave it to the boy.’ (adapted after Manzini and Franco 2016: 20a)

The structure of the dative case is modeled as in (21). The dative DP functioning as an indirect object contains the Q ( $\sqsubseteq$ ) functional head which takes as its complement the indirect object *băiat-u-l-*; the direct object encoded by *-l-* (‘it’), in turn, is merged in the external argument position. The interpretation obtained from this representation is read off at LF as specifying that the direct object is ‘zonally included’<sup>11</sup> by the IO ‘the boy’<sup>12</sup>.

(21) Structure of dative case as proposed by Manzini and Franco (2016)



The proposal Manzini and Franco (2016) make is that direct objects that are differentially marked also contain the Q ( $\sqsubseteq$ ) elementary predicate/operator. This requirement is due to the fact that such internal arguments are specified with Participant features, which entail specific referential properties. The illustrative example Manzini and Franco (2016) provide comes from 1<sup>st</sup> and 2<sup>nd</sup> persons in Italian, which can only show dative morphology when used as direct objects. The reasoning can be transferred to Spanish. As seen in the examples in (3), the 1<sup>st</sup> person pronominal form of the direct object in (3)(a) shares with referential animate internal argument DPs [(3)(c)] the obligatory presence of oblique morphology. Transposing Manzini and Franco’s (2016) structure to Spanish differentially marked animate DPs (as in (3)(c)), we obtain the representation in (22). The two structures, (21) and (22), make the similarity between internal objects with participant features and oblique indirect objects transparent. Both categories contain the QP ( $\sqsubseteq$ ) operator which is spelled out as oblique morphology.

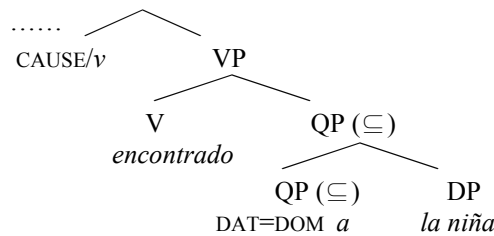
An even stricter prediction the two authors want to make is that the two categories should *always* have the same syntax, given the presence of the operator with possessive semantics. But, although Manzini and Franco (2016) provide an elegant solution to the

<sup>11</sup> Zonal inclusion covers various relations, such as being in the material possession, in the vicinity, etc.

<sup>12</sup> The analysis is specified to also work for intransitive predicates, but we leave the details aside here.

syntactic nature of the dative morphology for differential marking, the assumption of a *global* syntactic nature for both categories proves extremely problematic. As has been observed in both philological as well as more formal studies, a core puzzle with differential objects is that they pass syntactic diagnostics that are characteristic to accusative/absolute direct objects and not to dative indirect objects. For example, in languages like Spanish dative marked differential objects undergo passivation just like regular inanimate internal arguments which cannot take the *a* marker. Thus, the structures containing direct objects in (3)(c) and (3)(d) have the passive counterparts in (23). However, indirect objects marked with the dative *a* cannot undergo passivization, as shown by the contrast in (24):

(22) Structure of Participant DPs with dative differential marking – example (3)(c)



(23) Passivization of direct objects *possible* in Spanish irrespective of DOM

- (a) La niña fue encontrada.  
 DEF.F.SG girl was found.F.SG  
 ‘The girl was found.’ (passive corresponding to DOM transitive in (3)(c))
- (b) El libro fue encontrado.  
 DEF.M.SG book was found.M.SG  
 ‘The book was found.’ (passive corresponding to non-DOM transitive in (3)(d))

(24) Indirect object passivization *not possible* in Spanish

- (a) Le doy el libro a la mujer.  
 CL.3SG.DAT give DEF.M.SG book DAT DEF.F.SG woman  
 ‘I give the book to the woman.’ (adapted after Bárány 2018: 1c)
- (b) \*[(A) la mujer fue dado el libro].  
 DAT DEF.F.SG woman was given.M.SG DEF.M.SG book  
 Intended: ‘The woman was given the book.’ (adapted after Bárány 2018: 2c)

The presence of PPA with differentially marked objects is equally problematic. We have seen that this morphology, which is overt in both Neapolitan and Gujarati, characterizes accusatives/absolutives and not datives. Under the assumption that DOM and datives have the same syntax, it is not clear how this fact can be accommodated. Moreover, the languages examined here present other non-trivial diagnostics under which DOM and

datives behave differently from a syntactic point of view. We summarize some of them<sup>13</sup> in Table 1 below:

*Table 1*  
ACC, DOM and OBL syntactic diagnostics

DIAGNOSTIC & LANGUAGE	ACC	DOM	DAT/OBL
PPA (Neapolitan, Gujarati)	√	√	*
<i>(Periphrastic) Passivization</i> (Neapolitan, Gujarati, Basque, Spanish)	√	√	*
<i>ACC clitic doubling of DOM</i> (Standard Spanish pronouns, Neapolitan)	√	√	*
<i>Case preserved under nominalization</i> (Spanish, Neapolitan, Gujarati, Basque)	*	*	√
<i>Hosting secondary predicates</i> (Spanish, Neapolitan, Gujarati, Basque)	√	√	*(or very restricted)
<i>Hosting reduced relative clauses</i> (Spanish, Neapolitan, Gujarati, Basque)	√	√	*
<i>PCC</i> (Spanish, Neapolitan, Basque)	√	√	*
		(Basque, Odria 2019)	

Manzini and Franco (2016) are aware of the syntactic differences between the DOM and datives. The solution proposed is to attribute them to independent explanations. For example, it is claimed that periphrastic passivization does not undermine the syntactic unity of DOM and OBL as it is due to independent conditions affecting accusatives. These conditions are however not discussed. The PPA configurations are left aside in the 2016 paper, but taken up in Manzini in Franco (2019), where accusative agreement with differential objects is assimilated to variation in agreement seen with partitives (*a group of children comes* or *a group of children come*). However, one problem is that DOM and partitives diverge with respect to this diagnostic in the languages under discussion here.

## 5. DATIVE DOM IN THE SYNTAX – MULTIPLE LICENSING

To summarize what has been discussed in the previous sections, we have put forward the following observations:

- Direct objects which encode features at the higher end of *Scales* have a surprising property: in a wide range of genetically unrelated languages they tend to be signaled by dative (oblique) morphology
- Dative DOM can co-occur with accusative/absolute agreement

<sup>13</sup> The full data cannot be inserted here for lack of space. For Spanish more details can be found in Bárány (2018), for Basque in Odria (2017), for Neapolitan in Ledgeway (2000), and for Gujarati in Mistry (1976), a.o.

- Dative DOM as surface opacity encounters several sets of problems, among which the issue that differentially marked objects are active in the syntax in different ways than corresponding structural internal objects, as demonstrated by PCC effects, a.o.;
- The assumption of a common syntactic structure specified as the presence of an inclusion operator (Manzini and Franco 2016), on the other hand, cannot predict the important syntactic differences between DOM and oblique datives

The robust conclusion is that, although differential objects must have a dedicated syntax, which sets them aside from non-differentially marked internal arguments, their structural make up is not identical to that of datives either. In fact, DOM shares some non-trivial syntactic properties with non-DOM internal arguments, and it also shares some morphological features with datives. DOM-ed objects also exhibit differences: morphological and syntactic with respect to non-DOM direct objects, and syntactic with respect to indirect object datives. The challenge is how to reconcile these facts and how to derive the presence of dative morphology. We are also interested in whether the syntactic differences DOM exhibits with respect to non-DOM direct objects can be connected to some structural piece in the composition of DOM which is in turn spelled-out as the dative.

The answer we propose here builds on recent accounts on multiple case assignment (Richards 2013, Pesetsky 2014, Chen 2018, a.o.). The leading hypothesis in these analyses is that case licensing operations can apply to a nominal more than once; moreover, one of these operations can be connected to an information-structure or discourse-related property, beyond Case per se (see especially Chen 2018, a.o). In some languages, spell-out overtly indicates the presence of the multiple licensing operations, for example as case stacking.

We unify the differential marking configurations (discussed in this paper) with the presence of more than one feature on the same nominal that requires licensing. As the initial licenser in the low verbal domain ( $\nu$ P) checks the grammatical Case feature, any additional feature will require an additional licenser. This implies that an independent functional projection in the  $\nu$ P is recruited and values the additional feature. The result of this additional licensing operation is the *spell-out of dative (oblique) morphology*. The idea of a secondary licenser follows the insights in the so-called *Kayne's Generalization*, as formulated by Jaeggli (1982) for DOM, and reinstated more recently by Kalin (2018) or Levin (2019).

As the various features in the nominal get licensed by distinct functional projections, the analysis predicts that differential marking co-occurs with other types of morphology tracking grammatical information. The feature that is spelled-out as dative on DOM is, strictly speaking, independent of an uninterpretable case [uC] specification. We further corroborate these hypotheses with insights from the recent discussion in Miyagawa (2017) according to which features requiring licensing on a nominal can be of two types, either  $\varphi$  (purely grammatical) or  $\delta$  (discourse) related. We see here a configuration where differential object marking, which targets a  $\delta$  feature, can co-occur with morphology which signals the  $\varphi$ -related accusative/absolute Case. This gives us precisely the pattern we see in Neapolitan or Gujarati, where dative DOM co-occurs with accusative/absolute morphology.

We have also seen that DOM exhibits crucial syntactic distinctions from the dative. For this reason, we do not follow the assumption that DOM and datives are unified by the presence of a predicate/operator specified with an oblique nature and possession semantics (QP ( $\subseteq$ ) in Manzini and Franco 2016). We follow instead other lines of research (building on Richards 2008, a.o.) under which features like animacy, humanness, etc., are related to a [+PERSON] specification. With insights from Givón (1984) regarding the correlation between dative DOM and the discourse, we also build on various works (Nevins 2007, Zubizarreta and Pancheva 2018, a.o.) where [+PERSON] is linked to the discourse in that it specifies those entities that are participants in a certain discourse setting. The syntactic projection which is spelled-out as dative, on the other hand, contains a [+PERSON] specification and can match/value the corresponding feature in the DPs.

The current proposal has a wider cross-linguistic coverage than the assumption of a common operator with an oblique nature. On the one hand, it can be extended to languages where DOM is not signaled by oblique morphology and also to languages where specifications at the higher end of *Scales* (animacy, topicality, etc.) are spelled-out by (accusative) case stacking, without the need of oblique markers. The problem boils down to understanding what the possible licensors are in a specific language<sup>14</sup>; there can be varieties (such as those discussed here) where an additional [+PERSON] specification on a DP can only be checked by the dative functional projection, as no other functional projection endowed with [PERSON] is available at the necessary locus in the derivation. A further advantage is that the [+PERSON] hypothesis also allows us to derive the PCC facts, which do not go through in other accounts. Below we make more precise some of the core assumptions underlined here.

### 5.1. Animacy and [PERSON]

The DOM cases discussed here are, generally, conjunctive systems where animacy is tracked alongside other specifications such as specificity, and/or topicality. The important role animacy plays in differential marking systems has been examined in more detail in recent accounts. We have seen that marking associated to animacy has a deep syntactic nature. In accounts put forward by Richards (2008), Cornilescu (2000), Adger and Harbour (2007), Nevins (2007), Zubizarreta and Pancheva (2018), a.o, animacy is seen as a reflex of a [PERSON] feature. Following Anagnostopoulou (2003) we use a binary specification (+/-) just for convenience. We include below a feature geometry, adapted after Harley and Ritter (2002) and Nevins (2007).

Table 2

[PERSON] and animacy

PERSON/ANIMACY	FEATURES
1 <sup>st</sup> person	[+PERSON] (= [+PARTICIPANT]) speaker
2 <sup>nd</sup> person	[+PERSON] (= [+PARTICIPANT]) addressee
3 <sup>rd</sup> person [+human, +animate]	[+PERSON] (= [+PARTICIPANT])

<sup>14</sup> This can also explain why in some languages the differential marker is only seen on direct objects, as opposed to subjects.

## 5.2. Multiple licensing operations

Given that certain nominals can contain additional [+PERSON ] features, we can obtain a system like the one in (25); we see there that the direct object contains an [uC] feature as well as a [+PERSON] feature, the latter being read off as animacy. For simplicity, we decompose the verbal domain into two functional licensing projections, namely  $\nu$  and Voice. This will allow us to better explain the marking in languages like Neapolitan, where as we saw in examples like (4)(a), differential objects can have three layers of marking: direct object agreement, a clitic double which can only have accusative morphology and differential marking which is homophonous with the dative. We assume that accusative clitic doubling is checked by Voice (or higher). The feature that is spelled out as PPA is the [uC] feature on the object DP; it is checked by  $\nu$ , namely the main licenser in this domain. After  $\nu$  is used up, a new licenser must be made available as there are still features left unchecked, namely the [+PERSON] feature, which is connected to animacy. The Appl head (which licenses indirect objects) has [+PERSON] specifications and will act as a last resort licenser to avoid a derivation crash, triggered by a [+PERSON] feature that would otherwise be left unlicensed. The presence of Appl as a secondary licenser explains the presence of dative morphology on differential objects in Neapolitan and Gujarati, as well as of dative agreement in Basque<sup>15</sup>. The syntactic behavior of such objects is however systematically accusative, as shown above. This is due to the fact that such objects contain a [uC] feature which is checked in a configuration where the initial licenser ( $\nu$ ) can only check accusative case.

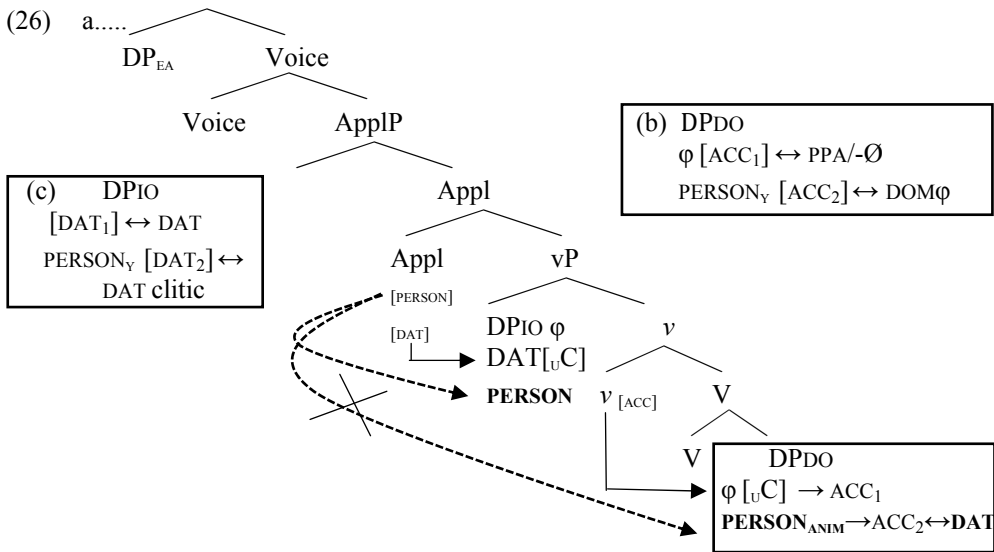
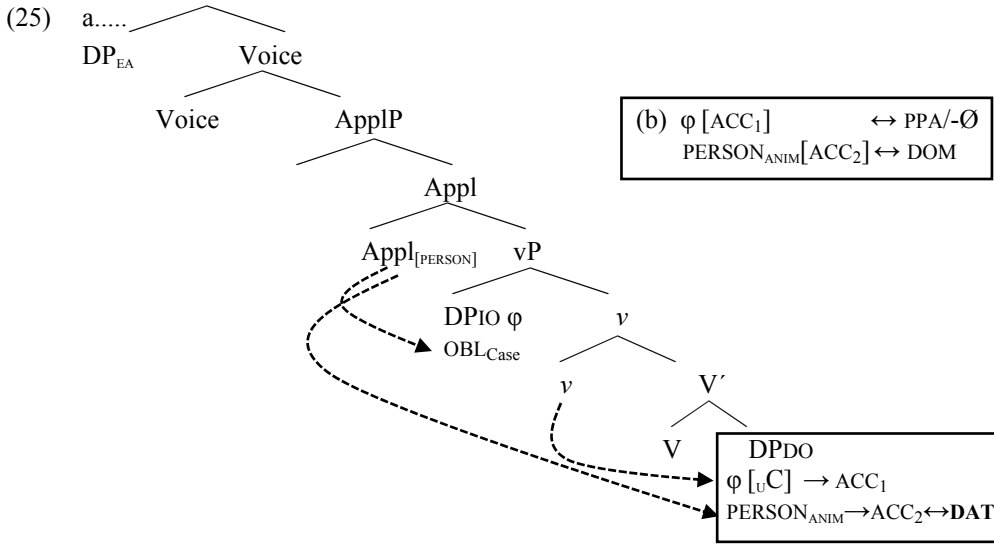
## 5.3. DOM and the PCC

The multiple case assignment system devised here, together with the animacy as [PERSON] hypothesis can also straightforwardly derive the PCC with DOM contexts. We have provided the relevant examples in (15)(b), (16), (18), and (19). These contexts have shown that a differentially marked clitic or full DP are incompatible with other structural datives (either dative clitics in Spanish or Neapolitan, indirect objects that show dative agreement in Basque or indirect objects that are clitic doubled by a dative clitic double in Spanish). Using an intervention-based account for the PCC under Anagnostopoulou's (2003) initial formulation, we propose that the ungrammaticality is triggered here by the impossibility to check more than one [+PERSON] feature. Some dative indirect objects come specified with a [+PERSON] feature that needs to be licensed (as opposed to being only inherent/lexical datives or containing just a dative Case feature). The [+PERSON] specification on Appl will be used for this purpose<sup>16</sup>. However, the [+PERSON] on the direct object (the one responsible for animacy) will remain unchecked, as the only [+PERSON]

<sup>15</sup> Given that there are at least two features that require licensing (inside  $\nu$ P), the system predicts variation at Spell-Out. For example, we can obtain this type of parametrization: i) languages where DOM surfaces with both DAT and ACC morphology (like Neapolitan); ii) languages where the morphology is systematically accusative (like Romanian, where DOM does not use dative morphology); iii) languages where the overt morphology is systematically dative (such as Southern Basque). In the latter language, morphological insertion seems to be regulated by competition. As discussed in numerous contributions (Fernández and Rezac 2106, Odria 2017, 2019), absolutive agreement in Basque also signals the presence of a [+PERSON] feature, distinct from the DOM one. Spell-Out distinguishes the two categories (DOM and non-DOM absolutive) by extending the dative morphology across-the-board to DOM. However, its syntactic behavior is absolutive, as shown above.

<sup>16</sup> And in languages like Neapolitan, Spanish, a dative marked clitic gets spelled out besides the dative morphology on the nominal.

licenser available has been used up. No other [+PERSON] licenser can be recruited, as Appl is already last-resort in vP. The [+PERSON] feature on the direct object remains unlicensed; given that it is a feature which requires obligatory licensing<sup>17</sup> (Nichols 2001, Béjar and Rezac 2003, Preminger 2019, a.o.), probably due to its relevance in the discourse, ungrammaticality ensues in the derivation.



<sup>17</sup> As opposed to regular φ features which do not trigger a clash in the derivation if left unchecked (Preminger 2014). This can also explain why in some languages PPA/ACC object agreement is not overt.

The intervention-based account used here has another advantage. It avoids the problems raised by connecting DOM (animacy) to the Object Agreement Constraint (OAC) introduced by Ormazabal and Romero (2007). Its formulation in (17) predicts the data from Neapolitan and Gujarati, as well as southern Basque to be ungrammatical. As we saw, the problem is that DOM can co-occur not only with direct object agreement, but also with indirect object Case at the same time. The PCC data further corroborate the observation that the restriction is not simply about blocking more than one type of (object) agreement on the verbal complex. What causes a clash here is rather the presence of more than one category that requires obligatory licensing to the discourse, in the form of a [PERSON] feature. The analysis proposed in this paper can straightforwardly capture these facts. The licensing of differential objects is a matter of an additional (Agree) licensing operation beyond [uCase]; thus the supplementary  $\delta$ -licensing mechanism is not only responsible for the appearance of dative (oblique) morphology but also interacts with other  $\delta$ -licensing processes in the configuration;  $\phi$  licensing strategies which might result in object agreement are not affected.

## 6. CONCLUSIONS

In this paper we have examined the hypothesis that, in some languages, differential object marking instantiates a multiple case configuration, in that it signals an additional licensing operation, beyond phi-licensing ([uCase]). Following Givón (1984), as well as more recent work we have connected this additional licensing strategy to the need of certain categories to be linked to the discourse. We have also shown that this analysis can straightforwardly derive the puzzling dative morphology on objects which otherwise have a syntactic *accusative/absolutive* nature. Another advantage is that DOM similarities with as well as differences from both accusatives and datives can be easily reconciled.

## REFERENCES

- Adger, D., D. Harbour, 2007, "Syntax and syncretisms of the Person Case Constraint", *Syntax*, 10, 1, 2–37.
- Aissen, J., 2003, "Differential object marking: Iconicity vs. economy", *Natural Language and Linguistic Theory*, 21, 3, 435–483.
- Anagnostopoulou, E., 2003, *The syntax of ditransitives. Evidence from clitics*. Berlin/New York, Mouton de Gruyter.
- Bárány, A., 2018, "DOM and dative case", *Glossa*, 3, 1, 97, 1–40.
- Béjar, S., M. Rezac, 2009, "Cyclic Agree", *Linguistic Inquiry*, 40, 1, 35–73.
- Bobaljik, J. D., 2008, "Where's  $\phi$ ? Agreement as a postsyntactic operation", in: D. Harbour, D. Adger, S. Béjar (eds), *Phi-theory: Phi features across modules and interfaces*, Oxford, Oxford University Press, 295–328.
- Bonet, E., 1994, "The Person-Case constraint: A morphological approach", in: H. Harley, C. Phillips (eds), *MIT Working Papers in Linguistics 22: The morphology-syntax connection*, Cambridge, MA, MITWPL, 33–52.
- Bossong, G., 1991, "Differential Object Marking in Romance and beyond", in: D. Wanner, D. Kibbee (eds), *New Analyses in Romance Linguistics: Selected Papers from the XVIII Linguistic Symposium on Romance Languages*, Urbana-Champaign, April 7-9, 1988, Amsterdam, John Benjamins, 143–170.
- Bossong, G., 1998, "Le marquage différentiel de l'objet dans les langues d'Europe", in: J. Feuillet (ed.), *Actance et valence dans les langues de l'Europe*, Berlin, Mouton de Gruyter, 259–294.

- Chen, T., 2018, *Multiple Case assignment: an Amis case study*, Doctoral dissertation, MIT.
- Comrie, B., 1989, *Language universals and linguistic typology*, Oxford, Basil Blackwell.
- Cornilescu, A., 2010, “Notes on the interpretation of the prepositional accusative in Romanian”, *Bucharest Working Papers in Linguistics*, 2, 1, 91–106.
- Dalrymple, M., I. Nikolaeva, 2011, *Objects and information structure*, Cambridge, Cambridge University Press.
- Fernández, B., M. Rezac, 2016, “Differential object marking in Basque varieties”, in: B. Fernández, J. Ortiz de Urbina (eds.), *Microparameters in the Grammar of Basque*, Amsterdam, John Benjamins, 93–238.
- Givón, T., 1984, “Direct objects and dative shifting: Semantic and pragmatic case”, in: F. Plank (ed.), *Objects. Towards a theory of grammatical relations*, London, Academic Press, 151–183.
- Halle, M., A. Marantz, 1993, “Distributed morphology and the pieces of inflection”, in: K. Hale, S. J. Keyser (eds), *The view from Building 20*, Cambridge, MA, MIT Press, 111–176.
- Harley, H., E. Ritter, 2002, “Person and number in pronouns: a feature-geometric approach”, *Language*, 78, 3, 482–526.
- Jaeggli, O., 1982, *Topics in Romance syntax*, Dordrecht, Foris.
- Kalin, L., 2018, “Licensing and differential object marking: the view from Neo-Aramaic”, *Syntax*, 21, 2, 112–159.
- Keine, S., 2010, *Case and agreement from fringe to core: a minimalist approach*, Berlin/New York, de Gruyter.
- Keine, S., G. Müller, 2008, “Differential argument encoding by impoverishment”, in: M. Richards, A. L. Malchukov (eds), *Scales*, Linguistische Arbeits Berichte volume 86, Universität Leipzig, 83–136.
- Ledgeway, A., 2000, *A comparative syntax of the dialects of southern Italy: a minimalist approach*, Oxford, Blackwell.
- Levin, T., 2019, “On the nature of differential object marking: insights from Palauan”, *Natural Language and Linguistic Theory*, 37, 1, 167–213.
- López, L., 2012, *Indefinite objects: scrambling, choice functions and differential marking*, Cambridge, MA, MIT Press.
- Loporcaro, M., 1998, *Sintassi comparata dell'accordo participiale romanzo*, Turin, Rosenberg and Sellier.
- Loporcaro, M., 2010, “The logic of past participle agreement”, in: R. D'Alessandro, A. Ledgeway, I. Roberts (eds), *Syntactic variation: the dialects of Italy*, Cambridge, Cambridge University Press, 225–243.
- Manzini, M. R., L. Franco, 2016, “Goal and DOM datives”, *Natural Language and Linguistic Theory* 34, 1, 197–240.
- Manzini, M. R., L. Franco, 2019, “Agreement of structural obliques parameter: DOM and pseudopartitives”, *Linguisticae Investigationes*, 42, 1, 82–101.
- Mistry, P. J., 1976, “Subject in Gujarati: An examination of verb agreement phenomenon”, in: M. Verma (ed.), *The notion of subject in South Asian languages*, Madison, WI, University of Wisconsin, 240–268.
- Mistry, P. J., 1997, “Objecthood and specificity in Gujarati”, in: J. Hill, P.J. Mistry, L. Campbell (eds), *The life of language*, Berlin, Mouton de Gruyter, 425–442.
- Miyagawa, S., 2017, *Agreement beyond phi*, Cambridge, MA, MIT Press.
- Nevins, A., 2007, “The representation of third person and its consequences for person-case effects”, *Natural Language and Linguistic Theory*, 25, 2, 273–313.
- Nichols, L., 2001, “The syntactic basis of referential hierarchy phenomena. Clues from languages with and without morphological case”, *Lingua*, 111, 4–7, 515–537.
- Odria, A., 2017, *Differential Object Marking and datives in Basque syntax*, Doctoral dissertation, UPV/EHU.
- Odria, A., 2019, “DOM and datives in Basque: not as homogeneous as they might seem”, *Linguisticae Investigationes*, 42, 1, 7–30.

- Ormazabal, J., J. Romero, 2007, "The object agreement constraint", *Natural Language and Linguistic Theory*, 25, 2, 315–347.
- Ormazabal, J., J. Romero, 2013a, "Differential Object Marking, Case and Agreement", *Borealis. An International Journal of Hispanic Linguistics*, 2, 2, 221–239.
- Ormazabal, J., J. Romero, 2013b, "Non-accusative objects", *Catalan Journal of Linguistics*, 12, 155–173.
- Ormazabal, J., J. Romero, 2019, "Prolegomena to the study of object relations", *Linguisticae Investigationes*, 42, 1, 102–131.
- Pesetsky, D., 2014, *Russian Case morphology and the syntactic categories*, Cambridge, MA, MIT Press.
- Preminger, O., 2014, *Agreement and its failures*, Cambridge, MA, MIT Press.
- Preminger, O., 2019, "What the PCC can tell us about 'abstract agreement', head movement and locality", *Glossa*, 4, 1, 13, 1–42.
- Rezac, M., 2008, "The syntax of eccentric agreement: the Person Case Constraint and absolutive displacement in Basque", *Natural Language and Linguistic Theory*, 26, 1, 61–106.
- Richards, M., 2008, "Defective Agree: Case alternations, and the prominence of Person", in: M. Richards, A. L. Machukov (eds), *Scales*, Linguistische Arbeits Berichte 86, Universität Leipzig, 137–161.
- Richards, N., 2013, "Lardil 'Case stacking' and the timing of Case assignment", *Syntax*, 16, 1, 42–76.
- Rodríguez-Mondoñedo, M., 2007, *The syntax of objects. Agree and differential object marking*. Doctoral dissertation. University of Connecticut
- Silverstein, M., 1976, "Hierarchy of features and ergativity", in: R.M.W. Dixon (ed.), *Grammatical categories in Australian languages*, Atlantic Highlands, NS, Humanities Press, 112–171.
- Torrego, E., 1998, *The Dependencies of Objects*, Cambridge, MA, MIT Press.
- Woolford, E., 2006, "Case agreement mismatches", in: C. Boeckx (ed.), *Agreement systems*, Amsterdam/Philadelphia, John Benjamins, 299–316.
- Wunderlich, D., 2012, "Case and agreement variation in Indo-Aryan", Ms available on author's webpage.
- Zubizarreta, M. L., R. Pancheva, 2017, "A formal characterization of person-based alignments. The case of Paraguayan Guarani", *Natural Language and Linguistic Theory*, 35, 4, 1161–1204.