

# GENITIVE/‘OF’ ARGUMENTS IN DOM CONTEXTS

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**Abstract:** Manzini and Franco (2016) argue that in many languages, Differential Object Marking (DOM) of highly ranked DPs takes the form of embedding under the same part-whole  $\sqsubseteq$  predicate which introduces goal arguments; therefore DOM arguments surface as datives. Since genitive arguments are introduced by the part-whole or possession predicates  $\sqsubseteq$  as well, they predict that there are languages encoding DOM by the same morphemes as genitives (section 1). In section 2, we briefly review languages which externalize DOMs and genitives by the same morphology, leaving out datives (e.g. Slavic, Ossetic, Finnish). In section 3, we discuss what we argue is an instance of genitive DOM in prepositional contexts in Italian, whereby highly ranked referents (personal pronouns) are preceded by *di* ‘of’ whereas other DPs are embedded bare.

**Keywords:** genitive, DOM, possession, adpositions, oblique, dative.

## 1. INTRODUCTION: THE DATIVE/DOM SYNCRETISM

A widespread case pattern attested in DOM languages is characterized by the identity of DOM and dative morphology. For instance, in the majority of Romance languages, goal arguments and DOM arguments are both introduced by *a* ‘to’. We illustrate this with a Southern Italian variety, where *a* embeds a goal dative in (1) and a DOM object in (2a) – as opposed to the non-DOM object in (2b) (Manzini and Savoia 2005: §4.9.1).

|     |    |                   |        |       |                         |
|-----|----|-------------------|--------|-------|-------------------------|
| (1) | a. | da-nn-illə        | a      | jiddə | <i>Canosa di Puglia</i> |
|     |    | give-him-it       | to     | him   |                         |
|     |    | ‘Give it to him’  |        |       |                         |
| (2) | a. | sə                | vvistə | a     | kkur əmə                |
|     |    | I.am              | seen   | to    | that man                |
|     |    | ‘I saw that man.’ |        |       |                         |
|     | b. | sə                | vvistə | n     | əmə                     |
|     |    | I.am              | seen   | a     | man                     |
|     |    | ‘I saw a man.’    |        |       |                         |

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Manzini and Savoia's (2011a,b) basic idea concerning datives can be illustrated by reference to the simple English data in (3). Following Kayne (1984), Pesetsky (1995), Beck and Johnson (2004), Harley (2002), in (3a) a possession relation holds between the dative (*John*) and the theme of the ditransitive verb (*the books*). Manzini and Franco (2016) use the label  $\subseteq$  for the possession relation instantiated by the Preposition *to*. They take the content of  $\subseteq$  to be part/whole, akin to what Belvin and den Dikken (1997: 170) call zonal inclusion. Thus in (3b),  $P \subseteq$  takes as its internal argument its sister DP *John* (the possessor) and as its external argument the sister to its projection, i.e. the theme of the verb *the books* (the possessum).

(3) a. I gave the books to John  
 b. [VP gave [PredP the books [PP $\subseteq$  to John]]]

According to Manzini and Franco (2016) the syncretism of dative, as just defined in (3), and DOM, is based on the fact that the same lexical content  $\subseteq$  is instantiated in both contexts. In other words, object DPs highly ranked in animacy/definiteness require for their embedding the same elementary predicate  $\subseteq$  introducing goals. Specifically, while in (3b) the two arguments of  $\subseteq$  are two DPs, in structure (4) for sentence (2a), the two arguments of  $\subseteq$  are the object DP and an eventive constituent. Recall that Hale and Keyser (1993), Chomsky (1995) assume that transitive predicates result from the incorporation of an elementary state/event into a transitivizing *v* layer. Within such a framework, (2a) can be rendered as 'He had a sight of that man', where 'that man' is the possessor (or locator) of the sight sub-event (Svenonius 2002 uses the internal articulation of the predicate in a rather different fashion to predict datives with unergatives).

(4) [VP v [VP vvistə [PP $\subseteq$  a [DP kkur ɔmə]]]]

This sensitivity to the two layered *v*-*V* structure, on the other hand, characterizes only highly ranked referents. By contrast, indefinite/inanimate complements are embedded as accusative themes, as in structure (5) for sentence (2b). In (5), 'see' behaves as a single predicate while its lowly-ranked complement displays no sensitivity to the presence of sub-events/states.

(5) [VP v [VP vvistə [DP n ɔmə]]]

Under the line of analysis adopted here, therefore, languages with DOMs are those where an argument with highly ranked referential properties must have a role at least as high as that of 'possessor' (of the event), and cannot be embedded as bare themes. This is schematized in (6).

(6) DOM  
 [VP ... [\*( $\subseteq$ ) DP] ...] where DP is highly ranked (subject to parametric variation)

This treatment raises many questions, first of all, whether DOM can be cross-linguistically connected to obliquization – and secondarily what happens in languages where DOM object are externalized by an oblique different from the dative. Quite modestly, here, we will consider genitive/DOM syncretisms (i.e. instantiations of DOM by the genitive case/preposition) which are predicted to arise under Manzini and Savoia’s (2011b) approach to case in Albanian, i.e. a language with a single oblique case for both genitive and dative contexts.

Consider English (7a). The ‘s genitive ending or the *of* preposition introduces a possession relation between the argument it selects, namely *the woman* (the possessor), and the head of the DP, namely (*the*) *children* (the possesum). The content of the ‘s case or the *of* preposition is the same part/whole elementary predicate  $\sqsubseteq$  assumed above for datives. Thus in (7b)  $\sqsubseteq$  takes as its internal argument its sister DP (the possessor) and as its external argument its head N/D (the possesum) – saying that ‘the children’ is in the domain of inclusion of ‘the woman’.<sup>3</sup>

(7) a. The woman’s children/the children of the woman  
 b. [DP the children [PP $\sqsubseteq$  of the woman]]

Manzini and Savoia (2011b), argue that the widespread genitive/dative syncretism (e.g. in the Armenian and Romanian examples in this paper) corresponds precisely to such a common lexicalization. This approach is not incompatible with languages like English with two separate lexicalization for ‘to’ (dative) and ‘of’ (genitive). Simply genitive ‘of’ is specialized for DP-embedding of  $\sqsubseteq$  and dative ‘to’ for sentential embedding of  $\sqsubseteq$ . Similarly the *a* ‘to’ preposition of Italian, Spanish establishes a possession (or inclusion, or part/whole) relation between the argument it embeds (the whole or possessor) and the theme of a transitive verb (sentential/dative embedding). The *di/de* preposition also corresponds to a  $P(\sqsubseteq)$  category, which however establishes a possession/part-whole relation between

<sup>3</sup> As pointed out by an anonymous reviewer, the implication of the text that English *of* and English ‘s are entirely parallel is not without problems. Taking ‘s to be just a case ending we could assign to *the woman’s children* the structure in (i). The case ending would then take *the woman* as its internal argument and *children* as its external argument yielding the interpretation whereby the woman possesses/locates the children,

(i) [ $\sqsubseteq$ P [DP the woman] ‘s] [DP children]

We are aware that this analysis may be questioned on both syntactic and interpretive ground. Thus ‘s has phrasal attachment properties that make it unlike an inflectional case and more like a head; this further connects to certain interpretive difference between the two constructions (roughly the *of* genitive is more restricted). Our anonymous reviewer suggests that one may consider treating ‘s as with in Franco and Manzini (2017) – namely as an exponent of the reverse inclusion relation  $\supseteq$  with the embedding structure in (ii). The structure would then be read with *the children* as the internal argument of  $\supseteq$  and *the woman* as its external argument, i.e. roughly as ‘the woman has the children’. We note this as a formal possibility; the matter obviously requires further investigation.

(ii) [DP the woman [ $\supseteq$  ‘s [NP children]]]

the DP it embeds (the possessor or whole) and the DP that it modifies (DP/genitive-embedding).

Summarizing so far, dative (3b) and genitive (7b) involve the embedding of a DP under the  $\sqsubseteq$  structural layer. Furthermore, DOM involves embedding of highly ranked referents within VP under the same structural layer, as in (6). We therefore expect the Romance pattern in (1)-(2), where dative and DOM coincide – but we expect also additional patterns. Trivially, we expect languages in which DOMs, goal datives and possessors in the nominal domain (i.e. genitives) are externalized by the same morphology, since they all embed the same primitive  $\sqsubseteq$  syntactic relation. An example of this state of affairs is provided by Eastern Armenian in (8)–(9) (Dum-Tragut 2009: 84, 86–87). Genitives (8a), datives (8b) and DOMs (9) are all externalized by the same oblique *-i* inflection.

(8) a. ašakert-i girk’-ě nor ē. *Eastern Armenian*  
 pupil-gen book.nom-the new is  
 ‘the pupil’s book is new.’

b. dasaxos-ě usanol-i-n tvec’ girk’-ě.  
 lecturer.nom-the student-dat-the give-aor.3.sg book.nom-the  
 ‘The lecturer gave the book to the student.’

(9) Ašot-ě tes-av Aram-i-n  
 Ašot.nom-the see-aor.3sg Aram-dom-the  
 ‘Ašot saw Aram.’

Less trivially, we predict there to be languages which externalize DOMs and genitives with the same morphology, leaving out datives. We turn to some of them in section 2, before addressing a case study in Italian. In the meantime, it is worth introducing some brief general considerations on the conception of syncretism implied by the present discussion. In the standard generative morphology framework, namely Distributed Morphology (DM) syncretisms result from the application of morphological rules after the output of the syntax, but before lexical insertion. The argument has been made more than once (Kayne 2010: 171; Manzini and Savoia 2011a) that the morphological rules of DM are powerful enough to generate essentially any lexical string from any underlying syntactic structure. Markedness hierarchies (Calabrese 1998, 2008) are an interesting response to non-accidental syncretism patterns – since contiguity in lexicalization is made to depend on contiguity in the hierarchy. However they have the same problem as any extrinsic ordering device: is there any internal reason for the ordering? In other words, the markedness hierarchy is not generated by internal principles, but corresponds simply to the UG encoding of typological implicational scales. Much the same can be said of the nanosyntactic Case hierarchy of Caha (2009).

On the contrary we approach obliques (inflectional or prepositional) keeping Chomsky’s (2001) conclusions on the non-primitive nature of case firmly in mind. Oblique case is simply the name given to elementary predicative content when realized inflectionally on a noun. Correspondingly, Calabrese’s markedness

hierarchies, or nanosyntactic functional hierarchies need not (and cannot) play any role, since syncretism depends on shared content, namely  $\sqsubseteq$  in the instances discussed.

Vice versa, one may legitimately wonder what may be excluded from the denotation of such a wide-ranging relator. We observe that precisely because of its very general denotation, the part/whole or inclusion predicate (whether it corresponds to a case inflection or to a prepositional head) does not have sufficient lexical content to characterize, say, specific subtypes of possession, location, etc. Thus, in a language like Latin (the same) oblique case attaches to locations, possessors, goals e.g. *Romae* (Rome-obl) ‘in Rome, of Rome, to Rome (dative)’. However, there are no languages where the oblique case may denote, say, ‘after’ as opposed to ‘before’, ‘on’ as opposed to ‘under’, etc. To encode those meanings, natural languages usually resort to more specialized relational nouns/axial parts (Svenonius 2006).

## 2. THE GENITIVE/DOM SYNCRETISM

According to Bossong’s (1998) survey of the languages spoken in Europe, the Gen=DOM syncretism is attested in practically all Slavic languages, in Ossetic (Iranian) and in Mordvin (Uralic). We should add that Gen=DOM is not unknown to Baltic languages, as attested by Latgalian, a dialect of Latvian (Nau 2014). We may also consider Finnish (and other Uralic varieties behaving like Finnish), as a Gen=DOM language as we will see below. In all these languages, datives are externalized by a distinct morpheme.

For instance, Ossetic differentiates objects on the basis of their specificity/definiteness ((10a) vs. (10b)),<sup>4</sup> and uses the same morphology with DOMs (10a) and possessors (11) (Erschler 2009: 425).

|      |   |                                      |
|------|---|--------------------------------------|
| (10) | a. fexston dur-y<br>I.threw stone-dom<br>'I threw a stone'    | b. fexston dur <i>Ossetic</i>        |
|      |   | I.threw stone<br>'I threw the stone' |
| (11) | Lewan-y      fyd<br>Levan-gen      father<br>'Levan's father' |                                      |

<sup>4</sup> Indo-European DOM displays sensitivity to definiteness and/or to animacy. While some language animacy oriented (e.g. Indo-Aryan), others are definiteness oriented (e.g. Iranian); others yet are sensitive to both properties, for instance the Romance languages with DOM (Aissen 2003). This state of affairs is generally described in terms of the referential hierarchies that also determine ergativity splits, inverse agreement phenomena and a vast range of typological case and agreement alignments. A number of issues arise concerning the relation between definiteness/deixis and animacy/agentivity which are obviously beyond the scope of the present article.

The same morphology is employed to externalize other adjuncts. Thus the inessive (12) has the same *-y* ending as the DOM=Gen in (10a) and (11). Theories relying on a non-contentive construal of genitives (e.g. as means for identity avoidance, Richards 2010) face the fact that the same morphology is employed to lexicalize *bona fide* semantic relations, such as locatives. Of course this is not necessarily a problem given a realizational theory of morphology such as DM (see the discussion at the end of section 1). Vice versa, we may account for locatives (specifically state-in locatives like the inessive) in terms of inclusion in location, i.e. again in terms of the  $\sqsubseteq$  content with an added locative restriction; we return to this point in section 3.

|      |                     |               |               |            |              |
|------|---------------------|---------------|---------------|------------|--------------|
| (12) | χoxag               | qaw-y         | je-rynčyn     | mad-imę    | sard-iš      |
|      | mountain            | village-iness | 3sg.poss-sick | mother-com | live.pst-3sg |
|      | męg <sub>w</sub> yr | łeppu-leg     | Zabo          |            |              |
|      | poor                | boy-man       | Dzabo         |            |              |

‘In a mountain village, there lived a poor young man Dzabo with his sick mother.’

We further illustrate Lagtalian data in (13) (Nau 2014: 232), where case endings can be compared with the table of singular case inflections in (14) (Nau 2014: 214).

|      |    |                            |                      |              |                  |
|------|----|----------------------------|----------------------|--------------|------------------|
| (13) | a. | dzan                       | Pedz-is <sup>j</sup> | prūm.        | <i>Latgalian</i> |
|      |    | drive.prs.3sg              | Pedze-gen            | away         |                  |
|      |    | ‘...drives Pedze away.’    |                      |              |                  |
|      | b. | taisa                      | lyl-u                | gūd-u,       |                  |
|      |    | make.prs.3sg               | big-acc.sg           | feast-acc.sg |                  |
|      |    | ‘...organizes a big feast’ |                      |              |                  |

|      |     |         |    |                 |     |                  |                 |
|------|-----|---------|----|-----------------|-----|------------------|-----------------|
| (14) | I   | I < III | II | IV              | V   | VI               |                 |
|      | nom | -s      | -s | -s <sup>j</sup> | -a  | -e               | -s <sup>j</sup> |
|      | acc | -u      | -u | -i              | -u  | -i               | -i              |
|      | gen | -a      | -s | -a              | -ys | -is <sup>j</sup> | -s <sup>j</sup> |

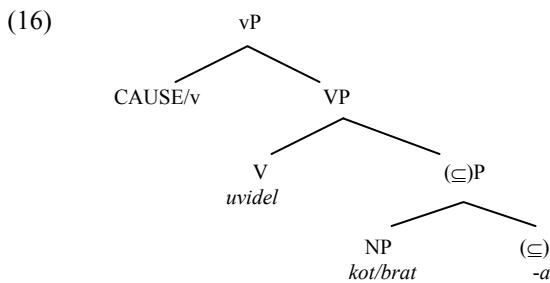
Glushan (2010), working in the Distributed Morphology (DM) framework, as defined specifically by Calabrese (1998, 2008), offers the generalization that languages in which no Nominative=Accusative syncretism obtains, have Dative as the output of the DOM rule. On the other hand, for languages in which the Nominative=Accusative syncretism obtains, the outcome of the DOM rule is a special marked Accusative case (Acc') or the syncretism of Acc' with either Dative or Genitive. Latgalian seems to us a good example of a language where (in the singular) there is no nominative/accusative syncretism and yet a genitive (rather than dative) DOM.

Coming then to more familiar languages, in Russian, a number of different patterns of syncretism are attested (Baerman and Brown 2013), for instance locative=dative (singular of *a*-stem nouns), locative=genitive (plural of adjectives

and pronouns), genitive=locative=dative (singular of *i*-stem nouns). A similar state of affairs is generally replicated in Slavic languages (Baerman et al. 2005). Slavic languages differ as to whether they manifest the DOM=Gen syncretism in the singular or in the plural, as well as with respect to the declensional and nominal (i.e. gender) classes involved (Bossong 1998). In Russian (15), highly individuated (i.e. animate) patients have an inflectional DOM=Gen ending (Kagan 2012).<sup>5</sup>

(15) Maša uvidel dom/kot-a/brat-a.  
 M. saw house/cat-gen/brother-gen  
 ‘Masha saw the house/the cat/the brother.’

Applying to Russian DOM genitives the same account Manzini and Franco (2016) propose for DOM datives (see section 1), we may represent DOM as in (16) for example (15), where ‘cat’ or ‘brother’ are lexicalized as possessors of the seeing/sight sub-event.



A further fact to consider is that genitive morphemes surface in many languages under negation. In Slavic languages, this phenomenon is widespread (Franks 1995). Polish, like all Slavic languages, exhibits an animacy triggered DOM (based on a +/- virile system, Brown 1998), as shown in (17). The same case seen on highly ranked referents in (17) also externalizes possession relations (as well as partitive relations) in the nominal domain, in (18) (Willim 1999: 196).

<sup>5</sup> Exceptions include animate internal arguments in the plural feminine (i) and neuter (ii), which are zero-marked, whereas the inanimate internal arguments are genitive marked (Bailyn & Nevins 2008 for a DM account).

(i) Ja vižu ženščin /dom-a  
 I see.prs.1sg women/house-gen  
 ‘I see these women/houses’

(ii) Ja znaju etix lic/ eti knig-i  
 I know these persons these.gen.pl book-gen.pl  
 ‘I know these persons/books.’

The DOM obliquization strategy in section 1 promotes animate/definite themes to possessors of an event/state and therefore it cannot apply to inanimates/indefinites. See also fn. 7.

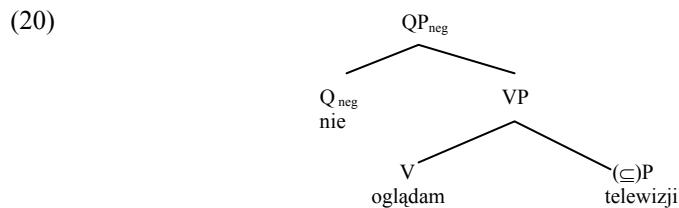
(17) Mam syn-a/ps-a/komputer. *Polish*  
 I.have son-gen/dog-gen/computer  
 'I have a son/a dog/a computer'

(18) pudelko zapalek Marysi  
 box matches.gen Mary.gen  
 'Mary's box of matches'

In addition, in Polish, the direct object in negative sentences (19b) is in the genitive, instead of the unmarked form employed in affirmatives (19a).

(19) a. Oglądam telewizję. b. Nie oglądam telewizji.  
 watch.1sg television  
 'I watch television.' neg watch.1sg television.gen  
 'I don't watch television.'

For genitives of negation, we assume the same morphosyntactic  $\subseteq$  structure as for possession genitives (as well as for genitive DOMs). Following Pesetsky (1982), Pereltsvaig (1999), a negative quantifier licenses the genitive objects embedded within its scope/domain, as schematically indicated in (20).<sup>6</sup>



The final DOM system to be considered in this section is Finnish (Kiparsky 2001), where affected and unaffected objects are assigned two different cases, namely partitive for non-affected objects, as in (21b), and a case morphologically identical to genitive for affected objects, as in (21a) (Kiparsky 1998: 267). To be more precise, genitive indicates that the whole of the quantity denoted by the object is affected by the verb. Partitive indicates merely that a given quantity exists, which happens to be affected by the verb (without further specification of how much it is affected).

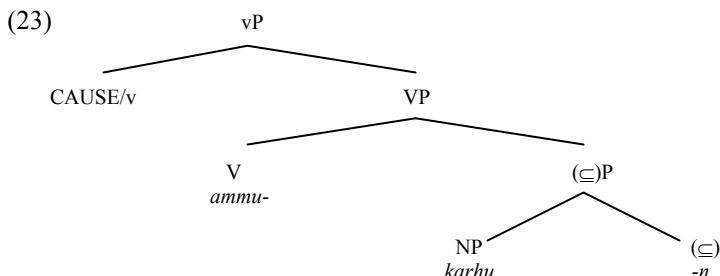
(21) a. Ammu-in karhu-n *Finnish*  
 shoot-pst.1sg bear-gen  
 'I shot the/a bear.'  
 b. Ammu-in karhu-a  
 shoot-pst.1sg bear-part  
 'I shot at the/a bear (the bear is not dead).'

<sup>6</sup> Manzini and Savoia (2011a) discuss several Romance varieties, where negation also requires partitive under a [Q ... [ $\subseteq$  DP]] structure.

Pronouns have an accusative case, distinct from the genitive. Hence accusative pronouns in affected contexts, as in (22a), alternate with partitive pronouns in non-affected contexts, as in (22b) (Kiparsky 1998: 279).

(22) a. Nää-n häne-t b. Nää-n häntä  
 see-1sg him-acc see-1sg him-part  
 ‘I see him/her.’ ‘I’m seeing him/her/I see a bit of him/her’

Summarizing, unaffected internal arguments are always partitive, independently of their position on the definiteness hierarchy, while affected objects split between genitive (lexical DPs) and accusative (pronouns). For Kiparsky (2001: 326, cf. Kiparsky 1998) partitive is a complement case (+LR, Lowest Role), genitive is a Spec case (+HR, Highest Role), and accusative is a case characterized by a negative value of both features (−LR, −HR) – corresponding to a higher (indirect) object, in his terms, i.e. a dative–though (goal) datives in Finnish are rendered as allatives, i.e. motion-to arguments. Suppose we maintain for Finnish genitives (possessors, objects, other environments) the same  $\subseteq$  content motivated in section 1 for Romance DOM datives and above for Russian DOM genitives. Affected objects bearing genitive in Finnish are then morpho-syntactically structured as in (23) for (21a). As before, we assume an underlying cause-result articulation of the event, represented by *v* and *V* respectively. Therefore  $(\subseteq)P$  introduces an argument construed as being in a possessor-possessed relation with the result sub-event.



We surmise that what is labelled as the accusative of pronouns, may be an instance of  $(\subseteq)$ . In Finnish, the *-t* inflection of the accusative pronouns is also the inflection of direct case arguments in the plural (Timberlake 1975). A syncretism between oblique singulars and direct case plurals is attested in Latin, in Albanian and in general in Indo-European languages. Manzini and Savoia (2011a, forthcoming) account for it by extending to plural inflections the  $\subseteq$  content. Specifically, the shared predicative content  $\subseteq$  may apply to sentential constituents, establishing an inclusion/possession relation between them, of the type seen so far. It may equally apply to the denotation of a root/stem, namely a set (of sets) of individuals, saying that a subset can be defined on it; this is the divisibility property that Borer (2005) identifies with plural. Based on this, we may take the syncretism between *-t* for accusative pronouns and *-t* for plural direct cases in Finnish, as

pointing to their common  $\subseteq$  content. In other words, it may be possible to extend to the Finnish so-called accusative pronouns the same  $\subseteq$  oblique content that we are attributing here to DOM genitives. This is not incompatible with Kiparsky (2001), who assumes that Finnish accusative pronouns are akin to datives (see the brief discussion of Kiparsky's feature system above).

In the imperative (24b), as well as in impersonal and non-finite contexts (Timberlake 1975) so-called nominative forms, i.e. forms unmarked for case, replace genitive objects as seen in (24a). On the contrary, the personal pronoun *häne* 'he' still retains its *-t* inflection, as in (24b), so that in our terms, personal pronouns retain their 'possessor' connotation also in this syntactic environment.

(24) a. Tuo-n häne-t/karhu-n b. Tuo häne-t/karhu  
bring1Sg he-Acc/bear-Gen bring.imp he-Acc/bear(Nom)  
'I bring him/the bear' 'Bring him/the bear!'

The contexts not displaying DOM (at least in present terms) are generally characterized as being subject-less. The admittedly important issue why they would exclude DOM will be left open here. As stated at the outset, our aim is quite modest, namely to verify the prediction that DOM may be genitive (as well as dative), before turning to our Romance case study. For the same reason, the Finnish partitive, as illustrated in (21b)-(22b), is beyond the scope of this article. Indeed Kiparsky (1998, 2001) (cf. Vainikka 1993) assumes that partitive expresses a 'complement case' attached to the NP merged as the sister of V. More recently, Poole (2015) assumes a tripartite v-Asp-V predicate structure, where the genitive-marked NP undergoes A-movement to the Aspectual projection with telic events (which is compatible with present hypotheses), while the partitive is spelled-out *in situ* in atelic constructions. These analyses configure the partitive as a direct case of sorts, perhaps the true accusative of the system.<sup>7</sup>

<sup>7</sup> This is not to deny that English marks the unbounded event in (ii) with a richer embedding structure than the bounded event in (i) (Tenny 1994).

(i) cut the bread (ii) cut at the bread

Similarly in Dutch, the (animate) undergoer of the biting action, *de man*, is encoded as a regular direct object in (iii), while the inanimate *het brood* in (iv), is encoded as a prepositional phrase (*in*). This alternation is generally observed with verbs denoting physical contact (e.g. *bijten* 'to bite', *slaan* 'to hit', *schoppen* 'to kick'), according to de Swart (2014).

(iii) De hond beet de man  
the dog bit the man  
'The dog bit the man.'  
(iv) De hond beet in het brood.  
the dog bit in the bread  
'The dog bit the bread.'

However, though these facts may very well insist on the same conceptual hierarchies as DOM, they differ from it in that DOM has counterparts such as inverse agreement phenomena (a highly ranked object takes precedence over a lower ranked subject for Agree) or the Person Case Constraint (a highly ranked object blocks a lower ranked dative). There are no analogous constraints governed by hypothetical anti-DOM scales.

### 3. GENITIVE DOM IN ROMANCE

Let us consider Romance languages again. We used a Romance language in (1) to exemplify the coincidence of DOM morphology with goal datives, construed as  $\subseteq$  obliques. Before going on to Romance examples of the externalization of DOM by genitive (*di/de* ‘of’) morphology, it is worth commenting briefly on another possibility for the lexicalization of DOM, prominently displayed by Romanian (Dobrovie-Sorin 1994). Romanian has an inflectional oblique, covering genitive, as in (25b) and dative, as in (25a) (Dimitrova-Vulchanova and Giusti 1998: 342). Needless to say, the oblique inflection can be assigned the  $\subseteq$  content in our framework.

(25) a. L- am dat băiet-i-l-or/ fet-e-l-or *Romanian*  
 him.it I.have given boy-mpl-def-obl/girl-fpl-def-obl  
 ‘I gave it to the boys/ girls’

b. pahar-ul băiet-i-l-or /fet-e-l-or  
 glass-msg.def boy-mpl-def-obl/girl-fpl-def-obl  
 ‘the glass of the boys/ girls’

However the DOM morphology does not coincide with the oblique case but with a prepositional expression. Thus animate/specific internal arguments are introduced by the preposition *pe*, as in (26b) (Mardale 2009: 64), which is independently attested in Romanian as a locative.<sup>8</sup>

(26) a. Caut un student.  
 Seek.prs.1sg a student  
 ‘I’m looking for a student.’

b. Il caut pe un student.  
 cl.acc seek.1sg.prs pe a student  
 ‘I’m looking for a student.’

The oblique  $\subseteq$  relation can encompass the notion of location – which is in fact in competition with it as the primitive underlying possession (Freeze 1992). Specifically Franco and Manzini (2017) assume that locatives are construed in terms of a locative restriction on the  $\subseteq$  relation, namely ‘x included by y, y a location’, where different locatives introduce different restrictions. Suppose we apply this general suggestion to Romanian *pe*; *pe* will involve the same basic predicate  $\subseteq$  assumed so far for DOM objects – except with a locative restriction. In fact, it is reasonable to assume that the locative restriction is lifted in DOM contexts, producing the typical ‘bleaching’ effect invoked in grammaticalization accounts.

<sup>8</sup> Though the *pe* phrase is doubled by a clitic in (27b), this is not necessarily the case, according to the literature (Dobrovie-Sorin 1994). For instance, *pe* is mandatory with indefinite quantifiers such as *nimemi* ‘no-one’, *cineva* ‘somebody’, while the clitic is ungrammatical (López 2012).

This brief mention of locatives is useful in introducing the next and final topic of our discussion – namely the fact that though DOM is a phenomenon normally studied in relation to the embedding of verbal objects, it is in fact attested in prepositional embedding as well. Specifically the choice of locative prepositions in Romance is in part governed by strictly locative notions, but in part also by the ranking of the prepositional object in the animacy/definiteness hierarchy. We will take Italian as our primary case study. An example of specifically locative notions encoded by prepositions is the contrast between proper containment in a location, lexicalized by Italian *in* ‘in, into’ and adjacency to location (partial containment), lexicalized by Italian *a* ‘at, to’, as shown in (27) for state-in contexts and in (28) for motion-to contexts.

(27) a. Sono nel Colosseo  
I.am in.the Coliseum  
'I am inside the C.'

b. Sono al Colosseo  
I.am at.the Coliseum  
'I am in the proximity of the C.'

(28) a. Entro nel Colosseo  
I.enter into.the Coliseum  
'I go inside the C.'

b. Vado al Colosseo  
I.go to.the Coliseum  
'I go to the proximity of the C.'

In (27)–(28) it can be seen that both state-in and motion-to are encoded by the same prepositions. Incidentally English is more sensitive to directionality as can be seen from the obligatory distinction between *in* (state-in) and *into* (motion-to), as well as between *at* and *to*. However motion-from is another specifically locative dimension encoded by the grammar of Italian and corresponds to the deployment of the preposition *da* ‘from’, as in (29); note that in this instance proper containment vs. adjacency is disregarded.

(29) Vengo dal Colosseo  
I.come from.the Coliseum  
'I am coming from/from inside the Coliseum'

In all of this, what we are interested in is the further fact that purely locative parameters are suspended when location is defined by highly ranked, i.e. human, individuals – in other words, when human referents form the Ground of the locative relation, in the sense of Talmy (1985). In this case, the locative relator is *da*, independently of directionality.

(30) a. Sono/vado da lui  
I.am/I.go at/to him  
'I am in his proximity/I go to his proximity'

b. Sono/vado da Gianni  
I.am/I.go at/to Gianni  
'I am in the proximity of Gianni/I go to the proximity of Gianni'

c. Sono/vado/esco                    dal                    parrucchiere  
 I.am/I.go/I.come.out            at/to/from.the    hairdresser  
 ‘I am at the hairdresser/I go to the hairdresser/I am coming out of the  
 hairdresser’s’

The data in (27)-(30) raise an interesting question given the present approach based on substantive content, namely why there would be coincidence between the preposition introducing location at highly ranked referents in (30) and the preposition introducing motion-from in (29). We provide no answer here; the Italian syncretism is not replicated in other Romance languages, where one finds dedicated prepositions such as French *chez* (Longobardi 2001). What is directly relevant, and in fact fairly striking, is that languages like Italian or French that display no DOM phenomenon in the embedding of verbal arguments, nevertheless are associated with sensitivity to referential prominence hierarchies in the prepositional locative system. In other words the classical DOM of Romanian or of Central/Southern Italian dialects like (1) is part of a Romance continuum characterized by sensitivity to Person splits, animacy splits, definiteness splits which include the lexicalization of locatives (as noted by Fàbregas 2007).

Against this background, we concentrate on an instance of DOM in prepositional (locative) contexts characterized by the alternation between the bare embedding of lexical DPs and the embedding of pronouns *via* the genitive preposition *di* ‘of’. For instance, the genitive *di* preposition is possible (and preferred), with person pronouns in (31b), while it is excluded with lexical DPs, including human referents, as in (31a).

(31) a. Il            cane            corre            verso            il/\*del            suo            padrone  
 the            dog            runs            toward            the/of.the            its            owner  
 ‘The dog runs toward its owner’  
 b. Il            cane            corre            verso            (di)            me/voi/lei  
 the            dog            runs            toward            of            me/you/her  
 ‘The dog runs toward me/you/her’

In general, there is a set of Italian prepositions (*senza* ‘without’, *dopo* ‘after’ and others, see Rizzi 1988: 535–536) which employ a genitive *di* layer in order to embed personal pronouns, namely deictic elements. Other non-deictic complements are embedded bare. More precisely, Rizzi (1988) notes that it is possible to extend the use of the genitive *di* to demonstratives (e.g. *verso di questo*, ‘toward this’). This is consistent with what we know about the complex interplay of animacy and definiteness scales in Romance DOM. Demonstratives are obviously very high in the definiteness hierarchy, whence the behaviour observed by Rizzi.

In present terms, the relevant Italian Ps, though normally selecting a DP complement, are allowed (and for some speakers/contexts forced) to syntactically

encode their pronominal complements *via a*  $\subseteq$  (genitive) layer, as schematized in (32). Therefore highly ranked elements on the definiteness scale (deictic pronouns) are encoded as possessors of the spatial (or temporal, etc.) axis lexicalized by the preposition, which in the terms of Svenonius (2006), Franco (2016) is in fact an Axial Part. Note that the formulation in (32) emphasizes the parallelism with the classical sentential DOM schema in (6). This syntactic parallelism between the structure of prepositions and verbs is in keeping with recent literature (Svenonius 2007, Wood 2015).

(32) *DOM: Italian Ps* [<sub>PP</sub> P [ ( $\subseteq$ ) DP]] where DP = pronouns

The DOM phenomenon briefly illustrated in (31) is not to be confused with the fact that certain prepositions require or allow the  $\subseteq$  layer of embedding with all DP complements. This  $\subseteq$  layer may further correspond to a *di* lexicalization or to an *a* lexicalization, as illustrated in (33) for two instances where the  $\subseteq$  layer is obligatory. The two lexicalizations *a* and *di* are not interchangeable. Ultimately, lexical selection will play a role in the alternation of *di* and *a* in (33); one may nevertheless wonder whether there is an at least partially principled account of this selection. Recall that we suggested in section 1 that possessors inside DP are genitive/*di*-phrases; if we consider the connection of prepositions (*qua* Axial Parts) to nouns, we may reach the conclusion that *di* in (33a) is essentially the expected choice for oblique case embedding. Vice versa, if possessors inside DPs are genitives, then this presumably means that *a* complements of nouns are allowed to the extent that they are construed as locative.

(33) a. prima \*(della) pioggia/\*(di) te/\*alla pioggia  
before of.the rain/of you/to.the rain  
'before the rain/you'  
b. davanti \*(alla) porta/\*(a) te/\*della porta  
in.front to.the door/to you/of.the door  
'in front of the door/of you'

Now, the zero/*di* alternations in (31), governed by DOM, and lexical selection properties of the type in (33) interact in complex patterns of the type in (34)-(35). In (34a) the lexical DP can be embedded under an *a* layer, can be embedded bare – but cannot be embedded under a *di* layer. Nevertheless, (34b) shows that pronouns are preferentially embedded under a *di* layers, though bare embedding and *a* embedding remain possible. The data in (35) are similar though perhaps clearer, since the *a* layer present with lexical DPs in (35a) seems to be altogether replaced by a *di* layer with pronouns in (35b).

(34) a. sopra al tavolo/il tavolo/\*del tavolo  
above to.the table/the table/of.the table  
'on/above the table'

(35) b. sopra di/?Ø/?a te  
above of/Ø/to you  
'on/above you'

a. contro al muro/il muro/\*del muro  
against to.the wall/the wall/of.the wall  
'against the wall'

b. contro \*a/?Ø/dime  
against to/Ø/of me  
'He slammed against me'

Some authors (Tortora 2005, Folli 2008) consider the possibility of both *Ø* and *a* embedding in examples of the type in (34a), (35a), linking it to different aspectual interpretations of the Ground, namely as denoting bounded space/time (*Ø* objects) or unbounded space/time (*a* objects). Garzonio and Rossi (2016), however, point out that there is a great deal of intra-speaker variation in judgments, and that many speakers do not perceive any different aspectual interpretations related to the presence/absence of *a*.

In present terms, the *Ø/a* alternation in (34a) or (35a) again must ultimately depend on selection, namely on whether the preposition takes the DP ground as its sister yielding the configuration [PP P [DP]] – or rather it selects a possessor-possessum embedding, by means of a relator  $\subseteq$ . A role for selection in the assignment/licensing of oblique case is required independently of the data at hand. Thus there are famous instances of inter-linguistic variation in the verbal domain, for instance ‘help’. Italian *aiutare* ‘help’ selects accusative (bare) objects, while Latin *adiuvo* (transparently related to it) selects dative ones. German *helfen* selects dative–while English has again accusative. In those languages where ‘help’ takes dative, a  $\subseteq$  structure of embedding is present (‘cause help to’) while in the accusative embedding languages it is not. Thus accusative vs. dative selection corresponds to structures fixed by Universal Grammar, but which of the two embedding is chosen by any given language must be learned by the child. We assume that a similar variation can be instantiated intra-linguistically, yielding the alternation between zero embedding and  $\subseteq$  embedding in (34a), (35a).

Garzonio and Rossi further link the alternation among *Ø/a* in (34a), (35a) and *di* in (34b), (35b) to the movement of the DP Ground to various landing sites within a layered PP skeleton along the lines of Cinque (2010). Specifically, they derive the possibility of both *a* and *di* in examples like (34b) by assuming that pronouns move from the base generated Ground position to a Deictic projection within a DP PLACE projection when introduced by *di*, and to a stative PP layer (similar to Svenonius 2006’s PlaceP) when introduced by *a*. They also mention that different interpretive (aspectual) facts highlighted by Tortora and Folli may be linked to the different landing sites of the moved pronoun/DP.

There is no incompatibility between Garzonio and Rossi’s proposal and the present approach. However it seems to us that a position like DeicticP encodes the

DOM facts that we have illustrated rather than explaining them. In other words, it doesn't seem to have any advantage over the stipulation that we may offer here, that DOM in P contexts takes the form of genitive (as opposed to dative/locative) marking. The interesting question should rather be why. We do not really see any reason why genitive/*di* should be associated with Deictic in Garzonio and Rossi's model. In the terms suggested above switching from *a* to *di* means switching from locative to possessor embedding – giving us a potential insight as to why the latter would be preferred/necessitated by deictic elements. In any event, this point requires further research.

#### 4. CONCLUSION

In this paper we have addressed languages which externalize DOM arguments and genitives by the same morphology, leaving out datives. Building on Manzini and Savoia (2011b), Manzini and Franco (2016) we have assumed a part-whole content, notated as  $\sqsubseteq$ , for datives and genitives and we have further construed DOM in terms of the same elementary predicate. Thus while datives in ditransitive contexts and genitives introduce possessors of entities, DOM introduces possessors of (result) sub-events. This explains why one finds languages encoding datives, genitives (prototypical part-whole predicates) and DOMs with the same morphology. Languages with DOM=Gen reviewed in section 2 include the Slavic languages and Finnish. In section 3 we focussed on the Romance languages and specifically on a series of facts that illustrate how PP embedding, like vP embedding yields DOM of highly ranked referents. Specifically Italian pronouns trigger the presence of a *di* 'of' (genitive) layer of structure which is absent with non-pronominal DPs.

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#### REFERENCES

Aissen, J., 2003, "Differential Object Marking: Iconicity vs. economy", *Natural Language and Linguistic Theory*, 21, 3, 435–483.

Baerman, M., D. Brown, G. Corbett, 2005, *The Syntax-Morphology Interface: A study of syncretism*. Cambridge, Cambridge University Press.

Baerman, M., D. Brown, 2013, "Syncretism in verbal person/number marking", in: M. S. Dryer, M. Haspelmath (eds), *The World Atlas of Language Structures Online*, <http://wals.info/chapter/29>.

Bailyn, J., A. Nevins, 2008, “Russian genitive plurals are impostors”, in: A. Bachrach, A. Nevins (eds), *Inflectional identity*, Oxford, Oxford University Press, 237–270.

Beck, S., K. Johnson, 2004, “Double objects again”, *Linguistic Inquiry*, 35, 1, 97–124.

Belvin, R., M. den Dikken, 1997, “*There, happens, to, be, have*”, *Lingua*, 101, 151–183.

Borer, H., 2005, *Structuring Sense*, 2 vols., Oxford, Oxford University Press.

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, 193–258.

Brown, D., 1998, “Defining ‘subgender’: Virile and devirilised nouns in Polish”, *Lingua*, 104, 197–233.

Caha, P., 2009, *The nanosyntax of case*, Ph.D. Dissertation, CASTL, Tromsø.

Calabrese, A., 1998. “Some remarks on the Latin case system and its development in Romance”, in: J. Lema, E. Trevino (eds), *Theoretical advances on Romance Languages*, Amsterdam, John Benjamins, 71–126..

Calabrese, A., 2008, “On absolute and contextual syncretism”, in: A. Nevins, A. Bachrach (eds), *The bases of inflectional identity*, Oxford, Oxford University Press, 156–205.

Chomsky, N., 1986, *Knowledge of Language. Its Nature, Origin, and Use*, New York, Praeger.

Chomsky, N., 1995, *The Minimalist Program*. Cambridge, MA, MIT Press.

Chomsky, N., 2001, “Derivation by Phase”. In: M. Kenstowicz (ed), *Ken Hale: A Life in Language*, Cambridge, MA, MIT Press, 1–54.

Cinque, G., 2010, “Mapping Spatial PPs: an Introduction”. in: G. Cinque, L. Rizzi (eds), *Mapping Spatial PPs*, New York, Oxford University Press, 3–25.

de Swart, P., 2014, “Prepositional inanimates in Dutch: A paradigmatic case of Differential Object Marking”, *Linguistics*, 52, 2, 445–468.

Dimitrova-Vulchanova, M., G. Giusti, 1998, “Fragments of Balkan nominal structure”, in: A. Alexiadou, C. Wilder (eds), *Possessors, predicates and movement in the determiner phrase*, Amsterdam, John Benjamins, 333–360.

Dobrovie-Sorin, C., 1994, *The syntax of Romanian*, Berlin, De Gruyter.

Dum-Tragut, J., 2009, *Armenian: Modern Eastern Armenian*, Amsterdam, John Benjamins.

Erschler, D., 2009, “Possession marking in Ossetic: Arguing for Caucasian influences”, *Linguistic Typology*, 13, 3, 417–450.

Fábregas, A., 2007, “(Axial) parts and wholes”, *Nordlyd*, 34, 1–32.

Folli, R., 2008, “Complex PPs in Italian”, in: A. Asbury, J. Dotlačil, B. Gehrke, R. Nouwen (eds), *Syntax and Semantics of Spatial P*, Amsterdam, John Benjamins, 197–220.

Franco, L., 2016, “Axial Parts, phi-features and degrammaticalization”, *Transactions of the Philological Society*, 114, 149–170.

Franco, L., M. R. Manzini, 2017, “Instrumental prepositions and case: Contexts of occurrence and alternations with datives”, *Glossa*, 2, 1, 8, 1–47.

Franks, S., 1995, *Parameters of Slavic Morphosyntax*, New York, Oxford University Press.

Freeze, R., 1992, “Existentials and other locatives”, *Language*, 68, 3, 553–595.

Garzonio, J., S. Rossi, 2016, “Case in Italian Complex PPs”, in: E. Carrilho, A. Fiéis, M. Lobo, S. Pereira (eds), *Romance Languages and Linguistic Theory 10: Selected papers from ‘Going Romance’ 28, Lisbon*, Amsterdam, John Benjamins, 121–138.

Glushan, Z., 2010, Deriving Case Syncretism in Differential Object Marking Systems. Ms. University of Connecticut.

Hale, K., S. J. Keyser, 1993, “On argument structure and the lexical expression of grammatical relations”, in: K. Hale, S. J. Keyser (eds), *The view from building 20*, Cambridge, MIT Press, 53–109.

Harley, H., 2002, “Possession and the Double Object Construction”, *Linguistic Variation Yearbook* 2, 29–68.

Kagan, O., 2012, *Semantics of Genitive Objects in Russian*, Dordrecht, Springer.

Kayne, R., 1984, *Connectedness and binary branching*, Dordrecht, Foris.

Kayne, R., 2010, *Comparisons and contrasts*, Oxford, Oxford University Press.

Kiparsky, P., 1998, “Partitive case and aspect”, in: M. Butt, W. Geuder (eds.), *Projecting from the lexicon*, Stanford, CSLI Publications, 265–307.

Kiparsky, P., 2001, "Structural case in Finnish", *Lingua*, 111, 4–7, 315–376.

Longobardi, G., 2001, "Formal syntax, diachronic minimalism, and etymology: The history of French *chez*", *Linguistic Inquiry* 32, 2, 275–302.

López, L., 2012, *Indefinite objects: Scrambling, choice functions, and differential marking* (Linguistic Inquiry Monograph 63), Cambridge, MA, MIT Press.

Manzini, M. R., L. Franco, 2016, "Goal and DOM datives", *Natural Language and Linguistic Theory*, 34, 1, 197–240.

Manzini, M. R., L. M. Savoia, 2005, *I dialetti italiani e romanci. Morfosintassi generativa* (3 volumes), Alessandria, Edizioni dell'Orso.

Manzini, M. R., L. M. Savoia, 2011a, *Grammatical Categories*, Cambridge, Cambridge University Press.

Manzini, M. R., L. M. Savoia, 2011b, "Reducing 'case' to denotational primitives: Nominal inflections in Albanian", *Linguistic Variation*, 11, 76–120.

Manzini, M. R., L. M. Savoia, forthcoming, *The Morphosyntax Of Albanian And Aromanian Varieties: Case, Agreement, Linkers, Complementation*, Berlin, De Gruyter.

Mardale, A., 2009, *Les prépositions fonctionnelles du roumain: études comparatives sur le marquage casuel*, Paris, L'Harmattan.

Nau, N., 2014, "Differential object marking in Latgalian", in: A. Holvoet, N. Nau (eds), *Grammatical relations and their non-canonical encoding in Baltic*, Amsterdam, John Benjamins, 207–255.

Pereltsvaig, A., 1999, "The genitive of negation and aspect in Russian", *McGill Working Papers on Linguistics*, 14, 111–140.

Pesetsky, D., 1982, *Paths and categories*, Ph.D. dissertation, MIT.

Pesetsky, D., 1995, *Zero syntax*, Cambridge, MIT Press.

Pool, E., 2015, "A configurational account of Finnish case", *U. Penn Working Papers in Linguistics*, 21.

Richards, N., 2010, *Uttering trees*, Cambridge, MIT Press.

Rizzi, L., 1988, "Il sintagma preposizionale", in: L. Renzi, G. P. Salvi, A. Cardinaletti, *Grande grammatica italiana di consultazione*, Bologna, Il Mulino, 507–531.

Svenonius, P., 2002, "Icelandic case and the structure of events", *Journal of Comparative Germanic Linguistics*, 5, 1–3, 197–225.

Svenonius, P., 2006, "The emergence of axial parts", *Nordlyd*, 33, 1–22.

Talmy, L., 1985, "Lexicalization Patterns: Semantic Structure in Lexical Forms", in: T. Shopen (ed), *Language Typology and Syntactic Description*, vol. 3, New York, Cambridge University Press, 36–149.

Tenny, C., 1994, *Aspectual Roles and the Syntax-Semantics Interface*. Dordrecht, Springer.

Timberlake, A., 1975, "The nominative object in Finnish", *Lingua*, 35, 201–230.

Tortora, C. 2005. "The Preposition's Preposition in Italian: Evidence for Boundedness of Space", in: R. Gess, E. Rubin (eds), *Theoretical and Experimental Approaches to Romance Linguistics*, Amsterdam, John Benjamins, 307–327.

Vainikka, A., 1993, "The three structural cases in Finnish", in: A. Holmberg, U. Nikanne (eds), *Case and other functional categories in Finnish syntax*, Berlin, Mouton de Gruyter, 129–158.

Willim, E., 1999, "On the syntax of the genitive in nominals: The case of Polish", in: I. Kenesei (ed.), *Crossing boundaries: Advances in the theory of Central and Eastern European languages*, Amsterdam, John Benjamins, 179–210.

Wood, J., 2015, *Icelandic Morphosyntax and Argument Structure*, Dordrecht, Springer.