

Goal and DOM datives

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Abstract In a range of Indo-European languages (Romance, Albanian, Iranian, Indo-Aryan), the same oblique case (‘dative’) is associated with indirect objects and with animate/definite direct objects, independently of the particular morphology employed to spell out the oblique (inflectional or pre/postpositional). We argue that there is a syntactic category dative coinciding with the morphological one and encompassing both goal dative and definiteness/animacy dative. We provide a characterization of goal dative as an elementary predicate introducing a part-whole (i.e. possession) relation, arguing that the definiteness/animacy dative is an instance of this elementary predicate. Evidence sometimes used against the unification proposed (e.g. passives, agreement) admits of, or requires, other explanations.

Keywords Case · Differential object marking · Dative · Oblique · Agreement · Romance · Indo-Iranian

1 Definite/animate objects and the morphological dative

Many Romance languages have a ‘prepositional accusative’ phenomenon that is discussed in the generative literature at least since Jaeggli (1981). Generative authors take the same approach to the phenomenon as implied by its traditional name—namely that some deep accusatives (depending on animacy and definiteness) are superficially preceded by a prepositional introducer. In most Romance varieties, this

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prepositional introducer is *a* and the surface realization of the prepositional accusative coincides with the dative. In (1) we illustrate an Italian variety, whose morphological properties will become useful in Sect. 2. The traditional classification of (1a-b) as instances of prepositional accusative privileges the paradigmatic relation of these examples to (1c) where the same predicate takes a bare accusative. This means that the morphological identity of (1a-b) to the conventional dative (1d) is a mere matter of surface opacity. *Prima facie* empirical support for this systematization of the facts comes from passivization. Romance languages allow for the passivization of accusatives but not for the passivization of goal datives; prepositional accusatives pattern with accusatives in this respect and not with goal datives.

- (1) a. camənə a mmi/tti/ɣiddə
 they.call to me/you/him
 ‘They call me/you/him’
 b. camənə a kwedda femmənə
 they.call to that woman
 ‘They call that woman.’
 c. camənə u kanə
 they.call a dog
 They call a dog.’
 d. u rainə a mmi/tti/jiddə
 it they.give to me/you/him
 ‘They give it to me/you/him’

Sasso di Castalda

The prepositional accusative of Romance is part of a large spectrum of Differential Object Marking (DOM) phenomena (Bossong 1985; Aissen 2003), which form the focus of much functional-typological literature. Consider Kashmiri (Dardic, Indo-Aryan). In the transitive sentence in (2), the inanimate internal argument, whether definite or indefinite, is in the direct case. In (3), the internal argument referring to a “sentient being” (Hook and Koul 2004:216) triggers a dative—i.e. the same case found on the inherent locative directional ‘to work’.

- (2) a. tim khe-n batɪ
 they eat-fut.3pl food
 ‘They will eat food.’
 b. su ani kita:b
 he bring.fut.3sg book
 ‘He will bring the book.’

Kashmiri (Wali and Koul 1997:227–228)

- (3) swa sooz-yi jelyis kaamyi
 she.nom send-fut.3sg Jol.dat work.dat
 ‘She will send Jol off to work.’

Kashmiri (Hook and Koul 2004:216)

In Kashmiri, the same passive facts concerning animacy datives and goal datives hold as in Romance. Under passivization, the internal argument takes the direct case and agrees with the auxiliary *yun* ‘to come’ while the external argument is embedded

under the postposition *zəriyi* or *dəs* ‘by’ (Wali and Koul 1997:208). As shown in (4), the animate internal argument that bears the dative in the transitive active, as in (4a), bears direct case and agrees with the verb in the corresponding passive, as in (4b).

- (4) a. su kariy tse me hava:lɪ
 he.nom do.fut.2sg you.dat me.dat handover
 ‘He will handover you to me.’
 b. tsɪ yikh me hava:lɪ karnɪ təm’sindi dəs’
 you.nom come.fut.2sg.pass me.dat handover do.inf.abl he.gen by
 ‘You will be handed over to me by him.’

Kashmiri (Wali and Koul 1997:208)

The data in (4) contrast with those in (5a-b), which show that the goal dative in the passive cannot surface in the direct case—nor can it control agreement. Wali and Koul (1997:209) consider its extraction to the subject position ungrammatical, as shown in (5c). Specifically, they state that “on the basis of these two criteria (i.e. dative case and agreement), some linguists have argued that the indirect object does not promote to the subject position”.

- (5) a. aslaman dits mohnas kəmi:z
 Aslam.erg gave.fsg Mohan.dat shirt
 ‘Aslam gave a shirt to Mohan.’
 b. kəmi:z a:yi aslam-ni zəriyi mohnas
 shirt.fsg.nom came.fsg.pass Aslam-gen.abl by Mohan.dat
 dɪnɪ
 give.inf.abl
 ‘The shirt was given by Aslam to Mohan.’
 c. *mohnɪ aav aslamni zəriyi kəmi:z dɪnɪ
 Mohan.nom come.msg Aslam.gen.abl by shirt give.inf.abl
 ‘Mohan was given a shirt by Aslam’

Kashmiri (Wali and Koul 1997:209)

The generative literature has paid attention to Kashmiri in relation to certain distributional properties of the DOM dative. Most recently, Béjar and Rezac (2009:64–67) label the superficial dative in examples like (3) as an “R-case” treating it as a specialized spell-out of “case assigned to the IA [internal argument] by *v*”. They support their conclusion that “R-case is radically different from homophonous inherent case”, i.e. dative, with the observation that “true inherent case on a DP ... remains under passivization”, unlike the homophonous R-case. In other words generative theorizing routinely applies different syntactic categories to animate/specific objects and goal datives—despite their identical Spell-Out.

The functional-typological literature is also not oblivious to the important differences between, say, Kashmiri (3) and (5a), though both examples involve the same morphological dative *Jelyis* ‘to Jol’ or *Mohnas* ‘to Mohan’. However in this tradition of studies there is a syntactic dative category coinciding with morphological dative, unproblematically. Where the different datives diverge is in having different functions.

Two main functions of case marking have been identified: the indexing function, that is, cases are used to encode semantic roles, and the discriminating function, that is, the need to distinguish between the core arguments (subjects and objects) ... The indexing approach provides a better account of case marking of oblique arguments ... From a distinguishing perspective, preferential marking of animate Ps is understandable, as they are more likely to be confused with the subject (Malchukov 2008:208; cf. also Iemmolo 2010).

In this article we embrace the notion of explanation in linguistics commonly held in generative grammar, where external, function-based considerations have no place. At the same time it seems to us that questions of explanatory adequacy arise with respect to the facts briefly illustrated with Southern Italian (1) and Kashmiri (2)–(5). As we will see more extensively in Sect. 2, in Indo-Iranian languages animate/definite objects appear in the inflectional dative/oblique. Romance languages show the same alignment of animate/definite internal arguments with dative, though the latter is prepositional. This evidence is not compatible with the conclusion that the coincidence of goal and DOM dative is a matter of accidental homophony. On the contrary, it appears that goal and DOM datives form a natural class in morphosyntax—hence the theory must somehow define what this natural class is.

1.1 Some theoretical background

There are essentially two options for explaining the coincidence of goal and DOM datives—namely that the phenomenon is morphological or that it is syntactic. As far as we can tell, there is no extant formal proposal, in either sense. On the other hand, the formal morphological literature contains frameworks for dealing with ‘absolute syncretism’ in the terms of Calabrese (1998, 2008). Calabrese is interested in the fact that certain cases, or case oppositions, are missing altogether in some languages (specifically the Romance languages). For instance Romanian opposes direct case to oblique case (see Sect. 3 for some data)—i.e. presents an absolute syncretism of nominative and accusative, as well as of all oblique, in particular genitive and dative. Calabrese works in the Distributed Morphology framework, which means assuming that functional categories are represented by abstract feature clusters in the syntax, realized by actual exponents only at the PF interface. His key assumption is that there is a markedness hierarchy of cases, or technically of the feature clusters corresponding to them, so that lower cases in the hierarchy are more likely to be blocked from surfacing at PF. If a case is blocked, the corresponding feature cluster is readjusted by the morphological component (by Impoverishment, etc.), yielding syncretism with some other case/feature cluster allowed to surface.

In principle the ‘absolute syncretism’ between goal and DOM datives can be captured by properly aligning the DOM case in the hierarchy; the blocking of either the DOM case or the goal dative can then lead to their surface syncretism. However, as far as we can tell, a solution along these lines (or in any event within the boundaries of Distributed Morphology or other formal models of morphology) has not been worked out in the literature. Here we are not interested in working one out, because of general concerns with Distributed Morphology (for a discussion of Calabrese, see for instance Manzini and Savoia 2011a, 2014). The key issue is Late Insertion, which allows the syntax to contain an arbitrary amount of abstract structure never externalized

at PF; when syntactic structure is externalized, manipulations by the morphological component (Impoverishment, Fusion, Fission) may produce a surface result which is arbitrarily far removed from its underlying source.¹

Therefore what we want to pursue here is a syntax-internal model for the unification of goal and DOM datives. The main empirical difficulty in the way of such a unification is that, as already illustrated in relation to Kashmiri, they show different behaviours under syntactic tests—in particular under passivization. We will consider this difficulty after presenting our main proposal in Sect. 3. In Sect. 4, we will further consider the unification of goal datives with other thematic datives, in particular experiencer ‘subjects’. We are also aware of the dative/oblique subjects that appear under ergativity splits in Indo-Iranian languages, cf. Sect. 2.1; however they must be left for future work.²

Preliminarily, let us note that in order to capture the generalization we are interested in (goal = DOM dative) we need a framework theory of case. Within the minimalist approach (Chomsky 1995, 2001, 2008, 2013), properties such as gender (nominal class), number and person, which are intrinsically associated with nominal constituents, are features. However relations, for instance theta-roles, are not features, but correspond simply to syntactic configurations. From this perspective, it is potentially problematic to find that case is treated as a feature, i.e. as nominal class or as number rather than as theta-roles. The fact that case is the only feature in Chomsky (1995) which is radically uninterpretable (i.e. which does not have an interpretable counterpart) is a reflex of the deeper difficulty in reconciling the traditionally relational core of this notion with its feature status. The solution at which Chomsky (2001, 2008) arrives is that the real underlying relation between case assigner and case assignee is an agreement relation, involving phi-features; case is but a reflex of this relation which appears on nominal constituents.

¹ Other formal morphology frameworks adopting Late Insertion aim to correct some of these problems, for instance nanosyntax has no underspecification (hence Impoverishment). However, it has other problems—for instance an exponent in DM resembles a conventional lexical item (up to underspecification), with a non-contradictory content; an exponent in nanosyntax is a set of all of the specifications it can in principle fill, including potentially contradictory ones. In other words, nanosyntax is much less restrictive than DM in this respect. As far as we can tell, nanosyntactic treatments of case (Caha 2009) go no further than the empirical results of DM.

In present terms, the lexicon is the locus of externalization in the sense of Berwick and Chomsky (2011) pairing syntactico-semantic content with phonological content. As in Chomsky (1995), furthermore, syntax does not exist but as the product of the merger of lexical items. In what follows we shall often use the expression ‘*x lexicalizes y*’. In the absence of Late Insertion, ‘*x lexicalizes y*’ cannot, of course, mean that the phonological string *x* lexicalizes the syntactic node *y*, which is what is more usually rendered in DM as ‘*x* is an exponent for *y*’. What we mean is that *lexical item* *x* lexicalizes *concept* *y*, by pairing *y* with a phonological form *z*.

² In fact, exactly as we claim that goal and DOM datives correspond to the same syntactic category, so it is tempting to see a potential unification between experiencer ‘subject’ datives and the dative/oblique external arguments found in ergativity splits. See also Sect. 3 below for the relevance of the notion of ‘possession’ to goal datives and DOM—the historical and typological literature on Iranian languages (e.g. Montaut 2004) insists on the relevance of the same notion for the assignment of oblique to perfective (‘ergative’) subjects (cf. Manzini et al. 2015).

Chomsky's proposal only directly covers nominative and accusative (reflexes of phi-feature checking on T and *v* respectively).³ If we ask ourselves how Chomsky's approach could be applied to obliques, the Applicative literature comes naturally to mind (Pylkkänen 2008; Cuervo 2003, on Romance). According to this literature a functional head Appl checks the descriptive dative. We could therefore say that dative is but the reflex of phi-feature agreement between Appl and a DP. Within this framework the question we are asking would then be the following: how come Appl checks not only goals but also animate/definite themes?

Now, there are indications that the agreement approach to case, though standard in minimalism, is not empirically adequate. In particular, Baker and Vinokurova (2010) argue that direct case cannot be reduced to phi-feature agreement for Sakha (Turkic). They do not exclude that Chomsky may be right on treating case as a reflex of agreement for languages like English. But their examples from Sakha are largely replicated by familiar Western European languages like Latin (see Sect. 3.2 for some examples of 'extended accusative' in Latin), casting some doubts on the idea that a macroparameter may distinguish between languages where case reduces to agreement and languages where it does not.

Since this article is concerned with oblique, a fairly obvious intuition, originally formalized by Fillmore (1968), is that oblique cases are the inflectional equivalent of prepositions; note that, as before, we are not interested in the functional equivalence of the two categories, but in their formal unification. We assume that a preposition is a predicate introducing a relation between the argument it selects and another argument; the same will then be true of so-called oblique case. For example, in a French expression like *le livre de Jean* 'the book of Jean' the preposition *de* can be taken to introduce the 'possession' relation, between *Jean* (the possessor) and 'the book'. Similarly, in the German expression *Johann-s Buch* 'John's book', we take the *-s* ending to realize the 'possession' relation as a morphological inflection. This does not contradict Chomsky's (2001) conclusion as to the incompatibility of feature status with relational content—rather it derives different consequences from it, namely that (oblique) case is not a feature. On the basis of the characterization of oblique case as an elementary predicate, in Sect. 3 we will try to address the empirical question we set out to solve (a unified model for goal and DOM datives).

Abandoning the agreement model of case need not logically involve abandoning its uninterpretable status of case itself. For instance the dependent case algorithm of Marantz (2000[1991]) revived by Baker and Vinokurova (2010) is neutral with respect to the (un)interpretability of case. On the other hand, if we say that (oblique) case has a relational content (it is effectively an inflectional counterpart of a P), then it is evident that we take the category case (at least, oblique case) to be interpretable. This does not necessarily impinge on other minimalist postulates.

At very many points in the logical path that we have outlined in this section we meet bifurcations where we could easily have gone the other way. Specifically, we could have chosen to look for a DM analysis or an agreement/Apppl analysis. We

³Other often quoted work on case, for instance Pesetsky and Torrego (2001, 2004) is conceptually close to Chomsky's (2001, 2008); case is a form of agreement (T agreement for them, where T must be abstract enough to encompass nominative, accusative and oblique). See Sect. 3 for more on the 'tense/aspect' generative literature on case, specifically Svenonius (2002).

have tried to briefly motivate the reasons why we believed these directions to be problematic, compatible with the dimensions of this article and the fact that an ample discussion of the issues is independently available in the literature. From now on, we will make our proposals within the framework of assumptions we just set up.

We begin by presenting a survey of cross-linguistic data in Sect. 2 which establish the empirical generalization goal case = DOM case in Indo-Iranian languages (based on secondary literature), as well as in Romance and Albanian (based on primary evidence). This section is theory-neutral. Theoretical matters are addressed in Sect. 3, where we provide a characterization of dative as an elementary predicate introducing a part-whole (hence possession) relation. We propose that the DOM dative represents an instance of this same elementary predicate. In Sect. 4 we briefly consider DOM case in some non-Indo-European languages (Turkish, Finnish) where it does not coincide with the goal case. We also briefly consider agreement, showing that DOM datives in several languages behave like goal datives in not triggering agreement, though in other languages they trigger agreement as accusatives do. We leave this issue open.

2 Indo-European DOM: Some evidence

In this section we illustrate a fact which is actually well-known, namely that in Indo-European languages (Hindi, Persian, Romance) animate/definite objects have the same lexicalization as goal datives/obliques, whether by a dative inflection or by a preposition/postposition. The data face us with an alternative: either across the Indo-European family there is an accidental homophony of goal and DOM datives (a conclusion normally rejected in linguistics) or else goal and DOM dative form a natural class in morphosyntax. The latter option, specifically that goal and DOM datives have the same syntax, is argued for in the rest of the paper.

2.1 Eastern Indo-European languages

In Hindi, the same ending *ko* appears on recipients/goals in ditransitives (6a), on experiencer subjects of psych verbs (6c), as spatial/temporal marker (6d-e), as well as on definite/animate objects (6b).

- | | | | |
|-----|----|--|--------------------|
| (6) | a. | anjum-ne saddaf-ko ciTThii dii | <i>recipient</i> |
| | | Anjum.fsg-erg Saddaf.fsg-KO letter.fsg give.perf.fsg | |
| | | ‘Anjum gave the letter to Saddaf.’ | |
| | b. | anjum-ne saddaf-ko dekhaa | <i>DOM</i> |
| | | Anjum.fsg-erg Saddaf.fsg-KO see.perf.msg | |
| | | ‘Anjum saw Saddaf.’ | |
| | c. | omair-ko iinaam milaa | <i>experiencer</i> |
| | | Omair.msg-KO prize.msg touch.perf.msg | |
| | | ‘Omair got the prize.’ | |
| | d. | chor raat-ko aayaa | <i>temporal</i> |
| | | thief.msg night.fsg-KO come.perf.msg | |
| | | ‘The thief came at night.’ | |

- e. saamaan ghar-ko pohoanch gayaa *spatial*
 luggage.msg home.msg-KO reach go.perf.msg
 ‘The luggage reached home.’

Hindi (Ahmed 2006:3–4)

Incidentally, as Hook and Koul (2004:215) point out, in Indo-Aryan languages normally “all nouns and pronouns that refer to specific human beings remain in the dative case when functioning as direct object, no matter what the tense, mood, or aspect”, hence irrespective of the Tense/Aspect ergativity split—a fact which will become relevant in Sect. 4.4. The examples in (7a) for Hindi involve a progressive tense, hence a nominative external argument, while that in (7b) involve a perfect, hence an ergative external argument. In both examples, the 1st person internal argument undergoes DOM and is associated with dative case.⁴

- (7) a. vo mujhe kahAA bhej-egaa
 he.nom me.dat where send-fut.3sg
 ‘Where will he send me?’
 b. us-ne mujhe kahAA bhej-aa
 he-erg me.dat where send-pst
 ‘Where did he send me?’

Hindi (Hook and Koul 2004:215)

Another relevant fact of Hindi is that two instances of the *-ko* oblique morphology are mutually exclusive, as in (8a), cf. Mohanan (1994), Yip (1998). This phenomenon is syntactically conditioned since it is sensitive to whether the two *-ko* arguments are part of the same core predicate, as in (8a), or rather an argument and an adjunct, as in (8b). As Yip (1998:235) comments, a “remedial strategy is to leave the accusative unmarked; this leaves it non-specific, but if the context allows, this may not matter”. Syntactic haplology phenomena, where the doubling of certain properties is excluded, even if their lexicalizations are not linearly adjacent or phonologically identical, have been considered in much theoretical literature (Yip 1998; Neeleman and van de Koot 2006; van Riemsdijk 2008; Richards 2010). Despite the different approaches, it seems fair to conclude that syntactic haplology must involve some syntactic identity (here between goal *-ko* and DOM *-ko* in (8a))—as well as some notion of locality under which adjunct *-ko* in (8b) does not qualify for mutual exclusion. The first condition supports the conclusion that goal *-ko* and DOM *-ko* are not just homophonous; rather

⁴However in Kashmiri, DOM is found only in progressive tenses. For instance, in the perfect in (i), where the external argument takes the ergative form *tsye*, the 1st person internal argument takes the *bi* non-oblique form.

- (i) tsye onu-th-as bi taalyi kiny
 you.erg brought-erg.2sg-nom.1sg I.nom head.dat toward
 ‘You brought me to the end of my tether...’

Kashmiri (Hook and Koul 2004:215)

their lexical coincidence corresponds to syntactic identity (with respect to at least some features).⁵

- (8) a. *Raam-ko bacco-ko samhaalna paaa
 Ram-KO children-KO take.care.inf fall.perf
 ‘Ram took care of the children’
 b. Raam-ko raat-ko raavi milaa
 Ram-KO night-KO Ravi meet.perf
 ‘Ram met Ravi at night.’

Hindi (Yip 1998:235)

Many Western Iranian languages (though not Persian, see below) are characterized by a two-cases inflectional system (direct vs. oblique) and by Tense/Aspect based split ergativity (cf. Arkadiev 2009; Haig 2008). In Vafsi (Northwest Iranian) a definite internal argument is oblique both in imperfective tenses, as in (9a), where the external argument is in the direct case, and in perfective tenses, where the external argument is also oblique, as in (9c). (9b) shows that an indefinite internal argument is in the direct case. Oblique case also lexicalizes the goal argument of ditransitive constructions, so that we may have instances of perfect sentences in which the external argument, the DOM internal argument and the goal are all oblique; an example is provided in (10).⁶ Vafsi also has oblique arguments embedded under prepo-

⁵Note that syntactic haplology provides a possible treatment for the incompatibility of ergative case and DOM case in Kashmiri (fn. 4). If in Kashmiri, there is a single oblique per *v*P, this determines the impossibility of DOM datives in ergative environments like (i) of fn. 4.

⁶It is worth noting that in some Indo-Aryan languages, the same morphology *-ne* lexicalizes both the external argument in ergativity splits and the DOM internal argument, leading to double oblique patterns similar to Vafsi (9). An example in point is Bangru (Stroński 2009:246)/Haryanvi (Butt 2007:18), as in (i)–(ii).

- (i) babbu-nē tʰore-nē gʰæŋa pitʰ-a
 father-NE son-NE very much beat-perf.msg
 ‘The father beat the son very much.’

Bangru (Stroński 2009:246)

- (ii) ma-ne sahab-ne mar-a
 I-NE sahib-NE hit-perf-msg
 ‘The Sahib hit me.’

Haryanvi (Butt 2007:18)

Vice versa, Iranian languages with three cases are also known. In Yazgulyam, a South-Eastern Iranian language, subjects of intransitive clauses (iii), and subjects and direct objects of transitive clauses (iv) in the perfect receive three morphologically distinct cases in 1st/2nd person, namely absolutive, oblique and accusative respectively.

- (iii) áz-əm mət mad
 1sg.abs-1sg tired become.pst
 ‘I am tired.’
 (iv) mon š-tu wint
 1sg.obl acc-2sg see-pst
 ‘I saw you.’

Yazgulyam (Payne 1980:173ff)

sitional/postpositional phrases, including ‘to’ type environments and the benefactive *-ra*, as exemplified in (11).

- (9) a. *tæ in xær-i næ-ruš-i*
 you.dir this donkey-obl neg-sell-2sg
 ‘Won’t you sell this donkey?’
 b. *in luti-an yey xær-esan æ-ruttæ*
 this wise.guy-obl.pl one donkey.dir-3pl dur-sell.pst
 ‘These wise guys were selling a donkey.’
 c. *luas-i kærg-e-s bæ-værdæ*
 fox-obl chicken-obl-3sg perf-take.pst
 ‘The fox took the chicken.’

Vafsi (Stilo 2004:243–244)

- (10) *taemen kell-i-m hà-da haesaen-i*
 I.obl daughter-obl.f-cl.1sg.obl preverb-gave Hassan-obl.m
 ‘I gave my daughter to Hassan.’

Vafsi (Stilo 2010:263)

- (11) a. *dæ tawan hic-es ná-wattæ*
 to we.obl nothing-cl.3sg.obl neg-said
 ‘He didn’t say anything to us.’
 b. *yey xærbozæ-san æ-day o tini*
 one melon-cl.3pl.obl preverb-gave to he.obl
 ‘They gave him a melon.’
 c. *kaqæ æn-nivis-om esdæ-ra*
 paper dur-write-cl.1sg.dir you.obl-to
 ‘I’ll write you a letter.’

Vafsi (Stilo 2010:256–259)

In standard Persian, the same *-ra* ending is attached to definite direct objects, as in (12a) (Ghomeshi 2003; Karimi 2003, 2005) and appears also in temporal and spatial expressions, as in (12b–c). Thus *-ra* roughly appears to be the Persian counterpart of the Hindi *-ko* morphology reviewed at the beginning. While all of the Indo-Iranian languages surveyed so far have some form of split ergativity, Persian is closer to more familiar European languages in lacking ergative case alignment in the perfect.

- (12) a. *bezar in æks-a* (-ro) beh-et nešun bedæm* *specific direct object*
 leave this picture-pl-RA to-you show.1sg
 ‘Let me show you these pictures.’
 b. *do hæfte-ro kamel esterahæt kærd-æm* *temporal adverbial*
 two week-RA complete rest did-1sg
 ‘I rested for a full two weeks.’
 c. *[ta xune]-ro dovid-æm* *space adverbial*
 until house-RA ran-1sg
 ‘I ran till [I got] home.’

Persian (Cagri 2007:2)

Finally, in Armenian the morphological dative corresponds to the goal of ditransitive constructions in (13a), to the animate/specific internal argument in (13b), and to spatial and temporal adverbials in (13c) and (13d) respectively.

- (13) a. Dasaxos-ě usanoł-in tvec' girk'-ě *goal*
Lecturer.nom-the student-dat.the give.aor.3sg book.nom-the
'The lecturer gave the book to the student.'
- b. Ašot-ě tes-av Aram-in *DOM*
Ašot.nom-the see-aor.3sg Aram-dat.the
'Ašot saw Aram.'
- c. Nrank' par°k-ac ēin get-i ap'-in *spatial*
they.nom lie-part.res they.were river-dat bank-dat.the
'They were resting on the river's bank.'
- d. Gar°nan-ě gnal-u enk' Moskva *temporal*
spring-dat-the go-part.fut we are Moscow.nom
'In spring we will go to Moscow.'

Armenian (Dum-Tragut 2009:86–87)

2.2 Romance and a comparison with Albanian

The Indo-Iranian data in Sect. 2.1 invite comparison with the prepositional accusative phenomenon in more familiar Romance languages of the type in (1). In standard Spanish and in Southern Italian dialects, the specific/animate internal argument of a transitive predicate is preceded by an *a* preposition, i.e. by the same preposition that introduces goal arguments. Non-animate/non-specific arguments do not present the prepositional introducer. Based on our previous survey of Indo-Iranian languages with inflectional case, one may describe the phenomenon by saying that depending on the animacy/definiteness of the internal argument, it will either be embedded as an accusative (i.e. as a bare DP) or as a dative (i.e. preceded by *a*).

A considerable amount of data is available from the literature on Spanish, including dialectal variation (Suñer 1988 on River Plate Spanish; Torrego 1998 on Castilian Spanish). A controlled sample of dialectal variation is also available for Southern Italian dialects (Manzini and Savoia 2005: Sect. 4.9). Consider *Sasso di Castalda* (Lucania) in (1), repeated as (14) for ease of reference, where DOM extends to 1st/2nd and 3rd person pronouns, as in (14a), and to animate/specific DPs, as in (14b), to the exclusion of indefinite/inanimate DPs, as in (14c).

- (14) a. caməno a mmi/tti/jiddə
they.call to me/you/him
'They call me/you/him'
- b. caməno a kwedda femməna
they.call to that woman
'They call that woman.'
- c. caməno u kanə
they.call a dog
'They call a dog.'

- d. u rainə a mmi/tti/jiddə
 it they.give to me/you/him
 ‘They give it to me/you/him’

Sasso di Castalda

Interestingly in this language (as in several other Romance varieties, cf. Loporcaro 2008; Manzini and Savoia 2011a), 1st and 2nd person singular pronouns present three or even four case inflections. Thus for 1st/2nd person singular, *Sasso* has a differentiated nominative form, as in (15a) and several objective forms. One specializes as the object of the *a* preposition; this includes both the goal dative in (14d) and the DOM dative in (14a). A further form (etymologically connected to the Latin postpositional phrases *me-cum*, *te-cum* ‘lit: me-with, you-with’) appears as the object of *ku* ‘with’, as in (15c), and of selected other prepositions, as in (15d). In most prepositional contexts, we find the *me/te* forms in (15b). The 1st/2nd person singular paradigm of *Sasso* is tabulated in (16) for ease of reference.

- (15) a. ijə rərmə/tu ruərmə/jiddə rərmə
 I sleep/you sleep/he sleeps
 b. l a ffattə pə mme/tte/jiddə
 it he.has done for me/you/him
 ‘He has done it for me/you/him’
 c. ku mmikə/ttikə
 with me/ you.sg
 d. viənə addo mmikə/ttikə
 he.comes to me/you
 ‘He is coming to (see) me/you’

Sasso di Castalda

(16)		<i>Nom</i>	<i>P Obj</i>	<i>a Obj</i>	<i>ku Obj</i>
	<i>1sg</i>	ji	me	mi	mmikə
	<i>2sg</i>	tu	te	ti	ttikə

The all-purpose prepositional objects *me/te* in (16), inflected by the nominal class morphology *-e*, represent the accusative case of the system. By contrast, the *mi/ti* forms embedded under *a* are morphologically dative (for cross-linguistic data, see for instance the discussion of Italian in (19)). In other words, even though the inflectional case system of Italo-Romance is confined to pronouns, and in particular to 1st/2nd person pronouns—it reveals that the so-called prepositional accusative involves an inflectional dative.

Case splits between 3rd person and 1st/2nd person are typologically common (cf. Sect. 4 on animacy/definiteness scales and the ergativity split). Albanian presents a particularly interesting pattern (cf. Manzini and Savoia 2011b). As illustrated here with the Geg variety of *Shkodër*, the case system of 3rd person arguments distinguishes nominative, accusative and oblique, as in (17). By contrast, 1st and 2nd person (singular and plural) distinguish nominative, an objective case inclusive of accusative and dative, as well as ablative, associated with some prepositional contexts, as in (18).

(17)		<i>Nom</i>	<i>Acc</i>	<i>Obl</i>
	3sg	ai/aja ‘he/she’	atë ‘him/her’	atij ‘to him/her’
	3pl	ata ‘they’	ata ‘them’	asaj ‘to them’
(18)		<i>Nom</i>	<i>Obj</i>	<i>Abl</i>
	1sg	un	mu	mej-ε-t
	2sg	ti	ty	tej-ε-t
	1pl	na	ne	ne-ʃ
	2pl	ju	ju	ju-ʃ

Shkodër

In traditional terms, the pattern in (17)–(18) is taken to mean that there are four underlying cases in Albanian, namely nominative, accusative, dative, and ablative, while 3rd person pronouns display a syncretism between dative and ablative, and 1st and 2nd person display a different syncretism between accusative and dative. In present terms, the descriptive syncretism between accusative and dative in the 1st and 2nd person points to a different generalization, namely that Albanian has a split accusative (DOM) system, whereby 1st and 2nd person internal arguments are systematically turned into DOM datives. *Shkodër* is morphologically opaque in this respect—but there are morphologically more transparent varieties supporting our conclusion. For instance in the Arbëresh (Italo-Albanian) variety of *Vena di Maida*, the objective (goal and DOM dative) form of the 2nd singular is *ti-çə*, displaying the same *-çə* ending independently found on the 3rd person singular (goal) dative *at-i-çə*.

The Albanian data are reminiscent of the fact that all Romance varieties (as far as we can tell) present the same clitic form for the accusative and the dative in the 1st/2nd person, despite the fact that many of them distinguish accusative and dative clitics in the 3rd person. Italian provides a typical example; thus the same 1st/2nd person clitic lexicalizes both contexts in (19a), while an accusative and a dative form of the 3rd person clitic are involved in (19b) and (19c).

- (19) a. Mi/ti ha colpito/parlato
 (to.)me/you he.has hit/talked
 ‘He hit/talked to me/you’
 b. Lo/*gli ha colpito
 him/ to him he.has hit
 ‘He hit him’
 c. Gli/*lo ha parlato
 to.him/him he.has talked
 ‘He talked to him’

Italian

The classical approach to the asymmetry in (19) is to postulate a single underlying case system—and to assume that a morphological process of syncretism in (19a) is responsible for surface differences. The alternative is that this supposed low-level syncretism reflects a genuine syntactic generalization. Morphologically, in (19a) the *mi*, *ti* 1st/2nd person forms have the same *-i* inflection as the 3rd person dative *gli* in (19c). This inflection contrasts with that of the accusative in (19b), corresponding to the nominal class morphology (e.g. *-o* for the masculine singular). Thus *mi/ti* are

morphologically dative, not accusative. Syntactically, two different structures of embedding are implied by the predicates ‘hit’ and ‘talk’ with 3rd person clitics, namely an accusative one in (19b) and a dative one in (19c) respectively. In present terms, on the other hand, we suggest that 1st/2nd person clitics are embedded as datives with both predicates; in other words, (19a) has the same structure of embedding (the dative one) with both predicates.

3 Unifying goal and DOM dative: The core idea

3.1 Goal datives with ditransitive verbs

For ease of discussion, we take as our starting point the Romance languages, for which we have primary data. The view of dative we want to put forth is perhaps most intuitively apprehended starting from the syncretism between genitive and dative, widely attested in natural languages, including Romanian,⁷ the only Romance language that displays a case declension throughout the nominal system. In (20a) we exemplify the dative plural with an embedding under ‘give’. In (20b) we show that the forms of the dative are identical to those of the genitive, illustrated by an embedding under N. Since the syncretism of genitive and dative is ‘absolute’ (in the sense of Calabrese 2008), one ordinarily speaks of a single oblique case. The oblique forms in (20) have three separate layers of inflection. The leftmost layer is the nominal class morphology *-i* for the masculine plural and *-e* for the feminine plural. The second layer is an *-l* definiteness specification; though Romanian is often described as a language with post-nominal articles, here we assume that the definiteness morphology is generated as an inflection within the noun (cf. Dimitrova-Vulchanova and Giusti 1998). Finally the *-or* ending lexicalizes oblique (dative/genitive) case.

- (20) a. (I)-l am dat băieṭ-i-l-or / fet-e-l-or
 him.it I.have given boy-mpl-def-obl/ girl-fpl-def-obl
 ‘I gave it to the boys/ girls’
 b. pahar-ul băieṭ-i-l-or / fet-e-l-or
 glass-msg.def boy-mpl-def-obl/ girl-fpl-def-obl
 ‘the glass of the boys/ girls’

In minimalist approaches, *-or* in (20) would be the lexicalization of an uninterpretable feature, which is either checked against a similar uninterpretable feature of the head of the construct (verb or noun), as in Chomsky (1995), or is checked as part of an independently defined Agree process (Chomsky 2001, 2008). The conditional is necessary here to the extent that Chomsky only explicitly discusses direct cases. In fact, though we reject the reduction of case to agreement, the present approach can

⁷The dative-genitive syncretism characterizes also Iranian languages, Albanian, Greek, as well as Middle Indo-Aryan (cf. Breunis 1990). In Iranian and in Albanian (as well as in Romanian, though not in the particular example we have chosen in (20b)), genitive embedding requires a pre-genitival introducer, namely the *ezafe* of Iranian varieties, the article of Albanian or Greek etc. (Larson and Yamakido 2008 on Persian; Manzini and Savoia 2011a, 2011b on Albanian; Franco et al. 2015 on the comparison of Iranian and Albanian).

be seen as an implementation of deeper insight of Chomsky (2001, 2008) that case is not a primitive category. Though we argue that it does not reduce to agreement, all we say supports the conclusion that it reduces to more primitive categories—here predicative, elsewhere possibly referential (nominal class, quantification etc.). A sustained discussion of this point can be found in recent work by Manzini and Savoia (2011a, 2011b) on Albanian case.

Against this background, in present terms, *-or* is the inflectional equivalent of the prepositions *to* or *of*, i.e. a predicate introducing a relation between the argument it selects and another argument. Indeed in Romance languages without nominal case inflections, genitive and dative are lexicalized by prepositions, for instance Italian *di* ‘of’ or *a* ‘to’ in (21). Thus in (20b) *-or* says that the noun that it attaches to (i.e. ‘the boys’ or ‘the girls’) bears the ‘genitive’ (roughly the ‘possession’) relation to the head noun. The same is true of *di* in (21b), introducing the possession relation between ‘Gianni’ and ‘the glass’.

- (21) a. Ho dato il bicchiere a Gianni
I.have given the glass to Gianni
‘I gave the glass to Gianni.’
b. il bicchiere di Gianni
the glass of Gianni
‘Gianni’s glass’

An idea put forth in very similar terms by various strands of literature is that ‘possession’ is in fact a surface manifestation of the more elementary part-whole relation. Thus Manzini and Savoia (2005, 2007) propose that the Romance clitic *ne* (syncretic in some varieties between genitive and dative) introduces a pronominal set which is a ‘superset-of’ some other argument of the sentence (the internal argument, cf. Burzio 1986). Belvin and den Dikken (1997:170) define the relation introduced by ‘have’ as ‘zonal inclusion’ in the following terms: “the ‘meaning’ of have ... denotes a special kind of inclusion relation ... dubbed ‘zonal inclusion’ ... Entities have various zones associated with them, such that an object or eventuality may be included in a zone associated with an entity without being physically contained in that entity ... The type of zones which may be associated with an entity will vary with the entity”. Boneh and Sichel (2010) take the Part-Whole relation to be the conceptual core of partitives (*three of them*) and of inalienable possession (*John’s nose*)—though they factor out alienable possession (*John’s car*), treated as a locative relation (on which more below).

The part/whole or zonal inclusion relation is therefore very wide-ranging, potentially encompassing partitives, inalienable and alienable possession, and also the notion of location—which is in competition with it as the true primitive underlying possession. However, languages typically partition the potential space covered by the inclusion relation, by introducing specialized partitive, genitive, dative and locative cases/relations (on which more below). Furthermore, 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 there are languages with oblique cases attaching to locations (states), as well as to partitive and possessors, e.g. Latin *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.

Let us then turn to datives, that we are directly concerned with. The line of analysis of ditransitive verbs initiated by Kayne (1984) is characterized by the assumption that verbs like ‘give’ take a predication as their complement; the content of this predication is a possession relation between the accusative direct object (the possessum) and the dative (the possessor). In many subsequent works, the point is explicitly made that the head of the predication postulated by Kayne is an abstract version of the verb ‘have’. For instance, for Harley (2002) the head of the predication in an English Dative Shift sentence is an abstract preposition P_{HAVE} , as in (22b); for Beck and Johnson (2004), the head of the predication is an abstract verb HAVE, as in (22c)—though Pesetsky (1995) limits himself to an abstract characterization of the predicate head as G, cf. (22a).

- (22) a. ... give Sue [G a letter] (Pesetsky 1995)
 b. ... CAUSE [PP Mary [P_{HAVE} a letter]] (Harley 2002)
 c. ... send [$HAVE_P$ Satoshi [$HAVE$ HAVE the guide]]
 (Beck and Johnson 2004)

In the tradition of studies in (22), the alternation between Dative Shift and DP-*to*-DP structures is not construed derivationally, but rather as an alternation between two different base structures. For Pesetsky (1995) the DP-*to*-DP structure remains exactly the same as in (22a), only the predicate head changes to *to*, as in (23a). The same is true for Harley (2002) who takes English *to* to be a P_{LOC} as in (23b). Beck and Johnson (2004) follow Larson (1988) in adopting a variant of the same fundamental structure where the DP and *to*-DP complements occupy the Spec and sister position of V respectively, as in (23c). Note that at least Pesetsky’s or Harley’s version of the proposal would have to be understood as saying that in the Dative Shift alignment, the Theme is demoted to the object of a P, i.e. an oblique—essentially the same idea as in Larson (1988) (Larson speaks of the Dative Shift construction as a ‘passive’).

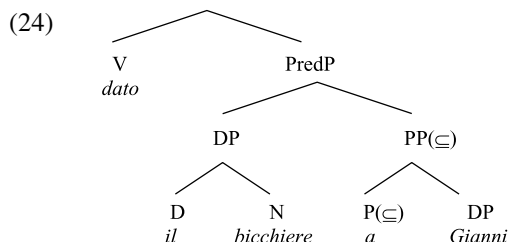
- (23) a. ... give a letter [PP to Sue] (Pesetsky 1995)
 b. ... CAUSE [PP a letter [$[P_{-LOC}$ to] Mary]] (Harley 2002)
 c. ... [VP the guide [V send to Satoshi]] (Beck and Johnson 2004)

The lexical alternation view on the other hand is not universally held. Freeze (1992) identifies the DP-*to*-DP structure as the only base structure (cf. also Hudson 1992) and construes it as a locative structure, of the general type in (23). For Freeze, Dative Shift structures of the type in (22) depend on what we may call locative inversion or possessor raising (cf. also Kayne 1994). Nevertheless DP-*to*-DP structures are base generated for everybody, as far as we can tell. Let us start with them and in particular with Italian (21a).

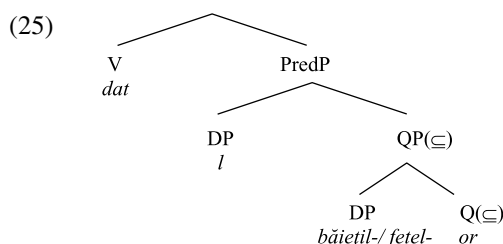
We take ‘inclusion’ (part-whole) to be the primitive content of the ‘to’ preposition; we take oblique case, for instance in Romanian (20a), to have the same content. We are guided in our conclusions largely by our observations on the structure of case systems. In many languages, including Romanian in (20), and several Iranian languages, e.g. Vafsi in Sect. 2.1, only an elementary two-case morphological opposition survives to characterize direct vs. oblique arguments. The oblique case covers the

traditional dative and genitive, while location proper is lexicalized by prepositions, eventually selecting oblique. In other words location is a specification of inclusion—not the reverse.

We notate inclusion with ($\subseteq$), though as indicated by the discussion that precedes, the inclusion relation is to be construed not mathematically but as a looser zonal inclusion one. Prepositions like English *to* or Italian *a* that have ($\subseteq$) content are notated $P(\subseteq)$, as in the structure of Italian (21a) provided in (24). In (24), $P(\subseteq)$ takes as its internal argument its sister DP *Gianni* and as its external argument the sister to its projection, i.e. the DP *il bicchiere* ‘the glass’. Correspondingly, the second internal argument of ‘give’, i.e. the traditional dative, participates in fixing the reference of the first internal argument, i.e. the accusative, by denoting a superset including it.



In (25) we provide a parallel structure for Romanian (20a), where the ($\subseteq$) content is associated with the case ending *-or*. Among DP-internal categories, we suggest that Q, given its relational core is closest to case morphology. Correspondingly, we label Romanian *-or* as $Q(\subseteq)$ in (25). The $Q(\subseteq)$ element takes as its complement its sister DP *băieții/-fetel-* ‘the boys/the girls’ and as its external argument the sister DP to its projection, i.e. *paharul* ‘the glass’, and it says that ‘the glass’ is ‘zonally included’ by ‘the boys’ or ‘the girls’ (it is in their material possession, or in their vicinity, etc.).



Recall that we started this section with the observation that in Romanian oblique case covers both sentential embedding (‘dative’), as in (25), and nominal embedding (‘genitive’), as in (20b). In Italian on the other hand *di* ‘of’ specializes for nominal embedding as in (21b) and *a* ‘to’ for sentential embedding as in (24). The present approach, that unifies ‘genitive’ and ‘dative’ is not invalidated by a language like Italian; simply $P(\subseteq)$ is lexicalized as *di* or as *a* depending on whether it is dominated by NP or VP. Similarly, we are aware that partitive (part-whole proper) may have a different lexicalization from genitive of possession; for instance in Palestinian Arabic, as studied by Boneh and Sichel (2010), material possession appears to be lexicalized by a locative preposition. We have already suggested that a locative may be construed

as a specialization of the part-whole relation, roughly ‘x included by y, y location’. Nothing prevents possession in a given language to be construed as locative inclusion rather than as pure inclusion.

Next, in Italian (as in French), classical reflexive and variable binding tests show that the theme DP and the goal DP are structurally symmetric in DP-*to*-DP contexts. Thus the theme can bind (inside) the goal, as in (26) or vice versa the goal can bind (inside) the theme, as in (27), independently of linear order (Giorgi 1986; cf. Boneh and Nash 2012 on French).⁸

- (26) a. Una lunga terapia psicoanalitica ha restituito Maria a se stessa.
A long psychoanalytic therapy restored Mary to herself.
b. Ho presentato ogni professore ai suoi studenti.
I introduced each professor to his students.
- (27) a. Una lunga terapia psicoanalitica ha restituito se stessa a Maria.
A long psychoanalytic therapy restored herself to Mary.
b. Ho presentato i suoi studenti a ogni professore.
I introduced his students to each professor.

In (26)–(27) the two arguments that stand in a binding relation to one another are DP and (in present terms) PP($\subseteq$). This is not surprising given the structural and interpretive equivalence of P($\subseteq$) to Q($\subseteq$) in (26)—modulo their head vs. inflectional status. Nothing prevents us from adopting the view that case (KASE, K) is a primitive category of grammar, extending KP status to both the Romanian inflectional dative Q($\subseteq$) and to the Italian prepositional dative P($\subseteq$), as originally proposed by Fillmore (1968) (cf. Giusti 2002; Franco 2012). Since in present terms we have suggested that oblique case is essentially an elementary predicate/operator Q($\subseteq$), we may equally extend the Q($\subseteq$) categorization to the elementary prepositions like ‘to’ that do not determine any binding opacity. Under either formalization, the two complements of the ditransitive structures in (26) are in a mutual c-command relation, predicting the existence of both patterns in (26)–(27).

In short, we conclude in favour of a fairly traditional approach to languages which display no surface dative alternation, like Italian (or French), allowing us to proceed relatively quickly to the core topic of this article, namely the unification of thematic dative with DOM dative. One may wonder nevertheless about languages that show a surface dative alternation like English in (22)–(23). As far as we can tell, both of the main approaches taken by the literature on Dative Shift are compatible with the present discussion. The first possibility is to embrace Freeze’s theory, or the earliest transformational approach to Dative Shift, and let leftward movement of the Goal argument derive (22) from (23). Since the structure in (24) is identical to the base structure of Freeze, we expect that nothing prevents his Dative Shift derivation from taking place from it. The second possibility is to adopt the view that Dative Shift structures involve a different base structure—as indeed sketched in (22) vs. (23).

Taking the second line of explanation raises a question concerning the nature of the empty head postulated in (22). Since this head takes the possessee as its internal

⁸Note that (26a)–(27a) do not violate principle C. The issue of the exact definition of binding principle is orthogonal to those discussed here.

argument and the possessor as its external argument, it is in fact the reverse of ‘to’, i.e. in present terms ($\supseteq$). Levinson (2011) suggests *with* (or Icelandic *með*, Romance *com/con*) as a possible overt realization of it. Therefore the Dative Shift alternation is closely comparable to the alternation between *He presented his pictures to the museum* and *He presented the museum with his pictures*. Again, there is no reason why the present model could not encompass such an alternation. Quite simply here we are interested in the *to* oblique, rather in the *with* oblique.⁹

A separate issue concerns the application of the tests in (26)–(27) to the English [DP [*to* DP]] structure in (23), which by hypothesis parallels Romance (24). Since the nature of the *to* preposition as $Q(\subseteq)$ plays a crucial role in the discussion of (26)–(27) it is tempting to assume that English *to* has a (slightly) different content, perhaps a truly locative one, as suggested in particular by Harley (2002). Since we have suggested that a locative may result simply from a location restriction on the ($\subseteq$) content, we can then say that the restriction (however represented) is sufficient to render the embedded DP argument opaque.¹⁰

3.1.1 Goal datives with unergative verbs

The possession/inclusion (or location) characterization of datives is not adopted by all the generative literature. Svenonius (2002) addresses a different type of cross-linguistic evidence, namely that fact that different languages present a different distribution of dative and accusative complements with various lexical subclasses; for instance, ‘verbs of ballistic motion’ take dative in Icelandic, though they take accusative in English (‘throw’ etc.). For Svenonius, case is interpretable as a property of predicates, while it is uninterpretable on nouns that check them (a position close to Pesetsky and Torrego’s 2001, 2004). Crucially, he suggests that dative case is associated with predicates where V and v denote imperfectly overlapping events. Thus in ditransitive structures “the dative case on the goal might be licenced by a temporal mismatch between V and R”, i.e. the Result head that introduces the dative argument (Svenonius 2002:218).

Svenonius does not discuss the possession/inclusion characterization of datives, not even in ditransitives, perhaps because he considers that there is no possibility of extending it to unergatives. Nevertheless, before moving on to DOM, we will analyze two-argument verbs taking dative precisely in terms of $Q(\subseteq)$. Again, for ease of

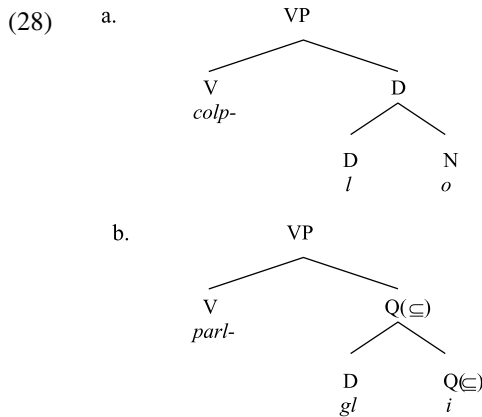
⁹We inserted this discussion at the prompting of an anonymous reviewer. We will return to ($\supseteq$) in Sect. 3.2.1.

A further twist is introduced by the Appl literature, since Cuervo (2003) for Spanish and Diaconescu and Rivero (2007) for Romanian argue that these Romance languages have a Dative Shift alternation. According to this literature the pattern in Italian (26) is observed in the absence of clitic doubling in Spanish and Romanian—while in the presence of clitic doubling pattern, (27) is observed. The overall conclusion is that the dative clitic is the head of an ApplP taking the theme as its object and the Possessor as its Spec and yielding a Dative Shift configuration; in its absence a non-Dative Shifted configuration is obtained (DP-*to*-DP). On the Appl idea applied to Romance, see fn. 11.

¹⁰Again the discussion of English was prompted by an anonymous reviewer. Actually the quantifier binding facts reported even by Larson (1988:338), are not completely clear-cut, cf. (i), leaving some room to believe that English *to* and Romance *a* may have the same status after all.

(i) ?I gave/sent his paycheck to every worker

reference, we start from a familiar Romance language, say Italian (19b-c), where two different case structures are implied by the predicates ‘hit’ and ‘talk’ in (19b) and (19c) respectively with 3rd person clitics, as illustrated in (28). In (28a) following Harris (1994), we assume that Romance accusative clitics consist of a definiteness base *l-* (with allomorphs including *gl-* in (28b)) and of a nominal class inflection N (cf. also Kratzer 2009 for a semantic justification of a D-N structure for pronouns). Following our own hypothesis, the dative inflection of the clitic in (28b) introduces the $Q(\subseteq)$ category, which combines with the *gl-* allomorph of *l-*.



Our analysis of (28b) yields the correct results at the morpholexical interface. But what about the interpretive interface? We have seen that with ditransitive verbs, $Q(\subseteq)$ establishes a relation between the argument to which it attaches and another argument present within the predicate (the VP). The question is what $Q(\subseteq)$ does in (28b). We propose that in this instance the two arguments of $Q(\subseteq)$ are the clitic (or rather its *(g)l-* definiteness segment) and—we assume—an eventive constituent. Intuitively, transitive predicates can be paraphrased as consisting of an elementary predicate associated with an eventive name. Hale and Keyser (1993), Chomsky (1995) formalize this intuition about the complex nature of transitive predicates by assuming that they result from the incorporation of an elementary state/event into a transitivizing predicate (CAUSE). In minimalist syntax the transitivizing predicate is standardly built into the structure in the form of a *v* functional head.

Within such a conceptual framework it becomes clearer what we mean when we say that $Q(\subseteq)$ takes as its arguments the (elementary) state/event and the pronoun. Thus (19c) can be informally rendered as ‘I caused him to be on the receiving end of some talk’, or more directly ‘I caused him talk’, corresponding to the v-V organization of the predicate in (30). Despite the complex organization of the predicate, complements of ‘hit’ (or rather ‘cause hit’) are embedded in a canonical transitive structure comprising a nominative agent and an accusative theme, as in (29). In other words, adopting and adapting Svenonius’ ideas, ‘hit’ behaves as a single predicate, its complementation structure displaying no sensitivity to the presence of (potential) subevents/states in it. On the contrary, the dative with ‘talk’ is a result of the sensitivity of argument structure to the finer event articulation of the predicate. In a way, (30) simply merges the generative tradition characterizing dative as posses-

sion/inclusion with Svenonius' insight into the relevance of eventive splits for datives.¹¹

- (29)
- ```

 vP
 / \
 CAUSE/v VP
 / \
 V D
 colp- / \
 D N
 l o

```
- (30)
- ```

      vP
     /  \
  CAUSE/v VP
         /  \
        V    Q(⊆)
      parl-  /  \
             D    Q(⊆)
             gl   i
  
```

As is well-known, the alternation in (29) is lexically governed—yielding variation even in closely related languages. In the examples provided so far we chose verbs that have stable selection properties across Romance and Germanic. However there are famous instances of variation, like ‘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. Because of this, accusative vs. dative selection cannot correspond to properties fixed by Universal Grammar, but must be learned by the child. In present terms what the child learns is really whether in his language ‘help’ has the syntax in (29) or the syntax in (30). Help1, with the accusative syntax in (29) (e.g. in Italian and in English), has a theme internal argument, i.e. ‘I [cause-help] him’; help2, with the oblique syntax in (30) (e.g. in Latin or German) has the internal argument as the possessor (locator, etc.) of the caused subevent ‘I cause him (to have) help’.

A more standard approach to data like (29)–(30), hence to the variation between help1 and help2, takes their underlying structures to be invariant, while appropriate stipulations at the morpholexical interface (idiosyncratic case selection or morphological case syncretism) insure the emergence of surface differences. In Sect. 1, we suggested that the realizational conception of the lexicon (Late Insertion) required by morphological readjustment in Distributed Morphology is too powerful. As for case selection, we agree with Svenonius (2002) that “there is no such thing as idiosyncratic lexical case; that is, . . . that a verb takes a dative object is . . . not entirely independent

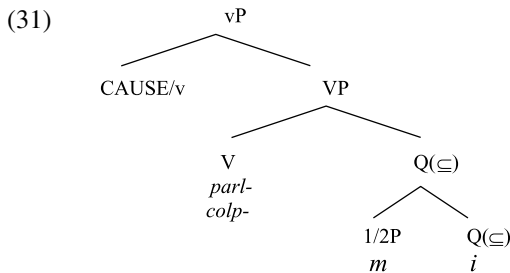
¹¹In the Appl literature, a dative that takes an event as its argument is a ‘high’ Appl. We refer the reader to Bonch and Nash (2012) for a review of problems arising in classifying Romance datives according to the categories ‘low’ and ‘high’ Appl. We will return to a core instance of ‘high’ Appl, i.e. experiencer datives, in Sect. 4.3.

of event structural properties” (p. 202). In other words, instead of denying general relevance to morpholexical variation, a more revealing approach consists in using it as a tool to uncover what the true underlying structural facts are.

3.2 DOM datives with [CAUSE] verbs

Against the theoretical background provided by the review of goal datives in Sect. 3.1, we are in a position to consider whether the coincidence of goal and DOM dative in many languages is a matter of mere morphological opacity (see the discussion in section 1 and immediately above) or rather it depends on the syntax—as we will argue in what follows. Crucially, we need to show that the different behaviour of goal and DOM datives under syntactic tests is not problematic.

For ease of reference, we attack DOM datives starting with Italian (19a), given the assumption that the *mi, ti* 1st/2nd person forms are morphologically dative. The dative morphology of *milti* suggests that their embedding requires the presence of $Q(\subseteq)$. In other words, the structure of embedding of *milti* in (19a) remains constant, as in (31), despite the fact that two different structures of embedding are implied by the predicates ‘hit’ and ‘talk’ with 3rd person clitics, as discussed in (29)–(30). More precisely, the structure in (31) parallels that in (30). Therefore both with ‘hit’ and with ‘talk’ the complex nature of the transitive event is relevant for the attachment of the internal argument. With both verbs the internal argument with Participant (‘speaker’, ‘hearer’ reference) is construed as a possessor of the embedded subevent.



As before, the analysis in (31) yields the correct results at the morpholexical interface, and leaves the interpretive interface for us to worry about. As hinted at the end of Sect. 3.1.1, though any number of abstract logics can be imposed on natural languages, one of the few insights that we can have into their real underlying logic is provided precisely by lexicalization patterns. Thus according to Svenonius (2002), the presence of a dative may imply the activation of a split eventive structure—though only in some languages and for some predicates. The same logic applies to (31). There is no *a priori* reason why an argumental frame including a Participant internal argument should reflect a complex organization of the event with verbs like ‘hit’ in (31)—while the embedding a 3rd person argument does not in (29). However the lexicalization patterns of Italian suggest that this is exactly what happens. DOM datives are no morphological accident—nor do they reflect morphological regularities. They arise in the syntax and they reflect a slightly different structuring of the event structure with Participant internal arguments.

Now, before considering any other problem raised by this approach we need to consider its consistency with known syntactic facts. As stressed more than once, the parallel representations in (31) display different properties when tested against standard syntactic rules, in particular passive.

Let us begin with the goal dative in ditransitives, e.g. in (24). This is introduced by the properties of the verb (i.e. of the event it denotes)—namely that of selecting a predication between a possessum and a possessor; $Q(\subseteq)$ is the head of this predication. With unergatives, given an underlying cause-state articulation of the event, e.g. in (30), $Q(\subseteq)$ introduces an argument construed as being a possessor-possessed relation with the stative/result subevent. What this dative shares with that of ditransitives is that both are selected by the predicate depend on the shape of the event, not on the nature (i.e. on the referential properties) of the argument to which $Q(\subseteq)$ attaches.

We use this common property of goal datives to explain why they cannot undergo passive raising to the EPP (nominative) position. Consider (32a). Italian is a language where ‘talk’ is always treated as a complex bi-eventive predicate, and $Q(\subseteq)$ is required by the predicate itself. In order to satisfy this selectional requirement, a $Q(\subseteq)$ internal argument must then be merged under passive as well, as in (32b). This means that precisely because of its inherent case properties, this internal argument is not available for movement and for satisfaction of the EPP (nominative) position.

- (32) a. *Io vengo/Lui viene parlato
 I am/ he is talked
 ‘I am/he is talked’
 b. ... CAUSE/v [parl- [$Q(\subseteq)$ mi/gli]]

McFadden (2006:72) comes to a similar conclusion about goal datives (for which he assumes an Appl approach), namely that dative “assignment depends only on which kind of head the argument is introduced by ... passivization will not change the fact that a given argument was introduced in SpecApplP”—or here as $Q(\subseteq)$. Like McFadden, we predict that there is nothing wrong with a passive structure where the goal dative is not raised to nominative—in other words, with an impersonal passive where only arbitrarization of the external argument takes place, as in (33).

- (33) Mi/gli è stato parlato di te
 To.me/to.him is been spoken of you
 ‘I have/he has been told about you’

Vice versa, we must explain why the 1st/2nd person argument of ‘hit’ raises to the EPP/nominative position in the passive in (34), exactly like a 3rd person argument—so that under passive, the symmetry between 1st/2nd person and 3rd person is re-established.

- (34) Io vengo/lui viene colpito
 I am/ he is hit
 ‘I am/he is hit’

Making explicit what the discussion so far implicitly suggests, while a goal dative is a $Q(\subseteq)$ constituent required by the event (the predicate)—the DOM dative is a $Q(\subseteq)$ constituent required by the referential properties of the internal argument.

Languages with DOM datives are those where an argument with certain referential properties (to which we will return Sect. 4.1) can never be inserted VP-internally except under $Q(\subseteq)$. In Italian, it is Participant arguments that must be embedded under $Q(\subseteq)$ when inserted as internal arguments. The constraint can then be formulated as in (35). We assume that (35) and similar DOM constraints hold at LF.

- (35) *DOM (Italian)*
[_{VP} ... [_{1/2P} *($Q(\subseteq)$)] ...], at LF

Consider the passive in (34) again. Assuming that bound copies ('traces') within a chain are read as bound variables (Fox 2002; cf. also Brody 2003), the LF structure of (34) is as in (36). The constraint in (35) does not apply to the VP-internal argument in (35), since the latter is just a bound variable. Hence (36) is well formed.

- (36) [_{1/2P} io] [_T vengo] [_v colpito] [x]]

Even granting that we are correct in our discussion as to why raising to the EPP/nominative position is possible with DOM in (36), the question arises why it would be obligatory, blocking the impersonal passive in (37) with a DOM dative clitics as well as with an accusative one.

- (37) *Mi/lo è stato colpito
Me/him is been hit
'I have/he has been hit'

This question needs to be considered in a crosslinguistic perspective.¹² Under the standard generative account of passive (Chomsky 1981), the essence of passive is raising from [V, DP], to [DP, TP] position (essentially a structural rendering of the object-to-subject promotion of relational grammar, cf. Perlmutter and Postal 1983). In turn, this is triggered by the suppression of accusative case and the removal of the external argument (arbitrarization or demotion to oblique). In minimalist theory, *v* both introduces the external theta role (causer/agent) and agrees with the internal theta-role, assigning accusative. Therefore absence of *v* defines a verb characterized by promotion from the object position (for which accusative is unavailable) to the EPP position (since no external argument intervenes).

Counterexamples to the standard generative theory of passive are however discussed by the typological literature under the label of 'extended accusative' (Plank 1985), documented in familiar languages like Latin. Late Latin has a number of accusatives corresponding to the sole argument of verbs associated with overt middle-passive (MP) morphology, as in (38a). The same pattern appears more sporadically in Early Latin, as in (38b) (see Cennamo 2011, where the data in (38) come from). Promotion from object to subject is also possible, as in Classical Latin.

- (38) a. Ips-os fic-os impon-at-ur
these-acc figs-acc gather-MP.3sg
'These figs should be gathered.'
Late Latin (Rufus of Ephesus, *De Podagra* 35)

¹²It is addressed at the prompting of an anonymous reviewer.

- b. vit-am viv-itur
 life-acc live-MP.3sg
 ‘Life is lived.’ (i.e. ‘One lives one’s life.’)

Early Latin (Ennius, *Tragoediae* 241)

Suppose we take a language where extended accusative (i.e. accusative with passive morphology) combines with DOM. Such a language is Sakha (Turkic) as discussed by Baker and Vinokurova (2010). Like Turkish (cf. the discussion in Sect. 4.2 below), Sakha has DOM case (not a dative/oblique) for definite/specific arguments. Like Latin, Sakha has extended accusative, meaning that the internal argument need not be promoted to nominative under passive. Therefore Sakha allows for the impersonal passivization with a DOM internal object that we need to exclude in Italian (37). The extended accusative normally alternates with promotion to nominative; this is true of Latin, where the arguments in (38) could equally be in the nominative (as in Classical Latin)—and it is also true in Sakha, where the DOM form alternates with the zero morphology nominative in (39).

- (39) caakki/caakky-ny aldyat-yn-na
 cup/cup-DOM break-pass-past.3sg
 ‘The cup was broken.’

Sakha

Consider Italian again. Italian patterns with English in the periphrastic passive, yielding the impossibility of (37). However with the middle-passive *si* morphology, Italian allows not only for promotion of the internal argument to the nominative position, as in (40a), but also for an accusative object, as in (40b)—effectively an ‘extended accusative’. The traditional approach to the alternation in (40) is to assume the existence of various different *si*’s, namely ‘passive’ *si* in (40a) and ‘impersonal’ *si* in (40b). Yet *si* has exactly the same morphosyntactic properties in the two sentences (Manzini and Savoia 2005, 2007) and also the same interpretation, in particular the external argument is ‘arbitrary’ in the sense of Chomsky (1981). In other words promotion of the internal argument to the EPP/nominative position appears to be simply optional. As we may expect, the ‘impersonal’ construction allows also for DOM dative clitics, as in (41).

- (40) a. (I gelati) si mangiano col cucchiaino
 (the ice-creams) MP eat.3pl with.the little.spoon
 ‘(Ice-creams) one eats them/they are eaten with a little spoon’
 b. Li si mangia col cucchiaino
 them MP eat.3sg with.the little.spoon
 ‘One eats them/they are eaten with a little spoon’
- (41) Mi si colpisce
 me MP hits
 ‘One hits me/I am hit’

In the formal literature (Chierchia 2004; Reinhart 1997), *si* is accounted for in terms of an arbitrarization operation, i.e. –arity reduction on the external argument; this is reminiscent of Comrie (1977), who proposes that the essence of passive is

valency reduction on the external argument. Given arbitrarization of the external argument, two possibilities in principle arise. One, as in Italian (40a) is for the internal argument to be promoted to the EPP position. The other, as in (40b), Latin (38) etc. is for the EPP position to be filled by an expletive (corresponding to the invariable 3rd person form of the finite verb inflection), and for the internal argument to attach VP-internally, eventually via the DOM predicate/operator. Importantly, given the contrast between the Italian periphrastic passive in (37) (raising to the EPP obligatory) and *si* constructions in (40)–(41) (raising optional), we conclude that when the external argument is arbitrarized it is not whole languages that differ in the nominative vs. accusative treatment of the internal argument, but rather single syntactic environments.

Let us draw some conclusions. For reasons that have only been briefly presented here, but are amply discussed in the literature (some of which quoted), we adopt the view that only -arity reduction is primitive in passive. The idea that lack of accusative case is equally primitive is undermined by data like (40b) for Italian, (39) for Sakha and (38) for Latin, showing that accusative case assignment is perfectly possible under arbitrarization of the external argument. If the internal argument is allowed to remain in VP, then the ordinary range of VP-internal structural cases is observed, including accusative and DOM—as in Italian (40b) and (41). If it forced to undergo promotion to the EPP position, then accusative and DOM are both impossible as in (37). The parallelism between accusative and DOM depends on the fact that they are both structural cases (not selected by the verb) assigned VP-internally. This is sufficient to predict that they pattern together, whether they are available or unavailable under passive in a given language. We are aware that the present discussion does not define the relevant parameter; however the issue arises for accusative, quite independently of DOM, and is beyond the scope of the present article.¹³

3.2.1 DOM datives with non-[CAUSE] verbs

The verb that we have used so far to study DOM clitics in Italian, namely ‘hit’, clearly has an agent/causer external argument, standardly introduced by the *v* predicate CAUSE. However, *mi/ti* clitics in Italian lexicalize the 1st/2nd person internal argument of any transitive verb, including those where the external argument is not an agent/causer.

For a language like Spanish, where DOM is a core phenomenon, corpus studies are available as to the range of verbs that allow and require DOM arguments. Specifically, von Heusinger and Kaiser (2011:610, Table 11) show that definite animate DPs are always associated with DOM in modern Spanish. With indefinite animate arguments, some verbs display obligatoriness (‘see’, ‘hear’ and other perception verbs), while other verbs have a preference for DOM (canonical action verbs, but also psych verbs like ‘fear’) and other verbs yet are at chance level or lower (verbs of ‘pursuit’ like ‘look for’; verbs of ‘knowledge’ like ‘know’; verbs of ‘feeling’ like ‘love’) (von Heusinger and Kaiser 2011:611, Table 12). Von Heusinger (2008:10), concludes that

¹³ Baker and Vinokurova (2010) provide an account for the optionality in Sakha (39), which is however at odds with the absence of semantic contrasts in Italian (40).

“affectedness seems to be an intuitively valid category, but it is very difficult to ... apply it to different verbs”. Von Heusinger and Kaiser (2011) note that the scale defined by Spanish does not exactly pattern with any typological affectedness scales. By the same token, the hierarchy defined by Spanish data does not correlate with notions most often advanced as explanations for affectedness such as ‘measuring out of the event’ (Tenny 1994) or ‘incremental theme’ (Dowty 1991); in particular complements of perception and psych verbs, which are high in the von Heusinger and Kaiser observational hierarchy, are not affected.¹⁴

These data leave us with the problem of how DOM works with non-[CAUSE] verbs. Consider the minimal pair of a [CAUSE] and a non-[CAUSE] psych verb in Italian (42) or Spanish (43). For ‘frighten’ in (42a) our structural account is based on the existence of paraphrases like ‘John causes me a fright’; the DOM argument ‘I’ is then a possessor of the internal/state event ‘fright’. Yet it is evident that with ‘fear’ in (42b) the possessor of the psychological state of ‘fear’, i.e. the experiencer, is ‘John’—which means that it is hardly plausible to try and impute such a status to the DOM argument ‘I’. In Pesetsky’s (1995) account ‘I’ is the subject matter of the psych event.

- (42) a. Gianni mi spaventa.
 G me frightens
 ‘Gianni frightens me.’
 b. Gianni mi teme.
 G me fears
 ‘Gianni fears me.’
- (43) a. mujeres que asustan a los hombres
 women that frighten to the men
 ‘women who frighten men’
 b. Quien teme a Virginia Wolf?
 who fears to VW
 ‘Who is afraid of Virginia Wolf?’

It seems to us that two options are open, though both of them require revising our conception of dative in terms of the $Q(\subseteq)$ elementary predicate. The first, more conventional option is renounce any attempt at associating ‘oblique’/‘dative’ with any univocal content, albeit elementary, and take it to be an unanalyzable primitive OBL/DAT. The discussion proceeds in all respects as before—except that the content that we associated with DOM, namely that discourse participants, and other referents that can be assimilated to them (see Sect. 4.1) admit only of certain modes of attachment, can no longer be understood in terms of the intuitive notion of possessor/part-whole/inclusion.

¹⁴Torrego (1998) includes the agentivity of the subject, the telicity of the predicate and the affectedness of the object among the necessary by-products of what she calls the marked accusative. According to Torrego, all of these, as well as the animacy/definiteness of the marked accusative, depend on movement of the internal argument to [Spec, *v*]. However the various properties are asserted of the [Spec, *v*] position, rather than truly explained by it. Furthermore, the data of von Heusinger and Kaiser (2011) undermine the idea that agentivity (causer) or affectedness (change-of-state) are necessary to determine DOM.

The second, more interesting option is to try to extend possessor/inclusion/part-whole to examples like (42b). The crucial point here is how to understand what Pesetsky (1995) calls subject matter. Consider (42b). What (42b) says is that Gianni is in a state of fear (includes the mental state of fear, i.e. experiences it)—and that crucially ‘I’ is part of that mental state. In other words one could paraphrase (42b) as saying that ‘John has fears and I am part of these fears’. In terms of this paraphrase, it is tempting to propose that the reason the subject matter argument ‘I’ turns up as an oblique in DOM environments like (42b) is that its attachment to the core state/event (here ‘fear’) is effected by the $Q(\subseteq)$ elementary predicate, but reversed. In other words, ‘Gianni’ includes the mental state of fear and ‘the speaker’ is included in this mental state of fears. If we notate the reverse of $Q(\subseteq)$ as $Q(\supseteq)$, the logical relations involved in (42) are a schematized in (44).

- (44) a. EA [CAUSE [fright [$Q(\subseteq)$ me]]]
 b. EA [HAVE [fear [$Q(\supseteq)$ me]]]

In terms of (44), the DOM generalization for Italian in (35) is then to be revised as in (45). Bare VP-embedding of a highly ranked argument such as ‘speaker’ and ‘hearer’ is not possible. Rather in all instance where an elementary predicate/operator (an ‘inherent case’) is not selected by the verb, attachment is via a part-whole predicate, whether as a superset/possessor $Q(\subseteq)$ or as a subset $Q(\supseteq)$; in other words the highly ranked referent can be embedded in VP only if evaluated with respect to the part-whole/possession relation.¹⁵

- (45) *DOM (Italian)*
 [_{VP} ... 1/2P *($Q(\subseteq / \supseteq)$) ...], at LF

We take (45) to be primitive, positively specifying the conditions for 1st/2nd person attachment. One could in principle reason in a different way, namely that (45) merely stipulates the ‘repair’ for a more basic prohibition against bare embedding of highly ranked arguments. Two kinds of considerations advise us against this course. First, it is evident that something like (45) would need to be stated anyway, since once we exclude bare embedding of highly ranked argument, we still need something to repair the expression via the oblique. Therefore it is simply more economical to state directly the positive conditions of occurrence of the 1st/2nd person referent, as in (45).

¹⁵ It is also tempting to extend the same treatment to the other main type of oblique case, namely genitive. In (i) ‘the students’ introduced by the preposition *di* ‘of’ is an experiencer, i.e. it is construed as a possessor of the mental state of ‘fear’. However in (ii) ‘the professor’, also introduced by ‘of’, far from being a possessor of the same mental state, is its subject matter—hence in present terms ‘the professor is (part of) the fear’ of the students. The experiencer and the subject matter can also combine, as in (iii). The contrast between (i) and (ii) is reminiscent of the literature on Romance *di* or English *of* as a copula admitting both of direct and inverse construal (Hoekstra and Mulder 1990; den Dikken 1995)—though at the moment we are unable to evaluate the relation between the two proposals.

- (i) la paura degli studenti quando sono interrogati
 the fear of the students when they are questioned
 (ii) la paura del professore quando interroga
 the fear of the professor when he questions
 (iii) la paura del professore degli studenti
 the fear of the professor of the students

Second, (45) as a positive condition on the attachment of highly ranked referents, admits of a unitary statement in terms of some notion of oblique, perhaps $Q(\subseteq / \supseteq)$. In formulating a negative constraint against bare embedding of the same referents, one may want to consider the possibility that highly ranked referents are not good themes, for instance because high individuation implies constant properties and makes them bad ‘measures of the event’ or ‘incremental themes’.¹⁶ The problem is that notions of affectedness are largely irrelevant for the DOM phenomenon. According to von Heusinger and Kaiser (2011) all definite animate internal arguments in Spanish are attached VP-internally via DOM—and DOM attachment of indefinite animate arguments is systematic with verb classes (perception verbs, psych verbs) that have non-affected objects.

This leads us back to the gradation between different types of predicates that is nevertheless observed by von Heusinger and Kaiser (2011:611, Table 12). The issue remains open in the dedicated literature, and we cannot close it here. Nevertheless, it is worth pointing out that the model we are building makes certain predictions. In essence, DOM amounts to the fact that highly ranked DPs enforce an attachment where they have an oblique/possession relation to the VP sub-event/state. Therefore we may surmise that in situations where the ranking of the argument makes it possible but not necessary for DOM attachment to take place (e.g. indefinite animate DPs in Spanish), the accessibility of the two-layered v-V structure required by $Q(\subseteq)$ attachment becomes a predictor of the likelihood of DOM. In other words, we suggest that in Spanish action, psych and perception predicates have more transparent v-V structures than, say, non-psych statives. This seems to us a plausible result.

It is also interesting to note that again with indefinite animate DPs, with which DOM attachment is possible, but not necessary, there are predicates that effectively exclude it, in particular possession ‘have’ (*tener*) as in (46). The same is true in Southern Italian dialects (Manzini and Savoia 2005). We would like to suggest that in essence, Spanish *tener* is just ($\supseteq$), therefore the structure avoids, as it were, duplication of the possession structure.¹⁷

- (46) Tiene (*a) una mujer muy inteligente
has to a wife very smart
‘He has a very smart wife’

3.3 Intermediate summary

Summarizing so far, the core of the present discussion is simply an attempt to provide a unified syntactic characterization for goal datives and DOM datives. What they have in common is the nature of the attachment they define, in terms of a syntactic

¹⁶We are discussing this at the suggestion of an anonymous reviewer.

¹⁷As an anonymous reviewer points out, we predict that animate definite DPs (and even more so pronouns) will nevertheless be associated with DOM. As far as we can tell this is true, as in Spanish (i).

- (i) Solo me tengo a mi misma
only me I.have to myself
‘I only have myself’

$Q(\subseteq)$ category, implying an articulated v -V structure of a transitive verb. Where they differ is that goal datives are required by the event (the verb), while DOM datives are introduced because of the intrinsic properties of the argument to which they attach, for instance Participant clitics in Italian (45). Section 3 was largely taken by the discussion of potential empirical problems with our proposal—including the occurrence of goal datives with both transitive and unergative verbs (Sect. 3.1.1); the contrasting behaviour under passive of goal and DOM datives (Sect. 3.2); the occurrence of DOM datives with different classes of transitive verbs (Sect. 3.2.1).

4 Crosslinguistic implications of the model

4.1 Definiteness/animacy hierarchies

The constraint in (45) in the formulation we gave of it, holds in a particular language, namely Italian. On the other hand, several potential dimensions of variation are implicit in (45), concerning the nature of V (briefly examined in Sect. 3.2.1), the nature of the DOM case ($Q(\subseteq)$ in (45)), and the type of arguments that undergo DOM (1/2P in (45)).

Let us begin with the different subsets of arguments that undergo DOM in different languages. The basic facts are well-known. According to Lazard (1984), “Persian and Hindi are languages in which both animacy and definiteness play a role in determining DOM, but ... animacy is stronger than definiteness in Hindi, while in Persian, definiteness is stronger than animacy” (quoted by Aissen 2003:468). In general, Indo-European DOM datives display sensitivity to definiteness and/or to animacy, with some language animacy oriented and others definiteness oriented and others yet sensitive to both properties.

The theoretical problem that faces us is defining definiteness, animacy and their possible subclasses. Consider again our test case for DOM here, namely Italian (45). Participant arguments are ordinarily construed as having the highest ranking in the animacy hierarchy. It seems natural to assume that they have the highest ranking in the definiteness hierarchy as well, in virtue of their deictic reference only—so that the two hierarchies coincide in their highest segment. In this sense, the basic animacy/definiteness split is the person split, between 1st/2nd person and all other referents (cf. DeLancey 1981). In (47) we provide an illustration of the Participant *vs.* everything else split with a more canonical example of Romance DOM than Italian clitics, from a Southern Italian variety. The Participant arguments in (47a) are introduced by the DOM preposition *a*, while the 3rd person arguments in (47b) are not, despite being pronominal/definite.

- (47) a. *a camatə a mme/nnu*
 he.has called to me/us
 ‘He called me/us’
 b. *a camatə kwilʎə/frattə tiə*
 he.has called him/ brother yours
 ‘He called him/your brother’

Colledimacine (Manzini and Savoia 2005: Sect. 4.9)

Apart from 1st/2nd person, descriptive definiteness and animacy properties diverge. The definiteness scale is characterized by referential notions of deixis, definiteness and specificity, or lack thereof, which are confidently manipulated by formal systems. For instance, in the Southern Italian variety in (48), a notion of deictic reference may be relevant, since under DOM pronouns in all persons, as in (48a), split away from non-pronominal DPs, as in (48b).

- (48) a. *ji camə a ttɛ/a vvo/a kkullu*
 I call to you/to you.pl/to him
 ‘I call you/him’
 b. *ji camə fratə-tə/killi fəmmənə*
 I call brother-yours/those women
 ‘I call you brother/those women’

Canosa Sannita (Manzini and Savoia 2005: Sect. 4.9)

As for the animacy scale, perhaps the most often quoted approach (Dixon 1979) construes it in terms of potential agentivity, i.e. potential control over the event. Yet the primacy of the person split suggests that animacy may instead involve potential control over discourse (cf. the notion of ‘view point’ in DeLancey 1981). Human referents are a potential set of discourse participants (speakers and hearers), while inanimates are excluded from playing this role. In other words, definiteness and animacy seem to correspond to two different pragmatic scales, one defined in terms of contextual salience (deixis, definiteness specificity), the other in terms of contextual control (i.e. animacy). If we read him correctly, these are essentially Leonetti’s (2004:104) conclusions on Spanish, since he argues that what tells apart DOM and non-DOM arguments is a notion of topic, in the sense both of “referentially autonomous expression” (definite) and of “anchor for new assertions”.

The second part of the theoretical problem is individuating the range of possible interactions between the definiteness/animacy categorial splits and DOM. Under (45), Participant clitics in Italian cannot be embedded in a predicate unless they are part of a possessor substructure. Languages without DOM are simply languages for which (45) holds of the empty set of referents, hence is void/undefined. On the other hand we know that referential splits can oppose not only Participants to other arguments, as in (47), but also the deictic pronominal set to other referents, as in (48) and so on. Evidently, the child who learns a language will have to fix where her/his language puts the boundary between lower ranked referents that allow for bare accusative embedding—and higher ranked referents that require the more complex oblique embedding. As far as we can tell, Universal Grammar can help in refining the definiteness/animacy hierarchies; however there is no predicting where a language will cut them.¹⁸

4.2 Non-dative/non-oblique DOM case

Another potential variable contained in (45) concerns the nature of the elementary predicate/operator which embeds a highly ranked argument VP-internally ($Q(\subseteq)$)

¹⁸We leave it completely open here whether accounting for the relevant cuts requires OT devices like harmonic alignments (Aissen 2003). We note that such devices do not sit well with minimalist theories.

in (45)). Our discussion so far offers an explanation as to why DOM morphology can coincide with $Q(\subseteq)$, i.e. the goal dative. Importantly, however, we do not predict that DOM morphology must coincide with $Q(\subseteq)$.

Let us begin with a very simple case in point. Romanian is one of the several Romance languages which has DOM with animate/definite internal arguments (Dobrovie-Sorin 1994, cf. also fn. 9). In (20), we further saw that this language has an inflectional oblique, covering genitive and dative. However the DOM morphology does not coincide with the oblique inflection. Rather, animate/definite internal arguments are introduced by the preposition *pe*, which is independently attested in Romanian as a locative (generally rendered as ‘on’). We have already suggested in Sect. 3.1 that locatives can be construed in terms of a locative restriction on the $(\subseteq)$ relation, namely ‘x included by y, y a location’, where different locatives introduce of course different restrictions.¹⁹ Suppose we apply this general suggestion to Romanian *pe*. The realization of DOM arguments by *pe* will involve the same basic predicate $(\subseteq)$ reviewed in Sect. 3—except with a locative restriction. It is possible that the inflectional nature of the pure $Q(\subseteq)$ predicate/operator in Romanian influences the identification of the DOM predicate/operator with a $Loc(\subseteq)$ preposition (*pe*). What crucially remains constant with respect to Italian (45) or the Indo-Iranian languages reviewed in Sect. 2.1 is that the DOM case coincides with an oblique, involving the $(\subseteq)$ relation.

A truly divergent pattern is exemplified by Turkic languages, including Turkish (Enç 1991) and Sakha (Baker and Vinokurova 2010). In Turkish, non-specific objects are in a morphologically uninflected direct case, which they share with the EPP argument, as in (49a). Specific objects bear a specialized DOM case-(y)I, as in (49b). The indirect object, as in (49c) has its own suffix -(y)A.

- (49) a. Ali bir piyano kiralamak istiyor
 Ali one piano to.rent want.prog.3sg
 ‘Ali wants to rent one (some) piano.’
 b. Ali bir piyano-yu kiralamak istiyor
 Ali one piano-acc to.rent want.prog.3sg
 ‘Ali wants to rent a certain piano.’
 c. Hasan kitab-ı Ali-ye ver-di
 Hasan book-acc Ali-dat give-pst
 ‘Hasan gave the book to Ali.’

Turkish (Enç 1991:4–5)

Turkish (Kornfilt 1997:90)

This distribution is not only different from the Indo-European one studied so far, but also more usefully compared to an altogether different set of IE data. Take Albanian, which has two different series of nominal declensions, one for definites and one for indefinites. The indefinite declension has a single direct case, as in (50a), coinciding with the bare lexical base, while the definite declension differentiates nominative, as in (50b) from accusative, as in (50c). Note that Albanian definite inflections are

¹⁹Manzini and Savoia (2011a, 2011b) treat in this way the syncretism of oblique and locative (‘ablative’) case in Albanian.

often construed by the formal literature as postposed articles (see the brief discussion of Romanian (20)); for present purpose, what matters is not the exact derivation of (50b-c) but simply the resulting distribution. In the discussion surrounding (17)–(18) we focussed on the 1st/2nd person vs. 3rd person split, whereby Albanian Participant pronouns only display oblique case when embedded as VP-internal arguments. From the data in (50) it now appears that Albanian also has a definiteness split, though unconnected with oblique, whereby definite arguments have a specialized accusative inflection, which indefinites lack.

- (50) a. *ɛrði/ pa:ʃ ji vajz/ji burr*
 s/he.came/ I.saw a girl a man
 ‘A girl/a man came’/‘I saw a girl/a man’
 b. *ɛrði vajz-a/ burr-i*
 s/he.came girl-Def/ man-Def
 ‘The girl/the man came’
 c. *pa:ʃ vajz-ən/ burr-in*
 I.saw girl-Acc.Def/ man-Acc.Def
 ‘I saw the girl/ the man’

Shkodër

The (Geg) Albanian case system in (17)–(18) and (50) faces us with an important illustration of the problems in importing functional-typological notions like DOM within a formal, mentalist framework, where the relevant phenomena are attacked in terms of more primitive notions like definiteness or oblique, interacting with the core computational mechanisms of grammar. By DOM, do we understand the attachment of internal arguments via the $Q(\subseteq)$ case/elementary operator, as seen in Albanian Participant pronouns in (17)–(18) (DOM-1)? Or do we understand the specialized accusative (non-oblique) case associated with definite internal arguments in Albanian (50) (DOM-2)? This article deals essentially with DOM-1; a separate discussion would be required for a proper account of DOM-2. For Albanian, Manzini and Savoia (2011a, 2011b) argue that the *-n* inflection seen in (50c) is simply definite. This suggests that the extra inflection of definite arguments introduced under DOM-2 in Turkish as well is simply a Definiteness operator. Functionally and typologically Albanian (17)–(19), Italian (19), Indo-Iranian in Sect. 2.1 may be instances of DOM as much as Turkish (49) or Albanian (50)—but this does not guarantee the formal equivalence of the various phenomena.

Another well-studied DOM system is Finnish (Kiparsky 2001), where affected and unaffected objects are assigned two different cases, namely partitive for non-affected objects, as in (51b) and a case morphologically identical to genitive for affected objects, as in (51a). Only a small subset of nominal expressions have a morphological accusative case, distinct from the genitive, namely pronouns. Accusative pronouns in affected contexts, as in (52a), alternate with partitive pronouns in non-affected contexts (52b).

- (51) a. *Ammu-in karhu-n*
 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).'
- Finnish* (Kiparsky 1998:267)
- (52) a. Näe-n häne-t
see-1sg him-acc
'I see him/her.'
- b. Näe-n hän-tä
see-1sg him-part
'I'm seeing him/her, I see a bit of him/her'
- Finnish* (Kiparsky 1998:279)

Finnish provides a bona fide example of a language where affectedness interacts with case. At the same time, while unaffected internal arguments are always partitive, independently of their position on the definiteness hierarchy, affected objects split between 'genitive' (lexical DPs) and 'accusative' (pronouns). For Kiparsky (2001:326) partitive is a complement case (+LR, Lowest Role), genitive a Spec case (+HR, Highest Role), and 'accusative' a structural case characterized by a negative value of both features—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.

At an abstract enough level, the overall distribution of Finnish appears to be rather similar to that of Albanian, where the two splits in (17)–(18) and in (50) yield three different types of attachment for internal arguments under VP: bare stem embedding ('direct case') for indefinites in (50a), specialized definite case ('accusative') for 3rd person definites in (50c), and oblique for 1st/2nd person in (18). In Finnish, the tripartition is between non-affected arguments in the complement case ('partitive') in (51b)–(52b), affected 3rd person arguments in the 'genitive' case in (51a), and affected pronouns in the 'higher object' (dative?) case in (52a). The difference is precisely that the Albanian split is determined solely by the definiteness hierarchy (Participant – definite non-Participant – indefinite)—whence in Finnish it appears to be determined by the interaction of definiteness/deixis (pronouns vs. non-pronouns) with affectedness. A discussion of the latter is outside the scope of this article; see Sect. 3.2.1 for a discussion of its irrelevance in Spanish (and perhaps by implication in typologically and genetically close languages).

4.3 Non-goal thematic datives: Experiencers

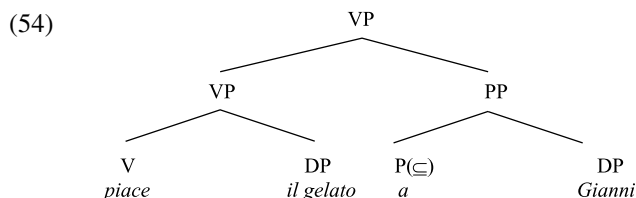
The recent Applicative literature (Pylkkänen 2008), takes it as not coincidental that the same dative/oblique morphology found to express goals also introduces experiencers. For the Appl literature, this corresponds to the fact that the same Appl head (externalized by dative/oblique) can attach at different points in the syntactic tree. The low Appl head establishes a relation between two arguments (namely the goal and the theme), while the high Appl head introduces relation between an argument (experiencer) and an event (the VP).

Consider then our test language, Italian, again. A natural intermediate link between goal datives of the type in (53a) and experiencer datives like (53c) is provided

by goal datives like (53b). Given the parallelism in morphosyntactic alignment between (53a) and (53b), the simplest assumption is that (53b) is indeed to be analyzed along the lines of (53a). Thus if (53a) involves a material possession relation between ‘Gianni’ and ‘the book’, (53b) amounts to possession/inclusion of a mental state, ‘fright’, by ‘Gianni’.

- (53) a. Ho dato il libro a Gianni.
I.have given the book to Gianni
‘I gave the book to Gianni.’
- b. Ho dato un gran spavento a Gianni.
I.have given a great scare to Gianni
‘I greatly scared Gianni.’
- c. A Gianni piace il gelato.
to Gianni likes the ice-cream
‘Gianni likes ice-cream.’

Applicative analyses of the experiencer dative in (53c) introduce it by means of a high Appl head, establishing a relation between it and the VP sub-event/state. But this is what we already proposed in Sect. 3.1.1 for non-experiencer complements of unergatives. If we extend the same treatment to (53c), we expect that the latter will be interpreted as saying that liking the ice cream is an elementary event/state in the ‘zonal inclusion’ domain of Gianni. Gianni will be an experiencer simply in that the event/state of liking is a mental one²⁰—while the unergatives considered before do not involve mental states. The other difference between the unergative structures in Sect. 3.1.1, and the structure in (54) for (53c) is simply that the event to which $P(\subseteq)$ connects ‘Gianni’ in (54) is slightly more complex, since it includes the theme (or subject matter) of the psych-state/event as well.



Reference to the Appl literature finally raises the issue of non-thematic datives, including non-thematic possessors and benefactives/malefactives. According to Boneh and Nash (2012), non-core datives are all attached immediately above the VP constituent, essentially as in (54). We are happy to adopt this conclusion, though the element that glues the non-core dative to the sentential tree in present terms is ($\subseteq$), not simply the lambda operator as in Boneh and Nash (2012).

²⁰This treatment of experiencers as possessors of mental states/events is essentially the same as Landau’s (2010), for whom experiencers are locations of mental events. We already commented in Sect. 3.2 on the relation between the present notion of inclusion/part-whole and the notion of location—with which much literature identifies possession.

4.4 The connection with agreement

Recall now that the main point of the present article is to show that a consistent theory can be built by taking at face value the morphological coincidence of the goal case with the DOM case and building it into the syntax. In Sect. 3 we have considered perhaps the most important difficulty with this conclusion, concerning passives. There are however other computational processes with which our hypothesis interacts, the most notable of which is agreement. As it will emerge, it is not obvious that the data as a whole follow either from our hypothesis or from the alternative hypothesis that DOM case is a deep accusative. Because of their potential interest we will at least try to present the main data, though their complexity will force us to leave the matter open for future research.

Under a Tense/Aspect based ergativity split, in the Hindi perfect the external argument of a transitive verb displays the ergative case *-ne*, while the verb, which is a perfect participle, agrees with the internal argument, as in (55a). Recall from the discussion surrounding (7) in Sect. 2, that in Indo-Aryan languages DOM is insensitive to the alignment of the external argument (nominative in the imperfective and ergative in the perfective). Therefore in the perfective, an animate internal argument also bears the DOM case/postposition *-ko*. What is relevant here is that the DOM object does not agree with the perfect participle, which shows up in the default masculine singular, as in (55b).

- (55) a. Anil-ne kitaabẽ becĩ
Anil-Erg book.fpl sell.perf-fpl
'Anil sold (the) books.'

Hindi (Mohanani 1995:83)

- b. Anjum-ne saddaf-ko dekhaa
Anjum.fsg-Erg Saddam.fsg-DOM see.perf.msg
'Anjum saw Saddam.'

Hindi (Ahmed 2006:3)

The interest of the data in (55) for the present account of DOM is that if DOM case is an underlying direct case only masquerading as an oblique when externalized, the contrast between agreeing bare internal arguments, as in (55a), and non-agreeing DOM internal arguments, as in (55b), remains mysterious. Vice versa if the DOM case is construed as the oblique that it superficially appears to be, as under the present proposal, we predict that since goal obliques do not agree with the perfect participle, DOM obliques will not agree either. Therefore the agreement contrast in (55) is not only consistent with present predictions, but strengthens the present model against its most obvious competitor.

Unfortunately, other languages implement the opposite scenario with respect to Hindi. In Marwari, a Rajasthani language the perfect participle "always agrees with O whether it is [DOM] marked or not" according to Verbeke (2013:234). Crucially "agreement with an IO or an experiencer, marked with the same postposition is out of the question" (ibid.). In (56) we illustrate agreement of the perfect participle with DOM objects (*-nai*), with examples imputed by Khokhlova (2002) generically to Rajasthani. About Rajasthani, one could conclude exactly the opposite with respect

to what we just concluded for Hindi—namely that agreement of the perfect participle with the internal argument, even if it is in the DOM oblique, as in (56), means that the grammar computes an underlying direct case.

- (56) a. giitaa raawaN-nai maariyau hai
Gita.f Rwan.m-DOM beat.perf.msg be.pres.3sg
'Gita has beaten Rawan.'
b. raawaN giitaa-nai maarii hai
Rwan.m Gita.f-DOM beat.perf.f be.pres.3sg
'Rawan has beaten Gita.'

Rajasthani (Khokhlova 2002)

Importantly, the presence of a DOM agreement parameter does not appear to be an artefact of special conditions prevailing in Indo-Aryan languages.²¹ Perfect participles in several Romance languages display what Burzio (1986) appropriately calls 'ergative' agreement, i.e. agreement with the internal argument. The Romance pattern, well known from languages like Italian or French, is made superficially more complex by a generalization formulated by Kayne (1989)—namely that agreement is lexicalized only when the internal arguments moves to (or is generated in) a position higher than the perfect participle. This generalization is not a deeply embedded one. Indeed in several Romance languages the perfect participle agrees with the internal argument of transitive verbs independently of their position relative to the participle. In (57) we provide an example from a Northern Italian dialect; see D'Alessandro and Roberts (2010) for Abruzzese and Manzini and Savoia (2005) for more examples from Southern Italian dialects.

- (57) a. ɔ kæ'm-a kal om'
I.have called-msg that man
b. ɔ kæm-aðæ kala fomlæ
I.have called-fsg that woma

²¹ As briefly discussed for Vafsi in (9)–(10), a Tense/Aspect triggered ergativity split, leading to the oblique realization of the external argument, also characterizes selected Iranian languages. In some of these languages, an internal argument bearing DOM dative/oblique case agrees with the perfect participle, for instance in Baluchi (i). In other languages, it does not. For instance Mâsâli is reported to use a fossilised 3sg agreement morpheme in the perfect, where the internal argument is a DOM oblique, as in (ii).

- (i) mā zahm-ā ārθ-aγ-ant
I.obl sword-obl.pl bring-perf-3pl
'I brought the swords.'

Baluchi (Gilbertson 1923:113 cited in Korn 2008:262)

- (ii) a. xərdan-i asb-un vel â-du-a
child-obl.sg horse-obl.pl loose all-give.pst-3sg
'The child let the horses go.'
b. xərdan-un asb-i vel â-du-a
child-obl.pl horse-obl loose all-give.pst-3sg
'The children let the horse go.'

Mâsâli (De Caro 2008:5)

- c. ɔ kæ'm-e kaj om
I.have called-mpl those men
- d. ɔ kæm-aðə kile fomle
I.have called-fpl those women
- e. l ɔ kæ'm-a/kæm-aðə
3sg I.have called-msg/called-fsg
'I have called him/her'
- f. i ɔ kæ'm-e/ kæm-aðə
3pl I.have called-mpl/called-fpl
'I have called them.'

Bagolino (Manzini and Savoia 2005: Sect. 5.1.2)

In standard Italian, following Kayne's (1989) generalization, in situ internal arguments cannot agree, but clitics can. Let us then go back to the examples originally introduced in (19). If we turn these examples to the present perfect, we find that in the 3rd person the accusative clitic obligatorily agrees with the participle, as in (58a), while the dative clitic cannot agree, as in (58b).

- (58) a. Li ha colpiti/*colpito
them he.has hit.pl/hit.sg
'He hit them'
- b. Gli/le ha parlato/*parlata
him/her he.has talked.m/talked.f
'He talked to him/her'

If we are correct in our conclusion that 1st/2nd person clitics are inherently oblique (whether as thematic or DOM datives), we expect that unlike the accusative clitic in (58a), they will not display perfect participle agreement. This prediction is only partially correct. In (59b) the 1/2P person clitic is indeed allowed not to agree in number, unlike the 3rd person clitic in (58a). Unfortunately, the other option is also allowed, i.e. agreement of the 2nd person clitic with the perfect participle, again seen in (59b). Under this latter option the 2nd person clitic behaves as if it was an underlying accusative, parallel to (58a). Goal/thematic datives never agree as in (59a).

- (59) a. Vi/ci ha parlato/*parlati
You(pl)/us he.has talked.sg/talked.pl
'He talked to you/us'
- b. Vi/ci ha colpiti/colpito
You(pl)/us he.has hit.pl/hit.sg
'He hit you/us'

The optionality of agreement in (59) replicates at a small scale the macro-parameter seen in Indo-Aryan languages in (55)–(56). This is not an unproblematic outcome for the present hypothesis, since we expect DOM arguments to always behave like true obliques. But it also is a problematic outcome for the traditional view, since if DOM obliques are deep accusatives/direct cases they should always agree. Given a sufficiently rich morphological readjustment component one can always stipulate the right result, but we already indicated in Sect. 1 why we consider

this irrelevant. It seems therefore fair to conclude that agreement data are problematic, no matter what view one adopts of DOM. As such they do not decide either in favour or against the present proposal—and require further research.

4.4.1 Clitic doubling and perspectives for future research

Spanish provides an interesting appendix to the discussion that precedes. Spanish does not have perfect participle agreement, so that we cannot check how animate/definite internal arguments introduced by *a* interact with agreement. What is relevant for us is that Spanish allows for full DPs to be doubled by clitics (and requires it in certain contexts). If the *a* phrase is an underlying accusative, we expect it to be doubled by an accusative clitic; if it is an underlying dative, then we expect it to be doubled by a dative.

The facts are that in standard Spanish, the DOM argument is doubled by an accusative clitic, as in (60a)—while an *a* phrase lexicalizing a goal dative is doubled by a dative clitic, as in (60b). This pattern appears to favour the view that the DOM argument in (60a) is an underlying accusative—and is correspondingly problematic for the present view.

- (60) a. Lo vio (a Juan)
him he.saw to Juan
'He saw Juan'
- b. Le dio el libro (a Juan)
to.him he.gave the book to Juan
'He gave the book to Juan'

Yet consider the phenomenon of 'leísmo', amply attested in non-standard varieties and deemed acceptable within the standard variety as well. In 'leista' dialects the *le* clitic lexicalizes both the goal dative, as in standard Spanish (60b), and an animate internal argument, as in (61) (from Alvar 1996:205). Within the present analysis, it is natural to conclude that the clitic in (61) reflects the same case organization as its doubling DP—hence the animate DOM clitic shows up in the same case (oblique/dative) as the *a* phrase.

- (61) Le vimos llorando (a la madre)
to.her we.saw crying to the mother
'We saw mother crying'

Ormazabal and Romero (2007) explicitly reject the possibility that *le* in (61) is a dative. One of their objections is that (60a) and (61) can both passivize, while goal datives cannot; but this objection is now addressed by the discussion in Sect. 3. Therefore the main objection we are left with is that *le* in (61) is "selective with respect to animacy", while goal dative is not; but this is not an objection—it is simply the name of the phenomenon to be explained, namely the lexicalization of animates (DOM arguments) and goals by the same oblique/dative morphology. Note that to the extent that the two possibilities in (60a) and (61) coexist in standard Spanish, the surface effect is optionality, as in perfect participle agreement in Italian (59b).

In present terms (61) is not problematic, since the *le* clitic and the argument it doubles, namely *a la madre*, agree in all properties, including phi-features and case, as roughly indicated in (62a). But (62b) is not problematic either, in the sense that mismatch in case between members of a chain is independently attested in natural languages. In (63) we provide an example from a free relative in Greek (Alexiadou and Varlokosta 2007), where the relative pronoun *opjon* is overtly accusative and the resumptive clitic *tu* that it binds is overtly oblique (traditionally called a genitive on etymological grounds).

- (62) a. $[Q(\subseteq) \text{ le}] \dots [PP(\subseteq) \text{ a la madre}]$
 b. $[lo] \dots [PP(\subseteq) \text{ a Juan}]$
- (63) Tha voithiso opjon tu dosis to onoma mu.
 Fut help.1sg whomever.acc him.obl give.2sg the name mine
 ‘I will help whomever you give my name to (him).’

The minimalist rule of Agree matches phi-features, not cases. If we dismiss Chomsky’s (2001, 2008) proposal that case is a by-product of Agree (see the discussion of extended accusative in Sect. 3.2), there are no grounds in the theory for the conclusion that all members of a chain must agree (be non-distinct) in case. In particular, we may say that the lexical argument and the clitic are each merged in its own domain (argumental and inflectional respectively, cf. Sportiche 1996) and that slightly different rules of argument attachment prevail in the two domain. What matters for chain formation is only agreement in phi-features (i.e. referentially relevant properties) and saturation of a single theta-slot.

5 Conclusions

The superficial identity of DOM internal arguments and of goal dative involves no accidental homophony or syncretism, but rather an underlyingly identical structure of embedding. Though passivization differentiates thematic and DOM datives, this can be explained by the independently needed assumption that thematic datives are selected by the predicate, but DOM datives are not. Other differences are more elusive. For instance, when it comes to agreement (Sect. 4.4) we have provided evidence that languages split into two: those that treat DOM datives like accusatives (potentially problematic for us) and those that treat them as datives (potentially problematic for proponents of an accusative status for DOM internal arguments).

In Sect. 3 we have argued for a theory of datives/obliques that makes case into an interpretable elementary predicate. Both goal thematic datives (Sect. 3.1) and experiencer datives (Sect. 4.3) are embedded through it. The essence of DOM of the Indo-European type is that highly ranked referents must be embedded under VP through this operator (‘inclusion’, ‘possession’ etc.)—which implies an appropriate (re)structuring of the event. In Sect. 4 we have reviewed some dimensions of variation relating to DOM, including the possibility that highly ranked referents require a special case embedding, but not an oblique one (Sect. 4.2).

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