

## RESEARCH

## DOM and dative case

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In some languages with DOM, the exponents of DOM and dative are homophonous, e.g. in Spanish and Hindi. I argue that this pattern is not due to DOM objects and indirect objects being represented identically in syntax, but due to syncretism between accusative and dative case in these languages. This is indicated by a number of syntactic tests which group DOM objects with morphologically zero-coded direct objects, rather than with indirect objects, including nominalisation, relativisation, controlling secondary predicates, and passivisation. I suggest that languages with a ditransitive alternation between direct/indirect and primary/secondary objects provide further support for the syntactic difference of DOM and dative objects.

**Keywords:** differential object marking (DOM); accusative; dative; case syncretism; direct objects; indirect objects

## 1 Introduction

In some languages with differential object marking (DOM), the exponents of DOM and dative case are identical. (1) illustrates this for Spanish (Torrego 1998; Leonetti 2004; 2008; Rodríguez-Mondonedo 2007; López 2012; Fabregas 2013). (1a) shows a transitive sentence with a morphologically unmarked direct object (DO), the definite inanimate DP *el libro* ‘the book’. (1b) shows an example with DOM: the definite animate direct object *la mujer* ‘the woman’ triggers the appearance of the marker *a*. As (1c) shows, a homophonous marker appears with the indirect object (IO), a recipient, in a ditransitive construction.<sup>1</sup>

- (1) *Spanish*
- a. No DOM, monotransitive  
Yo veo el libro.  
I see the book  
‘I see the book.’
  - b. DOM, monotransitive  
Yo veo a la mujer.  
I see DOM the woman  
‘I see the woman.’
  - c. No DOM, ditransitive  
Yo le doy el libro a la mujer.  
I CL.DAT give the book DAT the woman  
‘I give the woman the book.’

<sup>1</sup> Where no references are given for examples, data were constructed by the author and checked with native speakers.

Other languages with identical exponents for DOM and dative are Hindi, Kashmiri (both Indo-European), varieties of Basque (Odría 2014), Guaraní (Zubizarreta & Pancheva 2017), as well as a number of Semitic languages and Aymara (Bossong 1991; Iemmolo 2012). Languages with DOM in which its exponent is *not* syncretic with another case exist as well, e.g. Hebrew (Danon 2006), Turkish (Enç 1991; Kornfilt 2008), Romanian (Lindemann 2018), and Kannada (Lidz 2006), among others.

The main goal of this paper is to explore whether the exponents of DOM and dative in (1b,c) match mainly for syntactic or morphological reasons. It is possible that there is a single marker *a* in Spanish, for example, and that DOM objects are merged with the dative head *a*, or that DOM objects and indirect objects are assigned the same dative case. If this syntactic hypothesis is true, then the string *a la mujer* should have the same internal structure and possibly the same position in both (1b) and (1c) and it should represent the same type of argument, an indirect object. Such syntactic analyses have been proposed by Torrego (2010); Ormazabal & Romero (2013); Manzini & Franco (2016).

An alternative hypothesis is that the overlap between DOM and dative is a matter of syncretism in the case system of the relevant languages. On this view, direct objects with DOM and indirect objects are different types of internal arguments, i.e. direct vs. indirect objects, with different syntactic representations, and possibly originating in different positions. *a* spells out both accusative or dative, and can appear with both direct and indirect objects.

The two approaches, syntactic and morphological, make different predictions with respect to the behaviour of DOM objects. If DOM objects are syntactically identical to indirect objects, one would expect that DOM objects and indirect objects behave alike syntactically, showing the same behaviour in passivisation, for example. The purely morphological approach does not make such a prediction: if DOM is an allomorph of zero-marked accusative, DOM objects should pattern with morphologically unmarked direct objects syntactically.

To show this, in Section 2, I discuss the behaviour of direct and indirect objects with respect to passivisation, nominalisation, controlling secondary predicates and appearing in reduced relative clauses in different languages. Each of these tests shows that direct objects, with or without DOM pattern together to the exclusion of indirect objects. I claim that this is true for the languages under discussion here, and probably others too. In principle, there could be languages in which the homophony turns out to be syntactic, but I am not aware of any examples (see also Legate 2008; Kalin & Weisser 2018 for discussion of morphology and syntax in DOM).

Consider one of the tests, namely passivisation. In Spanish, the direct objects in (1a,b) can undergo passivisation, as shown in (2a,b). The indirect object in (1c), however, cannot, as shown in (2c).

(2) *Spanish*

- |    |   |                    |
|----|---|--------------------|
| a. | El libro fue visto.<br>the book was seen.M<br>'The book was seen.'  | theme passive      |
| b. | La mujer fue vista.<br>the woman was seen.F<br>'The woman was seen.'  | theme passive      |
| c. | *La mujer fue dada el libro.<br>the woman was given.F the book<br>intended: 'The woman was given the book.' | *recipient passive |

Further evidence for the syntactic difference of DOM and dative objects comes from languages with a ditransitive alternation between direct and indirect vs. primary and secondary objects (Dryer 1986), or so-called indirective vs. secundative alignment (Haspelmath 2005; Malchukov, Haspelmath & Comrie 2010).

Two such languages are the Uralic languages Khanty and Mansi from the Ob-Ugric branch of the family (Nikolaeva 1999a; b; 2001; Dalrymple & Nikolaeva 2011; Virtanen 2012; Sipőcz 2016). In these languages, there is differential object agreement (DOA) with accusative theme or patient objects and obligatory object agreement with accusative recipient or goal objects. Like in Spanish, arguments with different semantic roles can be marked identically and, what is more, themes show *differential* marking while recipients show *obligatory* marking. Khanty and Mansi differ from Spanish, however, in that only one object at a time can be accusative and that the other object is a PP or bears oblique case. I will show that such languages provide better evidence for the syntactic identity of patient and recipient arguments, as those accusative arguments which trigger agreement behave alike with respect to passivisation and other tests, independently of their semantic role (using data from Khanty).

The paper is structured as follows. In Section 2, I discuss data from several languages in which the exponents of DOM and dative are homophonous and I apply a number of tests in order to determine the syntactic behaviour of each type of object. In Section 3, I implement a morphological analysis that accounts for the syncretism straightforwardly. Section 4 provides supporting evidence from languages showing syncretism of accusative and dative without DOM, as well as from ditransitive alternations in Khanty and Spanish. In Section 5, I briefly compare the present analysis to previous work.

## 2 Matching exponents of DOM and dative

In this section, I discuss the behaviour of direct and indirect objects in a number of syntactic contexts, including passivisation, nominalisation and the objects' ability to control secondary predicates. The reasoning is the same in all contexts: I compare direct objects, i.e. theme or patient arguments with and without case-marking, to indirect objects, i.e. recipient or goal arguments, which bear dative case homophonous to DOM. Where a given test has not been applied to a language, I have not obtained the relevant data.

In addition, I will discuss language-specific differences between direct objects and indirect objects, such as their behaviour with respect to agreement (in Kashmiri) and the existence of separate clitics for direct and indirect objects (in varieties of Spanish and Italian).

### 2.1 Passivisation

Under passivisation, an internal argument can be promoted to subject. In many, but not all languages, this process leads to the loss of accusative on the passivised argument as it becomes a nominative subject and shows subject agreement with the finite, passivised verb. This is independent of whether one thinks of passivisation as a syntactic or a lexical process (see Chomsky 1981; Baker, Johnson & Roberts 1989 and Bresnan 1978; Bresnan et al. 2016, respectively).

Comparing which internal arguments can undergo passivisation hints at the source of the internal arguments' Case and how this Case is affected by passivisation. More concretely, we can examine the behaviour of direct objects without any morphological marking, direct objects with DOM and indirect objects with dative case under passivisation.

If DOM and dative objects are syntactically identical in all respects, we expect them to behave alike with respect to passivisation. As the examples from Spanish, Hindi and Kashmiri below show, however, this is not the case: direct objects with and without DOM

pattern together in that they can undergo passivisation and can appear in nominative case, in contrast to indirect objects with dative, which retain their dative case, if they can be passivised in the first place.

### 2.1.1 Spanish

Spanish has differential object marking expressed by the marker *a* preceding a proper subset of its direct objects. This marker is often said to be triggered by animacy and definiteness, but the factors determining DOM are complex and there is a lot of variation across varieties of Spanish (see Jaeggli 1982; Suñer 1988; Brugè & Brugger 1996; Torrego 1998; 2010; Gutiérrez-Rexach 1999; Aissen 2003; Leonetti 2004; 2008; Rodríguez-Mondoñedo 2007; von Heusinger & Kaiser 2011; López 2012).

Example (1), repeated below, shows a paradigm of DOM in Spanish, with animacy distinguishing the morphologically unmarked definite direct object in (1a) from the DOM object in (1b). (1c) shows a ditransitive construction in which the indirect object (the recipient argument) *a la mujer* appears with the dative marker, homophonous with DOM in (1b).

- (1) *Spanish*
- a. No DOM, monotransitive  
Yo veo el libro.  
I see the book  
'I see the book.'
  - b. DOM, monotransitive  
Yo veo a la mujer.  
I see DOM the woman  
'I see the woman.'
  - c. No DOM, ditransitive  
Yo le doy el libro a la mujer.  
I CL.DAT give the book DAT the woman  
'I give the woman the book.'

The passive counterparts of the sentences in (2), repeated below, show that while the direct objects in (1a,b) can undergo passivisation, the indirect object in (1c) cannot. (2d) shows that a verb which takes only a dative object does not support passivisation of this argument either, indicating that a ban on passivising datives does not just hold in ditransitives.

- (2) *Spanish*
- a. El libro fue visto. theme passive  
the book was seen.M
  - b. La mujer fue vista. theme passive  
the woman was seen.F
  - c. \*La mujer fue dada el libro. \*recipient passive  
the woman was given.F the book  
intended: 'The woman was given the book.'
  - d. \*La mujer fue hablada.  
the woman was talked.F  
intended: 'The woman was talked to.'

These examples show that the properties that determine DOM for direct objects do not affect the ability of undergoing passivisation. Rather, direct objects differ from indirect

objects in being able to undergo passivisation, independently of whether they would trigger DOM or not. The absence of DOM on the logical object after passivisation and expected if DOM is an allomorph of accusative. This is one indication that DOM, as accusative, is a case-marker of the *direct* object which is distinct from the marker of the *indirect* object in Spanish (see Montalbetti 1999 for a few apparent cases of datives passivising in varieties of Spanish, which do not affect this argument).<sup>2</sup>

### 2.1.2 Hindi

Hindi, too, has differential object marking: animate and specific direct objects get the case suffix or postposition *-ko* which is homophonous with dative case (Mohanán 1990; 1994; Butt & King 1991; Butt 1993; Bhatt 2007). (3a) shows that animate objects are case-marked and can be interpreted as definite and indefinite. (3b,c) show that inanimate objects can be case-marked or not, but case-marked nouns are interpreted as definite.<sup>3</sup>

- (3) *Hindi* (Mohanán 1990: 104–105)
- a. *ilaa-ne bacce-ko /\*baccaa uṭʰaayaa.*  
Ila-ERG child-ACC child.NOM lift.PFV  
'Ila lifted the / a child.'
  - b. *ilaa-ne haar uṭʰaayaa.*  
Ila-ERG necklace.NOM lift.PFV  
'Ila lifted a / the necklace.'
  - c. *ilaa-ne haar-ko uṭʰaayaa.*  
Ila-ERG necklace-ACC lift.PFV  
'Ila lifted the / \*a necklace.'

Mohanán (1990) suggests that *-ko* is the exponent of two distinct cases: accusative and dative. One of her arguments comes from passivisation: accusative is not retained under passivisation, while dative is. (4) shows this for a monotransitive predicate, and (5) for a ditransitive predicate.

- (4) *Hindi* (Mohanán 1990: 120)
- a. *raam anil-ko uṭʰaaegaa.*  
Ram.NOM Anil-ACC lift/carry.FUT  
'Ram will carry Anil.'
  - b. *anil (raam-se) uṭʰaayaa jaegaa.*  
Anil.NOM Ram-INS carry.PFV go.FUT  
'Anil will be carried by Ram.'
- (5) *Hindi* (Mohanán 1990: 121)
- a. *ram-ne Anil-ko haar bhej-aa.*  
Ram-ERG Anil-DAT necklace.M send-PFV.M  
'Ram sent Anil the necklace.'

<sup>2</sup> An anonymous reviewer points out that certain verbs, like *disparar* 'shoot', show different behaviour in that their dative object can passivise (the reviewer points to the discussion in Crespi 2017; see in particular p. 162). They suggest that the change might be due to influence from English, in which *shoot* takes a theme direct object (the thing or person being shot), whereas *disparar* prescriptively (Crespi 2017: 162; entry of *disparar* in the *Diccionario de la lengua española* of the Royal Spanish Academy) patterns like *shoot at*, taking a theme (the weapon) and a goal (the thing or person being shot). It is thus possible that such examples do not affect the approach proposed here but indicate that when passivisation is possible, *disparar* is interpreted as taking the thing or person shot as its direct object.

<sup>3</sup> Mohanán (1990: 105) points out that animate nouns can appear without case-marking when incorporated. See also Dayal (2011).

- b. anil-ko haar bhej-aa gay-aa.  
Anil-DAT necklace.M send-PFV.M go-PFV.M  
'Anil was sent a/the necklace.'
- c. haar Anil-ko bhej-aa gay-aa.  
necklace.M Anil-DAT send-PFV.M go-PFV.M  
'The necklace was sent to Anil.'

Mohanán's (1990) translation of (5b,c) indicates which argument is the subject in each clause. While case-marking is identical in both sentences, Mohanán suggests that the sentence-initial phrase is the subject in both cases.<sup>4</sup> Accusative and dative arguments thus behave alike in that both can be promoted to subject. However, accusative is not retained under passivisation, while dative is. Mohanán (1990: 121) suggests that this is natural, since "DAT is not associated with any particular grammatical function, but with a specific meaning". In other words, it is not a structural Case, while accusative is.

The variety of Hindi described by Mohanán (1990; 1994) thus patterns with Spanish in that DOM is not retained under passivisation, and direct objects with DOM pattern with morphologically unmarked direct objects and not indirect objects. Mohanán (1990: 122–125) does point out, however, that there exist what she calls "accusative preserving dialects" of Hindi, too (cf. also Bhatt 2007).

- (6) *Accusative preserving Hindi* (Mohanán 1990: 122)  
anil-ko (raam-se) ut<sup>h</sup>aayaa jaaegaa.  
Anil.ACC Ram-INS carry.PFV go.FUT  
'Anil will be carried by Ram.'

For these varieties, Mohanán (1990) suggests that accusative, like dative, is an *indirect* case, i.e. a case that is not tied to a specific grammatical function and is therefore preserved when the grammatical function changes from grammatical object to subject. In contrast, in non-accusative-preserving varieties, accusative only appears on grammatical objects (cf. the distinction between structural and inherent Case in Chomsky 1981 *et seq.*).

The two cases accusative and dative still cannot be fully equated, however. The reason is that accusative, even in the accusative preserving varieties, is not determined by meaning, but can rather express a range of thematic roles. In (7), Mohanán (1990: 124) describes these as simply "affected", "affected and undergoer of a change of state or location", and "experiencer, and undergoer of change of state".

- (7) *Hindi* (Mohanán 1990: 123)  
a. raam-ne anil-ko piiṭaa.  
Ram-ERG Anil-ACC beat.PFV  
'Ram beat Anil.'

<sup>4</sup> See Mohanán (1990: Chs. 6–7) for subject diagnostics in Hindi. One such diagnostic involves the possibility of dropping a subject if it has an identical antecedent that is also a subject. (6) shows that this is possible with a dative subject under passivisation, but not when the dative is an internal argument.

- (i) *Hindi* (Mohanán 1990: 200)  
a. niinaa-ko (ravi-se) guḍiyaa dii gaa aur us-ko / *pro* baḍii k<sup>h</sup>uṣii huii.  
Nina-DAT Ravi-INS doll.NOM give.PFV go.PFV and pron-DAT much joy.NOM happen.PFV  
'Nina<sub>i</sub> was given a toy (by Ravi), and she<sub>i</sub> / *pro*<sub>i</sub> was very happy.'
- b. ravii-ne niinaa-ko guḍiyaa dii, aur us-ko / \**pro* baḍii k<sup>h</sup>uṣii huii.  
Ravi-ERG Nina-DAT doll.NOM give.PFV and pron-DAT much joy.NOM happen.PFV  
'Ravi gave Nina<sub>i</sub> a doll, and she<sub>i</sub> / \**pro* was very happy.'

- b. raam-ne anil-ko giraayaa.  
Ram-ERG Anil-ACC fall.CAUS.PFV  
'Ram dropped/caused-to-fall Anil.'
- c. raam-ne anil-ko k<sup>h</sup>uš kiyaa.  
Ram-ERG Anil-ACC happy do.PFV  
'Ram made Anil happy.'

In the accusative preserving varieties, accusative is, obviously, retained under passivisation.

(8) *Hindi* (Mohanán 1990: 124)

- a. anil-ko piṭṭaa gayaa.  
Anil-ACC beat.PFV go.PFV  
'Anil was beaten.'
- b. anil-ko giraayaa gayaa.  
Anil-ACC fall.CAUS.PFV go.PFV  
'Anil was dropped/caused-to-fall.'
- c. anil-ko k<sup>h</sup>uš kiyaa gayaa.  
Anil-ACC happy do.PFV go.PFV  
'Anil was made happy.'

However, arguments bearing the same thematic roles can appear as nominative subjects in active constructions with identical meaning.

(9) *Hindi* (Mohanán 1990: 125)

- a. anil piṭṭaa.  
Anil-NOM be beaten.PFV  
'Anil was beaten.'
- b. anil giraa.  
Anil-NOM fall.PFV  
'Anil fell.'
- c. anil k<sup>h</sup>uš huaa.  
Anil-NOM happy become.PFV  
'Anil became happy.'

The crucial point here is that accusative arguments, even in the varieties that retain accusative, express a variety of thematic roles, and that they are all logical objects. Where accusative is not retained under passivisation, accusative only appears on grammatical objects. Where it is retained, accusative only appears on logical objects but it is not restricted to grammatical objects. However, the grammatical subject of a passive is a derived position. Whenever accusative appears in a non-derived position, it is a grammatical object, in both varieties.

This is in contrast to dative, which can also be a grammatical and logical subject, but is associated with specific thematic roles (Mohanán 1990: 185–186) and can be a derived, as well as a non-derived subject and object.

Rajesh Bhatt (p.c.) also informs me that there are subtle semantic differences in the two types of passive in Hindi. In (10b), where the logical object retains *-ko* the predicate is interpreted as more agentive:<sup>5</sup>

<sup>5</sup> This resembles passives in Sakha, a Turkic language, in which the logical object in a passive can retain accusative case. Baker & Vinokurova (2010) show that the presence of accusative on a passivised object in Sakha suggests the presence of an implicit agent which licenses agent-oriented adverbs like *intentionally*.

- (10) *Hindi* (Rajesh Bhatt, p.c.)
- a. Ram        bhuukamp-pe maaraa gayaa.  
Ram.NOM earthquake-in kill.PFV go.PFV  
'Ram was killed in an earthquake.'
  - b. Ram-ko    bhuukamp-pe maaraa gayaa.  
Ram-ACC earthquake-in kill.PFV go.PFV  
'Ram was murdered during the earthquake.'

Passivisation in Hindi mostly patterns with passivisation in Spanish: in the main variety Mohanan (1990) discusses, DOM is not retained under passivisation, as is natural if DOM is accusative and thus a structural case. Dative, on the other hand, is retained. The situation is less clear than in Spanish, as there are speakers who retain DOM on direct objects under passivisation, too. Importantly, however, even in these varieties, DOM and dative show some distinct behaviour. While dative can appear on non-derived subjects, as well as (indirect) objects, the exceptional accusative only appears on derived subjects.

### 2.1.3 Kashmiri

Differential object marking in Kashmiri appears in two domains. First, resembling Hindi and Spanish, Kashmiri marks specific, animate direct objects with a morphological case homophonous with dative, while non-specific, inanimate direct objects appear in their nominative form (Wali & Koul 1997; Bhatt 1999). With respect to passivisation, Kashmiri behaves like Hindi: while some speakers allow retaining accusative on passivised direct objects, such logical objects can also become nominative subjects. This is never possible with dative indirect objects. This is illustrated in the following examples.<sup>6</sup>

- (11) *Kashmiri* (Wali & Koul 1997: 208)
- a. su        chu me    parina:va:n.  
he.NOM is    I.DAT teaching  
'He is teaching me.'
  - b. me    chu yiva:n        təm'sindi dəs' parina:vni.  
I.DAT is    come-PASS he.GEN    by teach.INF.ABL  
'I am being taught by him.'

Wali & Koul explicitly compare (11) to indirect objects which also retain their dative case under passivisation. Like direct objects with DOM, such indirect objects do not control agreement either. Unlike direct objects, however, indirect objects never lose their case-marking.

Crucially, direct objects only retain their case-marking optionally: this means that direct objects behave as a natural class with respect to passivisation, independently of whether they would trigger DOM or not. Indirect objects are different: their dative case-marking is always retained, as shown in (12).

- (12) *Kashmiri* (Wali & Koul 1997: 209)
- a. Aslaman    dits        Mohnas    kəmi:z.  
Aslam.ERG gave.F.SG Mohan.DAT shirt  
'Aslam gave a shirt to Mohan.'
  - b. kəmi:z    a:yi                      Aslam-n-i        zəriyi Mohnas    dini.  
shirt.F.SG came.F.SG.PASS Aslam-GEN-ABL by    Mohan.DAT give.INF.ABL  
'The shirt was given by Aslam to Mohan.'

<sup>6</sup> *i* is a central unrounded high vowel; Wali & Koul (1997) use a dotless variant of the character for this phoneme.



- c. \*Mohni aav Aslam-n-i zəriyi kəmi:z dini.  
 Mohan.NOM came.M.SG Aslam-GEN-ABL by shirt give.INF.ABL  
 intended: ‘Mohan was given a shirt by Aslam.’

Second, differential object marking with personal pronoun direct objects is sensitive to aspect and the person of both the subject and the direct object. This is a so-called *global case split*: it is *global* because the properties of *two* arguments determine case-marking on one of them, rather than just the properties of a single argument (as in a *local* split; cf. Silverstein 1976; Malchukov 2008; Keine 2010; Georgi 2012; Bárány 2017 in general, and Wali & Koul 1997; Béjar & Rezac 2009 for Kashmiri). Descriptively, in the non-perfective aspect, personal pronoun objects appear in their dative form if the person of the direct object is higher than the person of the subject on the hierarchy in (13):

(13) 1 > 2 > 3

Examples are shown in (14). The case highlighted for each example indicates the case of the direct object. In (14b) and (15b), the object’s person is higher than the subject’s on (13) and therefore the object appears in a form homophonous with dative.

(14) *Kashmiri* (Wali & Koul 1997: 155)

- a. **1→2: NOM**  
 bi chu-s-ath tsi parina:va:n.  
 I.NOM be-1SG-2SG you.NOM teaching  
 ‘I am teaching you.’
- b. **2→1: DAT/DOM**  
 tsi chu-kh me parina:va:n.  
 you.NOM be.M.SG-2SG I.DAT teaching  
 ‘You are teaching me.’

(15) *Kashmiri* (Wali & Koul 1997: 155)

- a. **2→3: NOM**  
 tsi chi-h-an su parina:va:n.  
 you.NOM be-2SG-3SG he.NOM teaching  
 ‘You are teaching him.’
- b. **3→2: DAT/DOM**  
 su chu-y tse parina:va:n.  
 he.NOM be.M.3SG.-2SG.OBJ you.DAT teaching  
 ‘He is teaching you.’

In this second domain of differential object marking, passivisation works in the same way. In (16a), the active sentence, the direct object (and the indirect object) are both in their dative forms. In (16b), the logical direct object is promoted to subject and is morphologically unmarked (cf. also Béjar & Rezac 2009: 65 who take this is an argument that DOM is a structural Case, but dative is an inherent Case in Kashmiri).

(16) *Kashmiri* (Wali & Koul 1997: 208)

- a. su kariy tse me hava:li.  
 he.NOM do.FUT.2SG you.DAT I.DAT handover  
 ‘He will hand you over to me.’
- b. tsi yikh me hava:li karni təm’sindi dəs’.  
 you.NOM come.FUT.2SG.PASS I.DAT handover do.INF.ABL he.GEN by  
 ‘You will be handed over to me by him.’

### 2.1.4 Interim summary on passivisation

Examining patterns of passivisation in Spanish, Hindi, and Kashmiri, we find that DOM objects behave like other direct objects, rather than indirect objects in each language. Direct objects can be promoted to subject and lose their case-marking, controlling agreement with the finite verb. None of these languages allow indirect objects to undergo the same process.

Hindi and Kashmiri differ from Spanish in that both have varieties in which DOM can be retained on the logical object. While retaining case-marking on the passivised object is possible for direct objects, this is not the case with indirect objects. These *must* retain their dative case.

## 2.2 Reduced relative clauses

Some languages allow reduced relative clauses of the type shown in (17).

(17) the woman seen in the street

In (17), *the woman* is the logical direct object of *see*, which has been relativised. In ditransitive constructions, English allows either internal argument to appear as the head of a reduced relative, as shown in (18).<sup>7</sup> In (18a), the theme argument of *give* is relativised, while in (18b), the recipient argument is relativised.

- (18) a. the book given to the woman  
b. the woman given the book

Like with passives above, we can compare direct and indirect objects by testing their distribution in reduced relatives.

### 2.2.1 Spanish

Spanish allows reduced relatives modifying a DP, as shown in (19). Both *el libro* ‘the book’ and *la mujer* ‘the woman’, understood as the logical object of *visto/a* ‘seen’ can be modified by a reduced relative clause.

- (19) *Spanish*  
a. el libro visto en la calle  
the book seen.M in the street  
‘the book seen in the street’  
b. la mujer vista en la calle  
the woman seen.F in the street  
‘the woman seen in the street’

In ditransitives, it is not possible to relativise the indirect object (the recipient), as shown in (20a), but it is possible to relativise the direct object (the theme), as shown in (20b).

- (20) *Spanish*  
a. \*la mujer dada el libro  
the woman given.F the book  
intended: ‘the woman given the book’  
b. el libro dado a la mujer  
the book given.M to the woman  
‘the book given to the woman’

<sup>7</sup> The two examples in (18) presumably result from two different structures, namely the prepositional dative construction for (18a) and the double object construction for (18b). See also Section 4.

The reasoning here is the same as with finite passivisation: if a direct object that can get the DOM marker is introduced as an indirect object, it should not be affected by the verb's inability to assign accusative. Yet direct objects with and without DOM pattern together, independently of their ability to trigger DOM, and they pattern to the exclusion of indirect objects. Note also that it is not an inherent inability of ditransitive constructions to appear as reduced relatives, as (20b) shows: the direct object can be relativised in the context of an indirect object as well.

### 2.2.2 Hindi

According to Rajesh Bhatt (p.c.), reduced relatives in Hindi show the same pattern as reduced relatives in Spanish. DOs can be relativised, independently of their ability to trigger DOM, while IOs cannot. This is shown in (21).

- (21) *Hindi* (Rajesh Bhatt, p.c.)
- a. [ bazaar = meN dekhii gayii ] mahilaa  
market = in see.PFV.F PASS.PFV.F woman  
'the woman seen in the market'
  - b. [ us mahila-ko dii gayii ] kitaab  
that woman-DAT give.PFV.F PASS.PFV.F book.F  
'the book given to the woman'
  - c. \*[ kitaab dii gayii ] mahilaa  
book give.PFV.F PASS.PFV.F woman.F  
intended: 'the woman given the book'

While these data resemble the passives discussed in Section 2.1 to some degree, they show a clear-cut difference between direct and indirect objects: direct objects, whether or not they trigger DOM, can head reduced relatives, while indirect objects cannot.

### 2.3 Depictive secondary predicates

Odria (2014) discusses the ability of direct and indirect objects in Basque (and Spanish) to control depictive secondary predicates (see also Demonte 1987; 1988; Demonte & Masullo 1999 on Spanish). Such predicates modify one of the arguments in a clause but are often restricted to modifying the subject or the direct object (Odria 2014: 294). English examples are shown in (22). In (22a), the depictive secondary predicate *drunk* can be controlled by either the subject or the object. In (22b), however, only the subject can control the depictive secondary predicate and the indirect object cannot (cf. Williams 1980).

- (22)
- a. I<sub>i</sub> saw you<sub>j</sub> drunk<sub>i/j</sub>.
  - b. I<sub>i</sub> gave the book to the woman<sub>j</sub> drunk<sub>i/\*j</sub>.
  - c. I<sub>i</sub> gave the woman<sub>j</sub> the book drunk<sub>i/\*j</sub>.

#### 2.3.1 Spanish

Spanish behaves like English (and Basque, see below) in allowing the subject and the direct object to control a depictive secondary predicate, but not the (goal) indirect object.

The examples in (23) illustrate the relevant patterns. First, (23a) has a reading in which the modifier *rota* 'broken.F' is a secondary predicate rather than a postnominal adjective. The object, being inanimate, is a direct object without DOM.

(23b,c) illustrate a pair of sentences with monotransitive predicates taking dative and accusative objects, respectively. As gender agreement on the secondary predicate

*borracho/a* ‘drunk’ shows, only the DOM object in (23c), but not the dative in (23b) can control the secondary predicate (see also Bresnan 1982: 401 for this argument).

(23d,e) make the same point with ditransitives: again, it is only the direct object that can control a secondary predicate, but not the homophonous indirect object.<sup>8</sup>

(23) *Spanish*

- a. Demonte (1988: 1)  
Mi madre compró la lavadora<sub>i</sub> rota<sub>i</sub>.  
my mother bought the washing machine broken  
‘My mother bought the washing machine broken.’
- b. Odria (2014: 295), cf. Demonte (1987: 148)  
Juan<sub>i</sub> le<sub>j</sub> habló a María<sub>j</sub> borracho/a<sub>i/j</sub>.  
Juan CL.DAT.3SG talk.PST to María drunk.M/F  
‘Juan talked to María drunk.’
- c. Odria (2014: 295), cf. Demonte (1987: 148)  
Juan<sub>i</sub> le<sub>j</sub> encontró a María<sub>j</sub> borracho/a<sub>i/j</sub>.  
Juan CL.DAT.3SG find.PST DOM María drunk.M/F  
‘Juan found María drunk.’
- d. Demonte (1987: 151)  
Pedro no (la) azota a su mujer<sub>i</sub> sobria<sub>p</sub>, la<sub>i</sub>  
Pedro NEG CL.ACC.3SG.F beat DOM his wife sober.F, CL.ACC.3SG.F  
azota borracha<sub>i</sub>.  
beat drunk.F  
‘Pedro does not beat his wife sober, he beats her drunk.’
- e. Demonte (1987: 152)  
??Pedro no le da azotes a su mujer<sub>i</sub> sobria<sub>p</sub>, se<sub>i</sub>  
Pedro NEG CL.3SG.DAT give lashes DAT his wife sober CL.DAT  
los da borracha<sub>i</sub>.  
CL.ACC.3PL.M give drunk  
‘Pedro does not give lashes to his wife sober, he gives (to her) them drunk.’

These examples show that both the subject and the direct object can control the depictive secondary predicate *borracho/a* ‘drunk.M/F’, but the indirect object cannot. Like in passivisation, direct objects pattern together irrespective of whether they trigger DOM or not, to the exclusion of the indirect object.<sup>9</sup>

### 2.3.2 Basque

Odria (2014) shows that as in English and Spanish, Basque direct objects (and subjects) can control depictive secondary predicates, but not indirect objects. For those varieties of Basque which have DOM (marked with a suffix homophonous to dative), this is true of both unmarked and marked direct objects. (24a) shows this for the absolutive object *umea* ‘child.ABS’ while (24b) illustrates this with the DOM object *zu-ri* ‘you-DAT’.

<sup>8</sup> An anonymous reviewer points out that in addition to the general case discussed in the text, it is sometimes possible for a dative to control a depictive secondary predicate, e.g. *A María<sub>i</sub> le operaron el brazo dormida<sub>p</sub>*, where the dative *a María* is the inalienable possessor of the direct object *el brazo*. Demonte & Masullo (1999: 2467) point out that such constructions are very restricted: in addition to involving inalienable possession, the majority of verbs do not allow this type of construction, and the dative tends to be clause-initial.

<sup>9</sup> Note that the fact that subjects can also control secondary predicates obviously does not mean that subjects and objects are identical in their syntactic behaviour. This does not affect the argument in the text.

- (24) a. *Standard Basque* (Odria 2014: 294)  
 Ni-k<sub>i</sub> amona-ri<sub>j</sub> umea<sub>k</sub> pozik<sub>i/\*j/k</sub> eraman  
 I-ERG grandmother-DAT child.ABS happy carry  
 d-i-o-t.  
 TM(3.ABS)-(root)-DF-3SG.DAT-1SG.ERG  
 ‘I have carried the child to the grandmother.’
- b. *Oñati Basque* (Odria 2014: 295)  
 Ni-k zu-ri<sub>i</sub> pozik<sub>i</sub> ikusi d-o-t-zu-t.  
 I-ERG you-DAT happy see TM-root-DF-2.DAT-1SG.ERG  
 ‘I have seen you happy.’

## 2.4 Haplology

Another asymmetry that appears in several languages with homophonous exponents of DOM and dative case is what can be referred to as “haplology”: in sentences with both a direct and an indirect object, where the direct object would trigger DOM, it is often the case that only one of the markers can appear. In all languages with the homophony that I am aware of, it is always the DOM marker that is deleted and never the dative marker.

Ormazabal & Romero (2013: 224) write that DOM is suspended in Spanish when there is an indirect object doubled by a dative clitic in the same clause, as shown in (25).

- (25) *Spanish* (Ormazabal & Romero 2013: 224)  
 Le enviaron (\*a) todos los enfermos a la doctora Aranzabal.  
 DAT.3SG.CL sent.3PL DOM all the sick DAT the doctor Aranzabal  
 ‘They sent doctor Aranzabal all the sick people.’

Here, the appearance of *a* on the direct object is ungrammatical (or at least very restricted). However, when one of these markers is absent in ditransitive constructions, it is always the DOM marker, never the indirect object marker (see also Richards 2010: 30–31 for discussion and references). If direct objects with DOM and indirect objects were the same type of syntactic object, we would expect that either object could lose its marker (and possibly that word order becomes flexible). This is not the case, however. Indirect objects must retain their dative case. A reviewer points out that this pattern, in which only a single marker can appear, could be explained on the syntactic view by locality: it would simply be the higher recipient argument that is assigned the single available case expressed by *a*.

While this is true, such an explanation is arguably less adequate for languages in which both markers can appear, like in varieties of Hindi. When both the direct and the indirect object surface with the suffix *-ko*, Bhatt & Anagnostopoulou (1996) suggest that word order is fixed to DO-IO, even though word order is otherwise less rigid.

- (26) *Hindi* (Bhatt & Anagnostopoulou 1996)  
 Ram-ne chitthii-ko Anita-ko bhej-aa.  
 Ram-ERG letter-DOM Anita-DAT send-PFV  
 ‘Ram sent the letter to Anita.’

There seems to be variation among speakers of Hindi, in this case, however. Mohanan (1990: 110) marks two *-ko* phrases as ungrammatical:

- (27) *Hindi* (Mohanan 1990: 111)  
 Ilaa-ne mää-ko baccaa /\*bacce-ko diy-aa.  
 Ila-ERG mother-DAT child.NOM child-DOM give-PFV  
 ‘Ila gave a/the child to the mother.’

Bhatt (1999: 40–41) mentions that Kashmiri behaves in the same way. In ditransitive constructions where the direct object could get DOM based on aspect and its semantic properties, DOM is blocked when there is a dative indirect object as well.

## 2.5 Language-specific asymmetries

In this section, I present further, language-specific asymmetries between dative and DOM from Kashmiri, Spanish, and Palizzese, a Southern Italian variety, which indicate that these languages distinguish direct objects from indirect objects syntactically.

### 2.5.1 Agreement and case-marking in Kashmiri

As briefly mentioned above, DOM in Kashmiri is not determined based on properties of the direct object alone, but it relies on properties of both the subject and the object when the objects are personal pronouns and the sentence is in the imperfective (Wali & Koul 1997).

The relative person of the subject and the object determines whether pronominal direct objects appear in their morphologically unmarked (nominative) or a morphologically marked form that is homophonous with dative (Kashmiri is split-ergative: subjects are ergative in the perfective). This is determined based on the hierarchy shown in (28).<sup>10</sup>

(28) 1 > 2 > 3

To give a concrete example, the case-marking on a second person direct object depends on the person of the *subject*. If the subject is first person, the object surfaces in its nominative form, if the subject is third person, the object surfaces in its dative form. The relevant examples are repeated below:

(14) *Kashmiri*

a. 1 → 2: NOM

bi chu-s-ath tsi parina:va:n.  
I.NOM be-1SG.SBJ-2SG.OBJ you.NOM teaching  
'I am teaching you.'

(15) *Kashmiri*

a. 3 → 2: DAT/DOM

su chu-y tse parina:va:n.  
he.NOM be.M.3SG.-2SG.OBJ you.DAT teaching  
'He is teaching you.'

Informally speaking, the direct object is dative when its person is on the same level or higher on (28) than the subject's. Otherwise, it is NOM.

Consider now the behaviour of indirect objects. Indirect objects never show a NOM/dative alternation, independently of the person of the subject, the direct object and the indirect object. This is shown in (29a,b). First, in (29a), the indirect object *tam-is* 's/he-DAT' is dative, even though third person *direct* object pronouns appear in their nominative form when the subject is first person. Second, as (29b) shows, the indirect object is dative in the perfective aspect as well, even though the NOM/dative alternation on the direct object only appears in the imperfective.

<sup>10</sup> This is a simplification. See Béjar & Rezac (2009); Georgi (2012); Bárány (2017) for detailed discussion.

- (29) *Kashmiri* (Wali & Koul 1997: 252)
- a. *bi chu-s təm-is kita:b diva:n.*  
I.NOM be-1SG s/he-DAT book giving  
'I am giving her/him a book.'
- b. *me dits təm-is kita:b.*  
I.ERG gave s/he-DAT book  
'I gave her/him a book.'

In addition, direct objects also alternate between nominative and dative in ditransitive constructions. In (30), both internal arguments are pronominal. With the third person subject in (30a), the direct object *tse* 'you.SG.DAT' appears in the dative, as expected from the hierarchical Case-assignment rule. The indirect object *me* 'I.DAT' is also dative.

In (30b), however, with a first person subject, only the indirect object is dative — the direct object is nominative, as expected. This shows that effects of the person hierarchy only affect the direct object, but never the indirect object.

- (30) *Kashmiri* (Wali & Koul 1997: 208, 253)
- a. *su kariy tse me hava:li.*  
he.NOM do.FUT.2SG you.SG.DAT I.DAT hand over  
'He will hand you over to me.'
- b. *bi chu-s-an-ay su tse hava:li kara:n.*  
I.NOM be-1SG-3SG-2SG s/he.NOM you.DAT hand over doing  
'I am handing him over to you.'

Note again that this NOM/dative split is language-specific and therefore the resulting argument about the distinct behaviour of direct and indirect objects only holds for Kashmiri. Nevertheless, the data in (30) again clearly shows that direct and indirect objects do not behave alike syntactically, even if they share their morphological exponent.

### 2.5.2 Nominalisations in Spanish

Case-marking in nominalisations differs from case-marking in the verbal domain. In English event nominalisations, which retain the verb's argument structure, nominative and accusative are generally not assigned to the subject and the object, respectively (Chomsky 1970; Grimshaw 1990). Instead, these arguments are often expressed as pre-nominal possessors or post-nominal genitives introduced by the preposition *of* (see also Comrie 1976; Koptjevskaja-Tamm 2003; 2015 for cross-linguistic overviews of coding of arguments in nominalisations).

This property of nominalisations provides a further test of the similarity of DOM and dative arguments: in Spanish, DOM is generally absent in nominalisations (but see footnote 11), but dative is present on exactly the arguments that are assigned dative from a verb.

If both DOM and dative are exponents of identical syntactic structures and their cases have the same source, the expectation is that both (or neither) can be retained in nominalisations. This is not the case: DOM is, like accusative, unavailable in nominalisations, while dative is available.

Consider the sentences in (31). (31a) shows a transitive sentence with a definite, animate object, *Juan*, preceded by the DOM marker *a*. In (31b), the object of *captura* 'capture' is still *Juan*, but it appears with the preposition *de* 'of'.<sup>11</sup>

<sup>11</sup> Lopez (2018) discusses what he calls "n-DOM", i.e. the appearance of *a* in nominalisations. He shows, however, that the conditions on verbal DOM and n-DOM differ so that the two phenomena should not be equated. He also concludes that *a* in DOM and dative are not syntactically identical.

- (31) *Spanish* (López 2018: 85–86)
- a. El perro capturó a Juan.  
the dog captured DOM Juan  
‘The dog captured’
  - b. La captura de Juan por el perro fue sorprendente.  
the capture GEN Juan by the dog was surprising  
‘The dog’s capture of Juan was’
  - c. \*La captura a Juan por el perro fue sorprendente.  
the capture DOM Juan by the dog was surprising

In (31), an animate, specific object triggers DOM when it is the internal argument of a verb. When nominalised, DOM is no longer an option and the internal argument has to be introduced by *de*.

We can compare this pattern to the nominalisation of a ditransitive predicate like *entregar* ‘to deliver, to hand over’, which takes a direct object that can be coded with DOM, and an indirect object that appears in dative. When nominalised, the only way to express the direct object is with *de*, but neither as a bare noun nor with *a*. This is shown for an inanimate direct object in (32) and for an animate direct object in (33). In both cases, the (animate) indirect object *a Susana* retains its dative *a*.

- (32) *Spanish* (López 2018: 92)
- la entrega del paquete a Susana  
the delivery GEN.DEF package to Susana  
‘the delivery of the package to’

- (33) *Spanish*
- la entrega de los enfermos a Susana  
the delivery GEN the.M.PL sick to Susana  
‘the delivery of the sick to Susana’

In addition, the pattern remains the same if the indirect object is inanimate as in the following examples. This shows that the distribution of *a* on direct and indirect objects is not governed by identical semantic properties.

- (34) *Spanish*
- la entrega del paquete a la librería  
the delivery GEN.DEF package to the library  
‘the delivery of the package to the library’

- (35) *Spanish*
- la entrega de los enfermos al hospital  
the delivery GEN the.M.PL sick to.the hospital  
‘the delivery of the sick to the hospital’

The behaviour of DOM in passives and nominalisations thus indicates that its source is the finite, active verb: when it is passive, DOM is unavailable. When it is nominalised, DOM is not available either. Both these patterns are straightforwardly captured by treating DOM as accusative, a structural case that is assigned by the finite, active verb in a certain structural configuration.

In some cases, *a* fails to be retained in nominalisations too, however (as also pointed out by an anonymous reviewer). López (2018: 93) argues that *a* in nominalisations is a



preposition and not dative case. He bases this on the fact that dative *a* does not actually appear in nominalisations. His reasoning goes as follows. (36a) is an applicative construction which features both the clitic *le* and the marker *a*. In the absence of the clitic, in (36b), the preposition *para* introduces the beneficiary. In the nominalisation of this structure, only *para* but not *a* is licit. Thus, López argues, dative *a* is not retained and *a* in (32)–(35) is actually a preposition.

(36) *Spanish* (López 2018: 93)

- a. Juan le construyó una casa a su padre.  
Juan CL built a house DAT his father  
'Juan built his father a house.'
- b. Juan construyó una casa para su padre.  
Juan built a house for his father  
'Juan built his father a house.'
- c. la construcción de la casa para /\*a su padre.  
the construction GEN the house for DAT his father  
'the construction of the house for his'

For López (2018), this means that there are three homophonous markers spelled out as *a*: accusative, dative and a directional preposition. While I will gloss over the distinction between dative and the preposition in Section 3 and just contrast accusative *a* with dative *a*, it should be noted that neither the dative nor the preposition have the same distribution as DOM. DOM does not alternate with *para* and neither a dative nor a prepositional phrase can passivise like a DOM object.

That the dative or preposition *a* is retained in passives and (some) nominalisations thus suggests that it is *not* assigned by the finite, active verb in the same way that DOM is.

### 2.5.3 Object clitics in Spanish

Varieties of Spanish show a lot of variation in their object clitic systems. Iberian Castilian Spanish, among others, distinguishes accusative clitics, *lo*, *la*, masculine and feminine, respectively, from dative *le*, which is underspecified for gender. These clitics can double the respective arguments, though again there are differences across varieties of Spanish. The following examples from Rioplatense Spanish show clitic doubling of direct object with DOM:

(37) *Spanish* (Suñer 1988: 396)

- a. la oían a Paca / a la niña / a la gata.  
3SG.F.ACC.CL listened.3PL DOM Paca DOM the girl DOM the cat  
'They listened to Paca / the girl / the cat.'
- b. Diariamente, la escuchaba a una mujer que  
Daily 3SG.F.ACC.CL listened.1SG DOM a woman whosang.3SG  
cantabatangos.  
tangos  
'Every day, I listened to a woman who sang tangos.'

For varieties which do distinguish dative and accusative clitics from each other, the argument is straightforward. Even though DOM and dative objects are homophonous, they are doubled by distinct clitics, suggesting a categorical difference between the two types (see also Jaeggli 1982 for this argument in different terms).

There is, however, a lot of variation in Spanish clitic systems in this respect. Most importantly, there are so-called *leísta* varieties (see e.g. Bleam 1999; Ordóñez 2012), which neutralise the accusative-dative distinction in clitics in favour of a single form *le*.

In addition to *leísta* varieties, there are varieties which generalise the accusative clitics to indirect objects, so-called *laísta* and *loísta* varieties. Without going into details, the existence of syncretisms going both ways, i.e. from dative to accusative, and from accusative to dative, can also provide support for a morphological view of DOM and dative homophony, unless one wants to argue that *laísta* and *loísta* varieties treat “dative” arguments doubled by accusative clitics as accusative arguments.

While (to the best of my knowledge) all other arguments mentioned above still hold for these varieties of Spanish, some varieties do treat direct objects with DOM and indirect objects in the same way with respect to clitic doubling. As noted by an anonymous reviewer, more detailed analyses could potentially support a syntactic view of the homophony of DOM and dative in such varieties (e.g. Ormazabal & Romero 2013), but the existence of such varieties is compatible with a morphological view of DOM and dative homophony as well.

#### 2.5.4 Allomorphy in Palizzese

As a final empirical point in this section, I briefly turn to allomorphy in Palizzese, a Southern Italian variety. In Palizzese, *a* precedes animate, definite DOs, as well as IOs. When an argument preceded by *a* also has a definite determiner (*u*), the items fuse and are realised as *o*. This is illustrated in (38). In (38a), the direct object is inanimate, but definite, so it does not trigger DOM but only appears preceded by the determiner *u*. In (38b), the direct object is animate and definite and the fused marker *o* appears:

- (38) *Palizzese* (Olimpia Squillaci, p.c.)
- a. Vitti u libbru.  
saw.I the book  
'I saw the book.'
  - b. Vitti o figghiolu.  
saw.I DOM.the child  
'I saw the child.'

In ditransitives, *o* can mark the IO:

- (39) *Palizzese* (Olimpia Squilaci, p.c.)
- Nci dessi i sordi o figghiolu.  
CL.3SG.M gave.I the money DAT.the child  
'I gave the money to the child.'

Dative *o* has a genitive allomorph. In (40), the regular dative marker is replaced by the genitive marker *du* (cf. (39)).

- (40) *Palizzese* (Olimpia Squilaci, p.c.)
- Nci dessi i sordi du figghiolu.  
CL.3SG.M gave.I the money GEN.the child  
'I gave the money to the child.'

It is striking, however, that the genitive allomorph is not available for direct objects which trigger DOM, as shown in (41). Replacing the case-marker of a direct object with DOM by the genitive leads to ungrammaticality.

- (41) *Palizzese* (Olimpia Squilaci, p.c.)
- \*Vitti du figghiolu.  
saw.I GEN.the child

These data show that while direct objects and indirect objects *can* get homophonous marking, a certain type of allomorphy is only available on indirect objects. Again, if DOM objects and indirect objects have the same syntactic representation, it is unexpected that only indirect objects can appear with the genitive allomorph, but not direct objects.

## 2.6 Interim conclusions

In this section, I discussed evidence from different syntactic tests which indicate that direct objects with and without DOM show similar syntactic behaviour in contrast to indirect objects. The general pattern in passivisation, reduced relative formation, control relations in secondary predicates and nominalisation was that indirect objects either fail to take part in the same processes that direct objects participate in, or that indirect objects retain their dative case, while direct objects do not.

Language-specific behaviour like person-sensitive case-marking in Kashmiri, distinct accusative and dative clitics in some varieties of Spanish, as well as case allomorphy that only targets dative case in Palizzese provide further evidence that direct objects with and without DOM and indirect objects have different syntactic representations. In addition, semantic properties like animacy and specificity which often trigger or correlate with differential object marking do not play the same role in determining dative: dative on indirect objects is generally obligatory and independent of the indirect object's animacy or specificity.

In the following section, I turn to the common properties of DOM and dative objects, namely their morphology.

## 3 Analysis: Syncretism of accusative and dative

The main proposal in this section is that the homophony of DOM and dative case in the languages discussed so far is due to syncretism of accusative and dative. The motivation for this conclusion comes from the data shown in the previous section: there is substantial evidence showing that direct and indirect objects do not behave alike in syntax.

While there are different ways of modelling syncretism in morphology, I will adopt the view that case and case morphology can be decomposed into smaller features. There is a long tradition in linguistics in favour of this idea, see among others Jakobson (1971 [1936]); Bierwisch (1967); Wunderlich (1997); Stiebels (1999); Wiese (1999); Kiparsky (2001); Morimoto (2002); Müller (2002; 2004); McFadden (2004); Keine & Müller (2008); Caha (2009; 2013); Glushan (2010); Keine (2010); Harðarson (2016); Smith et al. (2016).

The general idea behind case decomposition is that cases like “ACC” or “DAT” are not atomic but are composed of features. The literature varies in both the labels of these features and whether they are binary or privative. For concreteness, I adopt a view that gives case-features abstract labels (such as, A, B, C, etc.) and that treats these features as privative (see Caha 2009; 2013; Harðarson 2016; Bárány 2017).

On this perspective, syncretism can be analysed as follows. (42) shows the representation of accusative and dative case using case-features. In a language that distinguishes the two cases morphologically, there are spell-out rules like the ones in (43). In a language with syncretism between DOM and dative, however, there is a single, underspecified spell-out rule that is used to spell-out both accusative and dative case, giving rise to syncretism.<sup>12</sup>

- (42) Case-features
- a. ACC = [A, B]
  - b. DAT = [A, B, C]

<sup>12</sup> This treatment of syncretism is based on the approach used in Distributed Morphology (Halle & Marantz 1993; 1994; Embick & Noyer 2007; Siddiqi 2010). See also Keine & Müller (2008); Keine (2010) for discussion of differential object marking in this way.

- (43) Spell-out rules for distinct case-markers
- a. [A, B]  $\leftrightarrow$  /-x/
  - b. [A, B, C]  $\leftrightarrow$  /-y/
- (44) Spell-out rule for syncretic case-marker
- [A, B]  $\leftrightarrow$  /-z/

Assuming that accusative (more precisely, the features in (42a)) is assigned to an argument, and dative (the features in (42b)) is assigned to another argument, a language like German which has distinct morphological realisations for both cases will use two different spell-out rules, schematically shown (43).

Syncretism of dative and accusative is captured by having a single spell-out rule for *both* cases, e.g. (44). The features of dative and accusative are distinct, yet the suffix in (44) masks this syntactic difference on the surface: both cases get the same spell-out.

This is of course a simple scenario that applies to any two (or more) cases in principle. The languages discussed in the previous section need further discussion, however, since not all direct objects have accusative case in the first place. In the next section, I address how differential object marking can be added to this picture, before further motivating this specific analysis. In Section 5 I briefly discuss how the present analysis relates to other analyses in the literature.

### 3.1 Differential marking, accusative, and dative

The basic workings of an analysis of syncretism just shown illustrate a scenario in which direct objects are assigned accusative and indirect objects are assigned dative. In the languages discussed in this paper, however, not all direct objects actually spell-out accusative case: they are differential object marking languages.

The question then is how to represent the alternation between zero spell-out and differential object marking (or accusative, in present terms). While there are a number of possible analyses of this phenomenon (too many to discuss here), broadly speaking we can distinguish syntactic and morphological approaches to DOM.<sup>13</sup> On the former, only objects with overt case-marking actually get Case and spell it out, while morphologically zero-coded objects are caseless. This approach is followed (with some variation) by López (2012) for Spanish (and other languages), Kornfilt (2008) for Turkish, and Danon (2006) for Hebrew, for example. The idea is that spell-out of morphological case reflects whether an argument has received syntactic Case or not: zero-coded arguments can be licensed through incorporation of some sort (see e.g. Chung & Ladusaw 2004 for one approach). Danon (2006) suggests that in Hebrew, some DPs are simply caseless: they need not be licensed and never show DOM. Similarly, Kalin & van Urk (2015) argue that only arguments that have uninterpretable Case features need licensing via Case in the first place, and those that lack them can go unlicensed.

The second approach, in contrast, assumes that all direct objects are assigned accusative, but that the variation is morphological: in the contexts that trigger DOM, case morphology is spelled out, but in other contexts, the argument's case features are deleted before spell-out. This approach is followed by Keine & Müller (2008); Glushan (2010); Keine (2010). To give a concrete example, on this approach any direct object is assigned accusative case, but certain features, such as [-animate] in Spanish, trigger impoverishment rules which delete accusative case, leaving the object to be spelled-out as (zero-coded)

<sup>13</sup> Depending on how exactly it is modelled in syntax and morphology, Aissen's (2003) well-known OT approach to DOM could be compatible with either approach.

nominative. Note that such systems, on the present view, would have no distinct accusative morphology: the zero allomorph of accusative is syncretic with nominative, while the overt allomorph is syncretic with dative.

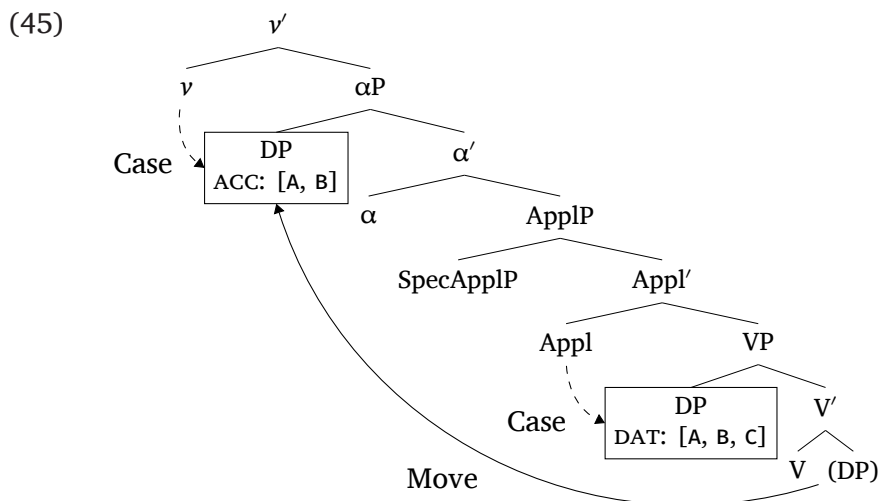
A third, in some sense hybrid approach, is arguably Baker's (2015) dependent case analysis of DOM. Here the idea is that certain direct objects move to the same syntactic domain as the subject where they are spelled-out with accusative case (see Kalin & Weisser 2018 for critical discussion of theories that employ movement to derive DOM). Objects that remain in their original syntactic domain are spelled-out without case morphology (or with different case morphology).

Since the main concern of this paper is not the question of what triggers differential object marking, it is not necessary to choose between these approaches to DOM (see Legate 2008 for discussion). In fact, it is possible that languages differ in this respect: some might not license all direct objects in the same way, while others do. The crucial point for languages in which DOM and dative are homophonous is that both of these arguments have (at least morphological) case and the question how this is represented. Next, I will consider two concrete examples to illustrate the present analysis, Spanish and Hindi.

### 3.1.1 Spanish

López (2012) argues that direct objects without DOM are incorporated into V and are licensed in that way. He further argues that direct objects with DOM are in a higher position than zero-coded objects, in a projection above  $vP$  he calls  $\alpha P$  (see López 2012 for evidence for this proposal). When a direct object DP is in  $\alpha P$ , it is assigned accusative, when it is incorporated it is not assigned Case at all.<sup>14</sup>

Assuming that López's analysis is correct, we can model the relevant parts of a derivation as follows.



In (45), the DP in Spec $\alpha P$  and the DP in SpecVP are assigned Case by different heads,  $v$  and Appl, respectively.  $v$ , by assumption assigns accusative (46a), while Appl assigns DAT (46b). They are spelled out identically because of a single spell-out rule, shown in (47a).

<sup>14</sup> Proponents of a syntactic analysis of the DOM and dative homophony discussed here might find the following line of reasoning tempting: since in Spanish both direct objects with DOM and indirect objects are in a position higher than morphologically unmarked direct objects, this *syntactic* commonality could be the cause of identical morphology. There are, however, languages with DOM and scrambling in which there is no homophony of DOM and dative case, e.g. Turkish (Kornfilt 2003) or Sakha (Baker & Vinokurova 2010; Baker 2015), showing that position and morphology are not directly correlated.

(46) Accusative and dative in Spanish

- a. ACC = [A, B]
- b. DAT = [A, B, C]

(47) Spell-out rules for Spanish

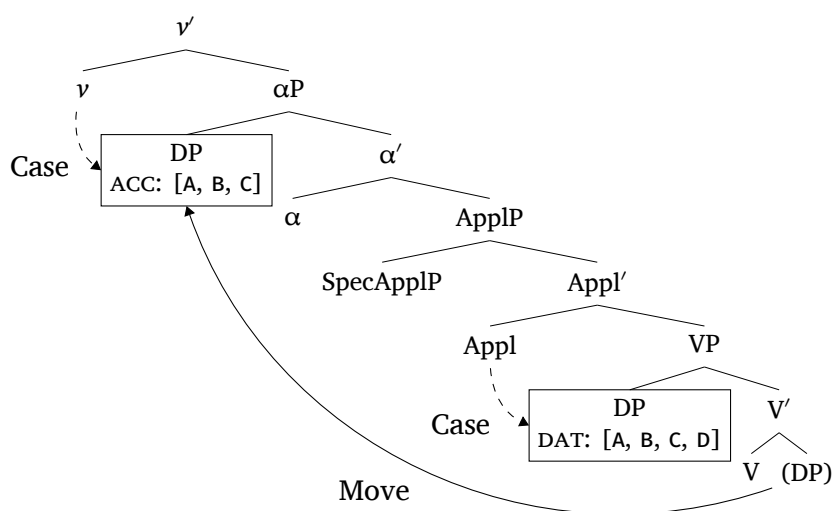
- a. [A, B] ↔ *a*
- b. [A] ↔ -∅

This simple system derives the homophony straightforwardly.

3.1.2 Hindi

Next, let us consider Hindi, in particular the analysis suggested by Keine & Müller (2008); Keine (2010). These authors propose that differential object marking can be derived purely in morphology. In Hindi, the suffix *-ko* can appear on animate and specific direct objects as well as any indirect object. Keine & Müller argue that both direct and indirect objects are assigned case in syntax, but that the direct object's case features can be modified by impoverishment rules (see also Keine 2010; Bárány 2017 for general discussion).<sup>15</sup>

(48)



As for Spanish, I assume that direct objects and indirect objects are assigned Case by different heads in Hindi (see Bhatt 2005; 2007; López 2012 for discussion).

I assume case suffixes to have a more complex representation in Hindi than in Spanish. This is because Hindi, as a split-ergative language, also has an ergative case (not shown here, but see Keine 2010; Bárány 2017). The relevant case-markers and their spell-out rules are shown in (49) and (50). As above, the idea is that a single spell-out rule, (50a), spells out both accusative and dative, even though they have different syntactic representations.

(49) Accusative and dative in Hindi

- a. ACC = [A, B, C]
- b. DAT = [A, B, C, D]

(50) Spell-out rules for Hindi

- a. [A, B, C] ↔ *-ko*
- b. [A] ↔ -∅

<sup>15</sup> In Hindi, only arguments without morphological case can agree with the verb. If impoverishment rules apply post-syntactically, as often assumed, this is compatible with Bobaljik's (2008) proposal that agreement is post-syntactic, too. However, Keine (2010) argues, following Müller (2005), that impoverishment rules can also apply during the syntactic derivation. For present purposes, it is not necessary to take a stand on this question.

These examples from Spanish and Hindi illustrate how a morphological approach can capture syncretism in DOM. Independently of its source, DOM is an allomorph of accusative case that is syncretic with dative case. This syncretism is purely morphological, and modelled by assuming that there is a single underspecified vocabulary item that is inserted for both accusative (DOM) and dative.

Because the two cases have different feature specifications in syntax and are assigned by different heads (as is generally assumed), their distinct behaviour in syntax need not be explained on this approach: the differences follow from their different syntactic representation. On this view, the only property direct and indirect objects must have in common is their morphological form.

### 3.2 Case features and case hierarchies

It is not difficult to model syncretism using underspecified vocabulary items and specific spell-out rules. In fact, it might be too easy to do this, since it is in principle possible to assume any fitting system of features that can be modified by impoverishment rules and spelled out as needed (see Manzini & Franco 2016 for a version of this criticism).

When it comes to case systems, however, there is ample evidence that syncretism and other morphological aspects are not random, but highly regular across languages. As Caha (2009) shows in some detail, there are certain patterns of syncretism that are common across languages and others which do not or do only rarely exist (see also Baerman 2008). In addition, case (morphology) is structured “hierarchically” across languages: languages tend to have zero expression of nominative or absolutive case, zero or overt expression of accusative or ergative, overt expression of dative, and overt expression of more oblique cases (see Blake 2001; Bobaljik 2008, among others). This hierarchy is also reflected in the behaviour of arguments with certain morphological cases, according to Bobaljik (2008). He argues that if a language allows agreement with an argument bearing any morphologically coded case, it will always allow agreement with arguments without morphological case-marking as well (see also Baker 2015; Bárány 2017).

For our purposes, what is relevant is that there is evidence that accusative and dative are more closely related than say, accusative and instrumental. Because of this, accusative and dative are more likely to be syncretic than accusative and instrumental (or other oblique cases). Importantly, this means that possible feature systems underlying our analysis of accusative and dative syncretism are strongly restricted, too. Given a proper representation of case features that is in line with cross-linguistic empirical facts, vocabulary items that are underspecified and spell out both accusative and dative are very easy to model while vocabulary items spelling out both accusative and instrumental would be more difficult or impossible to state succinctly.

Caha (2009; 2013); Harðarson (2016); Smith et al. (2016); Bárány (2017) model such restrictive case systems (based in part on hierarchies like those in Blake 2001). Informally, the assumption is that the regularities in syncretism, as well as agreement behaviour, can be modelled by hierarchies such as (51):

- (51) Blake (2001: 156)  
 NOM > ACC/ERG > GEN > DAT > LOC > ABL/INS > ...

This type of hierarchy can be formalised using features in several ways; in (52) it is treated as sets of features which are ordered by a (proper) subset relation.

- (52) {A} ⊂ {A, B} ⊂ {A, B, C} ⊂ ...

While this kind of representation is motivated empirically, it also provides a framework in which common instances of syncretism are much easier to model than rare ones. This is because most frequently, continuous stretches of cases on (51) or (52) are subject to syncretism (Caha's 2009; 2013 "case contiguity hypothesis").

While the hierarchy in (51) does not seem to be compatible with the claims made so far because accusative and dative are not adjacent, Harðarson (2016) argues that some languages order GEN and DAT differently. He provides the following examples from Old Norse and Icelandic case paradigms (Harðarson 2016: 1332).

## (53) Old Norse

	a-stem M	a-stem N	i-stem M	an-stem M
NOM	arm-r	land-∅	gest-r	grann-i
ACC	arm-∅	land-∅	gest-∅	grann-a
GEN	arm-s	land-s	gest-s	grann-a
DAT	arm-i	land-i	gest-∅	grann-a
	'arm'	'land'	'guest'	'neighbour'

## (54) Modern Icelandic

	a-stem M	a-stem N	o-stem F	on-stem F
NOM	arm-ur	land-∅	drottning-∅	tung-a
ACC	arm-∅	land-∅	drottning-u	tung-u
GEN	arm-s	land-s	drottning-ar	tung-u
DAT	arm-i	land-i	drottning-u	tung-u
	'arm'	'land'	'queen'	'tongue'

Harðarson (2016) points out that these patterns are compatible with a version of case contiguity that allows some variation in the way that cases are ordered. Note that in (54a,b) there are instances of syncretism between nominative and accusative, accusative and dative, and accusative, genitive and dative, but there are no instances of syncretism between dative/genitive or accusative/genitive syncretism to the exclusion of accusative and dative, respectively.

If we adopt Harðarson's (2016) version of case contiguity, shown in (55), syncretism of accusative and dative to the exclusion of GEN is natural.

## (55) NOM &gt; ACC &gt; DAT &gt; GEN &gt; ...

This makes it possible to analyse the homophony of DOM and dative case using underspecified spell-out rules in a general way. This approach is immune to the criticism that such rules are arbitrary because the case hierarchy is independently empirically motivated, and the spell-out rules deriving syncretism merely refer to abstract sets of features that are adjacent on the hierarchy. As such, syncretism of accusative and dative is as easy to model as syncretism of other adjacent cases and does not require any special mechanisms.

### 3.3 Interim summary

This section implemented a simple straightforward account of syncretism of dative and accusative in languages where dative and DOM are homophonous. I showed that the key to modelling this syncretism lies in underspecified vocabulary entries for both cases and



I argued that the existence of syncretism of accusative and dative (as opposed to other cases) is empirically motivated.

In the following section, I discuss further evidence that supports this analysis.

## 4 Discussion

In this section, I first present evidence that supports the conclusions reached so far before briefly discussing some advantages that the present proposal has over previous ones.

### 4.1 Supporting evidence

Here, I discuss two types of supporting evidence for the proposal that the homophony of DOM and dative case in the languages discussed above is a matter of syncretism, i.e. morphological identity, rather than of syntactic identity. First, I discuss accusative and dative case-marking in Icelandic, and second, I turn to accusative-marked recipients in a number of languages.

#### 4.1.1 Icelandic case-marking

In Section 3.2, I briefly discussed Harðarson's (2016) revised version of Caha's case contiguity hypothesis. As shown there, and repeated in (56), Harðarson shows that accusative and dative case are syncretic in some types of nominal stems in Icelandic. In (56), this is true of *drottning* 'queen' and *tunga* 'tongue'.

(56) Modern Icelandic

	a-stem M	a-stem N	o-stem F	on-stem F
NOM	arm-ur	land-Ø	drottning-Ø	tung-a
ACC	arm-Ø	land-Ø	drottning-u	tung-u
GEN	arm-s	land-s	drottning-ar	tung-u
DAT	arm-i	land-i	drottning-u	tung-u
	'arm'	'land'	'queen'	'tongue'

Icelandic does not have differential object marking. While accusative case has several allomorphs (see again (56)), the choice of these does not depend on referential or semantic properties of nominals but on the stem class they belong to.

In this respect, Icelandic differs from the languages discussed in Section 2. However, it is similar to them in another respect: certain stems show syncretism of accusative and dative. Icelandic is well-known for allowing a wide range of cases on subjects and objects (see e.g. Andrews 1982; Zaenen, Maling & Thráinsson 1985; Yip, Maling & Jackendoff 1987; Thráinsson 2007). While both direct (accusative) objects and indirect (dative) objects passivise, for example, the two cases nevertheless show some differences: accusative case is not retained under passivisation, but dative is (cf. Hindi discussed in Section 2). This is expected if accusative is a structural case, while dative is a lexical case (Yip, Maling & Jackendoff 1987; Thráinsson 2007: 181–185). These distinct patterns are analogous to the behaviour of direct and indirect objects as discussed in Section 2 for languages with DOM.

This shows that syncretism of accusative and dative is independent of differential object marking. What is more, if one were to say that the forms *drottning-u* 'queen-ACC/DAT' and *tung-u* 'tongue-ACC/GEN/DAT' are syntactically identical or special in some other sense, it becomes difficult to explain why other stem types, exemplified by e.g. *arm-ur* and *land* in (56) do not show the same syncretism.

In sum, Icelandic shows a clear example of syncretism of accusative and dative case in some nominal stems, i.e. a purely morphological phenomenon, in a language without differential object marking. The syntactic differences between accusative and dative in the language are parallel to those discussed in Section 2, which I take to support the claim that Spanish, Hindi, etc. also exhibit accusative (DOM) and dative syncretism.

#### 4.1.2 Accusative recipients

A number of languages show argument structure alternations in (certain) transitive verbs. In many cases, two internal arguments, e.g. a theme or patient argument and a recipient or goal argument, can appear in two different in case frames. (57) exemplifies this using the well-known English alternation between the so-called prepositional dative and double object constructions (see a.o. Oehrle 1976; Barss & Lasnik 1986; Larson 1988; Johnson 1991; Pesetsky 1995; Harley 2002; Beck & Johnson 2004; Rappaport Hovav & Levin 2008; Bresnan & Ford 2010; Bruening 2010; Hallman 2015; Harley & Jung 2015; Harley & Miyagawa 2018).

- (57) a. John gave [<sub>p</sub> him ] [<sub>R</sub> to Mary ].  
 b. John gave [<sub>R</sub> him ] [<sub>p</sub> the book ].

For present purposes, the relevant property of this alternation is that, while the two constructions are fairly similar in their meaning, they differ in their morphosyntactic properties. In (57a), it is the theme argument that is adjacent to the verb and appears in object case, while the recipient is introduced by a preposition. In (57b), it is the recipient argument that is adjacent to the verb and appears in object case. Here, the theme shows the same case-marking (although this is more difficult to show). The two types of constructions show “indirective” and “secundative” alignment, respectively, using the terminology of Haspelmath (2005); Malchukov, Haspelmath & Comrie (2010) (see also Dryer 1986).<sup>16</sup>

In addition to identical morphology (“ACC”), the patient in (57a) and the recipient in (57b) also show similar syntactic behaviour. For example, both can passivise, while the respective other argument in each clause cannot (or not as easily). This is shown in (58) and (59).

- (58) Prepositional dative construction  
 a. [<sub>p</sub> He ] was given [<sub>R</sub> to Mary ].  
 b. ??[<sub>R</sub> Mary ] was given [<sub>p</sub> him ].

- (59) Double object construction  
 a. [<sub>R</sub> He ] was given [<sub>p</sub> the book ].  
 b. ??[<sub>p</sub> The book ] was given [<sub>R</sub> him ].

Crucially, both the theme and the recipient can passivise, but in different constructions. They are straightforwardly passivised when they are in accusative case and adjacent to the verb.

English is obviously not the only language that shows an alternation of this type (see e.g. Bresnan & Moshi 1990; Harford 1991; Alsina 1996; Rackowski & Richards 2005; Baker 2010; Ackerman, Malouf & Moore 2015; Sipőcz 2016; van der Wal 2018). The following examples show data from the varieties of the Uralic language Khanty, in which ditransitive alternations of this type are found, too (Nikolaeva 1999b; 2001; Dalrymple & Nikolaeva 2011).

<sup>16</sup> With full NPs, English shows indirective and neutral alignment in case-marking. With pronouns, it is possible to show that both theme recipient arguments are spelled out with the same case morphology.

The data in (60) illustrate this for Northern Khanty (other varieties of Khanty behave alike, cf. Csepregi 2015; F. Gulyás 2015).

- (60) *Northern Khanty* (Dalrymple & Nikolaeva 2011: 148)
- a. Indirective case, no object agreement  
 ma [<sub>T</sub> a:n ] [<sub>R</sub> Pe:tra e:lti ] ma-s-əm.  
 I cup Peter to give-PST-1SG.SBJ  
 ‘I gave a/the cup to Peter.’
  - b. Indirective case and object agreement  
 ma [<sub>T</sub> a:n ] [<sub>R</sub> Pe:tra e:lti ] ma-s-**e:m**.  
 I cup Peter to give-PST-**OBJ.1SG.SBJ**  
 ‘I gave a/the cup to Peter.’
  - c. Secundative case and obligatory object agreement  
 ma [<sub>R</sub> **Pe:tra** ] [<sub>T</sub> a:n-na ] ma-s-**e:m** / \*ma-s-əm.  
 I Peter cup-LOC give-PST-**OBJ.1SG.SBJ** give-PST-1SG.SBJ  
 ‘I gave a/the cup to Peter.’, lit. ‘I gave Peter in a cup.’

Like English, Khanty allows both themes and recipients to be coded as accusative. In both types of construction, the other internal argument is coded in a different way. Crucially, the accusative-marked argument shows syntactic properties that the other argument lacks. These include triggering agreement with the verb, as shown in (60), being in a higher (VP-external) position, see (61), passivising, see (62) and heading reduced relatives, as in (63).

- (61) *Sinya Khanty* (Arkad’ij Longortov, p.c.); VP-external position of theme
- a. [<sub>P</sub> šajan ] χōlta tu-s-en?  
 tea cup.ACC where take-PST-2SG.SBJ > SG.OBJ  
 ‘Where did you take the cup?’
  - b. [<sub>T</sub> šajan ] [<sub>R</sub> Petra-ja ] mǎ-s-em.  
 tea cup.ACC Peter-DAT give-PST-1SG.SBJ > SG.OBJ  
 ‘I gave the cup to Peter.’
- (62) a. *Yugan Khanty* (Paasonen 2001); theme passive  
 [<sub>T</sub> εβi ] [<sub>R</sub> ʃəβeti ] mə-s-i.  
 girl.NOM 3SG.DAT give-PST-PASS.3SG  
 ‘The girl was given to him.’
- b. *Northern Khanty* (Nikolaeva 2001: 25); recipient passive  
 [<sub>R</sub> luw ] Juwan-na [<sub>T</sub> ke:si-na ] ma-s-a.  
 3SG.NOM John-LOC knife-LOC give-PST-PASS.3SG  
 ‘He was given a knife by John.’
- (63) *Surgut Khanty* (Agrafena Pesikova, via Márta Csepregi, p.c.)
- a. Reduced relative headed by theme  
 [[<sub>R</sub> ńewrem-a ] məj-əm ] [<sub>T</sub> kəńika ] tōŋqə tinəŋ.  
 child-LAT give-PTCP.PST book.NOM very expensive  
 ‘The book given to the child is very expensive.’
  - b. Reduced relative headed by recipient  
 [[<sub>T</sub> kəńika-γat ] məj-əm ] [<sub>R</sub> ńewrem ] jis-łəγ jey.  
 book-INS give-PTCP.PST child.NOM cry-PTCP.NEG turn.PST.3SG  
 ‘The child given the book stopped’

These examples resemble the Spanish and Hindi data discussed in Section 2 in the sense that arguments with different semantic roles can be expressed in morphologically identical ways. But they differ from those data in the crucial respect that in Khanty, recipients and themes with identical case-marking show identical syntactic behaviour (the exact opposite of what the Spanish and Hindi data showed).

The reason for this is that Khanty (and English) show a ditransitive alignment alternation such that whichever internal argument is coded with accusative behaves like a direct (or primary) object (cf. Dryer 1986) while the other internal argument is oblique and cannot passivise, etc. In the Spanish and Hindi data discussed earlier, DOM does not affect which internal argument is the direct object: both morphologically zero-coded objects and those with DOM are direct objects. Indirect objects (marked with DAT) show distinct behaviour.

Before concluding this section, I briefly turn to a similar alternation in Spanish. English and Khanty show two types of ditransitive alignment for certain verbs, including *give*. It is also well-known, however, that English does not allow all verbs to alternate between the double object and the prepositional dative constructions. The verb *donate*, for example, favours the prepositional dative construction, i.e. alignment preferences can be encoded lexically as well.

Such lexical preferences are also found in other languages, including Spanish. The verb *armar* ‘to arm’ or ‘to provide with weapons’ differs from the predicates discussed previously in that its accusative argument is a recipient rather than a theme or patient. The theme argument, if expressed, is coded by the preposition *con* ‘with’. This is shown in (64).

- (64) *Spanish*  
 El gobierno armó [R el ejército] [T con pistolas].  
 the government arm.PST.3SG the army with pistols  
 ‘The government armed the army with pistols.’

As in Khanty above, in Spanish it is also the accusative argument that shows the typical behaviour of direct objects (cf. Section 2). The recipient argument can now trigger differential object marking:

- (65) *Spanish*  
 El gobierno armó [R a los soldados] [T con pistolas].  
 the government arm.PST.3SG DOM the soldiers with pistols  
 ‘The government armed the soldiers with pistols.’

The ACC/DOM coded recipient can be passivised:

- (66) *Spanish*  
 Los soldados fueron armados por el gobierno con pistolas.  
 the soldiers were armed.PL.M by the government with pistols  
 ‘The soldiers were armed by the government with pistols.’

The predicate *armar* also allows its R argument to head a reduced relative:

- (67) *Spanish*  
 los soldados armados con pistolas  
 the soldiers armed.PL.M with pistols  
 ‘the soldiers armed with pistols’

The R argument's case changes to GEN in a nominalisation, *a* is impossible:

- (68) *Spanish* (V́ctor Acedo-Matellán, p.c.)  
 ?el armamiento del ej́rcito / de los soldados  
 the arming of the army of the soldiers  
 'the arming of the soldiers'

Finally, the R argument of *armar* can control a depictive secondary predicate:

- (69) *Spanish*  
 a. El capitán armó a María<sub>i</sub> borracha<sub>i</sub>.  
 the captain armed DOM María drunk  
 'The captain armed Mary<sub>i</sub> drunk.'  
 b. \*El capitán dió armas a María<sub>i</sub> borracha<sub>i</sub>.  
 the captain gave weapons DAT María drunk  
 intended: 'The captain armed Mary<sub>i</sub> drunk.'

In sum, with the predicate *armar* which assigns its recipient argument accusative case, the recipient shows the same behaviour as zero- or DOM-coded theme arguments discussed earlier. The recipient of *armar* behaves strikingly differently from the recipient of the predicates discussed in Section 2. I take this to mean that the syntactic Case assigned to an internal argument, be it a theme or a recipient, strongly correlates with the argument's syntactic behaviour. Morphological form, however, is not a good predictor of syntactic behaviour.

#### 4.2 Interim summary

In this section, I discussed further evidence in favour of the hypothesis that DOM and dative arguments are syncretic in Spanish, Hindi and other languages. First, we saw that Icelandic, a language without DOM, shows syncretism of accusative and dative in parts of its nominal paradigm. This is interesting because it establishes this particular type of syncretism independently of DOM. Second, I showed that in English and Khanty, accusative-marked recipients show the syntactic properties that zero- and DOM-marked themes show in Spanish and Hindi, suggesting that syntactic Case, rather than semantic role is a predictor of syntactic behaviour. Finally, I showed that Spanish predicates like *armar* make the same point: recipients which are assigned structural accusative behave like direct (or primary) objects.

All these arguments are of a similar type: by testing different constructions in different languages, we can manipulate variables that possibly affect the homophony of DOM and dative case. The fact that Icelandic shows syncretism of accusative and dative shows that DOM is not a necessary factor for the existence of accusative and dative syncretism; in other words, this kind of syncretism is attested independently of DOM. The ditransitive alternations discussed here, in turn, show that the semantic role of the internal argument is not a relevant factor of the homophony either.

Rather, in all languages discussed so far, one internal argument has a special syntactic status and this argument is encoded with accusative case. In DOM languages, this accusative has zero and overt allomorphs, while in others, like Icelandic, it can be syncretic with dative case. But these differences are morphological and do not determine the accusative argument's syntactic behaviour.

### 5 Previous analyses

Before concluding, I briefly discuss other analyses of the homophony of DOM and dative.

### 5.1 Morphological analyses

Bossong (1991) notes that dative and DOM share exponents in most of Romance, as well as many Semitic languages, and estimates that it is the most frequent syncretism of DOM and another case-marker (Bossong 1991: 157–158). He also points out that treating both dative and DOM as syntactically identical is “superficial” as it does not take into account the markers’ distinct syntactic behaviour (Bossong 1991: 155). Among the arguments against identity, he lists different pronominalisation of dative and DOM objects (cf. (70)) and the fact that dative is not differential. For Bossong, then, DOM and dative are morphologically identical, but not syntactically.

Bossong illustrates different pronominalisations in Campidanese Sardinian using the following examples. (70a) and (71a) show the homophony of DOM and dative markers. When replaced by pronouns, as in (70b) and (71b), the objects appear in different cases, accusative and dative, respectively.

(70) *Campidanese Sardinian* (Bossong 1991: 155)

- a. Carrabusu sighid a Efsia.  
Carrabus follows DOM Efsia  
‘Carrabus is following Efsia.’
- b. Barnardu **dda** sighidi.  
Bernard her.ACC follows  
‘Bernard follows her.’

(71) *Campidanese Sardinian* (Bossong 1991: 155)

- a. Giginu fai signali a Filliccu de aspettai.  
Gigino makes sign DAT Fillicco of wait.INF  
‘Gigino gives a sign to Fillicco to wait.’
- b. Carrabusu e Gironi **ddi** fainti signali de fueddai.  
Carrabus and Girone her.DAT make sign of speak.INF  
‘Carrabus and Girone give her a sign to speak.’

Glushan (2010) provides a morphological account of DOM and dative syncretism in terms of *feature freezing*. Focusing on the spell-out of case-markers, Glushan also adopts the idea that cases represent bundles of features (cf. Section 3.2 above). In her analysis, nominative, accusative and dative are represented as shown in Table 1.

Glushan assumes that direct objects with DOM in languages where it is homophonous with dative are assigned accusative. Objects high in animacy or definiteness ([+mot] in (72)), however, trigger the rule in (72), which changes the – value of the “per[ipheral]” feature to +. At spell-out, the resulting case-feature bundle will match DAT in Table 1.

(72) **DOM rule** (Glushan 2010: 10)

$$[-\text{per}] \rightarrow [+ \text{per}] / \frac{\quad}{[+ \text{mot}]}$$

**Table 1:** Case feature decomposition adopted by Glushan (2010: 5).

	<b>NOM</b>	<b>ACC</b>	<b>DAT</b>
Peripheral	–	–	+
Source	–	–	–
Location	–	–	–
Motion	–	+	+

Using additional rules, Glushan derives other patterns of syncretism (e.g. accusative and genitive). The pattern ACC=DAT is relatively frequent because it amounts to a single application of the DOM rule in (72), as the two cases differ by a single value in Table 1.

Glushan's approach is very powerful but arguably less restrictive than the one proposed in Section 3 since it does not take the independently motivated hierarchy of cases (and case features) into account. Therefore, any syncretism could be derived by a bespoke set of rules.

Starke (2017) specifically discusses the role of genitive in a case hierarchy and its potential to intervene between dative and accusative. Rather than assuming the existence of different hierarchies (cf. Harðarson 2016), Starke argues that there are two types of accusative and dative, respectively, both above and below genitive on the case hierarchy. Spanish, for example, has two accusative cases, a lower one which is syncretic with the nominative (morphologically unmarked), and a higher one which is syncretic with the dative (*a*). Without judging the merits of this analysis, I merely note that it is compatible with the aspect of the present proposal that arguments with DOM and arguments with dative do not bear the same case; Starke's (2017) approach necessitates assigning different accusatives to direct objects without and those with DOM, however.

### 5.1.1 Syntactic analyses

Manzini & Franco (2016) propose that DOM and datives are not just morphologically, but *syntactically* identical. The core of their proposal is that DOs with DOM and IOs are both sisters of the same head, a preposition they term  $P(\subseteq)$  (or  $Q(\subseteq)$  if the element is an affix).

Manzini & Franco (2016: 211–215) characterise these heads in informal semantic terms, suggesting that they express an “inclusion” or a “part-whole” relation, and that they are related to possession.<sup>17</sup>

Manzini & Franco (2016) also suggest that syncretism of dative and accusative in Romance pronominal systems instantiates the same overlap. (73) illustrates this for Italian. The verb *parlare* ‘to talk’ takes a dative object, while *colpire* ‘to hit’ takes an accusative object. This distinction is marked with third person arguments in (73b,c), but the cases are syncretic in first and second person.

- (73) *Italian* (Manzini & Franco 2016: 209)
- a. Mi / ti      ha      colpito / parlato.  
me you.SG has.3SG hit      talked  
‘He hit/talked to me/you.SG.’
  - b. Lo      / \*gli      ha      colpito.  
he.ACC    he.DAT has.3SG hit  
‘He hit him.’
  - c. Gli      / \*lo      ha      parlato.  
he.DAT    he.ACC has.3SG talked  
‘He talked to him.’

Manzini & Franco (2016: 210) suggest that the syncretism with first or second person is not morphological, but that the objects of both *parlare* and *colpire* are structurally represented as datives, i.e. as in (73c).

<sup>17</sup> Manzini & Franco (2016) reference similar proposals, like Harley's (2002)  $P_{loc}$  head, spelled out as *to* in the English prepositional dative construction (see also Pesetsky 1995; Beck & Johnson 2004). A potential problem for this approach, at least for Spanish, is discussed by Cuervo (2003), who argues that datives in Spanish are not PPs.

They adopt Svenonius's (2002) proposal that accusative and dative case are related to the way a predicate structures (sub-)events. Svenonius (2002: 197) proposes that accusative is assigned when two subevents overlap and dative when they are distinct, and discusses a range of different classes of verbs. Manzini & Franco (2016) adopt this distinction and argue that in Italian a third person accusative, e.g. the object of *colpire* 'to hit', is syntactically a D, while a third person dative, e.g. the object of *parlare* 'to talk to', involves a D head embedded under  $Q(\subseteq)$ . They suggest that such a dative structure can be paraphrased as "I caused him to be on the receiving end of some talk." (Manzini & Franco 2016: 216).

Manzini & Franco (2016) further propose that first and second person pronouns must be embedded in the dative structure (involving  $Q(\subseteq)$ ), independently of the predicate. This suggests, of course, that *to hit me* has a different event structure than *to hit him*, because the former, but not the latter, is based on the dative structure. Manzini & Franco do not spell out what this difference is, however:

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 [(73)]—while the embedding of a 3<sup>rd</sup> person argument does not in [(72a)]. 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*. (Manzini & Franco 2016: 218, emphasis mine).

Without specifying the semantic effects of the "slightly different structuring" of subevents, Manzini & Franco's (2016) argument w.r.t. to the structures shown here is essentially morphological, as they suggest that it is the "lexicalization patterns" of first and second person arguments which motivate representing them as datives in (73).

Discussing why DOs and IOs do not behave alike under passivisation, Manzini & Franco (2016: 219–220) then suggest that indirect objects are embedded under  $P/Q(\subseteq)$  because of selectional requirements of the predicates they are an argument of, while DOM DOs require  $P/Q(\subseteq)$  because of their referential properties (e.g. animacy and specificity). Merging IOs under  $P/Q(\subseteq)$  is thus obligatory and happens under passivisation, too. The authors attribute the impossibility of passivising indirect objects to their "inherent case properties", which make them unavailable for movement and promotion to nominative.

This acknowledges the fact that passivisation is possible for DOs with and without DOM and this means that even DOM arguments are not obligatorily merged with  $P/Q(\subseteq)$ . Manzini & Franco (2016: 220) propose that an LF constraint rules out first or second person objects inside VP *without*  $Q(\subseteq)$ : a way to escape this constraint is to move such arguments outside of the VP. This is exactly what happens under passivisation, although Manzini & Franco (2016) do not make it clear what exactly happens to the  $P/Q(\subseteq)$  head. They conclude their discussion of the distinct syntax of IOs and DOs with respect to passivisation by stating that the "parallelism between accusative and DOM depends on the fact that they are both structural cases (not selected by the verb) assigned VP-internally" (Manzini & Franco 2016: 222).

While Manzini & Franco frame their argumentation in semantic terms, they do not provide independent evidence of how the relationship between the predicate and its theme arguments with and without DOM differ semantically and in what way the former resemble indirect objects semantically or syntactically. Their proposal of how to capture differences



in passivisation introduces an additional constraint to account for asymmetries between direct and indirect objects, but again, it lacks independent motivation.

## 6 Conclusions

In this paper, I proposed that homophony of differential object marking in dative case in a number of languages, e.g. Spanish and Hindi, is due to syncretism of accusative and dative case. I presented evidence in favour of this hypothesis from these and other languages which showed that direct objects with and without DOM pattern together with respect to their syntactic behaviour, while indirect objects show different syntactic behaviour. A number of different tests across languages, as well as language-specific evidence supports this view. This set of data aimed to show that the syntax of direct objects with and without DOM is different from that of indirect objects.

I further argued that the semantic properties that affect the distribution of DOM, e.g. animacy, need not affect the distribution of dative. Direct objects with DOM also differ from indirect objects in their semantics. Similarly, I showed that certain predicates allow recipient arguments to behave like direct (or primary) objects, showing DOM, being able to passivise, etc. This supports the idea that one internal argument of the verb is assigned structural accusative case (or a primary object function) which correlates with certain syntactic and semantic properties.

I provided a morphological analysis of this syncretism based on underspecified spell-out rules, and supported by independently motivated patterns of case syncretism. This morphological approach provides a straightforward explanation of the homophony of DOM and dative in the languages under discussion and is compatible with their distinct syntactic behaviour.

## Abbreviations

1 = first person, 2 = second person, 3 = third person, ABL = ablative, ABS = absolutive, ACC = accusative, CAUS = causative, CL = clitic, DAT = dative, DEF = definite, DO = direct object, DOA = differential object agreement, DOM = differential object marking, ERG = ergative, F = feminine, FUT = future, GEN = genitive, INF = infinitive, INS = instrumental, IO = indirect object, LAT = lative, LOC = locative, M = masculine, N = neuter, NEG = negative, NOM = nominative, OBJ = object, P = patient-like argument of a canonical transitive verb, PASS = passive, PFV = perfective, PL = plural, PST = past, PTCP = participle, R = recipient-like internal argument of a ditransitive verb, SBJ = subject, SG = singular, T = theme- or patient-like internal argument of a ditransitive verb.

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## Competing Interests

The author has no competing interests to declare.

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