DIFFERENTIAL OBJECT MARKING AND OTHER OBJECT LICENSING STRATEGIES

MONICA ALEXANDRINA IRIMIA[1]

Abstract. The theoretical status of differential object marking (DOM) has given rise to numerous debates. In this paper we examine data from a set of languages with DOM (Uzbek, Hindi-Urdu, Estonian, Finnish), showing that previous theories addressing the problem of object licensing in DOM languages are insufficient to account for the facts. The complex morpho-syntactic behavior of direct objects in these languages provides further support to an account according to which DOM does not simply signal the difference between syntactically licensed objects, which are marked, and unlicensed ones, which are unmarked. Rather, DOM signals an additional licensing operation beyond that of structural licensing in terms of (uninterpretable) Case (following Irimia 2020, 2021, 2022).

Keywords: Differential Object Marking, nominal licensing, accusative marker, Case, morphological, structural.

1. INTRODUCTION

The vast phenomenon of differential object marking (DOM) encodes splits in the morphosyntactic marking of direct objects (Bossong 1991, 1998, Torrego 1998, Aissen 2003, Iemmolo 2010, Dalrymple and Nikolaeva 2011, López 2012, a.o.). Generally, the presence of features such as animacy, specificity, definiteness, topicality, etc., triggers dedicated marking in a variety of languages. A typical example comes from Uzbek (Turkic), a language in which definite objects require overt morphological marking with what is traditionally called the 'accusative case' – ***ni*** (Levy-Forsythe and Kagan 2018, Guntsetseg et al. 2008, Irimia 2020, 2022, a.o.), as seen in (1).

(1) Uzbek object splits (Levy-Forsythe and Kagan 2018: ex. 2a, b)[2]
a. Anvar rasm chiz-di.
Anvar picture draw-PST.3SG
'Anvar drew a picture/pictures.'

[1] University of Modena and Reggio Emilia; irimiao@unimore.it. A big thank you goes to the audience at AICED 2021 (Bucharest) for valuable discussion on the Uzbek data, as well as to the reviewers for their constructive feedback. We are particularly indebted to Gabriela Alboiu for the suggestions made on the paper, to Yash Singha for his help with the Hindi-Urdu data, and to Virginia Hill for the numerous discussions on DOM and for her inspiring work. Our errors are our own.

[2] Abbreviations=ABL: ablative, ACC: accusative, ASP: aspect, CAUS: causative, DAT: dative, DOM: differential object marking, ERG: ergative, F: feminine, GEN: genitive, IMP: imperative, IMPF: imperfective, INF: infinitive, IO: indirect object, M: masculine, NEG: negative, NOM: nominative, PL: plural, PART: partitive, PFV: perfective, PASS: passive, PRES: present, PST: past, SG: singular, TRANS: translative.

b. Anvar rasm-**ni** chiz-di.
Anvar picture-DOM draw-PST.3SG
'Anvar drew the picture.'

In other languages, such as Hindi-Urdu illustrated in (2), certain types of nominals (normally the ones encoding the highest referentiality, as in (2b) require dedicated morphological marking in the form of a postposition which is homophonous with the dative one (Singh 1994, Butt 1995, Mohanan 1994, 1995, Bhatt and Anagnostopoulou 1996, Bossong 1998, Torrego 1998, a.o.). These types of nominals contrast with unmarked direct objects; the latter can trigger agreement on the verbal complex, as in (2a).

(2) Hindi-Urdu object splits
a. Ram-ne [$_{VP}$ Anita-**ko** chittii bhej-ii.]
Ram-ERG Anita-DAT=IO letter(F) send-PFV.F.SG
'Ram sent a letter to Anita.' (Bhatt and Anagnostopoulou 1996, ex. 6)
b. rahul kitaab-**ko** paRha-taa thaa.
Rahul book.PL(F)-DAT=DOM read-IMPF.M.SG be-M.SG
'Rahul used to read the book.' (Baker 2021, ex.5d)

And yet, animacy-based DOM can affect languages which have other morphologically overt splits for internal objects, for example separating the so-called inherent cases from the structural ones or signaling a complex morpho-syntactic organization of structural cases for direct objects. A typical illustration comes from the Finnic family, for example Estonian and Finnish (and other Finno-Ugric languages more generally). In Estonian, a rule of differential marking respecting the Animacy Hierarchy (Koptjevskaja-Tamm and Wälchli 2001:661) is operative when it comes to direct objects. This rule applies beyond the well-known split based on telicity/perfectivity, which sets the partitive case aside from the nominative and the genitive. First and second person pronouns, the highest categories on the animacy scale must be differentially marked with partitive morphology, as in (3b). The contrast between (3a) and (3b) is telling – the plural non-pronominal direct object in (3a) shows up with the expected nominative case.

(3) Estonian direct objects and the Animacy Hierarchy
a. Võta **lapsed** kaasa.
take.IMP.3SG children.NOM along
'Take the children along.'
b. Võta **mind/meid // * mina/meie** kaasa.
take.IMP.3SG 1SG/PL.PART // 1SG/PL.NOM along
'Take me/us along.'
'Take some of us along.' (Miljan 2008, ex. 18a, c, p.60 adapted)

This repurposed partitive does not induce part-whole distinctions and is not sensitive to aspectual information. It thus has a different function from the aspectually-based partitive, seen in the contrasting contexts below. The direct object in (4a) carries genitive morphology in the singular and allows a telic interpretation of the eventive structure. The partitive morphology in (4b), on the other hand, permits only a 'part-of' interpretation on the internal object and is restricted to atelicity.

(4) Estonian direct objects and partitivity

a. Mari kirjutas **luuletuse**.
Mari.NOM write.PST.3SG poem.GEN.SG
'Mari wrote the poem.'

b. Mari kirjutas **luutust**.
Mari.NOM write.PST.3SG poem.PART.SG
'Mari was writing a poem/parts of a poem.' (Miljan 2008, ex. 5a, p.70 adapted)

As we will see in more detail in Section 4, the category called *accusative* in the related language Finnish can have at least four realizations. Out of these, the 'true' accusative suffix *-t* is reserved for pronouns (extending to human direct objects in colloquial Finnish). The animacy-based case marker for direct objects has received less attention in the Finnic grammar, when compared to the other types of splits. This paper is interested in providing some observations on how the animacy based DOM is to be best derived.

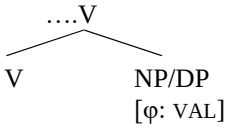
Object splits have been at the forefront of current research, the most important question being how to best model them theoretically. A prominent line of investigation revolves around the notion of nominal licensing: for languages of the Uzbek type, generally, differentially marked objects are seen as those classes of nominals which require an *obligatory* licensing operation in the syntax, while unmarked nominals can either stay unlicensed or undergo complex predicate formation with V (see especially the literature reviews in López 2012, Baker 2015, or the more extensive discussion in Irimia 2022, a.o.).

Under an implementation in this line, it is assumed that the obligatory licensing need on special objects forces them to enter the *Dependent Case* calculus with higher nominals in the clause (e.g., the subject), a process resulting in their overt morphology (building on Baker and Vinokurova 2010, Levin and Preminger 2015, Baker 2015, Irimia 2022, a.o.). A third prominent approach takes marked objects to encode, following de Hoop's (1996) terminology, *strong structural case*; unmarked nominals are either restricted to inherent case or at most *weak structural case* (see for example Rodríguez-Mondoñedo 2007, Kamali 2015 for Turkish, a.o.).

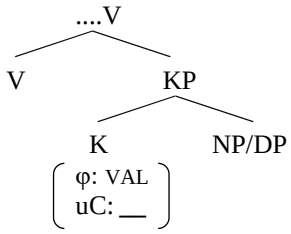
In this short paper, building on the analyses formulated in Irimia (2019, 2020, 2021, 2022), we show that none of these theories is enough to formulate a comprehensive cross-linguistic theory of DOM. To introduce the general framework of the analysis, in Section 2 we provide some data from Uzbek (see Irimia 2020, 2022 for more extensive discussion and other data), indicating that unmarked objects contain a structural Case feature and are not restricted to pseudo-incorporation with V. In Section 3 we look at data from Hindi-Urdu which corroborate the conclusion from Uzbek; more specifically, objects which are not differentially marked with the 'dative' postposition do give evidence of structural licensing in the syntax. Finally, in Section 4 we see that the *weak/strong structural Case* distinction is not sufficient for Estonian/Finnish either. Instead, what unifies all these DOM systems is the need of marked objects to undergo *an additional licensing operation*, beyond structural Case. We take this additional licensing to be related to the need to value a discourse-linking feature which is separate from structural Case. This implies that in these languages, as well as in many others (see Irimia 2019, 2020, 2021, 2022), object realization involves at least: i) unlicensed nominals, which are generally left unmarked (5); ii) nominals that contain an uninterpretable structural Case ([uC]) feature, as in (6); and iii) nominals which have an additional discourse(ð)-licensing feature beyond [uC]. This discourse related feature needs

an additional licensing operation the result of which is the (animacy-related) differential morphology.

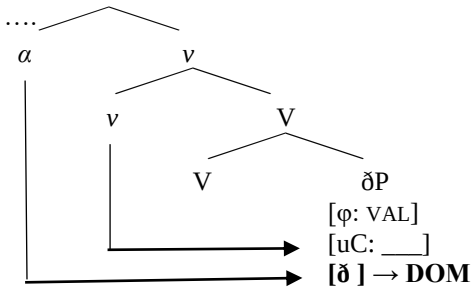
(5) Nominals without [uC]



(6) Nominals with [uC]



(7) DOM as a licensing operation beyond [uC]



2. CASE STUDY 1: OBJECT SPLITS IN UZBEK (TURKIC)

DOM has been extensively studied for Turkic languages, starting from Turkish (Kornfilt 1984, Enç 1991, von Heusinger and Kornfilt 2005, Öztürk 2005, Baker and Vinokurova 2010, Kamali 2015, a.o.). Most accounts (see the recent review in Jenkins 2021) derive object splits along these lines: unmarked objects must be caseless and, moreover, undergo complex predicate formation with V, blocking any intervening material, as in (8a); marked objects, on the other hand, have syntactic flexibility which is due to their containing a definiteness/specificity feature which is associated with structural Case. Following Diesing's (1992) Mapping Hypothesis, definite/specific objects can only be licensed in a position above VP; the output of this licensing operation is the overt marker.

(8) Turkish objects and adjacency: unmarked objects follow VP adverbials

a. Ali yavaș kitap (*yavaș) arı-yor.
Ali slow book slow search-IMPF
'Ali's book searching was slow.'

b. Ali kitab-**i** yavaș arı-yor.
Ali book-DOM slow search-IMPF
'Ali's searching for the book was slow.' (Kamali 2015, ex. 5a, b; adapted)

However, one challenge to this picture has been the observation that, despite their being more restricted both semantically and syntactically, Turkic unmarked objects *do* give indication of the presence of a structural Case feature. As the facts are much clearer, we illustrate here with data from Uzbek, a language very closely related to Turkish. Irimia (2020, 2022) addresses this problem in contexts containing more than one internal argument, for example syntactic causatives, as in (9), which contain: i) the causer (i.e., *Madina*) with nominative case and functioning syntactically as a subject; ii) the causee (i.e. *Anvar*), which is realized syntactically as an internal object, and iii) the theme (i.e., *the pear*), a second internal object. The very puzzling fact is that both an unmarked (9b) and marked theme (9a) trigger the same type of interaction with the higher nominal, the causee, forcing the latter to take dative marking and not the expected differential marking, as in (10).

(9) Uzbek synthetic causative of a transitive verb

a. Madina **Anvar-ga/*-ni** nok-ni/ bitta nok-ni yer-dir-di.
Madina.NOM Anvar-DAT/*-DOM pear-DOM/one pear-DOM eat-CAUS-PST.3SG
'Madina made Anvar eat the pear/a pear.'

b. Madina **Anvar-ga/*-ni** nok/bitta nok yer-dir-di.
Madina.NOM Anvar-DAT/*-DOM pear/a pear eat-CAUS-PST.3SG
'Madina made Anvar eat pears/a pear.'

c. Madina **Anvar-ni/*-ga** mexnat qil-dir-di.
Madina Anvar-DOM/*-DAT labour do-CAUS-PST.3SG
'Madina made Anvar work.'

d. Madina **Anvar-ni/*-ga** nok-dan bez-dir-di.
Madina Anvar-DOM/*-DAT pear-ABL get.tired-CAUS-PST.3SG
'Madina made Anvar get tired of pears.' (Zarina Levy-Forsythe, p.c.)

e. Madina **Anvar-ga/*-ni** nok-dan ye-dir-di.
Madina Anvar-DAT/*-DOM pear-ABL eat-CAUS-PST.3SG
'Madina made Anvar eat some of the pears.' (Zarina Levy-Forsythe, p.c.)

(10) Uzbek synthetic causative of an intransitive verb

Madina **Anvar-ni/*-ga** yugur-tir-di.
Madina Anvar-DOM/*-DAT run-CAUS-PST.3SG
'Madina made Anvar run.'

Example (9c), instead, shows that this type of interaction does not arise every time the causative contains a nominal theme. Similarly, in (9d), the theme, marked with a lexical

ablative, does not produce a restriction on the morphological marking of the causee. As Irimia (2020, 2022) shows, w**e** can draw two important conclusions from these data. On the one hand, unmarked nominals are *not* a uniform class syntactically, even if they are morphologically undistinguishable on the surface; some types, such as the complements to light verbs (*do, give,* etc.), as in (9c), are not visible to case competition with the causee. Levy-Forsythe and Kagan (2018), in fact, assume that N complements to light verbs construct T(rue) I(incorporation) with V. Unmarked nominals which are not complements to light verbs, however, appear to be *visible* to case competition processes and have an identical behaviour to the marked nominals from this point of view. On the other hand, these latter nominals are also different from lexically-marked themes too, for example the ablative in (9d), idiosyncratically selected by the predicate *get tired.* As expected, lexically marked nominals do not enter into competitions affecting *structural Case*. Non-TI NPs are similar to nominals with structural case, such as DOM in (9a) or the ablative which is interpreted as a partitive, and whose structural Case nature is not surprising.

These observations lead to an important question: if non-TI unmarked nominals are similar to DOM when it comes to the presence of an abstract structural Case feature, it cannot be that lack of abstract structural Case sets the former aside from the latter. Therefore, non-TI unmarked nominals do contain an abstract Case feature, with structural nature. A similar conclusion has, in fact, been argued for by Öztürk (2010) or Kamali (2015) for Turkish. But then, what distinguishes non-TI unmarked nominals from DOM?

We can take as a starting point the analysis Kamali (2015) has proposed for similar object splits in Turkish. Working in de Hoop's (1996) framework, Kamali assumes that both differentially marked and non-TI unmarked nominals contain a structural Case feature. The difference is that differentially marked nominals are specified with *strong structural* Case, while non-TI unmarked nominals contain *weak structural* Case. This explains why the latter are normally restricted to non-specific readings and stay closer to the verb in Turkish.

Following the exact same reasoning for Uzbek proves more problematic, however. First, it has been observed that non-TI unmarked nominals are *not* restricted only to non-specific readings. In (11) we see that unmarked indefinites receive the same range of interpretations as the differentially marked ones. This characteristic is difficult to reconcile under the assumption that unmarked nominals contain *weak structural Case*, which should prohibit specific readings, given that it is licensed closer to the verb.

(11) Uzbek – unmarked and marked indefinites with specific readings

a. Anvar **bitta** **maqola** õqishi kerak.
Anvar one/a article must read
'Anvar must read an article.'
must > ∃x: Anvar must read an article or other
∃x > must: There is an article such that Anvar must read it

b. Anvar **bitta** **maqola-ni** õqishi kerak.
Anvar one/a article-DOM must read
'Anvar must read an article.'
must > ∃x: Anvar must read an article or other
∃x > must: There is an article such that Anvar must read it
(Levy-Forsythe and Kagan 2018: ex.16a/b, adapted; Irimia 2022, ex. 20, 21)

Similarly, differential marking is not just a matter of raising. As opposed to Turkish, Uzbek non-TI unmarked nominals do not need to be adjacent to V but have syntactic flexibility. The two examples in (12) contain various types of adverbials which are interpolated between V and the unmarked nominal:

(12) Uzbek unmarked objects and intervening adverbials

a. Anvar kuzda palto [$_{ADV}$ **umuman/deyarli/hech]** ki-ma-di**.**
Anvar autumn coat whatsoever/virtually/at all wear-NEG-PST.3SG
'Anvar did not wear a coat/coats whatsoever/virtually/al all in the autumn.'

b. Anvar nok [$_{ADV}$ **ham]** ye-di.
Anvar pear also eat-PST.3SG
'Anvar also ate the pear.'
(Levy-Forsythe and Kagan 2018, ex. 8c/8a, adapted)

To summarize, non-TI unmarked nominals in Uzbek give evidence of the presence of a structural Case feature, exhibit similar interpretations to the marked ones and have similar syntactic freedom. Differential marking, on the other hand, is restricted to highly referential animates and/or nominals whose saliency is relevant in the context. Associating the non-TI unmarked nominals to weak structural Case can explain the former property, but not the latter two. Following Irimia (2022), instead, an analysis which takes differentially marked nominals to signal an additional licensing operation beyond [uC] can derive these facts. As shown in (7), differential object marking is a matter of discourse specifications and contains a discourse-linking feature beyond structural Case. This predicts that a language can contain other types of nominals specified with a structural Case feature, which might require obligatory licensing itself. As a result, such nominals might have syntactic flexibility and thus the possibility to appear in various positions, and might give rise to specific/definite readings, even if overt morphology is lacking. Differential object marking, on the other hand, is not just a matter of specificity, either. As observed by Guntsetseg et al. (2008), the special morphology is necessary in certain contexts (relativization, demonstratives, etc.), even if the expected definiteness readings are missing. Similarly, in many instances, the marking might be just optional. What is particularly relevant is how discourse specifications interact with categories that already contain a structural Case feature and escape complex predicate formation with V in syntax/semantics. In the next two sections we will be examining two other case studies further supporting the conclusion that differential marking is not just the presence of structural Case which forces obligatory raising.

3. CASE STUDY 2. DOM BEYOND AGREEMENT IN HINDI-URDU

Let's illustrate now with Hindi-Urdu, an Indo-Iranian language, which uses dative morphology to signal certain types of direct objects with interpretations related to specificity, definiteness, and animacy (Singh 1994, Mohanan 1994, Bhatt and Anagnostopoulou 1996, Bhatt 2005, a.o.). One difference between Uzbek and Hindi-Urdu is the presence of an aspectuality-based alignment in the latter. More precisely, in Hindi-Urdu the perfective uses an ergative-absolutive pattern while non-perfective aspects switch

to nominative-accusative (see especially Mohanan 1994). The differential marker *ko* is seen regardless of alignment; the sentences in (13a) and (13b) are ergative-absolutive, while those in (13c) and (13d) are nominative-accusative.

(13) Hindi-Urdu unmarked and *ko* marked direct objects

a. raam-ne makkhiyãã pakr-ĩĩ.
Ram-ERG fly.PL(F) catch-PFV.F.PL
'Ram caught flies.'

b. siita-ne makkhiyãã-**ko** pakr-yaa.
Sita-ERG(F) fly.PL(F)-DAT=DOM catch-PFV.M.SG
'Sita caught the flies.'

c. rahul kitaab paRha-taa thaa.
Rahul book(F) read-IMPF.M.SG be-M.SG
'Rahul used to read a/the book.' (Baker 2021, ex.5a)

d. rahul kitaab-**ko** paRha-taa thaa.
Rahul book.PL(F)-DAT=DOM read-IMPF.M.SG be-M.SG
'Rahul used to read the book.' (Baker 2021, ex.5d)

As we can also see in these examples, the marking of direct objects has important consequences on sentential-level processes, such as agreement on the verbal complex. Informally, the rule goes as follows: only (certain types of) unmarked nominals can trigger agreement (see Mahajan 1989, Mohanan 1995, Bhatt 2005, a.o., for extensive discussion). As such, the verbal complex in (13a) shows agreement with the unmarked direct object. The subject (the agent) is excluded from agreement as it carries the ergative case marker (functioning as a postposition). In (13b) instead, there is default (masculine, singular) agreement on the verbal complex, as both arguments carry case marking (the ergative on the agent and the differential marker on the direct object). Overt case marking blocks agreement.

Another crucial property of verbal agreement in Hindi Urdu is that it does not need to be local. To understand this point, let's examine the example in (14); here, the matrix predicate *chaah* 'want' shows agreement with the direct object *kitaab* 'book' which is not its argument thematically nor structurally. This direct object instead is a thematic argument of the embedded verb *paṛh* 'read' and triggers agreement with it too (as seen from the agreeing infinitival form).[3] Unsurprisingly, the subject of the matrix predicate does not trigger agreement as it is overtly case marked with the ergative postposition.

(14) Hindi-Urdu long distance agreement (LDA)
vivek-ne [kitaab paṛh-**nii**] chaah-**ii**.
Vivek-ERG book(F) read-INF.F want-PFV.F.SG
'Vivek wanted to read the book.' (Bhatt 2005, ex.4)

This phenomenon is known as *Long Distance Agreement* (LDA). Bhatt (2005) has provided several diagnostics indicating that it affects only restructuring (complex verb formation) contexts (see also Butt 1995). As expected under this analysis, LDA does not

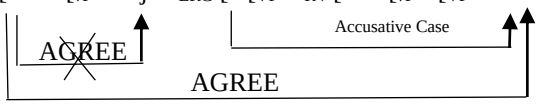
[3] As shown by Bhatt (2005) and previous literature, in contexts of this type, agreement with the embedded predicate is parasitic on LDA with the matrix predicate for many speakers. Moreover, LDA without agreement with the embedded predicate is similarly ungrammatical for the same speakers.

apply across embedded domains that are finite. Bhatt (2005) has also shown that there are also non-finite configurations where LDA does not apply, in the sense that the matrix and the embedded infinitive do not show agreement with an unmarked object. In these instances, the absence of LDA is attributed to the restructuring not having applied.

Examples such as (14) are relevant in that they show a multi-faceted behaviour of direct objects in Hindi-Urdu. Importantly, what is the difference between agreeing unmarked objects and differentially marked objects? What we need to emphasize regarding Hindi-Urdu is that an analysis that takes differentially marked objects to be the only classes of object that undergo obligatory licensing (in terms of Case) in the syntax cannot explain the source of agreement with unmarked nominals as in (13b) or (14).

As various accounts have shown (see the review in Bhatt 2005), the hypothesis according to which unmarked objects which trigger obligatory agreement, as in (13b) or (14), undergo obligatory licensing in terms of Case is necessary. For convenience, we will be building here on Bhatt's (2005) analysis, which contains motivation for the assumption that *v* assigns structural Accusative case to the unmarked direct object. This is illustrated in (15). The locus of agreement is T^0, which contains unvalued ϕ-features. These will be valued when T^0 locates the closest argument with visible ϕ-features and establishes the operation AGREE, formulated as in (16). Under this formalization, a head can agree with a nominal it does not case-license. As Bhatt (2005) also shows, this is a welcome result for the Hindi-Urdu data, as both internal arguments (direct objects) and external arguments (subjects) can show up with unmarked (nominative) case, even if they have not been licensed by T. Also remember that Hindi-Urdu nominals which have an overt case marker (ergative, DOM) block agreement. Therefore, in the configuration in (15), the ergative will be skipped, and T^0 finds the next available target with visible ϕ-features, namely the direct object (OBJ) which has structural accusative case.

(15) $[T^0 \ldots [_{vP}\ \text{Subject}_{ERG}\ [v\ [_{VP}\ V_{RV}\ [\text{Inf}^0\ [_{vP}\ v\ [_{VP}\ V\ \text{OBJ}_{ACC}]]]]]]]$



(adapting Bhatt 2005)

(16) 'AGREE is the process by which a head X^0 with unvalued uninterpretable features (the Probe) identifies the closes Y^0/YP in its c-command domain with the relevant set of visible matching (i.e. nondistinct) interpretable features (the Goal), and uses the interpretable features of Y^0/YP to value its uninterpretable features.'
(Bhatt 2005: 17)

Given that at least some types of unmarked objects give evidence of the presence of structural Accusative Case, how exactly are differentially marked objects to be analyzed? One possibility would be to say that the 'dative' marker repurposed as DOM does not have a 'narrow syntactic' nature, but simply signals the application of a superficial morphological process. For example, one possibility could be to say that both (agreeing) unmarked objects and DOM are nominals which have been licensed as structural accusatives. In turn, DOM is signaled by an additional morphological process which inserts the 'dative' marker to signal the presence of feature such as animacy.

Despite its appeal, the 'morphological hypothesis' runs into various problems and has to be rejected. Crucially, it cannot explain why differentially marked arguments have syntactic correlates. As has been discussed in the literature, marked objects are associated with scrambling and have to be realized in a position above VP. Bhatt and Anagnostopoulou (1996) provide unambiguous evidence from double-object constructions. Example (17)(17a) shows that an unmarked direct object follows an indirect object. A marked direct object, on the other hand, must precede an indirect object, as in (17b) and (17)(17c). Despite homophony between the morphology of the indirect object and that of the differentially marked object, the only possible interpretation of (17c) is one in which the initial *ko*-marked phrase is interpreted as a differentially marked direct object.

(17) Hindi-Urdu marked objects and scrambling

a. Ram-ne [$_{VP}$ Anita-**ko** chittii bhej-ii.]
Ram-ERG Anita-DAT=IO letter(F) send-PFV.F.SG
'Ram sent a letter to Anita.' (Bhatt and Anagnostopoulou 1996, ex. 6)

b. Ram-ne chittii-**ko**$_i$ [$_{VP}$ Anita-**ko** t$_i$ bhej-aa.]
Ram-ERG letter(F)-DAT=DOM Anita-DAT=IO send-PFV.M.SG
'Ram sent the letter to Anita.' (Bhatt and Anagnostopoulou 1996, ex. 7)

c. Ram-ne Bill-**ko** Anita-**ko** di-yaa.
Ram-ERG Bill-DAT=DOM Anita-DAT=IO give-PFV.M.SG
'Ram gave Bill to Anita.' / # 'Ram gave Anita to Bill.'
(Bhatt and Anagnostopoulou 1996, ex. 8c)

Bhatt and Anagnostopoulou (1996) also show that the type of movement seen with DOM is A-related. Just like other types of A-movement, raising of differentially marked objects in Hindi does not permit reconstruction for anaphor binding. This is illustrated in (18). Bhatt and Anangnostopoulou further show that it passes other tests characteristic to A-movement, such as obviation of Weak Crossover violations or obviation of Condition C violations (see the relevant examples in Bhatt and Anagnostopoulou's work).

(18) unhõne$_i$ [ek-duusre kii bahinõ]$_{i/*j}$-**ko** laRkõ-ko$_j$ di-yaa.
they each other GEN sister.PL-DAT=DOM boy.PL-DAT=IO give-PFV.M.SG
'They$_i$ gave each other's $_{i/*j}$ sisters to the boys$_j$.'
(Bhatt and Anagnostopoulou 1996, ex. 13c)

This indicates that a separate licensing operation is needed for the *ko* marked objects, which have important correlates in the syntax. The observation that DOM *ko* objects are set aside from agreeing unmarked nominals in the syntax is also prominent in accounts which take the latter to be subject to a process of pseudo-incorporation (Dayal 2011), which DOM must escape. We have not followed an analysis of Hindi DOM as an anti-incorporation mechanism in this paper as the process called *pseudo-incorporation* is not easy to define in the language and it might not amount to more than an epiphenomenon, whose correlates are not clear. In fact, Dayal (2011) herself lists several properties of unmarked direct objects which are hard to accommodate into a pseudo-incorporation account: they can raise to high positions in the left periphery, they can take wide(st) scope, etc.

What we want to propose is that similarly to Uzbek, *ko* DOM objects are special in that they need an additional licensing mechanism in narrow syntax. This additional operation is connected with the licensing of a discourse-linking feature beyond [uC] per se, as in (7). Bhatt and Anangnostopoulou (1996) also tentatively hypothesize that the special morphology (and raising) of marked objects is related to specificity, and not to Case licensing.

4. CASE STUDY 3: THE STRUCTURAL ACCUSATIVES IN FINNIC

The last example we are addressing here comes from Finnic. The morphological complexities of the case system make the Finnic family an excellent case study for the theoretical issues raised in this paper (Kiparsky 2001, de Hoop 1996, Hiietamm 2003, Miljan 2008, Vainikka and Brattico 2014, a.o.). We are particularly interested in the marking of direct objects under the influence of the Animacy Hierarchy (see especially Koptjevskaja-Tamm and Wälchli 2001:661).

As discussed by Miljan (2003), Estonian personal pronouns in the first and second person, the highest categories on the animacy scale, show up with partitive case when used as direct objects, in a variety of contexts including impersonals and imperatives. This marking distinguishes them from non-pronominal direct objects which take the genitive case in the singular and the nominative in the plural. Examine the contrast below:

(19) Estonian direct objects and the Animacy Hierarchy

a. Võta **lapsed** kaasa.
take.IMP.3SG children.NOM along
'Take the children along.'

b. Võta **mind/meid // * mina/meie** kaasa.
take.IMP.3SG 1SG/PL.PART // 1SG/PL.NOM along
'Take me/us along.'
'Take some of us along.' (Miljan 2008, ex. 18a, c, p. 60 adapted)

As shown by the translation in (19b), the partitive case ending on the first-person pronoun is not associated with a partitive interpretation. As is well known, across Finnic languages direct objects, when interpreted partitively, indefinite, and in atelic contexts, must show up with the partitive case marker. As a result, the object with partitive marking in (20b) can be interpreted only as an indefinite, in an atelic context. On the other hand, the genitive in (20a) obtains a definite interpretation and telicitiy is imposed.

(20) Estonian direct objects and partitivity

a. Mari kirjutas **luuletuse**.
Mari.NOM write.PST.3SG poem.GEN.SG
'Mari wrote the poem.'

b. Mari kirjutas **luutust**.
Mari.NOM write.PST.3SG poem.PART.SG
'Mari was writing a poem/parts of a poem.' (Miljan 2008, ex. 5a, p.70 adapted)

Finnish, closely related to Estonian, similarly shows the crucial effect of the Animacy scale on the marking on direct objects. The so-called 'accusative' category in the language illustrates several variants (Kiparsky 2001, a.o): a) the *-t* variant, seen in with human pronouns, as (21a); the *-n* variant, which is homophonous with the genitive, as in (21b), and the bare/zero form, which is homophonous with the nominative (21c). Importantly, these forms are conditioned syntactically, as conclusively demonstrated in numerous works (see especially Kiparsky (2001) or Vainikka and Brattico (2014) for extensive discussion and relevant bibliography). These realizations further contrast with the partitive, as in (21d), under which the nominal is interpreted as 'incompletely' affected.

(21) Finnish direct objects[4] (Vainikka and Brattico 2014, ex. 1a, b, c; Irimia 2020)

a. Minä näin **häne-t.**
I saw.1PST he.ACC(t)
'I saw him.'

b. Minä näin auto-n.
I saw.1PST car.ACC(n)
'I saw the car.'

c. Minun täytyy nähdä *auto*.
I must see car.ACC(0)
'I must see the car.'

d. Hän ammui *auto-a.*
he shoot.PST.3SG car-PART
'He shot at the car.'

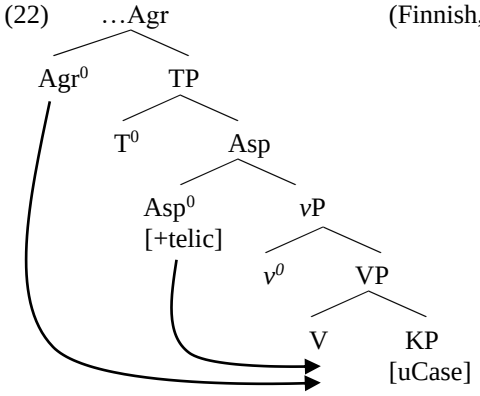
As can be seen from these examples, the case system of Finnic presents numerous intricacies, which cannot be extensively addressed in the short space available here. We are only interested in the influence of the animacy scale. In order to explain the special case morphology seen on direct objects containing specifications at the highest end of the animacy scale, it must be assumed that object licensing does not simply involve a split between licensed and unlicensed nominals. Some types of nominals might contain additional features beyond [uC], which appear to require the activation of an additional licenser. This conclusion has, in fact, been independently argued for Finnish by Vainikka and Brattico (2014). Irimia (2020) contains a further summary of this analysis. Here, we extend some parts of the account to Estonian too. Crucially, as Miljan (2008) and Vainikka and Brattico (2014) also show, what distinguishes the various types of structural accusatives is not a just a difference in position. In fact, Vainikka and Brattico (2014) present diagnostics from topicalization, clefting and idiom construction in Finnish which map the three objects as sharing the same position. Similar effects are seen in Estonian.

The analysis Vainikka and Brattico (2014) propose for the accusative category derives the various morphological realizations of *structural* direct objects as *affected by several case assigners.* We will briefly include some details here, also following Irimia (2020). For Vainikka and Brattico (2014), Finnish ACC(n), which is homophonous with the

[4] We follow Vainikka and Brattico (2014) in using the representation ACC(t), ACC(n) and ACC(0).

genitive, requires valuation by an Agr head in the clausal spine, conjunctively with Asp, as in (22). Asp is the initial licenser for direct objects in Finnic languages, directly above VP. If the predicate is atelic, the nominal will be marked as partitive (as in (21b) from Estonian and (21d) from Finnish). Research on both Finnish and Estonian has demonstrated through numerous diagnostics that the partitive is a structural case, and not a type of inherent marking.

(22) …Agr (Finnish, Acc(n), Estonian nominative and genitive)



A prediction is that in configurations which are not large enough as to contain Agr, Finnish ACC(n) will be ungrammatical, as it will be unlicensed. This is clearly borne out in the Agree-less impersonal passive, where the accusative is still licensed but not under its ACC(n) form, as in (23a). In configurations with an Agr head, instead, only ACC(n) and ACC(t) are possible, but not ACC(0); see the MA infinitive in (23b). In Estonian, in turn, the genitive is not possible on the direct object in impersonal constructions, such as the infinitive impersonal in (24). Only the nominative is allowed. See the contrast between (24) and (20a).

(23) Finnish accusatives and Agree (Vainikka and Brattico 2014, ex. 20 and 32a)

a. **Sinu-t/** **sisko/** ***sisko-n** löydettiin pihalta.
you-ACC(t) sister-ACC(0) ACC(n) found.PASS yard
'You/the sister were/was found in the (back)yard.'

b. Lähdimme hakemaan **hän-et/** **sisko-n/** ***sisko-0**.
went.PST.1PL get.MA him/her-ACC(t) sister-ACC(n) sister-ACC(0)
'We went to pick her/the sister up.'

(24) Estonian direct objects under impersonals (examples a, b, adapted after Miljan 2008)

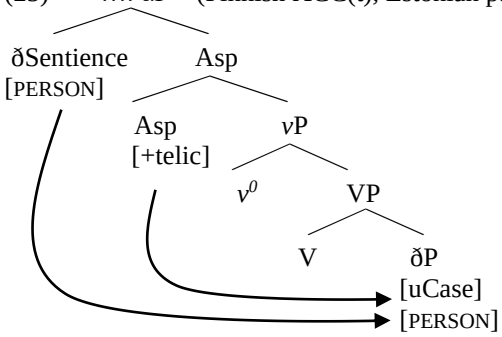
a. Minu ülesandeks on lahendada **see** **küsimus**.
my.GEN task.TRANS.SG be.PRES3 solve.INF this.NOM.SG question.NOM.SG
'My task is to solve this problem.'

b. *Minu ülesandeks on lahendada **selle** **küsimuse**.
my.GEN task.TRANS.SG be.PRES3 solve.INF this.GEN.SG question.GEN.SG
Intended: 'My task is to solve this problem.'

c. Tema ülesandeks on võtada **mind/meid** kaasa.
his task.TRANS.SG be.PRES3 take.INF 1.SG/PL.PART along
'His task is to take us along.'

It is also clear that the Finnish impersonal passive in (23a) does not involve the removal of the accusative case, as ACC(t) is preserved. Similarly, the partitive marking of the Estonian first-person personal pronoun is preserved under the impersonal in (24c). Extending the hypothesis put forward in this paper, Finnish ACC(t) and the Estonian partitive, generally reserved for *human* pronouns (or other human entities in colloquial Finnish), involve an *additional* licenser which is more local than the Agr head, for example a functional head similar to Pancheva and Zubizaretta's (2018) low sentience projection which licenses [PERSON]-related entities, as schematically shown in (25).

(25) …. αP (Finnish ACC(t), Estonian partitive on 1st and 2nd person pronouns)



In conclusion, as Brattico (2012) emphasizes, several case assigners can affect the case realization at one case assignee. Variation in the nature of features involved in multiple licensing can result in languages such as Estonian or Finnish, where the split is not just marked/unmarked, not even in the morphology. Although the Finnic facts discussed here barely scratch the surface when it comes to the nature of C/case in this family, they match the observations made for the other languages: object marking splits do not simply track the divide between structurally licensed vs. unlicensed objects.

5. CONCLUSIONS

The four languages very briefly examined in this short paper provide support for an important conclusion: differential object marking involves a structural licensing strategy beyond *uninterpretable Case* per se. Instead, the special marking seen on highly referential direct objects involves the presence of discourse-linking features which are generated separately from Case and need to be licensed separately. What is worthwhile to mention is that a similar picture can be seen in yet other languages. For example, Irimia (2019), (2020) (2021), or (2022) has motivated a similar analysis for differential object marking in other language families such as Basque, Romance, Sino-Tibetan, etc., and see also Hill and Mardale (2019, 2021) for the diachrony of Romanian. These observations have important consequences on the more general theory of nominal licensing and of differential object marking. An important question for further research is how to reconcile these results with hypotheses put forward for languages in which DOM signals out just those objects that are subject to nominal licensing.

REFERENCES

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

Baker, M., 2021. "On dependent Case and sometimes independence of ergativity and differential object marking", Ms.

Baker, M., 2015, *Case: Its principles and parameters*, Cambridge, Cambridge University Press.

Baker, M. C., Vinokurova, N., 2010, "Two modalities of case assignment: Case in Sakha", *Natural Language and Linguistic Theory*, 28, 3, 593–642.

Bhatt, R., 2005, "Long distance agreement in Hindi-Urdu", *Natural Language and Linguistic Theory*, 23, 4, 757–807.

Bhatt, R., and E. Anagnostopoulou, 1996, "Object shift and specificity: Evidence from *ko*-phrases in Hindi", in: L.M. Dobrin, C. Singer, L. McNair (eds), *Proceedings of CLS 32.1*, 11–22.

Butt, M., 1995. *The structure of complex predicates in Hindi,* Stanford (CA), CSLI Publications.

Bossong, G., 1991, "Differential Object Marking in Romance and beyond", in: D. Wanner, D. Kibbee (eds), *New Analyses in Romance Linguistics*, Urbana-Champaign, April 7–9, 1988, Amsterdam, John Benjamins, 143–170.

Bossong, G., 1998, "Le marquage différentiel de l'objet dans les langues d'Europe", in: J. Feuillet (ed.), *Actance et valence dans les langues de l'Europe,* Berlin, Mouton de Gruyter, 259–294.

Brattico, P., 2012, "Long distance case assignment in Finnish", *Studia Linguistica*, 66, 245–284.

Butt, M., 1995, *The structure of complex predicates in Urdu,* Stanford, CA, CSLI Publications.

Dalrymple, M., and I. Nikolaeva, 2011, *Objects and information structure*, Cambridge, Cambridge University Press.

Dayal, V., 2011, "Hindi pseudo-incorporation", *Natural Language and Linguistic Theory*, 29, 1, 123–167.

Diesing, M., 1992, *Indefinites*, Cambridge (MA), MIT Press.

Enç, M., 1991, "The semantics of specificity", *Linguistic Inquiry*, 22, 1–27.

Guntsetseg, D., K., von Heusinger, U. Klein, D. Niazmetova, 2008, "DOM in Mongolian and Uzbek", Handout from presentation at SFB 732 (January 21, 2008).

von Heusinger, K., and Kornfilt, J., 2005, "The case of the direct object in Turkish. Semantics, syntax and morphology", *Turkic languages*, 9, 3–44.

Hiietamm, K., 2003, *Definiteness and grammatical relations in Estonian*, Doctoral dissertation, Manchester, University of Manchester.

Hill, V., and A. Mardale, 2019, "Patterns for differential object marking in the history of Romanian, *Journal of Historical Syntax*, 3, 5, 1–47.

Hill, V., A. Mardale, 2021, *The Diachrony of Differential Object Marking in Romanian*, Oxford, Oxford University Press.

de Hoop, H.,1996, *NP interpretation and case configurationality,* New York, Garland.

Iemmolo, G., 2010, "Topicality and DOM: Evidence from Romance and beyond", *Studies in language*, 34, 2, 239–272.

Irimia, M. A., 2019, "Differential object marking, datives and types of licensing", *Revue roumaine de linguistique*, LXIV 4, 333–353.

Irimia, M. A., 2020, "Object splits and complex licensers", in: T. S. Kim, S.-Y. Cho (eds), *Proceedings of the 22nd Seoul International Conference on Generative Grammar* (SICOGG 22 2020), Seoul, Hankook Munhwasa, 90–110.

Irimia, M. A., 2021, "Oblique DOM and other nominals", *Canadian Journal of Linguistics*, 66, 4, 486–518.

Irimia, M. A., 2022, "DOM beyond Case. Some notes on Uzbek", in: M. Tănase-Dogaru, A. Tigău, I. Stoicescu, M. Zamfirescu (eds), *New Insights into Linguistic Communicative Behavior*, Newcastle upon Tyne, Cambridge Scholars Publishing, 75–125.

Jenkins, R., 2021, "Specificity effects and object movement in Turkish and Uyghur", Ms.
Kamali, B., 2015, "Caseless direct objects in Turkish revisited", in: A. Meinunger (ed.) *Byproducts and side effects: Nebenprodukte und Nebeneffekte (ZAS Papers in Linguistics 58)*, 107–123.
Kiparsky, P., 2001, "Structural case in Finnish", *Lingua*, 111, 315–376.
Koptjevskaja-Tamm, M., B. Wälchli, 2001, "The circum-Baltic languages. An areal-typological approach", in: Ö. Dahl, M. Koptjevskaja-Tamm (eds), *The Circum-Baltic languages: Typology and Contact*, vol. 2, Amsterdam/Philadelphia, John Benjamins Publishing Co., 615–750.
Kornfilt, J., 1984, *Case marking, agreement and empty categories*, Doctoral dissertation, Harvard University.
Levin, T., O. Preminger, 2015, "Case in Sakha: are two modalities really necessary?", *Natural Language and Linguistic Theory*, 331, 231–250.
Levy-Forsythe, Z., O Kagan, 2018, "Two types of object incorporation in Uzbek", Handout of presentation at IATL 34. Ben-Gurion University of the Negev October 8–9.
López, L. 2012, *Indefinite objects*, Cambridge (MA), MIT Press.
Mahajan, A.K., 1989, "Agreement and agreement phrases", in: I. Laka, A.K. Mahajan (eds), *Functional Heads and Clause Structure*, *MIT Working Papers in Linguistics*, No. 10. Cambridge, MA, MITWPL, 217–252.
Miljan, M., 2008, *Grammatical case in Estonian*, Doctoral dissertation, Edinburgh, University of Edinburgh.
Mohanan, T., 1994, *Argument structure in Hindi*, Stanford, CA, CSLI Publications.
Mohanan, T., 1995, "Wordhood and lexicality. Noun incorporation in Hindi", *Natural Language and Linguistic Theory*, 13, 333–348.
Öztürk, B., 2005, *Case, referentiality and phrase structure*. Amsterdam/New York, John Benjamins.
Pancheva, R., M.L. Zubizaretta, 2018, "The Person Case Constraint. The syntactic encoding of perspective", *Natural Language and Linguistic Theory*, 36, 4, 1291–1337.
Rodríguez-Mondoñedo, M., 2008, "The acquisition of differential object marking in Spanish", *Probus*, 20, 1, 111–145.
Singh, M., 1994, *Perfectivity, definiteness and specificity. A classification of verbal predicates in Hindi*, Doctoral dissertation, Austin (TX), University of Texas.
Vainikka, A., P. Brattico, 2014, "The Finnish accusative: Long-distance case assignment under agreement", *Linguistics*, 52, 1, 73–124.
Torrego, E., 1998, *The Dependencies of Objects*, Cambridge, MA, MIT Press.