# In the beginning was a to-phrase\*

Javier Ormazabal<sup>1 2</sup>& Juan Romero <sup>2 3</sup>

Fully expanded and revised version: December 2019

#### **Abstract**

In this paper we reply to all the relevant objections raised against a connection between DOCs and *to*-constructions and present new arguments showing the empirical and theoretical advantages of derivational (P-incorporation type) analyses over mainstream non-derivational (P-have and applicative) ones. We show that *to*-constructions and DOCs share a common substructure, where the theme is higher than the goal, that construction-based analyses fail to capture, both crosslinguistically and English-internally. Finally, we argue that variation on the lexical properties of verbs and adpositions is the right tool to account for the properties of the alternation.

**Keywords:** Dative alternations, P-incorporation, Ditransitive Predicates, lexical selection

#### 1. Introduction

According to a recent state-of-the-art paper, "a relatively broad consensus has been reached that the Double Object Construction [(1a)] and Dative alternates [(1b)] represent distinct underlying structures that are not derivationally related to each other" (Harley & Miyagawa 2016: 21).

(1) a. Sara sent **Mateo** the book Double Object Construction (DOC)

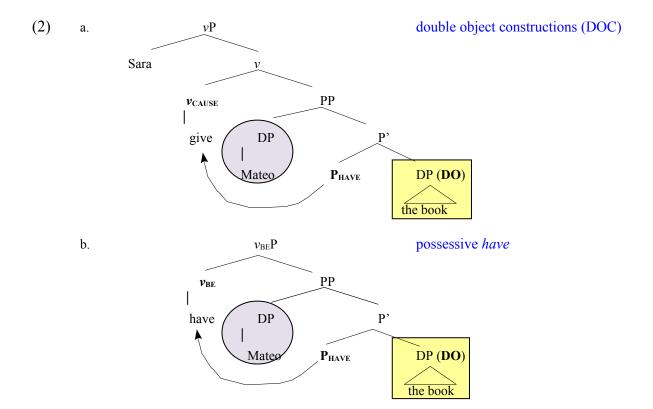
b. Sara sent the book **to Mateo** to-construction

They argue that each sentence in (1) encodes a different meaning--broadly speaking, change of possession (1a) and caused movement (1b)--each of them with specific restrictions; notably, the animacy constraint on possessors for DOCs. Accordingly, the two current mainstream approaches to dative alternations are strongly non-derivational. The first one, the P-have approach, is based on seminal work by Kayne (1984) and Pesetsky (1995), and has been extensively developed by Harley (2002, 2004) and colleagues. It proposes that DOCs and possessive *have* constructions share their basic structure: an integral small clause headed by P<sub>have</sub> whose specifier is filled by the possessor and its complement by the possessee, as in (2a-b).

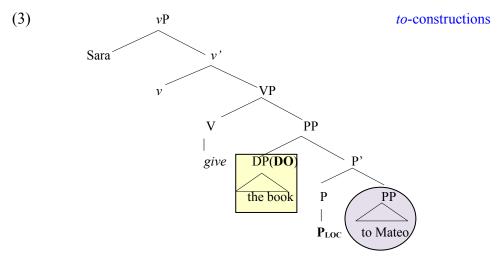
<sup>1</sup> University of the Basque Country (UPV/EHU); javier.ormazabal@ehu.eus

<sup>2</sup> Basque Group for Theoretical Linguistics (HiTT)

<sup>3</sup> University of Extremadura (UNEX); juantxo.romero@gmail.com

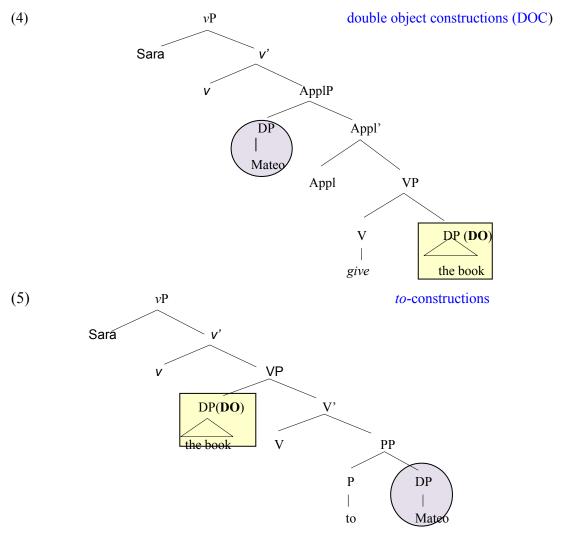


In most formulations, *to*-constructions correspond to structures headed by a locative preposition  $\mathbf{P}_{LOC}$  where the theme c-commands the recipient (3) (although see Harley & Jung 2015 [=H&J]):



The construction in (3) shows some vague structural resemblance with DOCs, since both internal arguments are in a small clause-type relation. However, in (3) the head is semantically and functionally different; and the configurational order of the internal arguments is reversed in order to capture the asymmetries observed by Barss & Lasnik (1986).

The second approach, the "functional applicative projection" (*Appl*) analysis, was proposed by Marantz (1993), and fully developed by Pylkkänen (2008), Cuervo (2003), and Bruening (2010a, 2014), among others. In this case, DOCs and *to*-constructions are even more radically different. In its standard formulation, the DOC in (4) corresponds to a VP-shell-type structure split by a functional applicative projection from where the recipient c-commands the theme in the lower VP projection. In turn, *to*-constructions form a simple VP structure (5), where the theme c-commands the recipient from the specifier of VP, outside the PP projection (see Bruening 2014a, 2018, sect. 3 for some modifications):



In a recent paper, H&J present a mixed analysis where they maintain the basic P<sub>HAVE</sub> structure in (2), equivalent to Pylkkänen LowApplP, for DOCs but adopt Bruening's version of the *to*-constructions in (5) (see section 3.1).

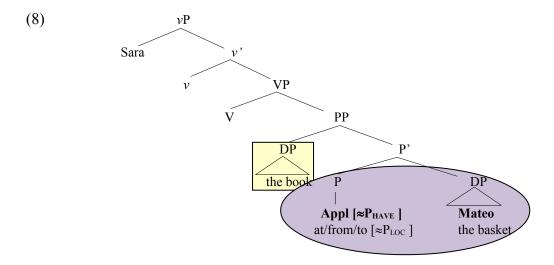
The purpose of this paper is to reanalyze the main arguments presented in the vast literature on DOCs and *to*-construction in detail. We dispute the mainstream "broad consensus" proposals and argue for an analysis that captures the relation between DOCs and *to*-construction derivationally. A key argument, following work by Rappaport-Hovav & Levin (2008) [henceforth RH&L], Ormazabal & Romero [henceforth O&R] (2010, 2017) and Larson (2014), among others, is that *to*-constructions in addition to *caused motion* (7) may also denote *caused transfer of possession* (6a), and when they do, they are also subject to the animacy constraint.

- (6) a. Sara gave/sent the book to Mateo/\*London [TRANSFER OF POSSESSION]
  - b. Sara gave/sent Mateo/\*London the book DOC
- (7) Sara sent/\*gave the book to/at/behind the basket [CAUSED MOTION]

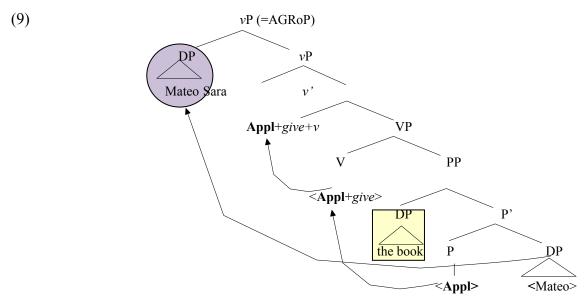
In other words, these constructions do not encode a dedicated meaning. Therefore, animacy cannot be addressed as a condition on DOCs, since it also operates on *to*-constructions, but as a condition on transfer of possession predicates. Thus, there is no one-to-one correspondence between each syntactic construction (DOCs and *to*-constructions) and each semantic interpretation (transfer of possession and caused motion).

In the analysis we propose, the *to*-constructions and the DOC share the same basic structure in (8). In that structure a prepositional element denoting transfer of possession heads a small clause structure where the theme c-commands the goal. (8) also represents the structure for change of location *to* and other lexical preposition denoting different spatial relations such as *at* and *behind* in (7).<sup>4</sup>

<sup>4</sup> Given that the parallelisms discussed through the paper extend to possession *have*, these constructions must also be derived from a PP small clause type structure, in the direction of Freeze's (1992). We will not consider the details here. We will also leave aside issues concerning the internal articulation of a richer PP structure. As far as we can see, it does not affect our argumentation in any important way. See O&R 2010, 2017 for details. See Larson (1988, 2014), Baker (1988, 1996), Romero (1997), Gonçalves (2016), among many others, for alternative derivational approaches. Also see recent proposals to derive the *to*<sub>have</sub> construction from the *have*/P<sub>have</sub> -type one, such as MacDonald (2015) or Hallmann (2015), among others.



The applicative structure involves the incorporation of the P-head. In English this operation triggers the derivation of DOC and gives rise to main surface changes in word order, as well as in categorial and hierarchical structure (9).<sup>5</sup>



5 Bruening (2018, sect. 6) attributes to us a unified analysis also for other dative relations across languages, including ethical datives, benefactives, experiencer datives, etc. It might be the case that some of them could be included in the general derivation proposed here but, in general terms, we have explicitly rejected that possibility. Our analysis is about applicative structures --in the classical descriptive sense (e.g. Shibatani 1996, Peterson 2007 and references)--, and in principle does not extend to other cases of dative marking/agreement. In particular, O&R (2017) explicitly observe that cases like dative experiencers of psych predicates, Differential Object Marking, or ethical datives and the phenomena grouped in Pylkkänen (2008) under "high applicatives" must have different basic structure and cannot fall under the same umbrella. Paul & Whitman (2010), Michelioudakis (2012), Odria (2017, 2019), O&R (2017) and Romero (2019), among others, explore different ways to unify all these phenomena at the level of case/agreement licensing --that is, at the last steps of the derivation-- but they uniformly attribute to these phenomena very different base-structures, which include being base-generated with different categories. In addition, O&R (2017) show that they have very different diachronic evolutions.

In sum, while sentences in (6) and (7) share the same base configuration (8), their derivations differ. Divergences are due to the different lexico-functional and semantic properties encoded in the heads, including their selectional features and their ability to optionally incorporate, in the case of P, or allow incorporation, in the case of V. In English this alternation is restricted to transfer of possession predicates (6a-b) (see section 2 below for motivation and consequences; also see O&R 2010; 2017, and references for details and discussion).<sup>6</sup>

The paper is organized as follows. In section 2 we discuss the main semantic arguments that allegedly support the non-derivational nature of DOCs, most characteristically those related to the animacy and transfer of possession mentioned above, showing that the alignment between constructions and semantic interpretation fails in both directions: we discuss contexts where *to*-constructions denote transfer of possession, and contexts where DOCs do not. In section 2.3 we also propose a way to capture Harley's parameter on the correlation between *have* and DOCs in derivational terms. In section 3 we argue that DOCs and *to*-constructions not only share thematic grids, but they also show structural and semantic identity. Specifically, we show that all arguments in support of a possessive small clause analysis for DOCs (Harley 2002; Beck & Johnson 2004; H&J and references there) support the same base-structure for *to*-constructions, and extend our results to other empirical contexts.

In section 4, we present arguments supporting a configurational relation between *to*-constructions and DOCs that is not possible in non-derivational and construction-based proposals, but is naturally captured by the specific directional derivation in (8)-(9). As we proceed, we reply to all the relevant objections raised against the derivational connection: our argumentation shows that, when analyzed in context, either they are hypothesis-neutral or, in most cases, they support our approach. Especially relevant are the observations that, contrary to standard assumptions, (i) there are certain contexts where *deny* verbs resort systematically to the *to*-construction over the DOC; and (ii) DOC nominalizations do indeed exist. In both cases we

<sup>6</sup> In this paper we cannot enter into the details of the derivation. As expected of any relation, the applicative one depends on the properties of the two syntactic objects involved (O&R 2019a). On the one hand, the inventory of applicative adpositions is language-particular, and a given language may or may not have an applicative adposition specific for a certain meaning, as our discussion of the locative-applicative required for change of location below illustrates (see Peterson 2007; and section 2.1). On the other hand, the requirements of the predicate also determine how that relation is realized. In that respect, the lexical properties associated to specific predicates might also be the source of well-known blocking effects on incorporation (Stowell's latinate roots, *deny*-verbs or the specificities of *say*, for instance). Finally, there are also strictly relational conditions on the derivation, such as the Person Case Constraint (see O&R 2007, 2010, 2013c, 2019a and references).

argue that that state of affairs is problematic for construction-based analyses and support derivational ones.

Before we proceed, some observations about the scope of this paper are in order. First, it must be emphasized that our main concern is a general discussion on the abstract relations in ditransitive structures and their logical consequences. We argue that DOCs and to-constructions share critical properties that clearly support a syntactic relation between them; these are linguistic facts that either have to be explained or shown to be empirically false. Their validity is thus independent of the specifics of our proposal in (8)-(9), in the same way the validity of the arguments for, say, the possessive  $have \sim DOC$  connection does not depend on whether H&J's specific structural solution in (2)-(5) is the right one or not. In that respect, we think that our results are still compatible with a relatively wide range of theoretical options, but all of them conceptually far away from mainstream constructionist analyses (also see Larson 2014).

If our arguments go through, a derivational approach must be considered the null hypothesis from a minimalist perspective. With very few exceptions (e.g. the Jackendoff 1990b/ Larson 1990 controversy, or the discussion on linking rules in Gropen et al. 1989) the arguments against derivational analyses of DOCs have traditionally been mostly empirical: the alleged syntactic and, especially, semantic differences between DOCs and *to*-constructions. If, instead, DOCs and *to*-construction are shown to exhibit the same thematic relations, the same basic structural configurations and the same semantic denotation, analyses capturing that identity as a consequence of mapping and deriving the different structural paths from general conditions of the system (Case, agreement and lexical specifications in this case) are conceptually better founded than construction-based ones that attribute emerging properties to the DOC or the *to*-construction (see Larson 2014 for other arguments in the same direction). The only alternative would be to claim that the parallelism between, say, DOCs and *have* is substantial while the one between them and *to*-constructions is circumstantial, a rather unprecedented conclusion scientifically speaking. We thus find both the empirical and the conceptual implications of statements like the following untenable:

<sup>&</sup>quot;It is therefore not a disadvantage of a particular analysis of caused-possession double object constructions that it cannot cover other types of double object constructions. It is actually an advantage, since the differences between them are legion. (Of course, if another language does have a caused-possession

double object construction, that construction should be analyzed in the same way as the English one, **unless significant differences indicate otherwise**.)" [Bruening 2018: 147; emphasis ours].

In our view, approaches that define the object of inquiry aprioristically in such a narrow way --as a closed object about which any explanation would be just to provide a possible solution to the empirical problems that particular construction might present in itself-- will get short of contributing in any sensible way to the understanding of the general properties of human language. The interesting discussion cannot be whether an observed alternation in a given language deserves to be identified with the English DOC/to-construction alternation, but how the observed common properties (those that lead us to dub them *alternations*) may be explained, and in what respect they differ so that the differences are also accounted for (also see Levin 2006, 2015, and references for discussion). From that perspective, we argue that derivational and comparative analyses that take syntactic as well as semantic and information-structural issues into consideration not only are better shaped to deal with the main challenges these constructions present but, in addition, they open unexplored ways for new empirical and theoretical discoveries, English internally as well as cross-linguistically and diachronically (see O&R 2017).

## 2. The playing field: give and animacy

Most non-derivational analyses are based on the idea that DOCs and *to-c*onstructions encode different meanings: the former is assumed to have a dedicated *caused transfer of possession* (CTP) meaning, and the latter a *caused motion* (CM) one. In this section we first summarize RH&L findings based on Jackendoff 1990a, according to which the semantic range of interpretations is not determined by the construction, but by the lexical predicate. We also show that the readings non-available in the DOC vary from language to language, and propose a mechanism to account for that variation. Section 2.2 extends our discussion to contexts where *give* is a light verb or is interpreted in a figurative way; consequently, it does not denote caused transfer of possession and, yet, participates in DOCs. In all these contexts *to*-constructions behave the same way DOCs do. In addition, these contexts show that construction-based analyses not only have to postulate a dedicated set of thematic roles for animate arguments, multiplying the number of primitive thematic relations unnecessarily, but they also must postulate a large number of (minimally differing) DOC-type constructions. Section 2.3 sketches a way to derive Harley's parameter on P<sub>HAVE</sub> from the lexical specifications of P.

# 2.1. The animacy requirement and transfer of possession predicates

It is a common place in the literature that English DOCs require for the first object to be animate (10). The standard claim is that this restriction shows up in DOCs but is not present in *to*-constructions (see Green 1974, Oehrle 1976, and much subsequent work):

- (10) a. # Brenda sent London a book. (London office reading only)
  - b. Brenda sent a book to London. (Either regular or office reading OK)

This contrast is taken as evidence of a thematic difference that in turn fosters a different base-structure for DOCs and *to*-constructions (Gropen et al. 1989, Harley 2002, Krifka 2004, Pylkkänen 2008, Pinker 2013, among many others). Accordingly, DOCs correspond to a CTP interpretation, and are subject to the animacy constraint, while *to*-constructions are associated to a CM schema, and are unconstrained.

However, this one-to-one correspondence is not descriptively accurate. Jackendoff (1990a) and RH&L show that the actual split regarding the animacy constraint is not rooted in the constructions but encoded in the predicate. On the one hand, verbs of instantaneous transfer like *give* or *tell* exhibit the animacy constraint and the CTP interpretation in both DOCs (11) and *to*-constructions (12) (note the contrast between (10b) and (11b)):

- (11) a. Brenda gave John a book
  - b. # Brenda gave London a book. (only possible if interpreted as London office)
- (12) a. Brenda gave a book to John
  - b. # Brenda gave a book to London (idem)

On the other hand, *send/throw* verbs are polysemic, encoding both a CTP and a CM interpretation. In English the CM interpretation is confined to the to-construction (11a), while the CTP one is available for both DOC and to-construction.<sup>7</sup> This ambiguity is obscured in English by the fact that the same preposition, *to*, is used for both contexts, but the polysemic nature of this contrast shows up overtly in languages that resort to different adpositions for each meaning.

<sup>7</sup> Pesetsky's (1995) initial treatment of *to*-constructions included DOC basic structure as part of the complex internal structure of *to*-PPs in order to capture the superset/subset relation in the semantics of the Goals. In an attempt to drift apart from derivational analyses, other proposals put the emphasis on the alleged differences and eliminate all connections between the two constructions. Bruening (2018: sect 6), for instance, claims that the CTP interpretation in to PP-constructions with *give* and *promise*-type verbs is not its main semantic content but a "vague" addition to the CM one. However, BH&L show in detail is that those arguments have all the properties of CTP and none of the CM ones associated to the ambiguous *send* or *throw*-verbs.

In Basque, for instance, animacy effects never show up with the CM adposition *ra/-gana* (13), but they are observed with the possession-denoting one *-ri* (14b).<sup>8</sup>

- (13) a. Ogia igorri dut amaren-gana bread(abs) send aux[(3abs)-1erg] mother-all 'I sent (the) bread to the mother'
  - b. Ogia igorri dut merkatu-rabread(abs) send aux[(3abs)-1erg] market-all'I sent (the) bread to the market'
- (14) a. Ogia igorri dut ama-**ri** North-Eastern Basque bread(abs) send aux[(3abs)-1erg] mother-**dat**'I sent (the) bread to the mother'
  - b. \* Ogia igorri dut merkatua-ri bread(abs) send aux[(3abs)-1erg] market-dat 'I sent (the) bread to the market'

These facts are not new, but they have often been neglected in the literature, probably because animacy effects constitute one of the main semantic argument to postulate two dedicated structures for DOCs and *to*-constructions.

Bruening (2018:143) observes that the choice of the predicate cannot be the entire story:

"However, it is a leap from that small observation to the claim that double object constructions and prepositional dative constructions are identical. What all of this literature downplays, and what I wish to emphasize here, is that the double object construction, in contrast with the prepositional dative construction, has a completely uniform semantics, regardless of the verbs involved (even when that meaning is negated, as with *spare* and other non-alternating verbs)"

In other words, although the isomorphism between syntactic constructions and semantic frames does not hold, there is still an unexplained residue: DOCs in English are restricted to the CTP reading even when combined with predicates that are lexically ambiguous such as *send* and *throw* verbs (10a), contrasting in that respect with *to*-constructions which are compatible with a wider spectrum of lexical semantic frames, including CTP. In a derivational approach, this restriction can be attributed to the different lexical properties of each head. While the preposition

<sup>8</sup> Basque examples from O&R (2017,ex. (34)). See RH&L (2008, sect. 8) for Russian, Pescarini (2014: sect. 5) for Italian, and Larson (2014:45) for Portuguese. See references cited as well as O&R (2010), Harley & Miyagawa (2016), and Bruening 2018 for discussion. Note, finally, that the idea that the dative alternation in (14a-b) corresponds to English DOC/to-construction is supported by its behavior with respect to Barss & Lasnik-type tests and their DP/PP categorial difference, among other properties (see discussion below (17) and O&R 2017 for details).

expressing transfer of possession can incorporate, and then derive a DOC, English locative prepositions --change of location *to*, but also *at*, *in*, *over*, *beyond*, etc.-- do not incorporate and consequently do not yield dative alternations [see O&R 2019b]. This approach makes the right prediction that in languages with richer applicative systems, not even this weaker DOC ~ CTP relation will hold. Cross-linguistically, locative, instrumental or comitative prepositions may enter into the dative alternation (O&R 2010; Larson 2014; see also Peterson 2007 for an extensive review of applicative systems). Compare, for instance the use of *tie* in English (15) and in North-Eastern Basque (16), where change of location or unbounded-path alternates between a prepositional and a dative agreement construction (Etxepare 2014, O&R 2017). Description of the construction of the construction (Etxepare 2014, O&R 2017).

- (15) a. I tied two ropes to (the extremes of) the bridge
  - b. \* I tied (the extremes of) the bridge two ropes

In fact, the seeds of cross-linguistic diversity are found even within English. North Western dialects of England present unaccusative datives (i) (Myler 2013) and DOCs with change of location verbs (Haddican 2010; Haddican & Holmberg 2012; O&R 2017).

- (i) a. John came the pub with me
  - b. Today I'm going the library

Myler (2013) presents an analysis of structures like (i) that is almost identical to ours, but he is reluctant to extend the analysis to regular DOC constructions because of (a) some bias towards the standard polysemic approach to DOCs and (b) the existence of a ditransitive version where the theme precedes the prepositionless locative element, together with the connected fact that it is the theme itself that passivizes:

- (ii) a. Me nan sent me the shops.
  - b. I was sent the shops (by me nan).

Concerning the first objection, we have shown that it does not hold, and the mentioned Labourdian Basque path-based dative alternations strongly confirm that point. As for the second objection, England's North Western dialects also allow theme-goal ditransitives and passivization of the theme with bare goals (see Haddican 2010 and references for extensive discussion):

- (iii) a. She sent them me
  - b. The ball was given my sister

Haddican argues that theme-goal ditransitives in (iii) show properties of DOCs, and explores a short object movement of the pronominal in the line of Anagnostopoulou's (2003) clitic climbing analysis in other languages to get the right order. His analysis for (iii) extends straightforwardly to the theme-locative structures in (ii), in particular to the last step of the derivation concerning the theme-goal order of constituents.

10 It might be argued that our account stipulates P ability to incorporate on a language by language basis. Indeed, that information must be encoded somewhere among P's lexical properties. Notice that non-derivational analyses, in turn, must stipulate whether a language has dative construction, *to*-constructions or both. But in our case, this is encoded in a more abstract way, restricted to the feature properties of predicates and adpositional heads, and conforming to a very restricted set of possible parametric possibilities. Importantly, the cluster of morphological and syntactic properties associated to each construction is not stipulated, encoded in each syntactic construction, but results from the derivation itself. And the changes conform to a series of i-language external circumstances that may be pinpointed and evaluated with standard tools of historical linguistics, as O&R (2017) show in detail.

<sup>9</sup> Although in the text we focus on prepositions, the ability of the verb to allow incorporation is also crucial (see footnote 6 above). Cross-linguistically, dative alternations extend to verbs whose denotation is far beyond CTP: verbs of extraction/addition, of motion, of unbounded path, etc. See, e.g. Malchukov, Haspelmath & Comrie's (2007) different conceptual maps.

- (16) a. Zubiari bi soka lotu nizkion bridge-dat two rope tie Aux(1sE-Ap-3sD)
  Lit. 'I tied the bridge two ropes'
  - b. Bi soka lotu nituen/nuen zubiari two rope tie Aux(1sErg-Ap/As) bridge-dat 'I tied two ropes to the bridge'

Also note that while (16b) is not restricted to animate nouns, cross-linguistically -including NE Basque-- *give*- and *tell*-type verbs are subject to the same animacy constraint
observed in English, highlighting the fact that this constraint is universally linked to CTP
predicates, not to DOCs. At the same time, each construction in (16) behaves uniformly in
showing the structural properties associated to DOCs and *to*-constructions respectively: DP/PP
categorial difference, Barss & Lasnik-type (1986) c-command asymmetries, etc. Thus, for
instance, in dative agreement constructions the recipient c-commands the theme, while the
reverse c-command relation holds for agreementless datives (see O&R 2017 for details).

- \*Jon eta Miren; ez ziren ohartu pro; elkarr-i; lotu nizkio(n) -la
  Jon and Mary(abs) not aux realize recip-dat tie aux[(3pA)-3sD-1sE]-comp

  'Jon and Mary; didn't realize that I was tying them together.' (lit. 'to each other')
  - b. Jon eta Miren<sub>i</sub> ez ziren ohartu pro<sub>i</sub> **elkarr-i**<sub>i</sub> lotu nitue(n) -la Jon and Mary(abs) not aux realize recip-**dat** tie aux[(3pA)-1sE]-comp 'Jon and Mary<sub>i</sub> didn't realize that I was tying them together.' (lit. 'to each other')

If we put all these results together, the first conclusion is that the animacy constraint cannot be defined as a property of DOCs, but as a property of CTP denoting predicates. Moreover, if, as argued by H&J, these restrictions constitute an argument to postulate a syntactic relation between DOCs and *have*, they also provide us with a strong reason to introduce CTP *to*constructions in the equation. Finally, and as a logical consequence, the dative alternation must be independent of semantic conditions, as also shown by the fact that cross-linguistically prepositional elements other than transfer of possession regularly derive applicative structures.

In the next subsection we analyze contexts where systematic violations of the animacy constraint occur with *give*-type verbs. We argue that (i) these contexts are precisely those where *give* does not denote CTP of any kind, and (ii) we show that *to*-constructions also behave the same.<sup>11</sup>

<sup>11</sup> The argumentation in this section equally applies to other semantic arguments like the existent presupposition issue. We will leave them aside, since they have been discussed in much detail by RH&L and references, and fall within the same general schema. See section 3.2 for discussion of entailments and their failure.

## 2.2. When give does not require animacy

We have argued that (i) *give*-type verbs only encode transfer of possession, and (ii) that transfer of possession predicates are subject to the animacy constraint. In clear contrast, there are DOC cases like (18a) where the animacy constraint does not hold:

- (18) a. The painter gave the house a new coat of paint
  - b. The tower gave the town ("Torrevieja") its name

H&J characterize these contexts as involving *inalienable possession*, and therefore compatible with P<sub>HAVE</sub> and the DOC frame. However, *giving away* or *receiving something* that is possessed inalienably --that is, a "transfer of inalienable possession"-- is an oxymoron at best, if not directly a contradiction. As a matter of fact, it is the "light verb" nature of *give* that makes these structures especial, their crucial property being the absence of the "transfer of possession" component: "giving X a (new) coat of paint" is semantically equivalent to "(re-)painting X", in the same way "giving X a kiss" is "kissing X".

This light verb use of *give* presents interesting properties. First, it is not restricted to DOCs but, although slightly marked, it also appears in *to*-constructions (19) (exx. from Langacker 1987:39-40).

- (19) a. ?Your cousin gave a new coat of paint to the fence
  - b. Your cousin gave the fence a new coat of paint

Native speakers we have consulted agree that (19a) is less natural than (19b) but, given the right context, acceptable. Moreover, although examples with the *to*-construction are much less common than DOC ones, they may be found now and then, as illustrated in (20). As can be observed, in most of the examples there are no special heaviness issues involved.

(20) a. I gave a new coat of paint to the Arrow of Norwich

- b. [...] and I gave a new coat of paint to our carved work, which was very bare and parched
- c. Children gave a coat of paint to the walls
- d. I just gave a coat of paint to her cool sketches

Furthermore, the light verb version --thus, the option of ignoring the animacy constrain-- is restricted to a small group of verbs, mainly *give*, as shown by the ungrammaticality of (21b) (modified from Langacker (1987)).

- (21) a. The children threw red paint to the fence
  - b. \*The children threw the fence red paint

These facts suggest that the grammatical status of the examples in (19) and (21) is of a very different nature: while (21b) is ungrammatical, the relative marginality of (19a) is due to a pragmatic inadequacy of some sort.<sup>12</sup>

It has to be noted that the absence of transfer of possession (a concomitant failure to exhibit the animacy constraint) also appears in figurative senses of *give*, as so-called *Nixon* sentences (Oehrle 1976) and similar examples (22)-(23) show.

- (22) a. Some washing powders give cotton a softer feel
  - b. Cedar wood was chosen to give a softer feel to the courtyard.
- (23) a. The removal of trade restrictions could give the economy a substantial boost.
  - b. Better armor will give a substantial boost to your hit points

Given all this, we reach the following conclusions. First, neither in literal, nor in light/figurative sense does *give* distinguish the behavior of *to*-constructions from DOCs. In fact,

<sup>12</sup> This is not a minor point, since it has consequences that link this case to the Bresnan & Nikitina (2009) and RH&L vs. Bruening (2010b) controversy on *deny*-type verbs and fixed goal idioms.

Incidentally, Levin (2015) suggests that our analysis in O&R (2010, 2012) is too syntax-centered and that we do not take into consideration those information-structure and weight factors that have proven to be the key factor driving the distribution of DOCs and to-constructions. However, that is a misconception of our proposal: we acknowledge the relevance of those factors in the choice of each variant and, in fact, Bresnan & Nikitina's and RH&L's specific way to capture them is very compelling (see discussion in section 3.2). But given the organization of the grammar we assume, in order for pragmatic factors to determine choices among different structures, those competing structures must be first syntactically viable, as the example of Langacker's discussion illustrates nicely. Our work as syntacticians concentrates on making sure that the relevant syntactic structures, and only those, can be generated, and exploring the theoretical consequences. In fact, in the diachronic development of dative diathesis in Basque, O&R (2017) show that there is direct evidence that those processes of pragmatic specialization only arise when there are competing structures.

the opposite conclusion in H&J (and references therein) was almost paradoxical. The general argument against derivational analyses is based on the idea that animacy restrictions are confined to DOCs, and absent in *to*-constructions. The discussion in section 2.1 already showed that that is not the correct characterization, but if the "unnaturalness" of (19a), (20) and (22b)-(23b) was attributed to structural reasons —as suggested by H&J—, the *to*-construction would paradoxically end up showing stronger animacy effects than the DOC altogether.

The second conclusion is that RH&L's hypothesis that the animacy constraint is not a property of DOCs is not only supported by cross-linguistic evidence (Basque, Russian, Italian, etc.), but also English-internally. Examples in this section show that as soon as we deprive *give* from its transfer of possession meaning, DOCs are also available for inanimate goals.

#### 2.3. Conclusion and a note on parametric variation

As argued, the animacy constraint operates on transfer of possession predicates independently of the actual syntactic structure they appear in (see also sect. 4.2 for additional evidence from nominalizations). We have also shown that even the weaker constraint restricting DOCs to animate goals fails to account not only for cross-linguistic data, but also for English DOCs with light/figurative sense *give*. Furthermore, applying H&J's rationale in a systematic way we may also conclude that if *give*-type DOCs and possession *have* share the same base structure, then *to*-constructions must also share that base structure, given that, once we tear apart CTP and CM meanings, *to*-constructions and DOCs behave alike. In consequence, the facts observed in this section make construction-based analyses highly implausible.

To finish this section, consider Harley's generalization in (24a). Harley (2002: sect. 4) argues that it holds cross-linguistically, with (24b) as its most common repair strategy.

- (24) a. Languages that lack possessor *have* also lack Double Object Constructions.
  - b. In such languages,  $P_{LOC}$  is viable with the semantics of  $P_{HAVE}$

She argues that the first part of the generalization reduces to the existence of  $P_{\text{HAVE}}$  so that if a language lacks the preposition, it can construct neither DOCs nor possession *have*-constructions, which derive from it.

As for the second part, given our discussion in section 2.1. we may dispense with it, since we have concluded that possession is generally available for to-constructions, and not just when the language lacks  $P_{\text{HAVE}}$ . That is a welcome result for Harley's analysis, because it makes (24b)

independent of (24a), and the emergence of the integral meaning with a locative preposition does not have to be stipulated just in those cases where the possession-denoting preposition is missing. Notice, incidentally, that for  $P_{LOC}$  to be a credible candidate to the integral relation, the syntactic structure of the *to*-construction must be the small clause in (3), and not the alternative structure in (5)--proposed by Bruening and adopted by H&J--where no predicative relation is established between the arguments.

We have already seen that in languages like Basque among many others (Peterson 2007) P may incorporate into V in a wider range of contexts. By the same logic, languages lacking DOC are those that also lack incorporating prepositions. In other words, the generalization in (24a) follows from the lexical specifications of the preposition as a non-incorporating preposition in those languages, in a way fully coherent with what we propose as the locus of cross-linguistic variation in the previous section and in O&R (2017) in more detail, reducing Harley's (2002: sect. 4) typology of possible languages in a consistent way.

## 3. Have, DOCs, and to-constructions: three sides of the same coin

In the previous section we have shown that DOCs and *to*-constructions are thematically identical. Obviously, it is still possible to assume a non uniform approach to argument mapping of some sort, arguing for different frames that express the same logical relations and are both compatible with the lexical requirements of the predicates.<sup>13</sup> If that was the case we would expect to find some basic structural or semantic differences that could justify the need for two mechanisms expressing the same logical relation. In this section we argue that, quite to the contrary, DOCs and to-construction are also structurally and semantically identical.

The discussion is developed taking as a point of departure the arguments presented to this effect in H&J for the possessor have -  $give_{DOC}$  parallelism. First, we show that the same structural and semantic arguments that support a Small Clause analysis for DOCs equally work for transfer

<sup>13</sup>In spite of their argumentation, RH&L propose a "compatible-frames"-type approach, where they assume that both alternate constructions are base-generated semantically equivalent.

of possession *to*-constructions, as well as for change of location ones. Next, we present evidence that DOCs and *to*-constructions have the same semantic denotation. Once we have established the need for a unified analysis, in section 4 we discuss arguments that support the derivational analyses over non derivational ones.

# 3.1. Structural identity: small clauses

# 3.1.1. The two readings of 'again'

Beck & Johnson (2004) [B&J] observe that DOCs modified with *again* are systematically ambiguous, presenting a repetitive reading (25a), as well as a restitutive one (25b).

- (25) Thilo gave Satoshi the map again. [B&J's eexx. (48)-(49)]
  - A. Thilo gave Satoshi the map, and that had happened before.
  - B. Thilo gave Satoshi the map, and Satoshi had had the map before.

Expanding on Von Stechov's (1995; 1996) and Beck & Snyder's (2001) work on *again*, these authors argue that the ambiguity in (25) is structural. In particular, while the repetitive reading in (25a) is the consequence of clausal modification, the restitutive reading is obtained by modification of a small clause resulting state that is present as a sub-structure of DOCs. The references cited above present syntactic and semantic evidence for the small clause analysis and argue that it corresponds to Harley's P<sub>HAVE</sub> clause.

Assuming they are correct, various consequences follow from it. To begin with, it is worth observing that B&J attribute exactly the same ambiguous interpretations to *give+to* in (26).

- (26) Thilo gave the map to Satoshi again. [B&J's ex. (67)]
  - A. Thilo gave the map to Satoshi, and that had happened before.
  - B. Thilo gave the map to Satoshi, and Satoshi had had the map before.

Following their logic, the restitutive reading must be attributed to the same structural relation between the adverb and the small clause found in (26), in which case *give+to* has the same underlying sub-structure as DOCs. A different issue, to which we return, is whether that structure is closer to Harley's proposal in (2), where the possessor is the specifier of the small clause and the possessee is the complement of the prepositional head ("X has Y"), or our proposal in (8), where the structural (and semantic) relation is reversed ("Y is/belongs to X").

There is a second consequence of their proposal with respect to the issues involved in this paper. B&J also observe that not all *to*-constructions have a uniform interpretation in the restitutive reading. Thus, with verbs of motion "an object is restored to a location", and not to a previous possessor, as illustrated in (27b).

- (27) Thilo sent the plane to Yubara again. [B&J (69)]
  - A. Thilo sent the plane to Yubara, and that had happened before.
- B. Thilo sent the plane to Yubara, and the plane had been in Yubara before. Even in these cases, B&J's observation is not that the restitutive reading is unavailable, but that the target of the restitution is interpreted as a locative relation. This is exactly what we expect to happen according to what we have argued in section 2, since *send*-predicates are ambiguous and their example involves an inanimate *to*-complement, which may only be interpreted as a location. As expected, when the recipient is animate the change of possession becomes available also with these verbs.
- (28) Thilo sent the plane to Satoshi again.
  - A. Thilo sent the plane to Satoshi, and that had happened before.
  - B. Thilo sent the plane to Satoshi, and Satoshi had had the plane before.

Since the animacy restriction is a property of the possession relation and not of the constructions, restitution of possession is not possible in the *to*-construction in (27), but that interpretation becomes natural in (28) with the animate argument as the recipient of the change of possession.

Therefore, this test not only shows that DOCs and *to*-constructions pattern together, but also that a small clause structure is involved in both caused possession and caused motion *to*-constructions, contra Bruening (2010a) and H&J: different verbs, different prepositions, but the same underlying structure.<sup>14</sup>

To complete the paradigm, *send*-type predicates behave as expected in DOCs: inanimate goals in (29a) are ungrammatical and (29b) allows a repetitive reading and a restitutive one, but does not have a "restitution of location" interpretation.

- (29) a. \*Thilo sent Yubara the plane again.
  - b. Thilo sent Satoshi the plane again
    - A. Thilo sent Satoshi the plane, and that had happened before.
    - B. Thilo sent Satoshi the plane, and Satoshi had had the plane before.

The particularity of English is that in DOCs change of location interpretation is not available; in our terms, locative prepositions are not among the prepositions that incorporate. Once again, English contrasts with other languages where incorporation is more extensive, making DOCs more productive, and compatible with inanimate goals denoting semantic relations different from possession:

- (30) Thilok zubiari soka lotu zion berriz ere Thilo-erg bridge-dat rope-abs tie Aux(3abs-3dat-3erg) again
  - A. Thilo tied up the rope to the bridge, and that had happened before.
  - B. Thilo tied up the rope to the bridge, and the rope was tied up to the bridge before.

#### 3.1.2. Adverbial modifies possessive result state

The same reasoning extends to the interpretation of temporal durative adverbs such as *for a* week. Harley observes that in DOC, as well as in *have* contexts those adverbs do not modify the

<sup>14</sup> Bruening (2014) presents a combination of movements that have the effect of recreating the resulting state configuration required by von Stechov's (1996) and B&J's arguments on *again* without postulating a small clause configuration in the base, but that explanation does not cover the restitutive readings that also appear in *to*-constructions.

entire event of *giving*, which is basically a punctual event, but they pick out the resulting state of having (31a,b). Example (31c) shows that exactly the same interpretation holds for *give+to-*constructions.

- (31) a. John had the car for a week
  - b. Brenda gave John the car for a week (having lasts a week, not giving)
  - c. Brenda gave the car to John for a week (idem)

We must acknowledge that structural decomposition into a syntactically present resultative is not the only possible way to capture the desired interpretation of the adverbs in this and the previous subsection; thus, our argument does not fully guarantee the presence of the small clause in the *to*-construction. But if *again* and adverbial modifiers do not support a small clause analysis of *to*-constructions, it does not support it for the possessive *have*-DOC connection either, and the entire von Stechow/B&J argumentation as well as Harley's extension for adverbial modification become absolutely irrelevant. In fact, we find it surprising that anybody could be willing to accept the structural parallelism as the source for the converging semantic behavior in the case of two different lexical verbs, *give* and *have*, but be more than reluctant to do so in the case of two different "frames" of the very same predicate *give* (see discussion in the introduction).

# 3.1.3. Depictive secondary predicates

Williams (1980) observed that recipients in DOCs reject secondary predication (32). Baker (1997) observes that this is an unexpected fact, because those are the only DPs that do not license secondary predication. He concludes that the restriction must be derived from the PP-origin of

the DOC (33) (Baker (1997: 86-88); see Odria (2017, ch. 3; 2019) for a fully developed argument).

- (32) a. \*I gave John<sub>i</sub> a book drunk<sub>i</sub>
  - b. \*I gave Mary<sub>i</sub> the meat hungry<sub>i</sub>
  - c. \*I gave the baby<sub>i</sub> the bottle crying<sub>i</sub>
- (33) a. \*I gave a book to John<sub>i</sub> drunk<sub>i</sub>
  - b. \*I gave the meat to Mary<sub>i</sub> hungry<sub>i</sub>
  - c. \*I gave the bottle to the baby<sub>i</sub> crying<sub>i</sub>

If Baker's generalization is right, our incorporation-based derivational analysis makes the right cut, because structurally the subject of the secondary predicate in (33) is a PP in the base. Note that arguably raising to object does not enable the object to license secondary predication, since the subject of pseudopassive sentences do not either (Drummond & Kush 2011).

(34) \*John<sub>i</sub> was talked about  $t_i$  annoyed

This fact constitutes a serious drawback for Harley's theory, as observed by Pylkkänen (2008). Moreover, there is an additional twist regarding this issue. As discussed by Maling (2001) and Pylkkänen (2008), there are some cases where exceptionally secondary predication is grammatical.

- (35) a. The nurse gave the patient<sub>i</sub> the medication half-asleep<sub>i</sub>
  - b. \* Mary gave John, the book half-asleep,

Pylkkänen argues that all the relevant contexts are cases where *give* is a light verb. Whatever the right generalization proves to be, what is relevant for us is, once again, the perfect matching between DOCs (35) and *to*-constructions (36): either secondary predication is available in both constructions (35a)-(36a) or impossible in both (35b)-(36b) (also see O&R 2010 for additional evidence from Czech).

- (36) a. The nurse gave the medication to the patient<sub>i</sub> half-asleep<sub>i</sub>
  - b. \* Mary gave the book to John, half-asleep,

In contrast, non-derivational analyses would have to explain how two completely unconnected structures license secondary predication in exactly the same cases and disallow them also in exactly the same contexts. Thus, secondary predication facts together with the behavior of *again* and adverbial modification constitute solid evidence in favor of a common base structure for both *to*-constructions and DOCs.

#### 3.2. Semantic identity: entailments and their failure

As argued by Jackendoff (1990a) and RH&L, transfer inferences in ditransitive constructions are determined solely by the choice of verbs, not by the syntactic structure the verb appears in. Thus, verbs that inherently signify acts of giving (*give*, *hand*, *lend*, *loan*, etc.) entail successful transfer in either variant (37). On the other hand, verbs of future having (*owe*, *offer*, *promise*, etc) fail to entail it in both DOC and *to*-construction (38) [= RH&L (36)-(39].

- (37) a. # His aunt gave/lent/loaned my brother some money for a new car, but he never got it.
  - b. # His aunt gave/lent/loaned some money to my younger brother, but he never got it.
- (38) a. Max offered help to the victims, but they refused his offer.
  - b. Max offered the victims help, but they refused his offer.

In other words, with some predicates successful transfer is lexically encoded, independently of the event schema associated to each syntactic variant; and with others, it is not an entailment but a weak implicature governed by pragmatic factors. Building on RH&L's proposal, Beavers (2011) develops an aspect-based analysis that accounts for the difference in (37)-(38) by assuming that DOCs and possession-denoting *to*-constructions weakly entail that possession is achieved in some possible worlds (what Beavers calls "prospective possession"; Gropen et al 1989). Thus, the two structures minimally encode the same meaning in (39) [Beavers 2011: ex.

(36); p. 23], and the different event types are determined by specific lexical meanings associated to each predicate-type:

(39) Caused possession:  $\exists e \exists s \in U_{+s} [causer'(x,e) \land \lozenge receive'(y,z,e,s)]$ 

In particular, strong entailment is obtained through composition with the lexical semantic contribution of certain predicates like *give*, which lexically entails that possession must be achieved in every possible world.<sup>15</sup> The analysis makes it evident that the semantic contribution of the DOC and the *to*-construction in (39) must be kept identical: what varies is the specific lexical entry of the predicates, but the entailments themselves are the composition of the predicate's and the complement's interpretation.

This is an interesting state of affairs for two reasons. First this case shows that DOCs and *to*-constructions not only share identical thematic roles and structural configuration, but they also have identical truth conditional semantics. Therefore, their choice depends not on semantic differences between the constructions but on information-structure and pragmatic conditions of the type discussed by Bresnan & Nikitina (2007), RH&L, Etxepare (2014) and subsequent work. The second reason is that it contributes to show that, beyond CTP and CM, other lexical properties of the predicates are also central to explain many of the semantic and syntactic differences regularly attributed to the constructions themselves. But, unlike the lack of CM in DOCs (a consequence of the language-particular limits on head incorporation), in this case those properties cut the lexical domain in the same way within the double object construction and the *to*-construction. We observed in section 2 that this was obviously the case from a cross-linguistic perspective, against rigid constructionist views, but the cases in this section show it internal to English DOCs as well.

#### 4. 'Mateo has the book' because 'the book is to Mateo'

<sup>15</sup> Pylkkänen observes that *have* necessarily implies that possession has been achieved. This supposes a problem for Harley as long as Beavers explanation goes through, because P<sub>HAVE</sub> weakly infers possession. However, the behavior of copulative verbs in Spanish, where *tener* is arguably related to *ser* as an atelic predicate (Romero 2017), suggests that the property that tears apart both verb classes may be aspectual in nature.

In sections 2 and 3 we have shown that DOCs and transfer of possession *to*-constructions (as well as possession *have*) are identical with respect to thematic relations, structural properties and compositional semantics, an identity masked by the polysemic nature of *to*, which allows additional PP combinations, and by information-structural factors. As a consequence, derivational analyses are more appealing on conceptual grounds than non-derivational proposals. In this section we argue that moreover there are empirical and theoretical arguments to favor the argument alignment in (8) over Harley's P<sub>HAVE</sub> structure in (5) or the Low Applicative as the common structural source for DOCs and *to*-constructions.<sup>16</sup>

# 4.1. Deny-verbs

Because of their apparent lack of alternation, *deny* and *spear*-verbs have often been presented as evidence in favor of two different base structures. The well-known observation is that those verbs generally cannot appear in the *to*-construction, which makes it an implausible base-structure to begin with (Oehrle 1976: 142 and much subsequent work; examples from Krifka 2004, ex. (67)):

- (40) a. \*Ann denied the ice cream to Beth.
  - b. Ann denied Beth the ice cream.

Some instances of *to*-constructions with *deny* have been reported in the literature (Bresnan & Nikitina 2003:12) but, as observed by Bruening (2018), there is a leap from some loose examples to the claim that the *to*-construction is always *deny*'s base structure.<sup>17</sup>

The purpose of this section is twofold: first, we show that in some contexts the use of *to*structures is actually systematic and therefore cannot be considered a performance rarity, as
examples in Bresnan & Nikitina (2003) might suggest; second, we argue that the lexical
restriction (actually, an animacy constraint) that makes DOC mostly obligatory for *deny* is
independently motivated, and also predicts the emergence of the *to*-structure in most of the cases

<sup>16</sup> We leave aside issues related to idioms; see RH&L, Larson 2014, and references for extensive discussion. Bruening (2010a) claims that the many *to*-constructions reported by Bresnan & Nikitina (2007) and RH&L'are in fact DOCs in disguise, what he calls *R-Dative Shift*. He does not directly answer to these authors' extensive work on the information-structural factors that contribute to the choice of the DOC in class 1 idioms and to the lexical semantics of class 3 idioms, nor he disputes the empirical facts that support them. Instead, he builds his alternative on a series of syntactic arguments whose theoretical and empirical validity has been the source of a long-standing discussion ever since (see especially O&R 2012; Larson 2014; 2017; Antonyuk & Larson 2018, and Bruening's 2018 response). For the most part, we do not think his answers to the previous criticisms are sound, but this paper is not the right place to discuss it (but see discussion of *deny* verbs immediately below).

<sup>17</sup> Indeed, examples in Bresnan & Nikitina (2003) are peculiar: a dictionary definition of *abnegation*, a semi idiomatic use of *cost jobs*, etc.

discussed in this section. There are at least three contexts where DOCs are strongly disfavored and *to*-constructions are possible, and often the preferred or even the only option: (i) contexts subject to the Person Case Constraint (PCC), (ii) A-bar recipient extraction, and (iii) theme passivization.

Although the PCC is usually described as an agreement or clitic conflict between 1st and 2nd person direct objects and indirect objects (Bonet 1991), much work in the last two decades has shown that this syntactic restriction goes far beyond this specifications, including, for instance, contexts where animacy is the relevant feature triggering the constraint (O&R 2007, Rezac 2011). In that respect, consider (41).

- (41) a. ?\*Old John de Vienne denied him his daughter
  - b. Old John de Vienne denied his daughter to him

Proper names are one of the classes that typically trigger PCC in many languages. The contrast in (41) shows that, in English, when the theme is a proper name, *to*-constructions with *deny* not only are allowed (41b), but they are strongly preferred over DOCs (41a).

Both the impossibility of *to*-constructions in the general case (40a) and their emergence in (41b) may be explained if *deny*-verbs come lexically specified with a person/animacy feature that must be syntactically checked, a reasonable assumption (Richards 2015). In the regular case the theme is inanimate, and that feature is checked by the recipient, which is animate in transfer of possession predicates (see sec. 2.1); P-incorporation triggers object-shift of the recipient and the animacy feature in (P+*deny*) is checked. Thus, the combination of the requirement on *deny* and the obligatory object shift under P-incorporation yields the DOC as the only converging derivation. However, in PCC contexts like (41), where the theme also encodes an animacy/person feature, being closer (see structure in (8)), it enters into a checking relation with V's feature. Consequently, the *to*-construction arises as the most prominent derivation, avoiding PCC effects.<sup>18</sup>

The lexical codification of a syntactic animacy feature to be checked is not unique of *deny*-verbs. Consider Differential Object Marking (DOM) in Spanish, obligatorily assigned to

<sup>18</sup> The issue is more complex than suggested in the text. See O&R (2019a) for a more detailed analysis. According to our analysis, the fact that V person feature is checked by the theme is what blocks P incorporation. Regarding examples like *denying any credibility to opposing views*, where no internal argument is animate, we suggest that *deny* is used in that case with a different sense, a suggestion that seems to be supported by the fact that regular English dictionaries assign them an independent entry (see sect. 2.2). Note that once the animacy restriction encoded in V disappears, the *to*-construction is the preferred option. Again, this fact can be easily captured by derivational analyses, but becomes pure chance in construction-based approaches.

animate and specific NPs (see Fábregas 2013 and references therein). Remember that that is exactly the same set of elements that must appear in DOCs to satisfy the animacy constraint (see sec. 2). If we are on the right track, the restrictions on DOM and the animacy constraint on DOCs are two sides of the same constraint and, in fact, they are mutually excluded, as discussed in O&R (2019a). There are certain verbs in Spanish, like *avisar* 'to warn', *responder* 'to answer', *ayudar* 'to help', which obligatorily assign DOM to their object, even when nominalized. Therefore, as in the case of *deny*, this selectional restriction can be properly expressed as an syntactic animacy feature lexically encoded in V.

The other contexts where *to*-constructions also emerge in a systematic way involve different A'- and A-extraction configurations. First, although there is a great deal of dialectal variation, for many speakers and in Standard English A-bar extraction of the recipient from DOCs is ungrammatical or marginal (Hornstein & Weinberg 1981, Holmberg, Sheehan & van der Wall 2019:681, Douglas 2017: sect. 6.1, and references; also see Haddican & Homberg 2019, and references for discussion on dialectal variation), and the use of *to*-construction in those contexts is favored.<sup>19</sup>

- (42) a. (%?\*)Who did you give the book?
  - b. Who did you give the book to

According to our consultants the same grammaticality judgments are obtained with *denv*:

- (43) a. (%?\*)who did you deny the book?
  - b. who did you deny the book to?

Independently of the status of (42a) and (43a) and dialectal variation, what is important is that the *to*-construction is possible in these cases also with *deny*. A similar conclusion may be reached concerning passivization; in that case it is raising of the theme in DOCs that many speakers find at best marginal; as a result, for those speakers *to*-constructions are preferred. Again, dialectal/idiolectal variation on the DOC aside, all speakers coincide that in these contexts passivization of the theme in *to*-constructions with *deny*-verbs is also grammatical:

- (44) a. (%\*)A book was given Mary
  - b. Mary was given a book
- (45) a. (%?\*)A book was denied Mary
  - b. A book was denied to Mary

<sup>19</sup> This data is mirrored by asymmetric Bantu languages (Marantz 1993).

In the A-bar cases, wh-movement is often accompanied by preposition stranding, paralleling the behavior of other wh-prepositional phrases. Note that (44b) makes a "DOC in disguise" analysis highly implausible.

Green (1974) already observed that in relativization, another case of A'-movement, the *to*-construction is highly preferred also with *deny*, and she points out that similar effects show up in other contexts that usually favor *to*-constructions over DOCs (also see Larson 2014). Our consultants agree that theme relativization (46), heaviness (47), and final theme pronouns (48) make *to*-constructions preferred over DOCs, again with a big amount of variation on the judgements on DOCs.

- (46) a. The ice cream that Martha denied to John was poisonous
  - b. The ice cream that Martha denied John was poisonous
- (47) a. The teacher denied an ice cream to every student that asked for it
  - b. The teacher denied every student that asked for it an ice cream
- (48) a. Ann denied Peter the ice cream and now Peter denies it to Mary
  - b. Ann denied Peter the ice cream and now Peter denies Mary it

We know of no fully developed analysis of this heterogeneous group of restrictions on DOCs (see Romero 1997; Douglas 2017, Holmberg, Sheehan & van der Wall 2019 for some suggestions), but the absolute parallelism of *deny*-verbs illustrates better than anywhere that, except for their special lexical animacy feature, these verbs belong in all respects to the ditransitive alternating group; in particular, they are subject to the same constraints restricting the distribution of DOCs in general and to similar dialectal differences. That is expected in derivational analyses, which basically treat them as alternating verbs. In contrast, construction-based approaches postulate that *deny*-verbs are only compatible with the DOC;<sup>20</sup> consequently, they fall short in their inventory of available constructions to generate the structures in (41)-(48).

In sum, the existence of systematic cases of *to*-constructions with *deny*, the perfect parallelism of these contexts with regular alternating verbs and, most importantly, the fact that the obligatoriness of both DOCs --in the general case-- and *to*-constructions --in PCC contexts-follows directly from the derivation itself in a principled way strongly support derivational accounts over construction-based approaches.

<sup>20</sup> Note, incidentally, that these analyses do not have an account of why this group of verbs are not compatible with the dative alternation, beyond the mere observation of the facts.

#### 4.2. Nominalizations

A context where traditionally has been assumed that DOCs and *to*-constructions do contrast sharply is in nominalizations, where DOCs are banned, as originally shown by Kayne (1984) and discussed in several places in the literature (e.g. Grimshaw 1990, B&J, Bruening 2010a, H&J):

- (49) a. The/my offer of a scholarship to Mary
  - b. \* The/my offer of Mary (of) a scholarship

As we discuss in O&R (2019b), there are several alternative explanations of this asymmetry in the literature,<sup>21</sup> and most of them may be equally accommodated in derivational and non-derivational analysis, so the basic facts in (49) do not constitute an argument to discard competing hypotheses on ditransitive alternations. However, as discussed there, the issue seems to be more complex than previously assumed, and examples like (50)-(51) suggest that, under the right circumstances, the DOC/to-construction alternation also shows up in nominals after all:

- (50) a. And when she received her payment of \$80, it was written on a Harrah's check.
  - b. My daughter got 7 Distinctions and 2 Merits, she was over the moon, she received her offer of her first choice of college place.
  - c. A and B bind themselves to pay C their loan of P10,000 on a certain date.
- (51) a. On the date that payment of a salary to the deceased staff member...
  - b. The offer of a new position to her
  - c. This agreement covers the specific situation of a loan of money to family or friends...

In structural terms, the examples in (50) involve raising of the recipient to the prenominal position in a nominal passive fashion similar to well-known cases like (52).

(52) The city's destruction (by the aliens)

Differences aside, the contrast in (50)-(52) may be thus compared to the one in (53), where the recipient fails to trigger obligatory raising-to-subject in the passive construction:

- (53) a. \* There was given John a book
  - b. John was given a book

<sup>21</sup> That includes morphological approaches to head incorporation based on Mayer's generalization (Pesetsky 1995, Bruening 2001), some version of Kayne's proposal that nouns are, unlike verbs, unable to govern across a sentential boundary including small clauses (see, e.g. B&J) or Stowell's (1981) and Ormazabal's (1995) discussion on the different thematic and structural relationship between nouns and their nominal complements as compared to verbal projections; also see Bleam & Hornstein 2010 arguments that recipients are not true arguments in ditransitive constructions.

In our terms, the obligatory movement of the recipient is triggered --in sentential DOCs as well as in nominal domains-- by the incorporation of the applicative head, which forces movement of its complement to the Case/agreement position --be it (Spec,  $\nu$ P) in sentential DOCs or (Spec, DP) or the like in nominalizations. In contrast, if we are correct, the ungrammaticality of (49b) is not due to the unavailability of the DOC in nominal structures, but to the failure of object shift under P-incorporation. In other words, there is no agreement/Case target position to which the recipient might move NP-internally. When object shift is available higher up to (Spec, DP) the derivation converges, yielding the grammatical (50).

This explanation excludes all proposals that do not rely on object shift of some type in the derivation of DOCs. Moreover, given the contrast (49b)-(50), morphological solutions à la Myers cannot be right either, because the derivation of (50) must allow the same complex head-configuration as the ungrammatical (49b); instead, the contrast must be related to the object's obligatory movement and the impossibility of saving the derivation via *of*-insertion (see O&R 2019b for details and discussion). Note also that, given (50), construction-based analyses loose any straightforward structural explanation for the impossibility of (49b) and the difference between the nominal and verbal domains, beyond incrementing the inventory of constructions, because what (50) presents is a DP-internal "passivization" of a DOC structure (49) that, according to this kind of analysis, cannot exist in the first place.

## 4.3. Subextraction

Consider the paradigm in (54)-(55):

- (54) a. \*Who did you send friends of your pictures
  - b. \*Who did you send your pictures to friends of
- (55) a. **Who** did you send a picture/pictures of to all your friends
  - b. Who did you send all your friends a picture/pictures of

While subextraction from the theme is possible in both DOCs and *to*-constructions, it is ungrammatical when the *wh*-phrase moves from the recipient also in both DOCs and *to*-constructions. The data are a bit obscured by the fact that many English speakers find subextraction out of animate DPs a bit more marginal than inanimate ones also in regular transitive sentences [relative judgements from Lasnik & Saito (1989, fn 14) and confirmed by our informants]:

- (56) a. Who did you see pictures of \_\_\_\_\_?
  - b. ?Who did you see friends of ?

However, native speakers coincide that the contrast in (54)-(55) is more robust than the one in (56).

Abstracting away from other structural differences, according to our proposal in (8)-(9) subextraction in (55) proceeds as from the specifier of a regular small clause like (57):

(57) **?Who** did you consider [a picture of ] worth buying?

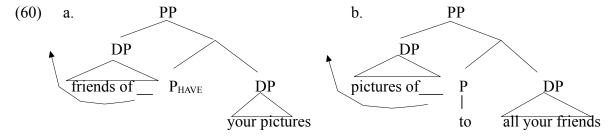
On the other hand, (54a) parallels the ungrammaticality of subextraction from PPs in general:

- (58) a. \*Who did you go to a house of
  - b. \*Who did you come from a bookstore of

In the DOC (54b), the recipient DP might have escaped the PP in its movement to (Spec,  $\nu$ P), as in preposition stranding under passive, but that DP shows subject condition effects, and subextraction is also impossible:

- (59) a. ?A book of linguistics was talked about in our seminar
  - b. \*What was [a book of ] talked about in our seminar

The original discussion in the literature involved the contrast between (54a) and (55a). Bruening (2010a) observes that Harley's (2002) structural proposal in (2)-(3) cannot deal with it: if subextraction from the specifier of the *to*-PP in (60b) is possible, subextraction from the specifier of the *to*-PP in (60a) should also be possible:



Based on this and similar arguments, H&J propose to abandon (3) in favor of Bruening's structure for *to*-constructions in (5). However, that structure does not seem to provide the right solution to the original problem. Given the possibility of subextraction from the specifier of the small clause in (57), the problematic case in the pair (54a)-(55a), for both Harley and Pylkkanen/Bruening, is not the grammaticality of (55a) but the strong ungrammaticality of (54a), which

remains unexplained. Thus, there is no justification to abandon (3) in favor of (5), but rather it is (2) that must be revised. On the other hand, the paradigm in (54)-(55) is precisely what derivational analyses predict, since the recipient is base-generated under the theme in both DOCs and *to*-constructions, and crosses over it to a higher position (Spec of *v*P in our analysis) in the DOC construction.

In addition, there is further evidence from constituency effects in the same direction.

Consider the contrast in (61), modified from Romero (1997:145):

- (61) a. What I sent was a truck to Paris
  - b. What I gave was a bottle to the baby
  - c. \*What I gave was the baby a bottle

(61a-b) show that the sequence [X to Y] behaves as a possible constituent in focus-fronted structures, independently of whether it is interpreted as a CM or a CTP. In contrast, the two objects in the DOC do not work as a single constituent. The derivation in (8)-(9) makes the right cut: the extraction of the complement of the applicative P to (Spec, vP) breaks the constituent into pieces. A priori (61) is a problem for both Harley's P<sub>HAVE</sub> analysis of DOCs in (2), where (61c) is predicted to be grammatical, and for Bruening's analysis of to-constructions in (5), where it is predicted that (61a-b) should be ungrammatical.

## 4.4. Scope freezing.

Lebaux (reported in Larson 1990 as personal communication) observed that DOCs and *to*-constructions differ in their scope properties. In particular, the observation is that DOCs show "scope freezing" effects, where the two quantifiers are interpreted in their surface order relative to each other, as illustrated in (62a); in contrast, the *to*-construction in (62b) shows the habitual scope ambiguity [Larson 1990: ex. (20)].<sup>22</sup>

- (62) a. The teacher assigned one student every problem  $\exists \forall \forall, \forall \forall \exists$ 
  - b. The teacher assigned one problem to every student  $\exists \forall \forall, \forall \exists$

**<sup>22</sup>** They also analyze *spray-load* diatheses, where the same scope freezing has been observed by Schneider-Zioga (1988).

Bruening (2001) presents an analysis in terms of superiority and equidistance. Larson, Antonyuk & Liu (2019) [LA&L] show that Bruening's analysis adapts naturally to a derivational analysis of the type proposed in Larson (1988, 2014) and in (8)-(9), but then they argue at length that such an analysis does not work. In particular, (i) the superiority-scope freezing parallelism breaks down in a wide variety of contexts, including *to*-constructions: the scope ambiguity --the lack of superiority in Bruening's terms-- in (62b) is at odds with the superiority effects in multiple *wh*-movement [LA&L: ex. (16)], polarity, etc.:

- (63) a. **What** did John give \_\_\_ [PP to **who**]
  - b. \*Who did John give what [PP to \_\_\_\_]
  - c. \*To whom did John give what \_\_\_\_

And (ii) there is no possibly coherent concept of equidistance that would exclude the two arguments in a DOC and include, for instance, the matrix object and an argument of the embedded verb in an object control configuration like (64) [LA&L, ex. (44c)]

- (64) Max persuaded two faculty [PRO to sit on every committee]  $2>\forall$ ,  $\forall>2$  LA&L do not develop an alternative analysis, but they go back to Lebeaux' original observation that was motivated by the parallelism between the scope freezing of DOCs and similar effects in passives, a fact that is known at least since Chomsky (1957) [example from Larson 2014: (133)]:
- (65) a. Everyone in this room knows at least two languages  $2>\forall$ ,  $\forall$  >2
  - b. At least two languages are known by everyone in this room  $2>\forall$ ,  $??\forall>2$

They observe that what these two configurations have in common is that they are both derived structures, and suggest that "crossing quantifiers overtly in the syntax has the effect of fixing scope." Their suggestion is quite appealing, but there are two pieces of evidence suggesting that "overt crossing" is too weak and we need some wider structural condition. First, note that

passive in *to*-constructions also induce scope-freezing; however, in this case the existential quantifier does not cross over the universal one, as Barss & Lasnik's original battery of tests showed.

(66) a. We assigned two homeworks to every student 
$$2>\forall$$
,  $\forall >2$   
b. Two homeworks were assigned to every student  $2>\forall$ ,  $*\forall >2$ 

Similarly, when the theme raises to the specifier of vP in a *to*-construction, no crossing occurs but still the wide scope reading for the universal quantifier disappears. This fact cannot be observed in English because, unlike in the passive (66), the theme does not move overtly (see Lasnik (1999); Boskovic (2010) and references), but in languages like Spanish some objects do move and show it morphologically. Torrego (1998), López (2012) and O&R (2013a,b) argue that differentially marked (DOM) objects in Spanish are in the object agreement position (spec, vP) while non-marked ones are in the VP-internal position:

(67) a. 
$$\begin{bmatrix} TP \text{ vimos } vP \end{bmatrix} \begin{bmatrix} a & la \text{ niña} \end{bmatrix} \begin{bmatrix} ... & vP \end{bmatrix}$$
 we saw **DOM** the girl b.  $\begin{bmatrix} TP \text{ vimos } vP \end{bmatrix} \begin{bmatrix} ... & vP \end{bmatrix} \begin{bmatrix} la \text{ ciudad} \end{bmatrix}$  we saw the city

The interesting contrast is that when the existential quantifier in the theme DP of the *to*-constructions shows up differentially marked (68a), the universal quantifier in the complement of *to* gets frozen with respect to it, minimally contrasting with the scope ambiguity when the object does not raise in English (68b) and Spanish (68b):<sup>23</sup>

Sent.3 a consultant to all the managers 'She sent a consultant to all the managers'

That suggests that LA&L's overt crossing suggestion is too weak. At the same time, A-movement in general as a way to fix scope looks too strong a structural condition, given that, for instance, movement of the subject to (Spec, TP) in a regular transitive clause does not restrict

<sup>23</sup> Following López (2012), in previous work (O&R 2013b) we have marked the wide scope reading of the universal quantifier over the existential in (68a) as possible. In the context of that paper, the sentence was used as a baseline to compare the behavior of the existential quantifier in DOM context, and we did not pay much attention to the behavior of the universally quantified argument; unfortunately, we overlooked the contrast in (68). We have checked with several native speakers who coincide with our own judgements.

scope ambiguities by itself. We leave a more precise characterization of the relevant structural condition for further research.<sup>24</sup>

## 4.5. Non-opaque domains for anaphora

Pesetsky (1995:159-160) and Bruening (2010a) mention the contrast in (69) as an argument against a small clause analysis of DOCs. According to them, while small clauses are opaque domains for anaphor-binding (69a), the anaphor is allowed in the structurally lower object of the DOC (69b).

- (69) a. \*John considered her angry at himself. [Pesetsky 1995: 159-160]
  - b. John showed her himself.

We are not sure that Pesetsky's original examples constitute a real minimal pair. Labels aside, the two structures in (69) do not seem to share many structural properties.<sup>25</sup> But if they are on the right track, their criticism to Harley's P<sub>HAVE</sub> does not extend to the derivational approach in (8)-(9). Among the structural differences between (2) and (8), the relative order in which the theme and the recipient are base-generated makes a crucial difference: in the P<sub>HAVE</sub> structure in (2) the theme (*himself* in (69)) is in the complement position of the small clause, c-commanded by the recipient (*her*) in the specifier position. In our structure in (8) the base positions are the reverse, as in many derivational analyses since Larson (1988) and Baker (1988), and only movement of the recipient over the theme to a case/agreement position outside the small clause gets the final hierarchical order. Unlike in the classical Barss & Lasnik contexts where the relevant issue is the theme's and the recipient's c-command configuration relative to each other, the movement of the recipient over the theme in (69b) does not change the c-command relation between the agent in main subject position and the theme, neither there is an intervention effect of the raised recipient in (Spec, vP). From that perspective, the Small Clause structure parallel to (69b) is the grammatical (70), rather than (69a).

(70) John has always considered himself close to his friends

<sup>24</sup> If the derivational solution shows up to be feasible, it is also additional evidence for an analysis of possessionhave constructions involving movement of the recipient across the theme à la Freeze (1992), since it also shows scope freezing effects, as observed by Satoshi Tomioka [mentioned by Bruening 2010a: 547].

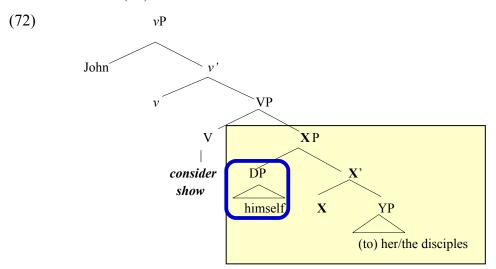
<sup>(</sup>i) a. Someone has every book.  $\exists \forall \forall \forall \exists$ b. Someone read every book  $\exists \forall \forall \forall \exists$ 

*Have* contrasts minimally with regular transitive verbs (ib), which show scope ambiguity, as expected. **25** Incidentally, this is another good example of how construction-based analyses may end up becoming purely nominalist controversies about non-existent objects.

As we expect, binding of the theme is also possible in *to-*constructions:

- (71) a. He showed/presented himself to the two disciples
  - b. [Christ] gave/offered himself to God/to the world/to us
  - c. Adriano offered himself to Palmeiras [Goal April 4, 2016]

The parallel behavior of DOCs in (69b), *to*-constructions in (71) and small clauses in (70) with respect to anaphora binding supports our analysis, where the three constructions share the same basic structure in (72):



Moreover, in this case, the parallelism is captured only if the relative arrangement of the arguments in the Double Object Construction is inverted derivationally, contrary to the  $P_{\text{HAVE}}$  analysis and more generally non-derivational proposals.

## 5. Conclusion

Summarizing, to-constructions share with DOCs the same thematic, structural and semantic structure. We have shown that the alleged one-to-one mapping from each syntactic construction to a given semantic interpretation fails in both directions, and that all the correlations observed in the literature between the properties of ditransitive constructions and have support an analysis where the three constructions --have VPs, DOCs and CTP to-constructions-- share a common substructure where the theme is higher than the goal. The specifics of the analysis are also supported by their distribution with deny-verbs, nominalizations, scope freezing, etc., contrary to what is standardly assumed. It has been also shown that CM-denoting to-constructions with

send/throw verbs also share that common small clause structure, although their prepositional head has different lexical properties and cannot incorporate, and that is the main reason why it does not enter into the dative alternation. As discussed, the incorporating preposition is subject to lexical variation, yielding, as an epiphenomenon, a different distribution in the range of applicatives for each language.

If we are right, in general terms there is no empirical gain in maintaining a non-derivational analysis (either ApplP or Phave-type) that does not capture the properties discussed throughout this paper; quite to the contrary, there are empirical advantages in pursuing a derivational analysis in terms of P-incorporation. In addition, the latter is conceptually better grounded from a minimalist perspective.

That still leaves quite a lot of room for different alternatives to derive dative alternations, provided that the results here are incorporated (see footnote 4 for some references). In this paper we have argued for a lexical P-incorporation analysis, a choice that seems empirically and theoretically supported. But the alternatives are for the most part closer than they appear, and the choice among them will depend on how each analysis deals with the parallelisms as well as with the obvious structural differences --mostly Barss & Lasnik's (1986) but also newly added onesbetween the two constructions, always within standard parameters of descriptive and explanatory adequacy.

#### Acknowledgements

The two authors, listed in alphabetical order, are equally responsible for the entire content of the paper. We are grateful to Alejo Alcaraz, David Basilico, Elena Castroviejo, Ricardo Etxepare, Katherine Fraser, Bryan Leferman, Norbert Hornstein, Jairo Nunes, Paco Ordóñez, Anna Pineda, Tim Stowell, Myriam Uribe-Etxebarria, and to the participants in a research seminar conducted by the first author at the University of the Basque Country (UPV/EHU) during the Fall 2019, for judgements and interesting comments and observations. We are also thankful to two reviewers of a previous squib version containing some of the arguments developed here ("If you (P-)have you may give to somebody") for their comments and criticism. Parts of this work were also presented at the *Workshop on Dative Structures and Beyond*, held at the Universitat Autònoma de Barcelona (January 2017), and in the *Basque Group for Theoretical Linguistics (HiTT)* Seminar Sessions. Many thanks to the participants in these events for lively discussion and suggestions. This work was made financially possible in part by the Government of Extremadura's

**IB18080** grant and *Grants to Research Groups* Program to the second author, and by the institutions supporting the research activities of the Basque Group of Theoretical Linguistics (HiTT): the Basque Government grant numbers **IT769-13** and **IT1396-19** (*Euskal Unibertsitate Sistemako Ikerketa-taldeak*), the Spanish Government's **VALAL** (# **FFI2014-53675-P**, Ministry of Economy and Innovation) and **LEPROP** (#PGC2018-093464-b-100, Ministry of Science, Research and Universities), and the University of the Basque Country's (UPV/EHU) **GIU18/221**.

#### References

Anagnostopoulou, Elena. 2003. The Syntax of Ditransitives. Mouton de Gruyter, Berlin.

Antonyuk, Svitlana & Richard Larson. 2018. Scope Freezing in PP Dative Constructions. Manuscript, Stony Brook University.

Baker, Mark. 1988. *Incorporation: a theory of grammatical function changing*. Chicago: U. Chicago Press.

Baker, Mark. 1996. The Polysynthesis Parameter. Oxford: Oxford University Press.

Baker, Mark. 1997: 86-88.

Barss, Andrew and Lasnik, Howard. 1986. "A note on anaphora and double objects." *Linguistic Inquiry* 17: 347–354.

Beavers, 2011. On Affectedness. Natural Language and Linguistic Theory 29, 335-370.

Beck, Sigrid, and Kyle Johnson. 2004. Double objects again. Linguistic Inquiry 35:97–123.

Beck, Sigrid & William Snyder. 2001. The resultative parameter and restitutive again. In C. Féry and W. Sternefeld, eds., *Audiatur vox sapientiae: A festschrift for Arnim von Stechow*, Berlin: Akademie Verlag, 48-69.

Bleam, Tonia & Norbert Hornstein. 2010. Deriving Multiple "Object" Constructions. Manuscript, University of Maryland.

Bonet, Eulalia. 1991. Morphology after syntax. MIT PhD dissertation.

Boskovic, Zeljko. 2010. On the locality and motivation of A-movement. *Linguistic Inquiry* 38, 589-644.

Bresnan, Joan & T. Nikitina. 2007. The Gradience of the Dative Alternation. To appear in *Reality Exploration and Discovery: Pattern interaction in Language and Life*, L. Uyechi & L.H. Wee (eds.), Stanford: CSLI Publications.

Bruening, Benjamin. 2001. QR obeys Superiority: Frozen scope and ACD. *Linguistic Inquiry* 32, 233–273.

Bruening, Benjamin. 2010a. Ditransitive asymmetries and a theory of idiom formation. *Linguistic Inquiry* 41:519–562.

Bruening, Benjamin. 2010b. "Double object constructions as disguised prepositional datives," *Linguistic inquiry 41*: 287-305.

Bruening, Benjamin. 2014. Precede and c-command revisited. *Language* 90, 342-388.

Bruening, Benjamin. 2018. Double Object Constructions and Prepositional Dative Constructions are Distinct: A Reply to Ormazabal and Romero. *Linguistic Inquiry* 49, 123-150.

- Chomsky, Noam. 1957. Syntactic Structures. Berlin: De Gruyter.
- Cuervo, María Cristina. 2003. Datives at large. PhD Dissertation MIT.
- Douglas, Jamie. 2017. Unifying the that-trace and anti-that-trace effects. *Glossa a journal of general linguistics* 2(1) 60. 1–28, DOI https://doi.org10.5334gjgl.312
- Drummond, Alex & Dave Kush. 2011. Reanalysis as raising to object. *Ms. University of Maryland*.
- Etxepare, Ricardo. 2014. Contact and change in a minimalist theory of parameters. In Carme Picallo (ed.), *Linguistic variation in the minimalist framework*. 108-139. Oxford: Oxford University Press.
- Fábregas, Antonio. 2013. Differential object marking in Spanish: State of the art. *Borealis–An International Journal of Hispanic Linguistics*, *2*(2), 1-80.
- Freeze, Ray. 1992. Existentials and other locatives. Language. 68. 553-595.
- Gonçalves, M. Rita. 2016. *Construções ditransitivas no português de São Tomé*. PhD. diss. Univ. Lisboa.
- Green, Georgia. 1974. *Semantics and Syntactic Regularity*. Bloomington: Indiana Univ. Press. Grimshaw, Jane. 1990. *Argument Structure*. Cambridge, MA: MIT Press.
- Gropen, Jess; Steven Pinker; Michelle Hollander; Richard Goldberg & Ronald Wilson. 1989. The learnability and acquisition of the dative alternation in English. *Language* 65, 203-257.
- Haddican, William. 2010. Theme-goal ditransitives and theme passivisation in British English dialects. *Lingua* 120: 2424–2443.
- Haddican, William & Anders Holmberg. 2012. Object movement symmetries in British English dialects: Experimental evidence for a mixed case/locality approach. *The Journal of Comparative Germanic Linguistics* 15.3, 189–212.
- Haddican, Bill, and Anders Holmberg. 2019. "Object symmetry effects in Germanic." *Natural language & linguistic theory* 37.1, 91-122.
- Hallman, Peter. 2015. Syntactic Neutralization in Double Object Constructions. *LI* 46.3, 389-424.
- Harley, Heidi. 1995. Subjects, events and licensing. MIT PhD Dissertation.
- Harley, Heidi. 2002. Possession and the double object construction. *Yearbook of Ling. Variation* 2: 29–68.
- Harley, Heidi. 2004. Wanting, having, and getting: A note on Fodor and Lepore 1998. *Linguistic Inquiry* 35:255–267.
- Harley, Heidi and Hyun Kyoung Jung. 2015. In support of the *Phave* approach to the double object construction. Linguistic Inquiry 46.4, 703-730. 10.1162/LING\_a\_00198
- Harley, Heidi & Shigeru Miyagawa. 2016. Ditransitives. Ms. Univ. of Arizona & MIT. To appear, *Oxford Research Encyclopedia of Linguistics*.
- Holmberg, Anders, Michelle Sheehan, and Jenneke van der Wal. 2019. "Movement from the double object construction is not fully symmetrical." *Linguistic Inquiry* 50.4, 677-722.
- Jackendoff, Ray. 1990a. Semantic structures. Cambridge: MIT Press.
- Jackendoff, Ray. 1990b. "On Larson's treatment of the double object construction." *Linguistic Inquiry* 21(3): 427–456.

- Kayne, Richard. 1984. Connectedness and Binary Branching. Dordrecht: Foris Pub.
- Krifka, Manfred. 2004. Semantic and pragmatic conditions for the dative alternation. Ms., Humboldt University & Zentrum für Allgemeine Sprachwissenschaft (ZAS), Berlin.
- Langacker, Ronald W. 1987. *Cognitive Foundation so f Cognitive Linguistics vol. 1: Theoretical prerequisites*, Stanford University Press.
- Larson, Richard. 1988. On the Double Object Construction. *Linguistic Inquiry* 19:335-391.
- Larson, Richard. 1990. Double Objects revisited. Reply to Jackendoff. *Linguistic Inquiry* 21, 589-632.
- Larson, Richard. 2014. On Shell Structure. New York/London: Routledge.
- Larson, Richard. 2017. On "Dative Idioms" in English. *Linguistic Inquiry* 48, 389-426.
- Larson, Richard; Svitlana Antonyuk & Lei Liu. 2019. Superiority and Scope Freezing. *Linguistic Inquiry* 50, 233-252.
- Lasnik, Howard. 1999. Minimalist Inquiries. Cambridge, MA: Blackwell.
- Lasnik, Howard & Mamoru Saito. 1989. *Move alpha: Conditions on its application and output.ove-alpha*. Cambridge, MA: MIT Press.
- Levin, Beth. 2006. First objects and datives: two of a kind?. Handout from a talk given at *Berkeley Linguistics Society*, *32*.
- Levin, Beth. 2015. Semantics and Pragmatics of Argument Alternations, *Annual Review of Linguistics* 1, 63-83. [doi:10.1146/annurev-linguist-030514-125141]
- López, Luis. 2012. *Indefinite objects: Scrambling, choice functions, and differential marking*. Cambridge, MA: MIT Press.
- MacDonald, Jonathan E. 2015. A derivational approach to the dative alternation in English. *Language*, *86*, 821-864.
- Maling, Joan. 2001. Dative: The heterogeneity of the mapping among morphological case, grammatical functions, and thematic roles. *Lingua* 111, 419-464.
- Malchukov, Andrej; Martin Haspelmath & Bernard Comrie. 2007. Ditransitive constructions: a typological overview. In Malchukov et al. eds. *Studies in Ditransitive Constructions*. *A Comparative Handbook*, Berlin: Mouton de Gruyter, 1-[DOI: 10.1515/9783110220377.1]
- Marantz, Alec. 1993. Implications of asymmetries in Double Object Constructions. In S. A. Mchombo, ed. *Theoretical aspects of Bantu grammar*, CSLI Publications, Stanford, 113-150.
- Michelioudakis, Dimitris. 2012. *Dative arguments and abstract case in Greek*. University of Cambridge PhD dissertation.
- Myler, Neil. 2013. On coming the pub in the North West of England: Accusative unaccusatives, dependent case, and preposition incorporation. *Journal of Comparative Germanic Linguistics* 16. 189-207.
- Odria, Ane. 2017. *Differential Object Marking in Basque syntax: A microcomparative survey.* University of the Basque Country (UPV/EHU) PhD dissertation.
- Odria, Ane. 2019. DOM and datives in Basque: Not as homogeneous as they might seem, Lingvisticæ Investigationes 42, 7 - 30. https://doi.org/10.1075/li.00027.odr
- Oehrle, Richard T. 1976. *The grammatical status of the English dative alternations*. MIT PhD Dissertation.

- Ormazabal, Javier. 1995. *The Syntax of Complementation*. Univ. of Connecticut PhD dissertation.
- Ormazabal, Javier & Juan Romero. 2007. The Object Agreement Constraint. *NLLT* 25, 315. <a href="https://doi.org/10.1007/s11049-006-9010-9">https://doi.org/10.1007/s11049-006-9010-9</a>
- Ormazabal, Javier & Juan Romero. 2010. The Derivation of Dative Alternations. In M. Duguine et al, eds. *Argument Structure and Syntactic Relations from a cross-linguistic Perspective*. Amsterdam/Philadelphia: John Benjamins, 203-232.
- Ormazabal, Javier & Juan Romero. 2012. PPs without disguise: a reply to Bruening. *LI* 43, 455-474
- Ormazabal, Javier & Juan Romero. 2013a. Object clitics, agreement and micro-dialectal variation. *Probus* 25. 301-354.
- Ormazabal, Javier & Juan Romero. 2013b. Non accusative objects. *Catalan Journal of Linguistics* 12: 155-173.
- Ormazabal, Javier, & Juan Romero. 2013c. Differential Object Marking, case and agreement. Borealis: An International Journal of Hispanic Linguistics, 2, 221-239.
- Ormazabal, Javier & Juan Romero. 2017. Historical Changes in Basque Dative Alternations: Evidence for a P-based (neo)derivational analysis. *Glossa: a journal of general linguistics* 2(1): 78. 1–39. https://doi.org/10.5334/gigl.103
- Ormazabal, Javier & Juan Romero. 2019a. Prolegomena to the study of object relations. *Lingvisticæ Investigationes* 42, 102 - 131. https://doi.org/10.1075/li.00031.orm
- Ormazabal, Javier & Juan Romero. 2019b. Double Object Constructions in nominalizations. Ms. Univ. of the Basque Country (UPV/EHU)-HiTT and Univ. of Extremadura-Hitt.
- Paul, Waltraud & John Whitman. 2010. Applicative structure and Mandarin ditransitives. In Maia Duguine et al (eds.), *Argument structure and syntactic relations from a crosslinguistic perspective*. 261-282. Amsterdam/Philadelphia: John Benjamins.
- Pescarini, Diego. 2014. Evidence for double object constructions in Italian. NELS 43.2, 55-66
- Pesetsky, David. 1995. Zero Syntax: Experiencers and Cascades. Cambridge, MA: MIT Press.
- Peterson, David A. 2007. Applicative constructions. Oxford: Oxford University Press.
- Pinker, Steven. 2013. *Learnability and cognition: The acquisition of argument structure*. Cambridge, MA: MIT press.
- Pylkkänen, L. 2008. Introducing Arguments. Cambridge, MA: MIT Press.
- Rappaport Hovav, Malka & Beth Levin. 2008. The English Dative Alternation: The Case for Verb Sensitivity'. *Journal of Linguistics* 44: 129-167.
- Rezac, Milan. 2011. *Phi-features and the modular architecture of language*. Dordrecht: Springer.
- Richards, Mark. 2015. Defective agree, case alternations, and the prominence of person. In Bornkessel-Schlesewsky, Ina, Andrej Malchukov, and Marc D. Richards, eds. *Scales and hierarchies*. *A cross-disciplinary perspective*, Berlin: Walter de Gruyter, 173-196.
- Romero, Juan. 1997. Construcciones de doble objeto y gramática universal: dativos, posesivos y predicción secundaria. Ph.D Thesis, Universidad Autónoma de Madrid.

Romero, Juan. 2017. Cuestiones marginadas en el estudio de" ser y estar". In *Relaciones sintácticas: homenaje a Josep M. Brucart y M. Lluïsa Hernanz*, Barcelona: Universitat Autònoma de Barcelona, 589-606).

Schneider-Zioga, Patricia. 1988. Double objects and small clauses. Ms., University of Southern California, Los Angeles.

Shibatani, Mashatoshi. 1996. Applicatives and benefactives: A cognitive account. *Grammatical constructions: Their form and meaning*, 157-194.

Stechow, Arnim von. 1995. Lexical decomposition in syntax. In U. Egli, et al., eds. *The Lexicon in the Organization of Language*. Amsterdam: John Benjamins.

Stechov, Arnim von. 1996. The different readings of *wieder* 'again': A structural account. *Journal of semantics* 13, 87-138.

Stowell, Tim. 1981. *Elements of Phrase Structure*. MIT PhD. Dissertation.

Torrego, Esther. 1998. The dependencies of objects. Cambridge, MA: MIT Press.

Williams, Edwin. 1980. Predication. Linguistic Inquiry 11, 203-238.

#### APPENDIX. SOURCES OF THE EXAMPLES:

- (20) a. I gave a new coat of paint to the Arrow of Norwich [Arthur Ransome. 1932. Peter Duck]
  - b. [...] and I gave a new coat of paint to our carved work, which was very bare and parched [A. Dalrimple: 1775. A collection of voyages]
  - c. Children gave a coat of paint to the walls
    <a href="https://www.thehindu.com/news/cities/chennai/a-new-hangout-for-kids-of-urur-olcott-kuppam/article19603505.ece">https://www.thehindu.com/news/cities/chennai/a-new-hangout-for-kids-of-urur-olcott-kuppam/article19603505.ece</a> (5-7-2019)
  - d. I just gave a coat of paint to her cool sketches https://pikstagram.com/patribalanovsky (5-7-2019)
- (22) a. Some washing powders give cotton a softer feel [MacMillan online English dictionary]
  - b. Cedar wood was chosen to give a softer feel to the courtyard.
     [Mark Lawson, Ray Ogden, Chris Goodier. 2014. *Design in modular construction*. CRC Press, p. 21]
- (23) a. The removal of trade restrictions could give the economy a substantial boost. [MacMillan online English dictionary]
  - b. Better armor will give a substantial boot to your hit points <a href="https://www.google.com/url?q=https://www.gamespace.com/featured/enoch-underground-review/wsa=D&ust=1562439320683000&usg=AFQjCNEIa2aASLKbJxJnahsAAX3Sl-qycg">https://www.gamespace.com/featured/enoch-underground-review/&sa=D&ust=1562439320683000&usg=AFQjCNEIa2aASLKbJxJnahsAAX3Sl-qycg</a> (5-7-2019)
- (50) a. And when she received her payment of \$80, it was written on a Harrah's check<a href="https://www.nytimes.com/1997/06/10/us/louisiana-vote-inquiry-focuses-on-gambling-and-new-orleans-politics.html">https://www.nytimes.com/1997/06/10/us/louisiana-vote-inquiry-focuses-on-gambling-and-new-orleans-politics.html</a>
  - b. My daughter got 7 Distinctions and 2 Merits, she was over the moon, she received her offer of her first choice of college place <a href="https://stmarysdeafgirls.ie/s3">https://stmarysdeafgirls.ie/s3</a> plc results.html

- c. A and B bind themselves to pay C their loan of P10,000 on a certain date <a href="https://www.coursehero.com/file/p2eeapi/2-What-obligations-are-deemed-indivisible-Answer-Obligations-deemed-Indivisible/">https://www.coursehero.com/file/p2eeapi/2-What-obligations-are-deemed-indivisible-Answer-Obligations-deemed-Indivisible/</a>
- On the date that payment of a salary to the deceased staff member... <a href="https://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:039:0018:0043:EN:PDF">https://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:039:0018:0043:EN:PDF</a>
  - b. The offer of a new position to her [https://books.google.es/books?
    id=YqRaAAAAYAAJ&pg=RA6-SA88-PA19&lpg=RA6-SA88-PA19&dq=
    %22The+offer+of+a+new+position+to
    %22&source=bl&ots=qQVQ\_\_W3Lq&sig=ACfU3U0pQobHio7Icj27OGWk02JYOSWwkA&hl=eu
    &sa=X&ved=2ahUKEwiXjK\_CxrLmAhXM7eAKHX63DmgQ6AEwAHoECAUQAQ#v=onepage
    &q=%22The%20offer%20of%20a%20new%20position%20to%22&f=false]
  - c. This agreement covers the specific situation of a loan of money to family or friends... [https://www.netlawman.co.uk/g/lending-agreements]