Differential Object Marking and the Lexical Semantics of Verbs in Spanish

Klaus von Heusinger & Georg A. Kaiser

http://www.ilg.uni-stuttgart.de/vonHeusinger/
georg.kaiser<at>uni-konstanz.de

1. Introduction*

In Spanish, the direct object can be accompanied by the marker *a*, which is homophone to the preposition *a* 'to'; hence, such direct objects are often called 'prepositional accusative", which is an type of Differential Object Marking (DOM). DOM is widespread among the languages of the world. Bossong (1985) mentions that at least 300 known languages exhibit DOM in one way or other. DOM or *a*-marking of the direct object in Spanish is a well studied subject (e.g. Brugè & Brugger 1996, Torrego 1999, Leonetti 2004, Pensado 1995 with a annotated bibliography), but there is no overall account of the different parameters that determine DOM, nor is there a theory that explains the interaction of the parameters. Two main approaches to DOM in general are currently under discussion: The Ambiguity Thesis and the Transitivity Thesis. The Ambiguity Thesis (Comrie 1975, Moravcsik 1978, Croft 1988, Bossong 1985, Aissen 2003) assumes that languages that do not distinguish subject and direct object tend to develop extra markers to indicate direct objects if they are too similar to typical subjects. These approaches focus on the properties of the direct object such as animacy, definiteness, specificity and topicality. The Transitivity Thesis (Hopper & Thompson 1980, Naess 2004), on the other side, assumes that a direct object is marked if it is a "good" argument in a transitive sentence. These approaches focus on semantic properties of the verb such as telicity, aspectuality and thematic information of the argument role of the direct object such as volitionality and agency. De Hoop & Narasimhan (2005) modify the Transitivity-Thesis and use the concept of "Strength of an Argument". According to them, DOM-languages mark strong arguments in direct object positions. We will develop this thesis further and account for the strength by analyzing the interaction of the properties of the direct object with the lexical semantics of the verb. Most synchronic research on DOM or *a*-marking in Spanish focuses on the properties of the direct object, while the verbal semantics has been less well investigated. Moreover, diachronic studies focus exclusively on these properties and do not investigate the verb class. In our study we investigate the role of the verb class for the diachronic development of *a*-marking in Spanish. Our findings clearly show the importance of the verbal semantics and they also motivate the variations that can be found in DOM marking, both in synchronic and diachronic data.

DOM in Spanish, as in other languages, can only be explained by the interaction of several parameters. We assume the following three families of parameters for DOM: (i) the properties of the direct object, (ii) its competition with other arguments in the sentence (mainly the subject), and (iii) the lexical semantics of the verb. The properties of the argument include animacy, definiteness, specificity and topicality. Even though these categories originate on

---

different grammatical levels, they converge to an overall category "referential status", which is often described in terms of degrees of "individualization". The competition with the subject triggers DOM: if the direct object is too similar to a typical subject (animate, definite, topical), a DOM language tends to mark the object in order to disambiguate between the two arguments. At the same time the lexical semantics of the verb determine the role of the argument in the described event. Sentences with verbs that prefer animate direct objects are more likely to mark animate objects low on the Referenciality Scale than sentences with verbs that prototypically take inanimate objects. We show that the subtle interaction between the verbal semantics, on the one hand, and the referential properties of the noun, on the other, can explain the variation in DOM that we find. In particular, we try to account for diachronic variation in Spanish. Diachronic studies show that DOM in Spanish spread from personal pronouns and proper names to definite and finally indefinite noun phrases (all human/animate). Our data suggests that besides this general picture, the lexical semantics of the verb is a driving force in the diachronic evolution of DOM. In a detailed analysis we compare a particular piece of literature (selected chapters of the Bible) from different periods (14th, 16th and 20th century) and regions (including an American bible translation of the 20th century). Since we are dealing with the same text, this detailed comparison allows us to control the contextual settings. It also shows that the properties of the direct object do not suffice to explain the variation and the diachronic development of DOM. We therefore extend our analysis to different verb classes and extend our corpus search to the whole Bible, and in a another step we use an even broader text corpus (the electronically available *Corpus del Español* from the 12th to the 19th century). The findings confirm our original hypothesis that the verb class is a main parameter for DOM in Spanish.

2. Parameters of Differential Object Marking in Spanish

As noted above, differential Object Marking (DOM) in Spanish is expressed by the marker *a*, which is homophone to the preposition *a* 'to' and the dative marker *a*.[1] DOM in Spanish is determined by three families of parameters: (i) referential properties, (ii) competition between the arguments in a sentence, and (iii) transitivity properties of the verb, i.e. the lexical semantics of the verb. The following subsections are devoted to these parameters.

2.1 Nominal properties

Some categories of a noun are animacy, referentiality (definiteness and specificity), and topicality.[2] These properties derive from different types of information: Animacy is a lexical (or conceptual) property, specificity is a referential property, definiteness a discourse pragmatic one, and topicality a property of information structure. Still, all these properties interact and yield a more general concept of "referential status", which corresponds to the often mentioned category "individuation". Each particular parameter can be expressed by a scale of two or more values. A language cuts across the scale at one particular point – the language specific-transition point.

  Silverstein (1976) has discussed the role of animacy for case-marking, see also Comrie (1975). We assume that animacy is a lexicalized conceptual category, i.e. speakers categorize

---

[1]   For want of space we cannot discuss the role of clitic doubling for DOM, but see Suñer (1988), Brugè & Brugger (1996) and Parodi (1998) for clitic doubling and von Heusinger & Kaiser (2003) for the relation between *a*-marking and clitic doubling as expressing DOM. Leonetti (2004:100) states that the conditions licensing clitic doubling are a subset of the conditions that license *a*-marking. He refers to Bleam (1999:199), who points out that "the semantic properties which give rise to clitic doubling form a subset of the semantic properties which give rise to the prepositional accusative [...]." We expect that our findings for *a*-marking are also relevant for clitic doubling, but we leave this for further research (see Leonetti (this volume)).

[2]   There are additional referential properties such as number, collectivity, concreteness etc. that influence the "individualization" of an argument.

objects they speak about according to different values of animacy. The Animacy Scale (1) distinguishes three values. Depending on the language, we find a transition point between human and animate or between animate and inanimate:

(1)   Animacy Scale:
       human > animate > inanimate

human	animate	inanimate
+ human	− human	

Spanish seems to take the first option and distinguishes between +human and –human. While the main information for animacy is encoded in the lexicon, additional contextual effects may shift the animacy marking to the higher or lower pole of the scale (see Weissenrieder 1990):

(2)   (a) Vi   *(*a*) **la** / **una   mujer**.
            saw-1SG   to   the / a   woman
       (b) Vi   (**a*) **la** / **una   mesa**.
            saw-1SG   to   the / a   table
            'I saw the / a table.'

The main parameter, however, for the individualization of a noun is referentiality as expressed in the Referentiality Scale[3] which combines definiteness and referentiality. This scale marks personal pronouns (Pro) most strongly, followed by proper names, definite noun phrases, specific indefinite noun phrases, and nonspecific indefinite noun phrases, with non-argumental nouns at the lowest end. The version presented in (3) combines different types of such Scales (see Comrie 1975, Bossong 1985, Croft 1988, Aissen 2003 and others). In particular, we have added the non-argumental noun slot, which is crucial for the description of DOM in Spanish.[4]

(3)   Referentiality Scale (extended version of Aissen 2003:437: "Definiteness Scale"):
       personal pronoun > proper noun > definite NP > indefinite specific NP > indefinite non-specific NP > non-argumental

Pro >	PN >	Def >	Spec >	−Spec >	−Arg
argument-status (e-type)					<e,t>-type

The scale can be cut in two at different transition positions. For contemporary European Spanish we assume that the cut is below non-specific indefinites (-Spec) and above non-argumentals (−Arg). In other words, DOM in Spanish (for animate direct objects) indicates that the noun is an argument rather than predicate that might be incorporated. (Leonetti 2004). Bleam (1999) formulates this distinction in terms of the type of noun: argument type e, vs. non-argumental type of $<e,t>$. The definite noun phrase in (4a) and the indefinite (specific) noun phrase in (4b) must be marked by *a*. Even the non-specific indefinite noun phrase in (4c) may optionally marked with *a*. The non-specificity is triggered by the subjunctive *sepa* in the

---

[3]   Contrary to our use of "Definiteness Scale" in earlier papers and the use of Aissen (2003), we prefer here to name the scale under discussion "Referentiality Scale" following Croft (2003:130). The advantage of this terminology is that it allows for a description that is independent from the otherwise well known and well grammaticalized definiteness. The terminology also allows us to include non-argumental direct objects, whether we call them incorporated or not.

[4]   We have suppressed many other categories such as possessives (depending on the language type: above definites), universals (pattern with definites), partitives (between definites and specific indefinites), different kinds of specific indefinites (see Haspelmath 1997) etc. This linear scale does not provide a slot for non-referential definites (see section 4.3 for an example of this kind).

relative clause. Even the indefinite (non-specific) pronoun *alguien* in its possible non-specific reading takes *a*. Only the predicate $<e,t>$-type meaning of (4e) does not allow *a*:

(4) (a) Vi   *(*a*) **la   mujer**.
         saw-1SG to   the   woman
         'I saw the woman.'
     (b) Vi   *(*a*) **una mujer**.
         saw-1SG to   a   woman
         'I saw a woman.'
     (c) Necesitan (*a*) **un ayudante   que sepa   inglés**.
         need-3PL to a   assistent   that speak-SUBJ.3SG   English
         'They need an assistent who knows English'
     (d) Está buscando *a* **alguien**.
         is   looking   to someone
         '(S)he is looking for someone'
     (e) El dentista necesita *a*   **un ayudante**.
         the dentist needs   DOM a   assistant
         'The dentist needs an assistant'

Topicality is a notion of information structure and therefore somewhat vague and difficult to test in corpora. Here we adopt the notion of "aboutness-topic", i.e. the topic of a sentence is that piece of information that the sentence is about. Topics can be syntactically or intonationally marked; the latter is hard to detect in corpora. The former would be a good test. We assume that a left moved direct object is topical, but we cannot tell whether a direct object close to the verb is topical or not.

(5) Topicality
     topical > non topical

topical	– topical

We assume that there are only topical and non-topical direct objects. The indefinite direct object right of the verb may optionally take *a*, while the left-moved one in (6b) must take it (cf. Leonetti 2004:86).

(6) (a) Ya   conocía (*a*) **muchos estudiantes**.
         already knew-1SG to many   students
         'I already knew many students'
     (b) *(*A*) **muchos estudiantes**, ya   los   conocía.
          (to) many   students,   already them knew-1SG
         'Many students I already knew'

We can summarize the conditions for DOM in Spanish in (7): Spanish has to mark the direct object if it is human and an e-type argument. In all other cases the marker must not be used.

(7)   DOM in Modern Spanish: Simplified description:

Standard Spanish	+ Arg	– Arg
+human	+	–
-human	–	–

2.2 Disambiguation and Competition

One approach to DOM in Spanish is to assume that *a*-marking disambiguates between subject and object. If the object is too similar to the subject, *a*-marking is necessary to indicate objecthood. It is interesting that *a*-marking is obligatory (or at least optional) even in those caseswhere we have two inanimate arguments (Weissenrieder 1991:146) (see also Torrego Salcedo 1999, García-García (this volume)).

(8)   (a) …que los gerundios modifican ***a*l   sujeto**.
            that the gerunds   modify   to-the subject
          '... that the gerunds modify the subject'
     (b) En esta receta, la leche puede sustituir ***a*l   huevo**.
          In   this   recipe   the milk   can   replace   to-the egg
          'In this recipe egg can replace the milk.'

There is also a second aspect of competition and disambiguation: There are other constituents that are marked with *a* and therefore compete with the direct object. The indirect object in Spanish is obligatorily marked by *a*. As a consequence, if only one constituent is marked, it must be the indirect object (Torrego 1999:1784):

(10) (a) Perseguía ***a*l guardia**   el   ladrón.
          pursued   to-the policeman the thief
          'The thief pursued the policeman'
     (b) Perseguía el   guardia   ***a*l   ladrón**.
          pursued   the policeman to-the thief
          'The policeman pursued the thief'

In ditransitive sentences and in sentences with nouns marked with the preposition *a*, DOM-marking of the direct object can create ambiguity of the grammatical functions, as in (11a). In order to avoid this ambiguity, it often occurs that direct objects – but never indirect or prepositional objects – appear unmarked in these sentences, as in (11b), even though they would be otherwise marked. This avoidance of *a* is only a "stylistic rule" and is, according to Real Academia Española (1973:374f), mostly applied in cases when both objects are full nouns:

(11) (a) Ha sido forzoso   dejar ***a*l   conde** en rehenes ***a*l enemigo**.
          has been compelling leave to-the count as   hostage to-the enemy
     (b) Ha sido forzoso   dejar ***e*l   conde** en rehenes ***a*l enemigo**.
          has been compelling leave   the count as   hostage to-the enemy
          'It has been compelling to leave the count as hostage to the enemy'

Disambiguation and competition are important factors for *a*-marking in Spanish, in particular for non-core cases, as in (8). However, they do not furnish an overall account or parameter able to explain fully the distribution and variation of *a*-marking.

2.3 Transitivity and the lexical semantics of verbs

DOM-marking in Spanish depends not only on the referential properties of the direct object and its competition with the subject or other arguments in the sentence, but also on the lexical properties of the verb. This has been noted in descriptive grammars of Spanish (Bello 1847:567-570, Fernández Ramírez 1951:151-190 and others). Particular approaches to describe DOM in terms of verb classes have been undertaken by Bolinger (1953), Fish

(1967), Pottier (1968), Leonetti (2004) and others (see also an overview in Pensado 1995 and Torrego 1999). These observations fit nicely into the more general approach of Transitivity of Hopper & Thompson (1980). They argue that the categories given below are ordered in a particular way: Languages prefer to mark categories with high transitivity values morphologically, rather than the lower values. Spanish, for example, marks the direct object with *a* if it is high in individuation (see point 10 in (12)). At the same time it also marks a telic event by this means (see example (13)), or affectedness (see examples (17)-(18) below). Hopper & Thompson (1980) account for the particular alignment of values shown in (12) by assuming that all high transitive values contribute to the discourse salience of the event described by the verb and its arguments.

(12) Parameters of Transitivity (Hopper & Thompson 1980)

	High transitivity	Low transitivity
1. Participants	Two participants or more (A and O)	one participant
2. Kinesis	Action	Nonaction
3. Aspect	Telic	Atelic
4. Punctuality	Punctual	Nonpunctual
5. Volitionality	Volitional	Nonvolitional
6. Affirmation	Affirmative	Negative
7. Mode	Realis	Irrealis
8. Agency	A high in potency	A low in potency
9. Affectedness of O	O totally affected	O not affected
10. Individuation of O	O highly individuated	O nonindividuated

For Spanish, different aspects of the lexical semantics of verbs have been described with respect to *a*-marking, including telicity, volitionality, type of causation, mode, agency and affectedness. For lack of space we can only refer to some of these aspects below.

According to Torrego (1999:1786f), telicity functions as a strong parameter for DOM in Spanish, for *a*-marked direct objects are obligatory with telic verbs, such as *insultar* ('insult'):

(13) Marta   insultó   *(*a*) **un compañero**.
     Marta   insulted-3SG to   a   collegue
     'Marta insulted a collegue'

DOM-marking can express subtle differences in the semantics of events. Torrego (1999:1788) notes the difference between (14a) and (14b): In (14a) the object is not identified nor identifiable, while in (14b) it is known (at least for the speaker) and more individualized. Moreover, in (14b) the subject is more strongly involved in the event, and the object constitutes an independent entity. This is also shown in (15) where the predicative *llorando* 'crying' is a secondary predicate. In (15a) it can only be predicated of the subject, while in (15b) it can be applied to the subject or the (higly individualized) object (Torrego 1999:1789).

(14) (a) Besaron   **un niño**.
          kissed-3PL a   child
      (b) Besaron   *a* **un niño**.
          kissed-3PL to a   child
          'They kissed a child'

(15) (a) Besaron **un niño** *llorando*.   (secondary predication: subject)
         kiss-3PL a   child crying
         'They kiss a child while they were crying'
     (b) Besaron ***a un niño*** *llorando*.   (secondary predication: subject, object)
         kiss-3PL to a   child crying
         'They kiss a child while they were crying' OR: 'They kiss a crying child'

According to Torrego (1999:1786) the verb *matar* 'to kill' strongly prefers *a* with direct objects, but does not require it. Thus the presence or absence of the marker *a* with animate objects expresses a very subtle difference in the kind of event: (16a) with the marked object is understood as expressing direct causation, while in (16b) without the marker expresses indirect causation.[5]

(16) (a) Han   matado ***a un buscador de oro***.   (direct causation)
         have-3PL killed   to a   searcher of gold
         'They have killed a gold searcher'
     (b) Han   matado **un buscador de oro**.   (indirect causation)
         have-3PL killed   a   searcher of gold
         'They have killed a gold searcher'

Torrego (1999:1791) discusses affectedness of the object by the event expressed in the verb as a very strong *a*-trigger in Spanish, as illustrated in the next examples with eventive or stative verbs. The affectedness can relate to physical circumstances, as in (17), or to psychological ones, as in (18). The (b)-examples without the marker are ungrammatical.

(17) (a) Golpearon *a* un extranjero.
         beat-3PL   to a   stranger
     (b) *Golpearon un extranjero.
          beat-3PL   a   stranger
         'They have beaten a stranger'

(18) (a) Odia   *a* un vecino.
         hate-3SG to a   neighbor
     (b) *Odia   un vecino.
          hate-3SG a   neighbor
         '(S)he hates a neighbor'

Contemporary Spanish has lexicalized this contrast: a whole class of verbs obligatorily take *a* with animate objects*,* such as *saludar* ('greet'), *odiar* ('hate'), *insultar* ('insult'), *castigar* ('punish'), *sobornar* ('bribe') or *atacar* ('attack') with animate objects, while other verbs like *encontrar* ('find'), *buscar* ('look for'), *esconder* ('hide') or *ver* ('see') allow for both options (with human/animate objects). According to Leonetti (2004:84) the marker *a* is fully lexicalized with verbs of the first class and does not express any further referential property. Nevertheless, the marker still indicates some kind of referential status, as Leonetti (2004:99)

---

[5]   Note that Torrego's judgements in (14)-(15) and in (16) are not shared by all Spanish speakers. Victoria Escandell-Vidal (p.c.) points out that the difference in (16) becomes more acceptable with another object:
   (i)   (a) Has   matado **a   un campeon**.
                 has-2SG killed   DOM a champion
                 'you have killed a champion'
      (i)   (a) Has   matado **un campeon**.
                 has-2SG killed   a   champion
                 'you have killed the carrier of a champion'

notes with respect to bare nouns in object position. The verbs of the class that have a lexicalized marker (cf. (19a)) cannot take bare nouns, as in (20a). On the other side, the class of verbs that exhibit a certain optionality of the marker, as in (19b), also allow for bare nouns, as in (20b):

(19) (a) {odiar/ admirar/ despreciar/ amar/ aborrecer/ soportar} *(a) una persona
             'to hate/ admire/ despise/ love/ detest/ put up with… a person'
      (b) {llevar/ curar/ contratar/ describir/ encontrar / ver}(a) una persona
             'to take/ cure/ hire/ describe/ find/ see a person'

(20) (a) {*odiar/ *admirar/ *despreciar/ *amar/ *aborrecer/ *soportar} personas
             'to hate/ admire/ despise/ love/ detest/ put up with… persons'
      (b) {llevar/ curar/ contratar/ describir/ encontrar / ver} personas
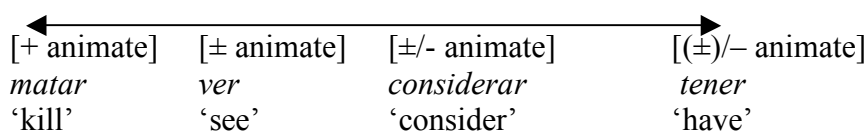   'to take/ cure/ hire/ describe/ find/ see a person'

Affectedness itself seems to be a complex category that consists of subproperties such as the animacy of the object, the agency of the subject, the involvement of the object, and the aspect or aktionsart of the verb. We cannot speculate about the contribution of each of the mentioned factors or their interaction. We only state that we can distinguish verb classes according to affectedness and arrange them on a scale. To our knowledge, Pottier (1968:87) was the first to propose such a Scale of Affectedness, with different verb classes ranked according to the degree of the affectedness of their direct object.

(21) Scale of Affectedness (Pottier 1968:87)

+ ←──→ −

matar   *ver*   *considerar*   *tener*
'kill'   'see'   'consider'   'have'
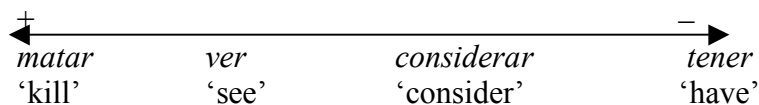
Affectedness is an intuitively valid category, but it is very difficult to give it a clear definition and apply it to various verbs. An additional complication is that other factors can interact with it. Therefore, we simplify the Scale of Affectedness and assume that the particular ranking is triggered by the specification of the verb to its object with respect to animacy. The verb *matar* 'to kill' has a strong tendency to take animate objects and is high in affectedness, while *ver* 'see' has no restriction with respect to animacy. *Considerar* 'consider' prefers an inanimate object and *tener* 'have' is an existential verb (see Bolinger 1953, Brugè & Brugger 1996:38, fn. 40 for the definition of "existential verbs"). It is also important to note that not the actual animacy is relevant, but the expected one.

(22) Scale of Affectedness and expected animacy of the object

←──→

[+ animate]   [± animate]   [±/- animate]   [(±)/− animate]
matar   *ver*   *considerar*   *tener*
'kill'   'see'   'consider'   'have'

This classification is quite coarse and many more subclasses are expected. The verbal class that strongly affects its objects (see (19a)) would be allocated above *matar*. In section 4.1 this classification will modified and then be the base for our corpus search.

3. Diachronic development of DOM

3.1 Diachronic development along the Referentiality Scale

Like Modern Standard Spanish, Old Spanish exhibits DOM. However, as shown in several diachronic studies (Melis 1995, Laca 2002, 2006), the use of DOM in Old Spanish is less frequent and determined by slightly different conditions than in Modern Spanish. The main results of these studies, summarized in von Heusinger & Kaiser (2005), are repeated here briefly and illustrated with some examples from the *Cantar de mio Cid* (following Melis 1995 and Laca 2006).

(Strong) object personal pronouns carry obligatory DOM in Old Spanish, as in (23). Human/animate proper names acting as direct object nouns are obligatory marked by DOM in Old Spanish, as in (24). Human/animate definite direct object NPs are not obligatorily marked by DOM in Old Spanish, as in (25). Human/animate non-definite direct object NPs are never marked by DOM in Old Spanish, as in (26) (cf. Laca 2006:444):

(23) e   ssi fuéredes   vençidos, non rebtedes   *a* **nós**   (Cid, 3566)
      and if   would-2PL defeated not blame-IMP.2PL to us
      'but if you are defeated you are not to blame us'

(24) Matastes *a* **Bucar** &   arrancamos el   canpo   (Cid, 2458)
      killed-2SG to Búcar and rupture-1PL the field
       'you killed Búcar and and we have won the battle'

(25) (a) Reçiba   *a* **mios yernos**   commo elle pudier   mejor (Cid, 2637)
           receive-IMP.2SG to my   sons-in-law as   he   could-3.SG better
           'Let him give to my sons-in-law the finest possible welcome'
      (b) Ca yo case   **sus fijas**   con yfantes de Carrion   (Cid, 2956)
           for I   married.1SG. his daughters with Infantes of Carrion
           'for I married his daughters to the Infantes of Carrion'

(26) Tanto traen   las grandes ganançias, **muchos gañados de ovejas e   de vacas**
      very   brought.3PL the big   wealths   many   herds   of sheep and of cows
      'They brought such great wealth, many herds of sheep and cows'   (Cid, 480-481)

Comparing these facts in Old Spanish to the situation in Modern Spanish, we can state that there is a crucial difference in the marking of definite object NPs and specific indefinite NPs, both animate and human ones. According to Laca's (2006) research, 36 percent of all animate definite object NPs are marked with DOM. In Modern Spanish, as already shown, these objects always appear with *a*. This difference is illustrated in (27) and (28), where the original version of *El Cantar de Mio Cid* is contrasted to a translation in Modern Spanish (cf. Laca 2006:455, Melis 1995:143):

(27) Old Spanish:
      (a) En braços tenedes **mis fijas**   tan blancas commo el   sol.   (Cid, 2333)
           in   arms   have-2.PL my daughters as   white   as   the sun
           'In your arms you hold my daugthers, as white as the sun'
      (b) Escarniremos   **las fijas   del   Campeador**.   (Cid, 2551)
           will-humiliate-1PL the daughters of-the Battler
           'We shall humiliate the Battler's daughters'

(28)   Modern Spanish:
    (a)   tenéis   ***a mis hijas***,   tan blancas como el   sol, en vuestros   brazos
          have.2.PL to my daughters as   white   as   the sun in your   arms
                    (*Cantar de mio Cid.* Translation A. Reyes. Madrid: Espasa Calpe 1976)
          'In your arms you hold my daugthers, as white as the sun'   (Cid, 2333)
    (b)   y podremos   escarnecer ***a las hijas***   del   Campeador.   (Cid, 2551)
          and will-can1.PL humiliate   to the daughters of-the Battler
                    (*Cantar de mio Cid.* Translation A. Reyes. Madrid: Espasa Calpe 1976)
          'We shall humiliate the Battler's daughters'

We can state that DOM has expanded considerably towards the right of the Referentiality Scale (while the Animacy Scale has not been affected from this extension, so far): the development goes from obligatory DOM for pronouns and proper nouns and optional DOM for definite nouns in Old Spanish to obligatory DOM for specific NPs and optional DOM for non-specific indefinite NPs in Modern Spanish. This holds for all animate direct objects (Laca 2006). Table (29) gives an informal representation of this development:

(29)   Informal representation of the diachronic evolution of the DOM- marker *a* in Spanish along the Referentiality Scale for animate direct objects (von Heusinger & Kaiser 2005, based on Laca 2006, Melis 1995)

+ animate	personal pronoun >	proper noun >	> definite NP	> indefinite spec. NP	> indefinite non spec. NP
Old Spanish (*Cid*)	+	+	± (36%)	–	–
Evolution	↓	↓	⇓	⇓	⇓
Modern (Standard) Spanish	+	+	+	+	±

3.2 Triggering conditions for the emergence and the development of DOM

Given this variation between Old and Modern Spanish with respect to the use of DOM, it is natural to ask which factors determine this variation. Melis (1995) and Laca (2006) point out that one of the most relevant factors for the use *a* in these cases are structures with syntactic topicalisation. In his study on *El Cantar de Mio Cid*, Melis (1995:134) observes that direct object NPs occurring in canonical word order, i.e. in postverbal position, are in general not employed with DOM, while preposed direct object NPs are. This observation is confirmed by Laca's study. On the one hand, she observes that in the part of *El Cantar de Mio Cid* which she investigated, 80 percent of all animate definite object NPs used without *a* appear in the canonical postverbal position (see the examples in (27)). On the other hand, Laka (2006:455) notes that 73 percent of the definite object NPs used with *a* are either preposed, doubled by a co-referent clitic, or both preposed and doubled, as illustrated by the examples in (30):

(30) (a) Assi **las**   escarniremos   ***a*las   fijas   del   Campeador**   (Cid, 2555)
          so   them humiliate.FUT-1PL to-the daughters of-the Battler
          'So, we shall humiliate the Battler's daughters'
    (b) ***A las sus fijas***   en braço **las**   prendia   (Cid, 275)
          to the his daugthers in   arm   them hold-3.SG
          'He gathered his daughters in his arms'

These findings provide one explanation for the variability found in the use of DOM with direct object NPs in Old Spanish, showing that topicality played a crucial role for DOM

marking in the earlier periods of Spanish. Note that in a later period topicality ceases to be a relevant factor for the use of DOM with (animate and definite) direct object NPs. As a consequence, almost all of these object types are used with *a*, which leads to a significant increase of DOM marking in Spanish. In a further step, DOM marking extends to indefinite NPs. The crucial feature here is [±specific]: while specific indefinite object NPs tend to be marked with DOM, unspecific ones are not. This observation has led us to conclude that the evolution of DOM is facilitated by intervening "transitional" categories, such as topicality and specificity. These categories are only active for the category to which DOM is developing: topicality for definite NPs, specificity for indefinite NPs. We can only speculate why we find such pairs: Topicality expresses a prominent contrast that (most often) affects definite NPs, while specificity expresses a contrast that (most) often affects indefinite NPs. In addition, a further distinction, indicated by the feature [±Arg(umental)] can be made with respect to unspecific indefinite NPs.

Extending von Heusinger & Kaiser (2005), we propose the following model of diachronic change, according to which the diachronic evolution of *a*-marking is triggered by additional parameters:

(31) Evolution of DOM from Old Spanish to Modern Spanish for animate objects:

Strong Pro >	PN >	Definite +top	Definite – top	Indefinite		

transition point between ±top for definite direct objects

Strong Pro >	PN >	Definite +top	Definite – top	Indefinite		

neutralization for ±top

Strong Pro >	PN >	Definite	Indefinite			

transition point between ±spec for indefinite direct objects

Strong Pro >	PN >	Definite	Indefinite +spec	Indefinite –spec		

transition point between an unknown feature for non-specific indefintite direct objects

| Strong Pro >	PN >	Definite	Indefinite +spec	Indef –spec + Arg	Indef –spec –Arg

4. Diachronic development and lexical classes

The commonly assumed summary (31) of the diachronic development of DOM in Spanish rests on two main parameters, referentiality and animacy, together with triggering conditions such as topicality (from proper names to definite NPs) and specificity (from definite to indefinite Nps). While these parameters have been well studied, they have not sufficed to account for the observable diachronic and synchronic variation. Our detailed analyses of three different kinds of accessible corpora show that the diachronic development of DOM is crucially dependent on the lexical class of the governing verb. Our corpus searches have confirmed our original hypothesis that the verb class is a main parameter for DOM in Spanish and that DOM-spreading depends on time, referential properties of nouns, and verbal class. In

general, this diachronic corpus study strongly suggests that case-marking is determined by parameters in a multi-dimensional space (see von Heusinger & Klein 2007 for an account to DOM as "strength of case relation").
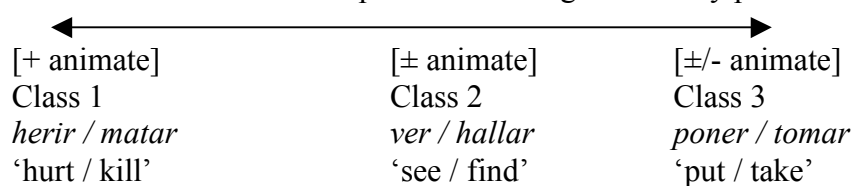
We start with the classification developed in section 2.3, which is based on Pottier (1968:87). While Pottier (1968) takes affectedness as the main dimension according to which we arrange our verbs, we simplified this in assuming that the semantic restriction on the type of animacy for the object is the decisive factor, as in (22), repeated as (32). Our view is motivated by similar observations for Hindi (Mohanan 1994).

(32) Scale of Affectedness:

+			−	Affectedness
matar	*ver*	*considerar*	*tener*	
'kill'	'see'	'consider'	'have'	
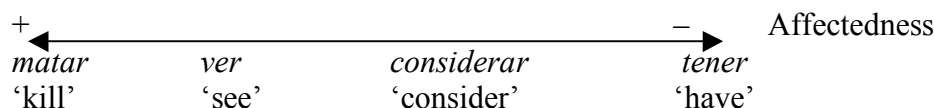
Since purely existential verbs such as *tener* 'have' have a very strong tendency, even today, not to take objects that are *a*-marked, we excluded existential verbs.[6] That left us with three verbal classes, and we selected particular verbs for each class depending on availability in the original material. Class 1: *herir, matar* all have a clear preference for animate direct objects, class 2: *ver, hallar* do not have any preference with respect to the animacy of the direct object, and class 3: *poner* and *tomar* have a slight preference for inanimate objects. We can locate them on the scale in the following way.

(33)   Scale of verbal classes in Spanish according to animacy preferences

[+ animate]	[± animate]	[±/- animate]
Class 1	Class 2	Class 3
herir / matar	*ver / hallar*	*poner / tomar*
'hurt / kill'	'see / find'	'put / take'

For a selection of these verbs (depending on the corpus) we categorized the direct objects according to the Referentiality Hierarchy. We used three types of corpora: Firstly, we compared the two books of Samuel and the two books of Kings in four Spanish bible translations: A from the 14th, B from 16th/17th, C from an European Spanish translation of the 20th century and D from an American translation of the 20th century, on the assumption that American Spanish has developed further. Secondly, we extended the search to the whole Bible, as the last three versions are electronically available (*bible-gateway*). Thirdly, we used the broader *Corpus del Español* from the 12th to the 19th century (*http://www.corpusdelespanol.org*). These corpus searches confirmed our original hypothesis that the verb class is a main parameter for DOM in Spanish and that DOM-spreading depends on time, referential properties of nouns and verbal class.

4.1. Comparing sentences in the same environment across time

Using parallel texts in general provides the great advantage of allowing one to compare the very same kind of construction, expression or lexical unit in texts from different languages or

---

[6]   Various authors note that there are certain conditions under which even *tener* requires (or allows) *a*-marking of the direct object. Pensado (1995:32) mentions the contrast between (i) and (ii). See also Bolinger (1953).
  (i)   tiene   *a* su   mujer enferma
        has-3.SG to his   wife   sick
        'His wife is sick'
  (ii) tiene   una mujer muy inteligente
        has-1.SG   a   wife   very intelligent
        'He has a very intelligent wife'

from different periods of the same language (cf. Cysouw & Wälchli 2007). Our assumption is that Bible translations serve this requirement best (cf. Kaiser 2005, Enrique-Arias 2007). Bible translations constitute a quite archaic text and often have a quite specialized register that differs substantially from that of spoken language, but they also contain a considerable amount of natural-sounding direct speech. In addition, unlike many other older texts, most parts of the Bible are written (and translated) in prose, which eliminates the possibility that rime constraints influence the morphosyntax. Furthermore, for many languages, including Spanish, Bible translations (as well as other religious texts) provide the very earliest written documentation, and many Bible translations are easily and freely available for download from the Internet. We chose the following four Bible translations from different times and from different regions, taking the book of Samuel as our data base:

(34) Bible translations used in the corpus search

Version A: 14th century
Biblias medievales romanceadas. Biblia medieval romanceada judio-cristiana. Versión del Antiguo Testamento en el siglo XIV, sobre los textos hebreo y latino. Vol. I: Genesis-Reyes. Edicón y estudio introductorio por el P. José Llamas. Madrid: Instituto «Francisco Suarez»

Version B: 16th / 17th century
Reina Valera Antigua (1569/1602). Source: http://www.biblegateway.com
(The Reina-Valera Antigua was first translated and published in 1569 by Casiodoro de Reina, after twelve years of intensive work, and later put out in 1602 in revised form by Cipriano de Valera, who gave more than twenty years of his life to its revision and improvement.)

Version C: 20th century (Standard European Spanish)
Europa Reina Valera (1995) (United Bible Societies).
Source: http://www.biblegateway.com/

Version D: 20th century (American Spanish)
La Biblia de las Américas (1971) (The Lockman Foundation).
Source: http://www.biblegateway.com/
This is a new translation of the Scriptures from the original languages. Completed in 1986 by a team of Latin American evangelical Bible scholars, La Biblia de las Américas is an original work translated from the Hebrew-Aramaic and Greek directly into modern Spanish.

4.1.1 Definite NPs

Our first corpus search concerned the presence or absence of DOM with definite human direct objects in the first ten chapters of the first book of Samuel. As expected, we found that pronouns and proper names are always marked with DOM in all four Bible translations. For definite object NPs, the results are summarized in table (35):

1 Sam 1-10	Definite direct object noun ([+human])			
	+ top (preverbal /clitic doubling)		− top (postverbal / no clitic doubling)	
± *a*	− *a*	+ *a*	− *a*	+ *a*
A	2	4	15	14
B	-	1	15	21
C	-	-	6	31
D	-	-	3	32

Table 1: DOM-marking in 1 Samuel 1-10 for definite human NPs (Bibles A-D)

As predicted, DOM increases through time, i.e. while only half of the definite NPs are marked in the earliest Bible (12th century), nearly all are DOM-marked in the two versions from the 20th century. However, another prediction could not be tested: In (31) we said – following Laca and others – that topicalized definite NPs have a strong tendency or preference to be DOM-marked. Unfortunately, we found very few cases of direct object NPs occurring in a syntactic topicalization structure (i.e. left moved), six of them in version A, one in B and none in the modern versions C and D. As predicted, direct objects are in most cases DOM-marked in these structures, with only two topicalized objects appearing without DOM. An example for each case is given in (35):

(35) (a) E   *a vuestras fijas*   tomará   por espeçieras e   cosineras
           ands to your   daughters will-take-3SG for perfumers and cooks
           e   panaderas.
           and bakers   (A: 1 Sam 8,13)
           'He will take your daughters to be perfumers and cooks and bakers'
      (b) [...] ca   del   señor *lo* demandé **el varón**.
           because of-the Lord   him asked-1SG the man   (A: 1 Sam 1,20)
           'because I asked the man from the Lord'

In other words, the comparison of Bible translations from different centuries does not provide evidence for the hypothesis that an increase of topicalization structures causes DOM marking to become more frequent and to finally extend to non-topicalized direct objects.[7]

Note that the distribution of non-topicalized object NPs is more complex. Although there is a clear development of DOM-marking through time, the triggering factors are not clearly identifiable. Topicalization cannot be an important factor, given that fact the already in A a great number of non-topicalized object NPs is DOM-marked. Obviously, not just position in the sentence (±topic) plays a role, but additional factors, as well. Our restricted but detailed search strongly suggested that the verb class determines the probability of DOM-marking. We therefore categorized DOM-marking according to our verb classes defined in 4.1. and extended our search to the two books of Samuel and the two books of Kings.

Table 2 lists the instances of DOM-marking with particular verbs in the four different Bible translations. The number in brackets gives the instances of all definite NPs for that verb, i.e. the unmarked instances are the difference between the two numbers. For convenience we have transferred the absolute instances into percentages in table 3, which clearly shows that DOM marking is increasing along the time dimension (left to right) and along the Scale of verbal classes (top to bottom).

class	*verb*	A: 14th cent.	B: 16th/17th cent.	C: 20th cent. (Euro)	D: 20th cent. (Am)
3	*poner*	1 (4)	3 (6)	5 (6)	6 (6)
	tomar	6 (19)	4 (17)	15 (24)	17 (25)
2	*ver*	7 (20)	9 (22)	24 (29)	15 (20)
	hallar	2 (4)	4 (5)	2 (3)	3 (4)
1	*matar*	19 (32)	23 (27)	26 (27)	27 (27)
	herir	5 (8)	14 (29)	10 (12)	13 (16)

Table 2: Bible translation of 1+2 Samuel and 1+2 Kings, instances of DOM with definite direct object (number of all definite NPs in brackets)

---

7   See Gabriel & Rinke (in preparation) for a more sophisticated approach to detecting topicalised direct objects that are not left located.

class		A: 14th cent.	B: 16th/17th cent.	C: 20th cent. (Euro)	D: 20th cent. (Am)
3	*poner*	25%	50%	83%	100%
	tomar	31%	23%	62%	68%
2	*ver*	35%	41%	83%	75%
	hallar	50%	80%	66%	75%
1	*matar*	59%	85%	92%	100%
	herir	62%	48%	83%	81%

Table 3: Bible translations of 1+2 Samuel and 1+2 Kings, percentage of DOM with definite direct object

The tendencies are clearly visible, even though there is still a certain amount of variation. In the following we discuss examples that show the detailed comparison between the different translations. In (36) the verb *tomar* ('take') is of class 3, i.e. it prefers to take inanimate direct objects. However, as in the example given, it can also take animate ones. In the translation from the 14th century, the direct object is left moved, which we interpreted as being topicalized. Accordingly, it is DOM-marked. In the B-version from the 16th century, it is not moved and not marked. Both contemporary texts DOM-mark the object, as expected.[8]

(36)   1 Samuel 8, 13:

A (14th century)	B (16th century)	C (20th century) (Spain)	D (20thc.) (Am)
E <u>a</u> vuestras fijas ***tomará*** por espeçieras e cosineras e panaderas.	***Tomará*** también <u>ø</u> vuestras hijas para que sean perfumadoras, cocineras, y amasadoras.	***Tomará*** también <u>a</u> vuestras hijas para perfumistas, cocineras y amasadoras.	***Tomará*** también <u>a</u> vuestras hijas para perfumistas, cocineras y panaderas.
'He will take your daughters to be perfumers and cooks and bakers.'			

At the other end of the Scale of verbal classes is the verb *matar* 'to kill' of class 1, i.e. it only has a strong preference to take animate direct objects. As shown in table 3, objects of *matar* are highly affected by the verb and are almost always animate or human. There we would expect a high degree of DOM marking during all periods of time, as is evidenced in (37).

(37) 1 Reyes 19, 1:

A (14th century)	B (16th century)	C (20th century) (Spain)	D (20thc.) (Am)
E notificó acab a ysebel todo lo que fiso elías e como ***mató Ø todos los profetas*** a espada.	Y Achâb dió la nueva á Jezabel de todo lo que Elías había hecho, de como ***había muerto*** á cuchillo **á todos los profetas**.	Acab dio a Jezabel la noticia de todo lo que Elías había hecho y de cómo ***había matado*** a espada **a todos los profetas**.	Y Acab le contó a Jezabel todo lo que Elías había hecho y cómo ***había matado*** a espada **a todos los profetas**.
'Now Ahab told Jezebel everything Elijah had done and how he had killed all the prophets with the sword.'			

In (38), however, we see the oldest translation varies between *mató* ('he killed') ... *el capitán* in verse 3 and *matara* ('he had killed') ... *al capitan* in the next verse. The B version uses different lexical items, *herir* ('to hurt') *la guarnición* without marker, while version C uses *atacar* ('to attack') with marker.

---

8   This example is a nice case for close comparison: One could argue that in all versions the object must be topicalized, since all texts have the same underlying text structure. In that case, however, the later translation (16th century) would be more conservative than the earlier version (12th century).

(38) Samuel 13, 3-4:

A (14th century)	B (16th century)	C (20th century) (Spain)	D (20thc.) (Am)
E *mató* jonatán Ø **el capitán** de los filisteos que estaban en gueba, …	Y Jonathán *hirió* Ø **la guarnición** de los Filisteos que había en el collado, …	Jonatán *atacó* a **la guarnición** de los filisteos que había en el collado, …	Y Jonatán *hirió* Ø **la guarnición** de los filisteos que estaba en Geba, …
E todo ysrrael oyeron desir que *matara* saul **al capitán** de los filisteos e …	Y todo Israel oyó lo que se decía: Saúl ha *herido* Ø **la guarnición** de los Filisteos; …	Cuando todo Israel supo que se decía: «Saúl ha **atacado a la guarnición** de los filisteos», …	Y todo Israel oyó decir que Saúl había *herido* Ø **la guarnición** de los filisteos, …
'Jonathan attacked the Philistine outpost at Geba, (and the Philistines heard about it. Then Saul had the trumpet blown throughout the land and said, "Let the Hebrews hear!"). So all Israel heard the news: "Saul has attacked the Philistine outpost, …'			

4.1.2 Indefinite noun phrases

While the development of the DOM-marker with definite object NPs started early, marking of indefinite object NPs starts several centuries later. Even though in our sample text we find very few indefinite direct objects, it becomes obvious that there has been some diachronic development, at least for the verbs from class 1 (i.e. that verbs that take only animate objects). Table 4 give the absolute figures and table 5 the percentages.

class		A: 14th cent.	B: 16th/17th cent.	C: 20th cent. (Euro)	D: 20th cent. (Am)
3	*poner*	0 (7)	0 (14)	1 (7)	0 (9)
	tomar	0 (8)	0 (14)	1(5)	2 (7)
2	*ver*	0 (7)	2 (10)	4 (8)	5 (9)
	hallar	0 (4)	0 (3)	1 (3)	3 (3)
1	*matar*	1 (14)	1(7)	7 (8)	9(9)
	herir	0(0)	0(7)	3 (3)	4 (4)

Table 4: Bible translation of 1+2 Samuel and 1+2 Kings, instances of DOM with indefinite direct object (number of all definite NPs in brackets)

class		A: 14th cent.	B: 16th/17th cent.	C: 20th cent. (Euro)	D: 20th cent. (Am)
3	*poner*	0%	0%	14%	0%
	tomar	0%	0%	20%	28%
2	*ver*	0%	20%	50%	56%
	hallar	0%	0%	30%	100%
1	*matar*	7%	14%	87%	100%
	herir	0%	0%	100%	100%

Table 5: Bible translation of 1+2 Samuel and 1+2 Kings, percentage of DOM with indefinite direct object

For verbs of class 3 (*tomar, poner*) we find a significant development only in the twentieth century. For verbs of class 2, *hallar* in (39) shows the different stages of development: Only in the American version of the Bible from the twentieth century, do we find the marker with the indefinite object NP.

(39)   1 Samuel 10, 2

A (14th century)	B (16th century)	C (20th century) (Spain)	D (20[th]c.) (Latin America)
En yéndote oy de mí fallarás ø dos omnes çerca la sepultura de rachel …	Hoy, después que te hayas apartado de mí, hallarás ø dos hombres junto al sepulcro de Rachêl, …	Hoy, después que te hayas apartado de mí, hallarás ø dos hombres junto al sepulcro de Raquel,….	Cuando te apartes hoy de mí, hallarás **a dos hombres** cerca del sepulcro de Raquel, …
'When you leave me today, you will meet two men near Rachel's tomb …'			

For verbs of class 1 (only animate objects) we find an interesting situation. The case for *herir* and *matar* is complex since both verbs can substitute for each other, which results in the somewhat unexpected distribution in table 5. Example (40) reveals the full complexity of our data. We find three instances of the verb *matar* or *herir*. In one and the same verse, the first instance is a partitive for A with *matar* and definite NPs with *herir* (B, D) and *hizo morir* 'make die' (C). The second instance is an indefinite NP-object (*cinquenta mill e setenta omnes* 'fifty thousand and seventy men'). A and B do not mark, while C and D do. Finally, the last instance in that verse has in B the pronoun *le*, while in C the pronoun *lo* and in D the full NP *al pueblo*.

(40)   1 Samuel 6, 19

A (14th century)	B (16th century)	C (20th century) (Spain)	D (20[th]c.) (Latin America)
E *mató* de los omnes de betsemes, porque vieron el arca del señor, e *mató* en el pueblo ø **çinquenta mill e setenta omnes**. E pusieron luyto el pueblo, ca *mató* el señor en el pueblo **grant matanza**.	Entonces **hirió** Dios **á los de Beth-semes**, porque habían mirado en el arca de Jehová; **hirió** en el pueblo ø **cincuenta mil y setenta hombres**. Y el pueblo puso luto, porque Jehová **le había herido** de tan gran plaga.	Entonces Dios **hizo** *morir* **a los hombres** de Bet-semes, porque habían mirado dentro del Arca de Jehová. **Hizo morir a cincuenta mil setenta hombres** del pueblo. Y lloró el pueblo, porque Jehová **lo había herido** con una mortandad tan grande.	El Señor **hirió a los hombres** de Bet-semes porque habían mirado dentro del arca del SEÑOR. De todo el pueblo *hirió* **a cincuenta mil setenta hombres**, y el pueblo lloró porque el SEÑOR **había herido al pueblo** con gran mortandad.
'But God struck down some of the men of Beth Shemesh, putting seventy [c] of them to death because they had looked into the ark of the LORD. The people mourned because of the heavy blow the LORD had dealt them.'			

4.1.3 Summary and further questions

Our very detailed and restricted corpus search in four Bible translations of the same chapters from the fourteenth to the twentieth century has shown that there is clear evidence for the evolution of DOM in Spanish. By examining identical sentences in identical contextual settings, we could show that the marker *a* becomes more frequent in later Bible versions. However, we were not able to corroborate the claim that topicality is a trigger for DOM-spreading into the definiteness slot or specificity for moving into the indefinite slot. We found rather that the evolution and the pace with which the evolution takes place depends strongly on the verb class. Definite NPs differ from indefinite in that they start to become marked at an earlier time – approximately three to four centuries earlier, as illustrated in the two charts below:
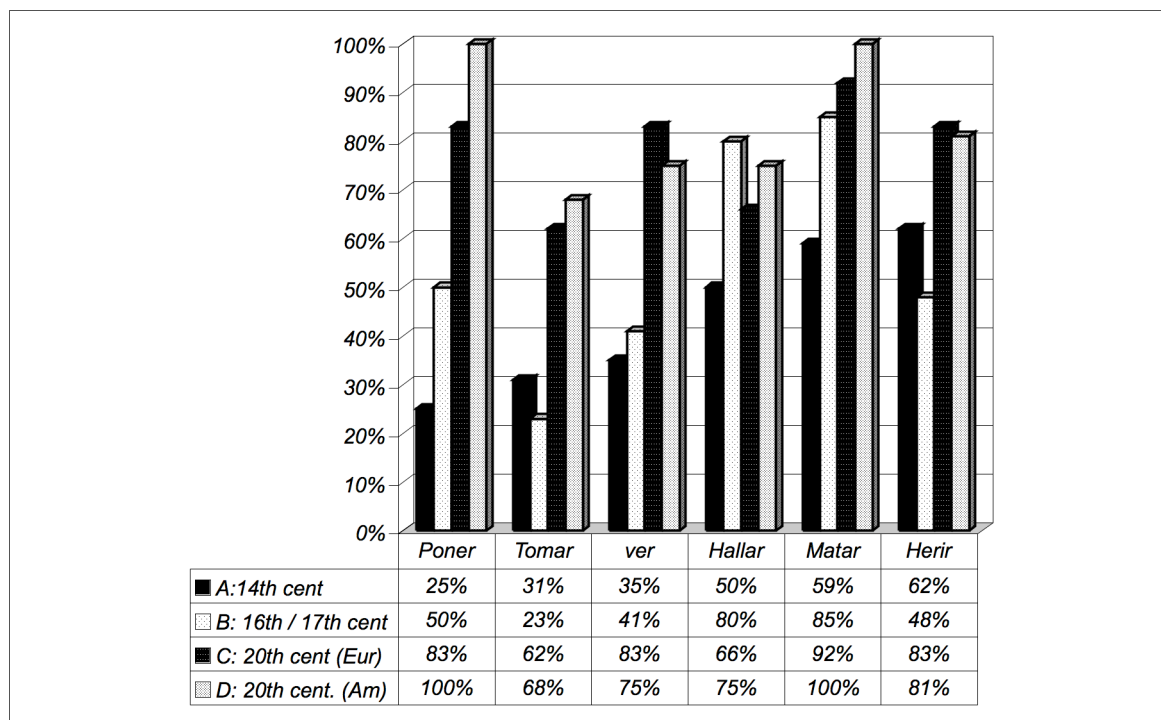
	Poner	Tomar	ver	Hallar	Matar	Herir
■ A:14th cent	25%	31%	35%	50%	59%	62%
☐ B: 16th / 17th cent	50%	23%	41%	80%	85%	48%
■ C: 20th cent (Eur)	83%	62%	83%	66%	92%	83%
▦ D: 20th cent. (Am)	100%	68%	75%	75%	100%	81%

Table 6: Percentage of DOM-marking of definite object NPs depending on Bible translation (Samuel / Kings) and verb class

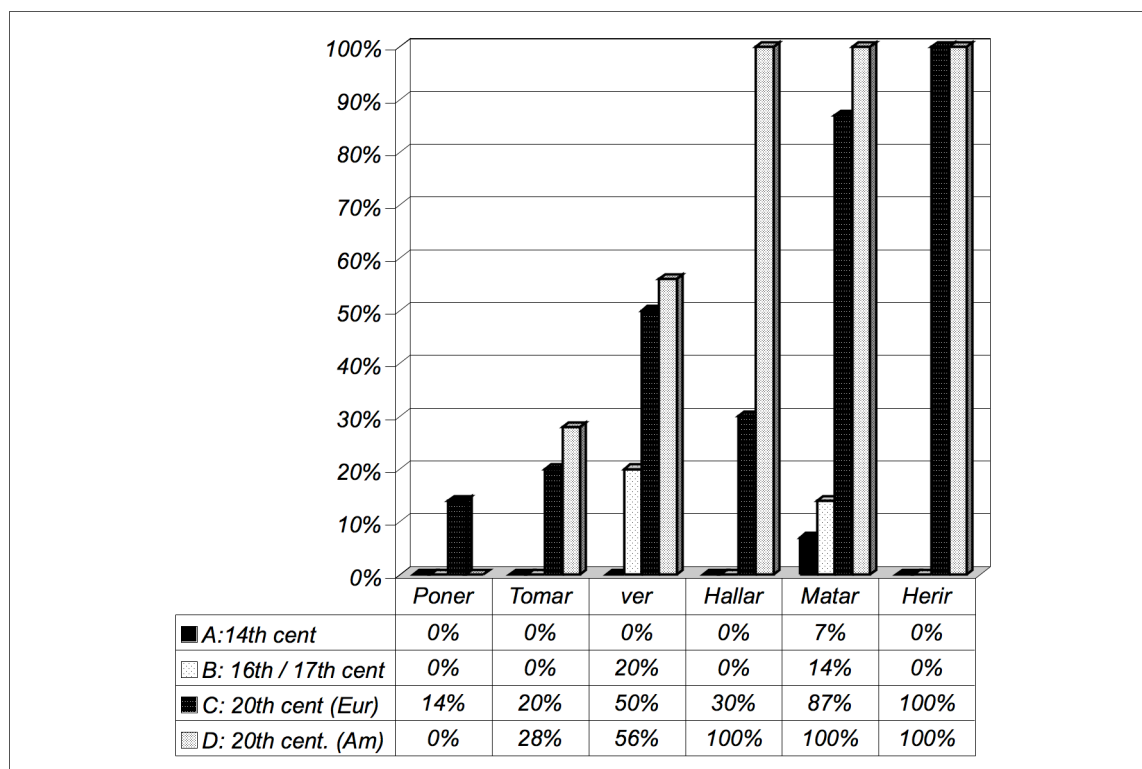|	Poner	Tomar	ver	Hallar	Matar	Herir
■ A:14th cent	0%	0%	0%	0%	7%	0%
☐ B: 16th / 17th cent	0%	0%	20%	0%	14%	0%
■ C: 20th cent (Eur)	14%	20%	50%	30%	87%	100%
▦ D: 20th cent. (Am)	0%	28%	56%	100%	100%	100%

Table 7: Percentage of DOM-marking of indefinite object NPs depending on Bible translation (Samuel / Kings) and verb class

Both charts clearly indicate that DOM-marking develops along the axes of time and verbal class. The third main factor is the position of the object on the Referentiality Scale: Indefinite objects come to show the same pattern as definite ones, but three to four centuries later. The questions that arise from these observations are: (i) The generalization for marking definite

and indefinite objects was based on selected chapters of the Bible. Is the generalization valid for the whole Bible? (ii) What has happened between early stages of the language and later stages? Our corpora were somewhat coarse grained since we had only access to data from the fourteenth, sixteenth, and twentieth centuries. A more fine grained analysis would help us to see the development in more detail.

   We will address both questions in the next two sections. Firstly, we extend a sample search to the whole Bible, and then we make some searches in the *Corpus del Español* with texts from the twelfth to the nineteenth century.

4.2 The whole Bible as corpus

Three of the four versions of the Bible translations are available on-line (see (34) above for a more detailed description).

(41)   Bible translations used in the in the on-line corpus search

Version B: 16th / 17th century
Reina Valera Antigua (1569/1602). Source: http://www.biblegateway.com

Version C: 20th (European Spanish)
Europa Reina Valera (1995) (United Bible Societies).
Source: http://www.biblegateway.com/

Version D: 20th century (American Spanish)
La Biblia de las Américas (1971) (The Lockman Foundation).
Source: http://www.biblegateway.com/

The on-line versions only provided the text, but no kind of morphological or syntactic information. Therefore we had to search for word forms, rather than for lemmata. We decided to check whether more instances from the whole Bible would confirm the tendencies we found in the last section by analyzing all instances in 1 Samuel 1-10. We decided to search for more instances of *ver* in the whole Bible, but to avoid the complication of searching different word forms (*ver, ve, vi, veia, visto* etc.) we restricted the search to forms beginning in *ve-* and to the participle *visto*. The result is summarized in table 8, where we have listed instances of human direct definite and indefinite direct objects. The total numbers are 43 for the B-version, 65 for C, and 68 for D. These are numbers that allow for stabler generalizations. However, the number of indefinite objects is only around one fifth of the number of definite objects.

ver (instances)	B: 16th/17th cent.	C: 20th cent. (Euro)	D: 20th cent. (Am)
def Ø	12	4	4
def +a	24	51	55
indef Ø	6	7	4
indef +a	1	3	4
all instances	43	65	68

**Table 8: Extended search for direct objects ([+human], [±definite]) selected word forms of *ver*
in three electronically available Bible translations**

Tables 9 and 10 compare the results from the last section, i.e. from the investigation of the two books of Samuel and the two books of Kings with the result from our extended search. Both tables unequivocally confirm the earlier results. Table 9 for the definite direct objects demonstrates that the tendencies of DOM-marking are even stronger in the broader corpus. The numbers for indirect objects in table 10 are also very similar in the two searches.[9]

---

[9]   While the second extended search did not result in many more instances, it gives different records and thus

ver	A: 14th cent.	B: 16th/17th cent.	C: 20th cent. (Euro)	D: 20th cent. (Am)
Samuel / Kings	7 (20)	9 (22)	24 (29)	15 (20)
	35%	41%	83%	75%
extended search	--	24 (36)	51 (55)	55 (58)
	--	67%	93%	95%

Table 9: Comparison between search result in Samuel / Kings and an extended search for DOM-marking with definite object NPs

ver	A: 14th cent.	B: 16th/17th cent.	C: 20th cent. (Euro)	D: 20th cent. (Am)
Samuel / Kings	0 (7)	2 (10)	4 (8)	5 (9)
	0%	20%	50%	56%
extended search	--	1 (7)	3 (10)	4 (8)
	--	14%	30%	50%

Table 10: Comparison between search result in Samuel / Kings and an extended search for DOM-marking with indefinite object NPs

The detailed comparisons among the different translations reveal interesting facts. As expected, the oldest translation from the sixteenth century exhibits DOM-marked direct objects less frequently. We discuss below some instances of DOM-marking (or the lack of) for indefinite direct objects. In (42) all three versions mark the indefinite direct object, which is a very long and very descriptive noun phrase: *a un hijo de Isaí de Belén que sabe tocar* ('a son of Jesse of Bethlehem who knows how to play the harp.'). In (43) from Proverbs 26, 12 the B-version from the sixteenth century uses the bare noun *hombre* modified by a complex adjective *sabio en su opinion*, while the contempory C and D-versions use an indefinite noun with a relative clause *a un hombre que se tiene por sabio,* both in the sense of 'a man wise in his own eyes'.

(42)   1 Samuel 16:18

B (16th century)	C (20th century) (Spain)	D (20thc.) (Latin America)
He aquí yo he **visto á un hijo** de Isaí de Beth-lehem, que sabe tocar.	He **visto a un hijo** de Isaí de Belén que sabe tocar	he **visto a un hijo** de Isaí, el de Belén, que sabe tocar
'I have seen a son of Jesse of Bethlehem who knows how to play the harp.'		

(43)   Proverbs 26, 12

B (16th century)	C (20th century) (Spain)	D (20thc.) (Latin America)
¿Has **visto hombre** sabio en su opinión?	¿Has **visto a un hombre** que se tienepor sabio?	¿Has **visto a un hombre** que se tiene por sabio?
'Do you see a man wise in his own eyes? There is more hope for a fool than for him.'		

To summarize, the extended corpus search in the whole Bible translation (in the electronically available versions) confirmed our findings in the last sections. The diachronic development of DOM-marking for verb class 2 (*ver, hallar*) for definite object NPs started in the fourteenth century and increased to nearly 100 percent in the twentieth century. The marking of indefinite direct object NPs started around four centuries later, in the sixteenth century, and has arrived at not more than 50 percent in the twentieth century, which is comparable to the situation for definite objects in the sixteenth century. There seems to be an interesting contrast between the European and the American contemporary Spanish. The latter seems to be more advanced with respect to DOM-marking of indefinite objects. In this context, we like to add the following observation for a contrast between the European translations and the American

---

confirms the first search.

one, as illustrated in (44) from Psalm 50:18. For the generically used 'a thief', both the older and the contemporary European Spanish versions (B and C) use the definite form with the DOM-marker *al ladron* 'DOM-the thief', while the contemporary American Spanish version uses the indefinite *a un ladron* 'DOM a thief'. Note that neither form is referential nor specific. This interesting case might motivate the extension of DOM-marking from specific indefinite to non-specific indefinites by analogy to non-referential definite cases. This observation needs further investigation.

(44)   Psalm 50:18

B (16th century)	C (20th century) (Spain)	D (20thc.) (Latin America)
Si **veías al ladrón**, tú corrías con él; Y con los adúlteros era tu parte	Si **veías al ladrón**, tú corrías con él, y con los adúlteros era tu parte	Cuando **ves a un ladrón**, te complaces con él,y con adúlteros te asocias
'When you see a thief, you join with him; you throw in your lot with adulterers.'		

4.3 *Corpus del Español*, twelfth to nineteenth century

Useful as they are, our Bible searches are somewhat coarse grained, and additionally we are not quite sure how archaic Bible translations are. Therefore we extended our corpus search again, this time to the *Corpus del Español* of Mark Davies (*http://www.corpusdelespanol.org*). This corpus comprises 100 million words of Spanish texts from the twelfth to the nineteenth century. The corpus interface allows one to search for lemmata, rather than for word forms (as in simple text files as the Bible texts). However, our searches were still very time-consuming since we had to select the human definite or indefinite direct objects by hand. Only 5 to 8 percent of all direct objects were identifiable as human and definite or indefinite. The others were either nonhuman or human and of a different type on the Referentiality Scale, such as clitics, personal pronouns, proper names and different types of quantifiers. Depending on the availability of texts, we searched all instances of a lemma if it produced fewer than 1000 tokens.

Due to time limits we restricted our searches to class 1 and class 3. We expected to find the early development of class 1 (*matar, herir*) and a very late development in class 3 (*tomar, poner*). We first present the particular results for *matar*, then for *tomar*, and give finally a comparison of all the verbs.

4.4.1 *Matar*

The verb *matar* ('to kill') from Class 1 (that takes only animate direct objects) is the starting point of the development of DOM in the history of Spanish. In the twelfth century we already find exactly 50 percent of definite direct objects marked with *a*, as shown in table 12. Table 11 shows the absolute token count we found in each corpus search.

matar	12th cent	13th cent	14th cent	15th cent	16th cent	17th cent	18thcent	19th cent
def Ø	13	12	10	6	7	2	3	1
def +a	13	12	13	14	14	18	19	20

Table 11: Instances of DOM-marking of direct human definite object NPs according to the *Corpus del Español*
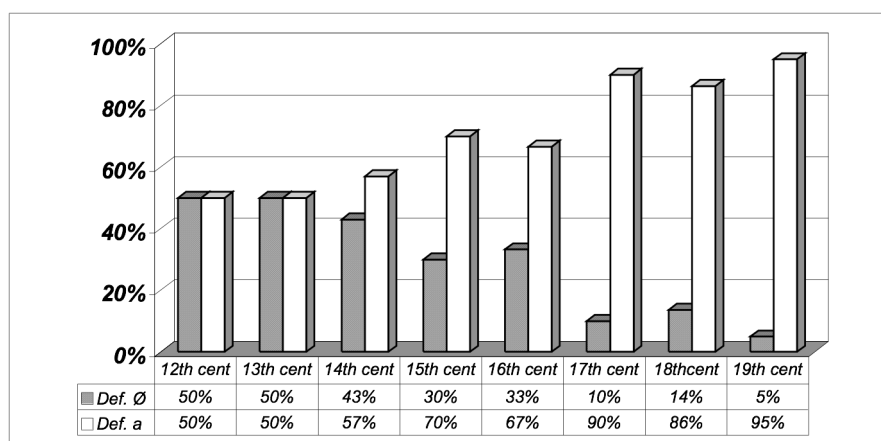
**Table 12: Percentage of DOM-marking of direct human definite object NPs
according to the *Corpus del Español***

As expected, for indefinite direct objects we find that the DOM-marking starts much later, in the Davies corpus not before the seventeenth century. This confirms the finding from section 4.1, where we compared Bible translations. Table 13 provides the absolute number, and table 14, the percentages:

matar	12th cent	13th cent	14th cent	15th cent	16th cent	17th cent	18thcent	19th cent
indef Ø	20	20	19	18	18	16	18	9
indef +a	0	2	0	3	2	4	4	12

**Table 13: Instances of DOM-marking direct of human indefinite object NPs
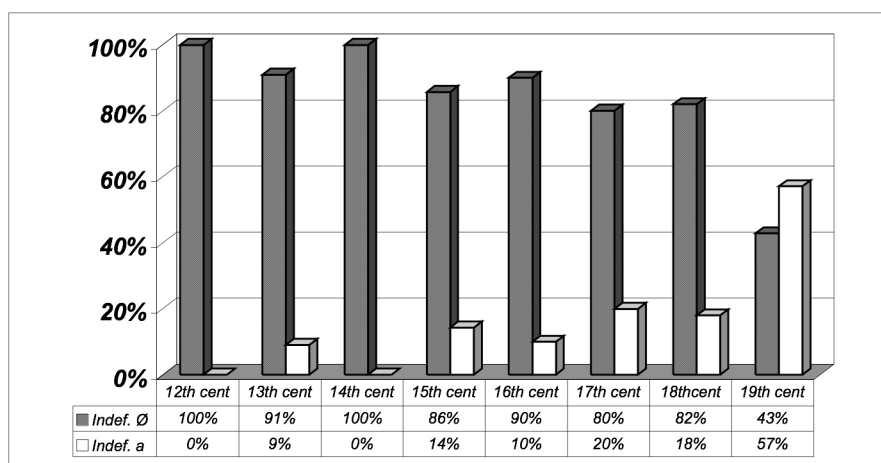according to the *Corpus del Español***

**Table 14: Percentage of DOM-marking of direct human indefinite object NPs
according to the *Corpus del Español***

4.4.2 *Tomar*

The verb *tomar* ('to take') from class 3 (i.e. the class that prefers inanimate direct objects) shows an increasing use of DOM-marking with definite objects-NPs from the twelfth to the nineteenth century. However, it seems that the development is two centuries later than the one for *matar* described in the last subsection. *Tomar* has 50 percent DOM-marking in the fourteenth century (*matar* in the twelfth century) and 90 percent in the nineteenth century (*matar* in the seventeenth century.)

tomar	12th cent	13th cent	14th cent	15th cent	16th cent	17th cent	18thcent	19th cent
def Ø	32	25	16	9	4	5	2	2
def +a	14	24	16	14	15	2	5	15

**Table 15: Instances of DOM-marking of direct human definite object NPs
according to the *Corpus del Español***

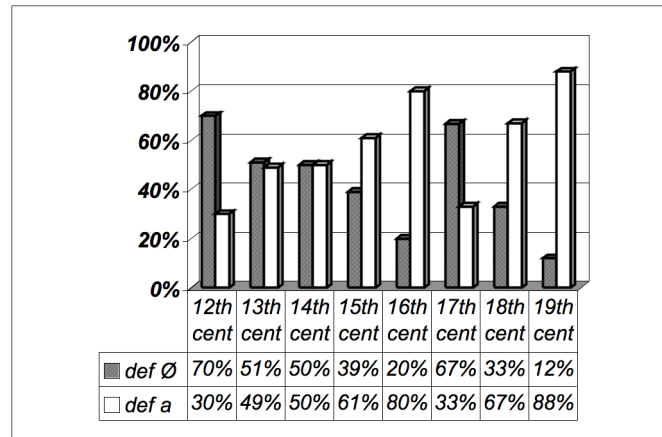|	12th cent	13th cent	14th cent	15th cent	16th cent	17th cent	18th cent	19th cent
def Ø	70%	51%	50%	39%	20%	67%	33%	12%
def a	30%	49%	50%	61%	80%	33%	67%	88%

**Table 16: Percentage of DOM-marking of direct human definite object NPs
according to the *Corpus del Español***

As expected, DOM-marking of indefinite direct objects is even more delayed. We find not much marking before the nineteenth century, and even there the absolute numbers are not very high, as summarized in tables 17 and table 18:

tomar	12th cent	13th cent	14th cent	15th cent	16th cent	17th cent	18thcent	19th cent
indef Ø	28	5	8	37	9	9	15	9
indef +a	1	0	1	1	0	2	3	4

**Table 17: Instances of DOM-marking of direct human indefinite object NPs
according to the *Corpus del Español***

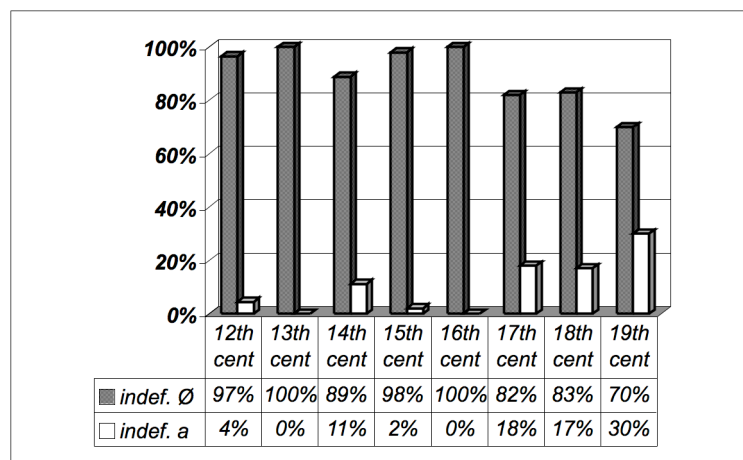|	12th cent	13th cent	14th cent	15th cent	16th cent	17th cent	18th cent	19th cent
indef. Ø	97%	100%	89%	98%	100%	82%	83%	70%
indef. a	4%	0%	11%	2%	0%	18%	17%	30%

**Table 18: Percentage of DOM-marking of indirect human indefinite object NPs
according to the *Corpus del Español***

4.4.3 Comparing verb classes through time

We can now combine the development in the different verb classes: We take two verbs from class 3 (*tomar, poner*) and two from class 1 (*herir, matar*). Table 19 shows that we have a continuously increasing probability of DOM-marking for definite direct object.
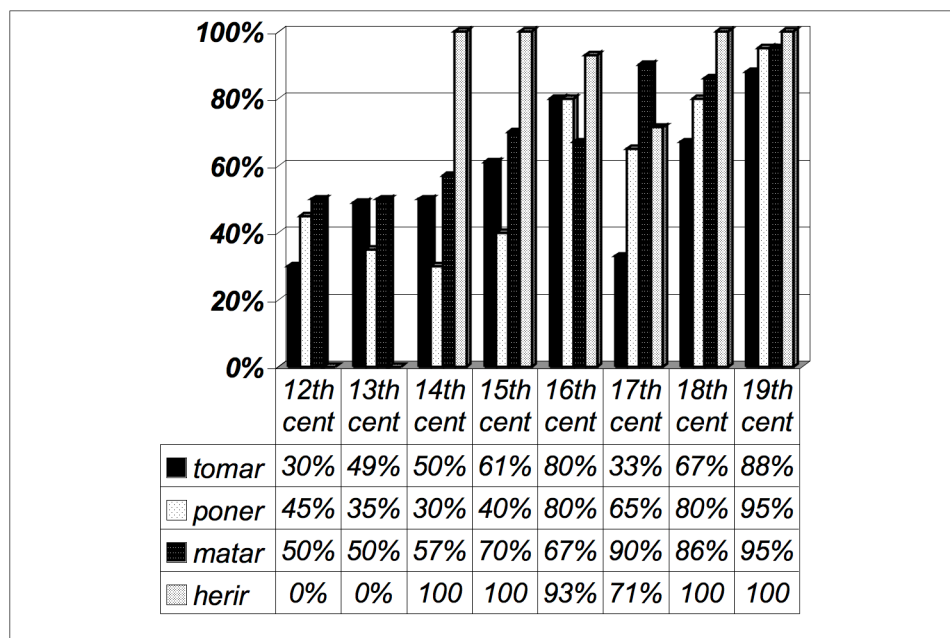

	12th cent	13th cent	14th cent	15th cent	16th cent	17th cent	18th cent	19th cent
■ *tomar*	30%	49%	50%	61%	80%	33%	67%	88%
▨ *poner*	45%	35%	30%	40%	80%	65%	80%	95%
■ *matar*	50%	50%	57%	70%	67%	90%	86%	95%
▨ *herir*	0%	0%	100	100	93%	71%	100	100

**Table 19: Percentage of DOM-marking of indirect human definite object NPs
according to the *Corpus del Español* depending on verb-class and time**

The same is the case for indefinite direct objects, but with a delay of 3 to 4 centuries. We expect a further development of the DOM-marking in Spanish, until all direct objects are marked.
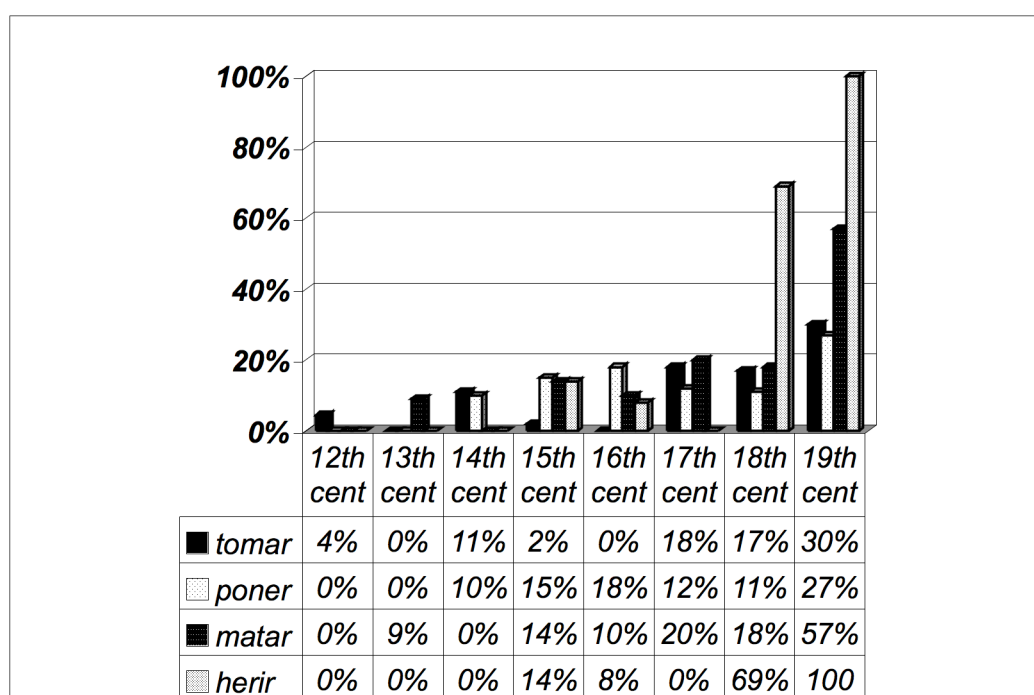

	12th cent	13th cent	14th cent	15th cent	16th cent	17th cent	18th cent	19th cent
■ *tomar*	4%	0%	11%	2%	0%	18%	17%	30%
▨ *poner*	0%	0%	10%	15%	18%	12%	11%	27%
■ *matar*	0%	9%	0%	14%	10%	20%	18%	57%
▨ *herir*	0%	0%	0%	14%	8%	0%	69%	100

**Table 20: Percentage of DOM-marking of indirect human indefinite object NPs
according to the *Corpus del Español* depending on verb-class and time**

5. Summary and further research

Our original findings from this first corpus search show for definite human direct objects a diachronic development of *a*-marking depending on verb class. The same development can be observed for indefinite human direct objects, but with some delay. In a second step, we extended our corpus search to the whole Bible, and in a third one we used an even broader text corpus (the electronically available *Corpus del Español* from the twelfth to the nineteenth century). These corpus searches confirmed our original hypothesis that the verb class is a main parameter for DOM in Spanish and that DOM-spreading depends on time, referential properties of nouns, and verbal class. In general, this diachronic corpus search strongly suggests that Differential Object Marking is determined by parameters in a multi-dimensional space.

6. References

Aissen, Judith 2003. Differential object marking: iconicity vs. economy. *Natural Language and Linguistic Theory* 21, 435-483.

Enrique-Arias, Andrés 2007. Biblias romanceadas e historia de la lengua. To appear in: *Actas del congreso de Historia de la Lengua de Mérida*.

Bello, Andrés 1847. *Gramática de la lengua castellana destinada al uso de los americanos. Con las notas de Rufino José Cuervo. Vol. 2.* Madrid: Arco Libros, estudio y edición de Ramón Trujillo 1988.

Bolinger, Dwight L. 1953. Verbs of being. *Hispania* 36, 343-345.

Bleam, Tonia 1999. *Leísta Spanish and the Syntax of Clitic Doubling*, PhD. Dissertation, University of Delaware.

Bossong, Georg 1985. Empirische Universalienforschung. Differentielle Objektmarkierung in den neuiranischen Sprachen. Tübingen: Narr.

Brugè, Laura & Gerhard Brugger 1996. On the acusative *a* in Spanish. *Probus* 8, 1-51.

Comrie, Bernard 1975. Definite and animate direct objects: a natural class. *Linguistica Silesiona* 3, 13-21.

Croft, William 1988. Agreement vs. case marking and direct objects. In: M. Barlow & C.A. Ferguson (eds.). *Agreement in Natural Language. Approaches, Theories, Descriptions.* Stanford: Center for the Study of Language and Information, 159-179.

Croft, William 2003. Typology and Universals. Cambridge: Cambridge University Press, 2nd edition.

Cysouw, Michael & Bernhard Wälchli 2007. Parallel texts: using translational equivalents in linguistic typology. *Sprachtypologie und Universalienforschung* 60, 95-99.

Fernández Ramírez, Salvador 1951. *Gramática española. Vol. 4: El verbo y la oración (volumen ordenado y completado por Ignacio Bosque)*. Madrid: Arco/Libros, segunda edición 1986.

Fish, Gordon A. 1967. 'A' with Spanish direct object. *Hispania* 50, 80-85.

Gabriel, Christoph / Rinke, Esther (in preparation): Information packaging and the rise of clitic doubling in Spanish. To appear in: G. Ferraresi & R. Lühr (eds.). *The Role of Information Structure in Language Change.* Berlin: Mouton de Gruyter.

García García, Marco (this volume). Differential object marking with inanimate objetcs, 63-84.

Haspelmath, Martin 1997. *Indefinite Pronouns*. Oxford: Clarendon.

von Heusinger, Klaus & Georg A. Kaiser 2003. Animacy, specificity, and definiteness in Spanish. In: K. von Heusinger & G.A. Kaiser (eds.). *Proceedings of the Workshop "Semantic and Syntactic Aspects of Specificity in Romance Languages"*. Arbeitspapier 113. Fachbereich Sprachwissenschaft, Universität Konstanz, 41-65.

von Heusinger, Klaus & Georg A. Kaiser 2005. The evolution of differential object marking in Spanish. In: K. von Heusinger, G.A. Kaiser & E. Stark (eds.). *Proceedings of the Workshop "Specificity and the Evolution / Emergence of Nominal Determination in Romance"*. Arbeitspapier 119. Fachbereich Sprachwissenschaft, Universität Konstanz, 33-69.

von Heusinger, Klaus & Georg A. Kaiser 2007. Differential object marking and the strength of case relations. Ms. Universität Stuttgart.

von Heusinger, Klaus & Udo Klein 2007. Differential Object Marking and the Strength of Case Relation. Ms Universität Stuttgart**.**

de Hoop, Helen & Narasimhan, Bhuvana 2005. Differential case-marking in Hindi: In: M. Amberber & H. de Hoop (eds.). *Competition and Variation in Natural languages the Case for Case.* Amsterdam Oxford: Elsevier, 321-345.

Hopper, Paul & Sandra Thompson 1980. Transitivity in grammar and discourse. *Language* 56, 251-299.

Kaiser, Georg A. 2005. Bibelübersetzungen als Grundlage für empirische Sprachwandeluntersuchungen. In: C.D. Pusch, J. Kabatek & W. Raible (eds.). *Romanistische Korpuslinguistik II. Romance Corpus Linguistics*

II. Korpora und diachrone Sprachwissenschaft. Corpora and Diachronic Linguistics. Tübingen: Narr, 71-85.

Laca, Brenda. 2002. Gramaticalización y variabilidad - propriedades inherentes y factores contextuales en la evolución del acusativo preposicional en español. In: A. Wesch (Hg.): *Sprachgeschichte als Varietätengeschichte: Beiträge zur diachronen Varietätenlinguistik des Spanischen und anderer romanischer Sprachen. Festschrift für Jens Lüdtke zum 60. Geburtstag*. Tübingen: Stauffenburg, 195-303.

Laca, Brenda. 2006. El objeto directo. La marcación preposicional. In: C. Company (dir.). *Sintaxis historica del español. Primera parte: La frase verbal. Volumen 1*. Mexico: Fondo de cultura económica / Universidad Nacional Autónoma de México, 423-475.

Leonetti, Manuel 2004. Specificity and differential object marking in Spanish. *Catalan Journal of Linguistics* 3, 75-114 [revised version of: Specificity and object marking: the case of Spanish *a*. In: K. von Heusinger & G.A. Kaiser (eds.). *Proceedings of the Workshop "Semantic and Syntactic Aspects of Specificity in Romance Languages"*. Arbeitspapier 113. Fachbereich Sprachwissenschaft, Universität Konstanz 2003, 67-101].

Melis, Chantal 1995. El objeto directo personal en *El Cantar de Mio Cid*. Estudio sintáctico-pragmático. In: C. Pensado (ed). *El complemento directo preposicional*. Madrid: Visor, 133-163.

Mohanan, T. (1994): Argument structure in Hindi, CSLI Publications, Stanford.

Moravcsik, Edit 1978. On the case marking of objects. In: J. Greenberg (ed.). *Universals of Human Language IV*. Stanford: Stanford University Press, 249-290.

Naess, Ashild 2004. What markedness marks. The markedness problem with direct objects. *Lingua* 114, 1186-1212.

Parodi, Teresa. 1998. Aspects of clitic doubling and clitic clusters in Spanish. In: R. Fabri, O. Albert & Teresa Parodi (eds.). Models of Inflection. Tübingen: Niemeyer, 85-102.

Pensado, Carmen 1995. El complemento directo preposicional. Estado de la cuestión y bibliografía comentada. In: C. Pensado (ed). *El complemento directo preposicional*. Madrid: Visor, 11-60.

Picallo, Carme 1994. A mark of specificity in indefinite nominals. *Catalan Working Papers in Linguistics 4*, 143-167.

Pottier, Bernard. 1968. L'emploi de la préposition *a* devant l'objet en espagnol. *Bulletin de la Société de Linguistique* 1, 83-95.

Silverstein, Michael 1976. Hierarchy of features and ergativity. In: R. Dixon (ed.). Grammatical Categories in Australian Languages. Canberra: Australian Institute of Aboriginal Studies, 112-171.

Real Academia Española 1973. *Esbozo de una gramática de la lengua española*. Madrid: Espasa Calpe.

Torrego Salcedo, Esther 1999. El complemento directo preposicional. In: I. Bosque & V. Demonte (eds.). *Gramática descriptiva de la lengua española Vol. 2: Las construcciones sintácticas fundamentales. Relationes temporales, aspectuales y modales*. Madrid: Espasa Calpe, 1779-1805.

Weissenrieder, Maureen. 1991. A functional approach to the accusativce *a*. *Hispania* 74, 146-156.