

TOWARDS AN ACCOUNT OF DIFFERENTIAL OBJECT MARKING IN ROMANIAN

Alina-Mihaela Tigău

Abstract: This paper proposes an analysis of Differential Object Marking in present-day Romanian along the lines of the DRT framework put forth by Kamp and Reyle (1993) and developed by Farkas and de Swart (2001), Farkas (2002), and Farkas and von Heusinger (2003). We provide an answer to the question as to what exactly (i.e. what semantic parameter) is responsible for Differential Object Marking in Romanian. A relevant answer seems to be the notion of “determined reference” which points to the stability of value given to a variable across verifying assignment functions – the narrower the allowed variation, the more stable the expression is. It seems, however, that other factors such as “animacy” or “the intention of the speaker” also need to be taken into account.

Keywords: differential object marking, determined reference, stability of reference, animacy

1. Introduction

The Differential Object Marking (DOM) parameter draws a line between languages such as Spanish, Romanian, Turkish, or Russian, which show a propensity for overtly marking those objects which are high in animacy, definiteness or specificity, and other languages, English included, where such a distinction between types of direct objects is not at stake. The former set of languages shows a propensity for overtly marking those objects which are high in animacy, definiteness or specificity. Thus, in Spanish, the use of the preposition *a* is correlated with animacy and referentiality/specificity (Leonetti 2004); in Turkish, only specific objects may be overtly case marked or trigger verbal agreement (Enç 1991, Kennelly 2004a, b). In other, more exotic languages such as Makua (Bantu, Mozambique), the differential object marker is obligatory with those objects whose referent is human (Morimoto 2002); Woolford (1999) shows that Ruwund (Bantu, Congo and Angola) employs DOM for animate specific objects.

As already pointed out above, Romanian ranges among those languages where the DOM parameter is set positively as it always overtly case marks by means of the preposition *pe* those direct objects which are considered to be prominent.¹

We will approach DOM by considering the semantic noun phrase typology in an attempt to distinguish between the various types of definite and indefinite DPs found in the language within the DRT framework put forth by Kamp and Reyle (1993) and developed by Farkas and de Swart (2001) and Farkas (2002). One of the basic tenets of this approach is that all argumentative DPs contribute a discourse referent and a condition on it. The idea underlying our analysis, which we adopted from Farkas (2002), is that DPs differ with respect to one another with respect to the value conditions which they contribute. We developed an

¹ We have employed the word prominence because we have not yet established which is the exact factor that triggers DOM in Romanian and because (as we have already seen) languages differ with respect to what types of objects exactly they overtly case mark. Therefore, for the time being, the term prominence is to be understood as “that specific feature which makes the object stand out for overt marking”.

analysis of DOM in Romanian sentences taking into account the value conditions which these DPs introduce. The core notion which we employed in this respect was that of “determined reference”, which seems to be the underlying parameter organizing DPs along the definiteness scale provided by Aissen (2003). DPs with determined reference are obligatorily marked by *pe*. The few exceptions will be also be accounted for.

The animacy scale of Aissen (2003) remains an important factor when it comes to differentially marking the object DP and can sometimes override the parameter of determined reference.

This paper is organized as follows: the remainder of this section draws some distinctions between the members of the set of semantically definite DPs and between definite and indefinite DPs. Section 2 analyzes those cases where *pe* is obligatory, i.e. with proper names and definite pronouns. Section 3 focuses on those cases where DOM is optionally employed and is further split into several subsections devoted to definite descriptions, the case of partitives and indefinite descriptions. Section 4 presents some cases where the use of DOM is impossible and section 5 contains the conclusions.

1.1 Semantically definite DPs

Under the umbrella term “semantically definite DPs” one traditionally lumps together definite pronouns, proper names and definite descriptions, as they behave in many respects as a natural class. In what follows we will try to understand which the common denominator for the elements within this class is and to identify the exact features which distinguish between its members. We shall do this by following the steps of Farkas (2002).

One has to operate a first split within the class set up above by setting apart definite pronouns and proper names on the one hand and the rest of the DPs on the other. What sets these two sub-classes apart is the fact that while the former do not have descriptive content, the latter (i.e. DPs involving a lexically headed NP) do. Farkas (2002) translates this along the lines that the value conditions contributed by DPs with descriptive content are predicative as they require the value to satisfy the predicate, whereas the value conditions contributed by definite pronouns and by proper names are equative.

1.2 What sets definite descriptions and indefinite descriptions apart?

Firstly, definite descriptions are required to refer uniquely (the uniqueness approach), i.e. their value is singleton (Farkas 2002). Note that this is what definite descriptions share with proper names, i.e. they both have unique reference.

Secondly, definite descriptions have to introduce a familiar discourse referent (or a new discourse referent which can be equated with a familiar one) (the familiarity approach). Under such a perspective, definite descriptions can be lumped together with definite pronouns.

The notion of “determined reference” is supposed to capture what is common to anaphoric and unique reference; it is a special type of uniqueness which, as Farkas puts it, “makes crucial use of the incremental nature of interpretation”. The main idea underlying this proposal is that semantic definiteness is sensitive to the latitude of choice concerning the value assigned to the variable introduced by the DP. In this respect, definite DPs are DPs for whom the choice of value is fixed. This feature draws definite DPs close to proper names and definite pronouns. What sets them apart, on the other hand, is the reason why in each case there is no choice as to the value assigned to the variable. For definite pronouns, there is no choice of value because the value condition with which they are associated is of the form $y = x$,

where x is an element of the input context and thus a variable for which f is defined. The value condition on y requires that any f' which extends f relative to y be such that $f'(y) = f(x)$. For definite pronouns the value is fixed relative to the input function.

For proper names there is no choice of value due to the fact that the value condition proper names introduce is $y = \text{Name}$; this value condition requires that any function which assigns value to y give y the value Name . In this case the value is fixed relative to the model (and the utterance world).

The variable introduced by definite pronouns and proper names meets the determined reference requirements by virtue of the equative value which they contribute.

On the other hand, definite descriptions contribute a discourse referent and a predicative condition. Farkas (2002) argues that predicative value conditions do not necessarily fix the reference of the variable introduced by the DP in the same way as equative conditions (found with proper names and definite pronouns) do.

Finally, indefinites can be defined as those DPs which are not required to have determined reference. Due to this characteristic, indefinite DPs vary greatly in what their interpretation possibilities and morphological subtypes are concerned.

2. When is *pe* obligatory?

2.1 *Pe* is obligatory with proper names

Along the lines of the DRT approach of Farkas (2002), proper names behave similarly to definite pronouns in that they introduce a new discourse referent y and engender an equative condition on it. However, with pronouns, a DP introduces a referent x in the discourse and the new discourse referent introduced by y has to pick up x . In the case of proper names, on the other hand, the value assigned to the discourse referent is equal to whatever the proper name names. In other words, the reference of a definite pronoun is crucially context dependent as opposed to that of proper names which is not.

Proper names are the most stable from the point of view of referential stability because once the parameter within the contextual world is fixed, their value is also fixed, irrespective of where they occur. As stated in 1.2, they have determined reference as there is no choice of value due to the fact that the value condition which proper names introduce is $y = \text{Name}$ and this value condition requires that any function which assigns value to y give y the value Name . The value is therefore fixed relative to the model (and the utterance world).

The parameter of determined reference imposes obligatoriness of DOM on proper names. However, the other parameter, i.e. the animacy scale, may also play a part in this respect; [-animate] proper names are not marked by means of *pe*, not even when the DP in question has determined reference. When the DP is [+human] or [-human, +animate], DOM is obligatorily employed. Consider the examples below:

- (1) a. Deseori (o) văd *(pe) Ioana stând la fereastră.
often (CL 3rd F SG ACC) see PE Ioana sitting at window.
'I often see Ioana sitting by the window.'
- b. Lizuca îl mângâie pe Patrocle îngândurată.
Lizuca CL 3rd M SG ACC pats PE Patrocle thoughtful
'Lizuca is patting Patrocle pensively.'
- c. În acea seară am admirat (*pe) Bucureștiul.
in that evening have admired PE Bucharest-the
'That evening I admired Bucharest.'

- d. Am citit (pe) Eminescu.
 have read (pe) Eminescu
 ‘I have read Eminescu’s work.’

As we can see in (1a) and (1b) *pe* is obligatory with proper names which are [+human] DPs and [+animate] DPs. On the other hand, *pe* is ungrammatical with geographical names (1c) and with [-animate] proper names, geographical names included (1c). Example (1d) stands out as an exception.

It has already been pointed out in Farkas (2002) that proper names are individual constants whose world of evaluation is fixed to the context of the speech act.

Thus, proper names acquire *pe* as a consequence of the interaction between two parameters: determined reference and the animacy scale. The former requires the obligatory use of *pe*, hence all proper names should be marked in this respect. However, the latter overrides the parameter of determined reference when it comes to [-animate] proper names; these DPs may not receive DOM. We obtain the following results:

- (2) a. [+determined reference] – obligatory DOM
 [+human] – the highest on the animacy scale – preference for DOM

 Result: obligatory DOM
- b. [+determined reference] – obligatory DOM
 [-human, +animate] – lower on the scale, optional DOM

 Result: obligatory DOM
- c. [+determined reference] – obligatory DOM
 [-human, – animate] – lowest on the scale, no DOM

 Result: no DOM (the animacy scale overrides the parameter of determined reference)

2.2 *Pe* is obligatory with definite pronouns

Following the analysis of Kamp and Reyle (1993), Farkas (2002) points to the fact that an anaphoric pronoun presupposes the introduction of a new discourse referent *y* and of a value condition $y = x$, where *x* represents a discourse referent that has been introduced prior to *y* and that is accessible to *y*. The referent *x* is actually introduced within discourse by a DP which is the antecedent of *y*. In other words the anaphoric pronoun has the same referent as the DP it refers back to.

When it comes to deictic pronouns, one has to take into account the range of discourse referents that are present within the input context and that are accessible to the deictic pronoun. The *x* is then one of these discourse referents *y* picks up – the same equative relation, i.e. $x = y$, is at stake.

The following definite pronouns are always marked by means of *pe*, irrespective of whether their referent is animate or not: personal pronouns, pronouns of politeness, reflexive pronouns, possessive pronouns, demonstrative pronouns, interrogative/relative pronouns.

Personal pronouns are always marked by *pe* when they function as direct objects, irrespective of whether their referent is animate or not. Farkas (2002) argues that personal

pronouns are always marked by *pe* because they are unconditionally dynamically stable, i.e. they are the most stable after proper names from the point of view of referential stability and this is what triggers the obligatoriness of overt case marking by means of *pe*.

- (3) Îi aşteptam pe ei cu sufletul la gură.
 CL3rd M PL ACC waited PE them M with soul-the at mouth
 ‘I could hardly wait for them to come.’

The same could be said about pronouns of politeness (4), reflexive pronouns (5) and possessive pronouns (6):

- (4) Vă strigă pe dumneavoastră, domnule Dinică.
 CL2nd PL ACC shouts PE you POLITENESS Mr. Dinică
 ‘It is you that they are calling, Mr. Dinică.’
- (5) Cine crede asta se amăgeşte pe sine.
 who believes that refl 3rd ACC fools PE self
 ‘Those who believe that deceive themselves.’
- (6) Nu i- am mai văzut pe ai mei de un car de ani.
 not clitic 3rd M PL ACC have more seen PE mine for a waggon of years
 ‘I haven’t seen my parents for a long time.’

Demonstrative pronouns may be used either as pronouns or as determiners. In the former case they are always overtly case marked irrespective of where exactly on the animacy scale the referent denoted by the demonstrative pronoun is to be found; notice that in (7c) below *acelea* ‘those’ has a [-animate] referent and is, nevertheless, overtly case marked:

- (7) a. Pe acestea din urmă le- am speriat de moarte.
 PE these latter CL3rd F PL ACC have frightened to death.
 ‘It is the latter crowd that I frightened to death.’
- b. Vrei (*pe) păpuşile acestea ?
 want (*PE) puppets-the these
 ‘Do you want these puppets?’
- c. Nu, le vreau pe acelea.
 no CL3rd F PL ACC want PE those
 ‘No, I want those ones.’

However, the situation changes when the demonstrative is used as a determiner. In this case the use of *pe* depends on the properties of the head noun. Thus in (8) below the DP *voinicul acesta* ‘this handsome man’ is overtly case marked because the head noun is [+human]. On the other hand, example (7b) above contains a [-animate] direct object *păpuşile acestea* ‘these puppets’ and cannot be overtly case marked by *pe* due to this reason.

- (8) Îl vezi pe voinicul acesta?
 CL3rd M SG ACC see PE handsome man this?
 ‘Do you see this lad?’

[-human, +animate] DPs of the type in (8) may acquire *pe*. This is in line with the behaviour of definite descriptions which we will analyze in the following sections. There too, DOM may be optionally employed.

- (9) a. Ana nu-i putea suferi pe acești câini.
 Ana not- CL3rd M PL ACC could stand PE these dogs
 ‘Ana couldn’t stand those dogs.’
- b. Îmbrac-o pe această păpușă cu hăinuțele potrivite.
 dress- CL3rd F SG ACC PE this doll with clothes suitable
 ‘Dress this doll in suitable clothes.’

Example (9b) is even more problematic as the direct object is not even [+animate]; maybe it reaches this level of prominence due to its status of an important character in the child’s world.

As Cornilescu (2000) points out, one can also group the adjectival article *cel* and the possessive *al* together with demonstratives:

- (10) Le- a ales pe cele de mătase.
 CL3rd F PL ACC has chosen PE *cel* F PL of silk
 ‘She has chosen the silk ones.’

Apparently, the DPs accompanied by *cel* behave like demonstratives in that they get overtly case-marked whenever the DP has no lexical head. When they have a semantic head, it is the semantic properties of this head that determine the use of *pe*. Unlike *cel* phrases, *al* ones always get overtly case-marked since they always lack a lexical head.

- (11) a. Cenușăreasa le- a iertat pe cele două surori ale sale.
 Cinderella CL3rd F PL ACC has forgiven PE *cel* F PL two sisters of hers
 ‘Cinderella forgave her two sisters.’
- b. Maria (le)- a ales (pe) cele două pisicuțe.
 Maria (CL3rd F PL ACC) has chosen (PE) *cel* F PL two kittens
 ‘Maria chose the two kittens.’

In what follows we will investigate the relative/interrogative pronouns *ce* ‘what’, *cine* ‘who’ and *care* ‘which (one)’. The first pronoun in the range seems not to go along the pattern put forth for the other pronouns in that it only denotes a [–animate] referent and it is never case marked overtly. Remember that pronouns get marked by *pe* irrespective of the status of their referent on the animacy scale. When the relative pronoun has a [+human] referent (the case of *cine* ‘who’), it will always be overtly case marked by means of *pe*:

- (12) Nu știu *(pe) cine ai văzut tu, dar eu unul vreau să dorm acum.
 not know (*PE) who have seen you, but I one-the want *să* sleep now
 ‘I don’t know whom you have seen, but I for one feel like sleeping now.’

Another pronoun which is always overtly case marked irrespective of its denotation is *care* ‘which (one)’. Consider:

- (13) a. Erau o mulțime de candidați și nu știam pe care să alegem.
 were a crowd of candidates and not knew PE which *să* CL3rd M SG ACC choose
 ‘There were a lot of candidates and we did not know which one to choose.’
- b. Furnicuțele cărau în spate proviziile pe care mai apoi le depozitau
 ants-the carried in back supplies-the PE which later CL3rd F PL ACC stored
 ‘The ants were carrying on their backs the supplies which they then stored.’

- c. Am văzut filmul *(pe) care mi l- ai
 have seen movie-the *(PE) which CL1st SG DAT CL3rd M SG ACC have
 recomandat.
 recommended
 ‘I saw the movie that you recommended to me.’

Thus, with the exception of the interrogative/relative pronoun *ce* ‘what’, all pronouns are obligatorily marked by *pe*, irrespective of the status of their referent on the animacy scale. This is due to the fact that the variables introduced by these DPs have determined reference, which presupposes the obligatory use of DOM on these DPs. The animacy scale may not override the parameter of determined reference.

2.3 Conclusions

Proper names and definite pronouns differ from definite descriptions in that only the former but not the latter are obligatorily marked by means of *pe*. This difference was captured in terms of the conditions on how variables introduced by DPs are assigned values. Thus, proper names and definite pronouns contribute equative conditions on the variable which they introduce – in virtue of the equative value conditions that these DPs contribute, the variables which they introduce meet the determined reference requirement. Hence these DPs are obligatorily marked by *pe*. The only exception in this case is that [–animate] proper names are not marked by means of *pe*, nor is the relative pronoun *ce* ‘what’.

3. Optional DOM: definite descriptions, partitives and indefinite descriptions

3.1 Definites + *pe*

3.1.1 Definites and determined reference

The examples above point to the fact that the preposition *pe* is optionally used with definite descriptions. In this section we will explore this optionality in marking in depth and to see whether we can come up with factors that (actually) determine DOM with definite descriptions, factors which might shed new light on the data.

The realm of definite descriptions will thus be partitioned into various sub-cases taking into account the capacity of various types of definite descriptions to acquire determined reference. Our hypothesis is that those special DPs which may achieve determined reference are obligatorily marked by means of *pe* just like proper names and definite pronouns. Determined reference overrides the animacy scale; therefore, we will expect all DPs with determined reference to be obligatorily marked by means of *pe*, irrespective of their [+/-human] and [+/-animate] status (as it happens with definite pronouns and proper names). Lack of determined reference with DPs will give rise to optionality with respect to DOM.

But let us now proceed with our analysis, which is an extension of Farkas (2002). Within the DRT framework she sketches following the lines of Kamp and Reyle (1993), argumental definite descriptions contribute a discourse referent (a variable) and a condition on it. The same happens in the case of proper nouns and definite pronouns. The only difference between these DPs consists in the different value conditions (on how variables are assigned values) that they contribute. Thus, proper names and definite pronouns contribute equative

conditions (see the sections above), whereas definite descriptions contribute a predicative condition.

Indeed, the value condition ‘woman (z)’ contributed by the definite description *the woman* below, is a predicative one, requiring the values of the discourse referent *z* to be selected from the set denoted by the NP, i.e. the set of women:

- (14) The woman laughed.

z
woman (z)
laugh (z)

The nature of value conditions contributed by these DPs is at the heart of the DOM mechanism. More precisely, the assignment of *pe* seems to be sensitive to the latitude of choice in what the value assigned to the variable introduced by a DP is concerned. For definite pronouns and proper names this choice of value is fixed by virtue of the equative conditions contributed by these DPs, which ensues determined reference. Hence both proper names and definite pronouns are obligatorily marked by means of *pe* in Romanian.

On the other hand, the predicative value conditions contributed by definite descriptions do not ensure determined reference as they do not fix the reference of the variable that definite DPs introduce. Hence the optionality of *pe* marking with definite descriptions in Romanian.

However, as pointed out by Farkas (2002: 11), there are some cases where definite descriptions may acquire determined reference. These are cases where the NP from within the definite DP denotes a singleton set either on account of its semantics, e.g. it is a superlative, or because of the properties of the model relative to which the discourse is interpreted, e.g. *the Queen of England*, *the moon*.

If we are to maintain the connection between “determined reference” and the obligatoriness of DOM, then these cases where definite descriptions acquire determined reference should be obligatorily marked by *pe*. If DOM turns out to be obligatory with definite descriptions that have acquired determined reference, then our analysis is on the right track and the notion of “determined reference” should be considered an important trigger for DOM in Romanian, perhaps overriding the animacy scale. Let us consider the facts.

3.1.2 The definite DP may denote a singleton set due to its semantics

Let us first consider the example below:

- (15) Nu (I-) am cunoscut *(pe) primul astronaut care a ajuns pe lună.
 not (CL3rd M SG ACC) have met PE first-the astronaut who has reached on moon
 ‘I haven’t met the first astronaut who reached the moon.’

As can be seen in (15), the predictions of our hypothesis are borne out for a definite DP such as *the first astronaut*. Notice that the definite DP in question is also [+human] (if we are to take into consideration the animacy scale proposed in Aissen 2003). At this point we need to inform the reader that both the examples above and those that follow below have been the subject of a grammaticality judgement task with 42 native speakers of Romanian who were required to pass judgments on their well-formedness. In what the example above is concerned,

all speakers pointed out that the variant with *pe* is incorrect, a fact which seems to verify our hypothesis that definite DPs with determined reference are obligatorily marked by *pe*.

However, in both examples above, the definite DP points to a [+human] referent and one might suppose that this is in fact the reason why the DP in question gets case-marked (as pointed out by so many linguists who point to the importance of the animacy scale). This is why in the next examples we go lower along the animacy scale and try out a definite [+animate] [-human] DP. Consider:

- (16) Nu am văzut (-o) (pe) prima cățea care a ajuns pe lună.
 not have seen CL3rdF SG ACC PE first dog which has arrived on moon
 ‘I haven’t seen the first dog which reached the moon.’

63% out of a total of 42 native speakers of Romanian that we asked to evaluate the grammaticality of such examples considered that only the variant with a clitic and *pe* was correct. The remaining 37% accepted both variants as correct.

These examples pattern with other definite descriptions that do not have determined reference and that are also optionally marked by means of *pe*:

- (17) Și eu (l-) am auzit (pe) câinele Mariei lătrând aseară.
 and me CL3rdM SG ACC have heard PE dog-the MariaDAT barking last evening
 ‘I, too, have heard Maria’s dog barking last evening.’

The optionality of DOM with [-human, +animate] DPs weakens our hypothesis according to which definite descriptions that acquired determined reference should be obligatorily marked by means of PE, irrespective of their status on the animacy scale. As it seems, only [+human] DPs with determined reference are obligatorily marked by *pe*. Therefore, when it comes to definite descriptions, one cannot say that the determined reference parameter overrides the animacy scale as it happens in the case of proper names and definite pronouns.

Furthermore, [-animate] definite descriptions with determined reference may not be marked by means of *pe*, which counts as a further weakening of our initial hypothesis. The examples below point to the fact that the animacy scale is clearly an important factor which should not be disregarded even with those definite descriptions which may acquire determined reference:

- (18) a. ?Nu- l știu pe primul obiect găsit în piramida lui Keops.
 not CL3rdM SG ACC know PE first-the object found in pyramid of Keops
 ‘I don’t know which was the first object they found in Keops’s pyramid.’
 b. *Am văzut-o pe prima farfurie zburătoare care a aterizat aici.
 have. I seen CL3rdF SG ACC PE first saucer flying which has landed here
 ‘I have seen the first flying saucer which landed here.’

3.1.3 The results so far

Our expectation with respect to definite descriptions that could acquire determined reference was for them to be obligatorily marked by means of *pe*. The examples proved, however, that only [+human, +determined reference] DPs meets this expectation. DPs of a [-human, +animate, +determined reference] type seemed to favour optional DOM, whereas examples containing [-animate, +determined reference] DPs were felicitous only in the

absence of DOM. These facts prove that the animacy scale should not be disregarded at the expense of the determined reference parameter when it comes to definite descriptions. Thus, unlike in the case of definite pronouns and proper names where the latter parameter overrides the animacy scale in that all DPs (irrespective of their status on the animacy scale) are obligatorily marked by PE, in the case of definite descriptions with determined reference, only those DPs that are very high on the animacy scale i.e., [+human] DPs, are obligatorily marked by *pe*.

However, the notion of determined reference does play a part when it comes to definite descriptions. As we know, DOM is optional with definite descriptions in Romanian hence it is optional with [+human] DPs as well. Thus, both variants are possible in example (19) below:

- (19) *Și eu (I-) am văzut (pe) bebelușul Simonei. Este tare drăguț.*
 and I CL3rd M SG ACC have seen PE baby-the Simona.DAT is very sweet
 ‘I, too, have seen Simona’s baby. He is very sweet.’

However, when the [+human] definite description acquires determined reference, DOM becomes obligatory, as we have seen above. Thus, with respect to definite descriptions with determined reference, we need to weaken our initial hypothesis in such a way as to make room for another important parameter, i.e. the animacy scale. The facts presented above follow as a consequence of the interaction between the two parameters: the determined reference and the animacy scale. The former requires the obligatory use of DOM but is overridden by the latter. Thus, we end up with the following three cases:

- (20) a. [+determined reference] – obligatory DOM
 [+human] – the highest on the animacy scale – preference for DOM

 Result: obligatory DOM
- b. [+determined reference] – obligatory DOM
 [–human, +animate] – lower on the scale, optional DOM

 Result: optional DOM
- c. [+determined reference] – obligatory DOM
 [–human, –animate] – lowest on the scale, no DOM

 Result: no DOM

3.1.4 The definite DP and unique referents

As we can see from the example below these definite DPs pointing to unique [+human] referents require obligatory overt case marking by means of *pe* patterning like superlative definite DPs, proper names and pronouns in this respect.

- (21) **(O) văd *(pe) mama venind de la serviciu cu plasele pline.*
 CL3rd F SG ACC see PE mother coming from work with bags-the full
 ‘I can see mother coming from work with her bags full.’

When we descend along the animacy scale overt case marking with [–human, +animate] DPs seems to become optional:

- (22) Făt-Frumos (îl) aştepta (pe) zmeu cu paloşul pregătit.
 Prince Charming CL3rd M SG ACC waited PE ogre with broadsword-the ready
 ‘Prince Charming was waiting for the ogre with his broadsword ready.’

Furthermore, definite [–animate] DPs are not overtly case marked, a fact which points to the importance of the animacy scale for the Romanian DOM:

- (23) a. Am cunoscut cândva un profesor meloman. Adora puterea.
 ‘Once I met a teacher who liked music. He adored power.’
 b. *O adora pe putere.
 CL3rd F SG ACC adored PE power.

Thus, when it comes to definite descriptions pointing to unique referents in relation to the model relative to which the discourse is interpreted, we need to weaken our initial hypothesis with respect to the parameter of “determined reference” in the same way as we did for definite descriptions which denoted a singleton set due to their semantics, i.e. determined reference still requires the obligatory marking of these DPs by means of *pe*, however, the animacy scale has precedence over it.

Only with [+human] DPs of this type is DOM obligatory. This is the only result which differs from what ‘normally’ happens with definite descriptions in general. As we know DOM is optional with these DPs as we can see in the example below. However, with definite descriptions that can acquire determined reference as is the case of the DPs we have been analyzing in this section, DOM becomes compulsory with [+human] counterparts. This prompts us into maintaining that the parameter of “determined reference” is not to be disregarded when it comes to imposing obligatoriness of DOM. Nevertheless, for some reasons yet to be uncovered, in the case of definite descriptions with determined reference, the animacy scale has precedence over the parameter of determined reference. Maybe this is due to the descriptive content of this type of DPs.

The interaction between the two parameters renders the same results as in the preceding section:

- (24) a. [+determined reference] – obligatory DOM
 [+human] – the highest on the animacy scale – preference for DOM

 Result: obligatory DOM
- b. [+determined reference] – obligatory DOM
 [–human, +animate] – lower on the scale, optional DOM

 Result: optional DOM
- c. [+determined reference] – obligatory DOM
 [–human, –animate] – lowest on the scale, no DOM

 Result: no DOM

3.1.5 Conclusions so far

In the preceding section we have followed the following logical steps: we saw at first that definite pronouns and proper names require obligatory DOM in Romanian and following the lines of Farkas's (2002) analysis, we linked this obligatory nature of *pe* marking with these DPs to the nature of the value conditions they contribute on the variables they introduce i.e., on account of the equative nature of the afore mentioned condition, these DPs acquire determined reference (there is no choice as to what the assignment of values to the variable they introduce is), which is to blame for the obligatoriness of DOM.

Unlike definite pronouns and proper names, definite descriptions contribute a predicative condition on the variables they introduce. This condition does not fix the reference of the variable in question in the way equative conditions do therefore this difference with respect to the nature of the value conditions could be taken to account for the optionality of DOM with definite descriptions. Nevertheless, as pointed out by Farkas (2002), there are some cases of special definite descriptions which may acquire determined reference i.e. if the NP denotes a singleton set relative to the model or a contextually restricted set of entities According to Farkas (2002), this can be achieved in several ways: if the NP is a superlative (e.g. 'the first man on the moon'), if it points to unique referents in relation to the model relative to which the discourse is interpreted (e.g. the moon).

Now, if these special types of definite DPs may acquire determined reference, our expectation with respect to their marking by means of *pe* was for DOM to be obligatory with such DPs. The analysis proved, however, that this is only partially true as only [+human, +determined reference] definite descriptions were obligatorily marked by means of PE. We needed therefore to weaken our initial hypothesis so as to correspond to the facts we had analyzed.

Thus, the parameter of determined reference still imposes obligatoriness of DOM on those DPs that have determined reference. Nevertheless, in the case of definite descriptions, this parameter is overridden by the animacy scale of Aissen (2003). This accounts for both the obligatory nature of DOM with [+human, +determined reference] definite descriptions (normally DOM is optional with [+human, –def] definite descriptions) and for the behaviour of [–human, +/-animate, +determined reference] definite DPs. The results concerning the interaction between the two parameters are repeated below:

- (25) a. [+determined reference] – obligatory DOM
 [+human] – the highest on the animacy scale – preference for DOM
-
- Result: obligatory DOM
- b. [+determined reference] – obligatory DOM
 [–human, +animate] – lower on the scale, optional DOM
-
- Result: optional DOM
- c. [+determined reference] – obligatory DOM
 [–human, –animate] – lowest on the scale, no DOM
-
- Result: no DOM

In the following sections we will turn our attention to those definite descriptions that may not acquire determined reference.

3.2 When definite descriptions do not have determined reference

As pointed by Farkas (2002), descriptions must contribute a predicative condition (only in special cases are they associated with an extra equative condition) and because of this they may not involve determined reference altogether. Our hypothesis is that the lack of determined reference with these DPs engenders at best optionality of DOM.

In order to verify this hypothesis, we will consider those cases where definite descriptions acquire a kind-generic reading and we will analyze their behaviour with respect to DOM.²

3.2.1 Definite descriptions and the subjunctive

As pointed out by Cornilescu (2000), definite descriptions are never compatible with *pe* when employed with subjunctive relatives. Consider the example below:

- (26) Nu *(l-) am întâlnit încă *(pe) politicianul care să fie și cinstit și bogat.
 not CL3rd M SG ACC have met yet PE politician-the who *să* be and honest and rich
 ‘I haven’t met the politician who should be both honest and rich yet’.

According to Cornilescu (2000), the subjunctive relative suspends the presupposition that the referent of the DP truly exists in the context world, therefore the DP in question cannot acquire determined reference. The lack thereof seems to engender impossibility of DOM with such DPs.

3.2.2 Verbs which allow the kind reading

Verbs like *a iubi* ‘to love’, *a urî* ‘to hate’, *a respecta* ‘to respect’, *a admira* ‘to admire’ are ranged by Cornilescu (2000) among those verbs which allow a “kind” reading for the DP occupying their object position, but which at the same time do not allow a “property” reading since they cannot combine with bare singular DPs. As the examples below point out, *pe*-DPs (in the plural) are not allowed with these verbs. On the other hand, definite DPs in the plural that are not accompanied by *pe* can occur in the object position of these verbs and can receive a “kind” reading as well.

- (27) a. Ion iubește femeile. (generic)
 Ion loves women-the
 b. ?Ion le iubește pe femei. (generic).
 Ion them-loves PE women
 ‘Ion loves women’. (from Cornilescu 2000)

² We are indebted to Alexandra Cornilescu for pointing one of her studies on this subject to us, namely Cornilescu (2000).

The verbs above may also combine with definite DPs in the singular, however, when *pe* accompanies the DP, the interpretation is no longer generic (kind generic), but argumental, i.e. the DP points to a referent within the context world. On the other hand when the definite DP is not accompanied by *pe* (as is the case of example a below) one can maintain a generic interpretation.

- (28) a. Ion iubește femeia. (generic)
 Ion loves woman-the
 ‘Ion loves the woman.’
- b. Ion o iubește pe femeie (și n-o va părăsi.) (non-generic)
 Ion her loves PE woman (and not her will abandon)
 ‘Ion loves the woman (and will not abandon her).’ (from Cornilescu 2000)

Generic interpretations point to the lack of determined reference with these DPs. The lack of determined reference engenders lack of DOM with these DPs.

3.2.3 The combination with kind denoting DPs

Determined reference in definite descriptions triggers the obligatory use of DOM (see the facts concerning the interaction between determined reference and animacy above). Kind denoting definite descriptions such as *fel* ‘kind’ and *tip* ‘type’ may not acquire determined reference therefore we expect DOM to be at best optional (if not impossible) with these DPs. Consider the examples below:

- (29) Mihai nu agreează *(pe) tipul ăsta de fete.
 Mihai not likes PE type-the this of girls
 ‘Mihai does not like this type of girls.’

Indeed, as we can see above, DOM is actually impossible with this type of DPs.

Having analyzed the case of those definite descriptions which may acquire determined reference, we devoted our attention to some cases where the definite descriptions in question had a kind-generic reading (hence they could not acquire determined reference). In all these cases where definite DPs had a kind interpretation the use of DOM was prohibited. As it seems, the fact that these DPs could not acquire determined reference was reason enough to disallow the employment of DOM.

3.3 Conclusions so far

Thus, the apparent optionality of DOM with definite descriptions may be better accounted for if one takes into account the interaction of two parameters: determined reference and the animacy scale. DPs with determined reference are obligatorily marked by means of *pe* provided that they are [+human]; when they descend along the animacy scale, DOM becomes at best optional (with [-human, +animate, +determined reference] definite descriptions) if not entirely impossible (with [-human, -animate, +determined reference] definite descriptions) as the animacy scale overrides the parameter of determined reference in the case of these DPs.

Furthermore, with those definite descriptions that may not acquire determined reference (as they have a kind-generic reading) the use of DOM is impossible.

restrictions on the value set whereas definite articles restricts the relation holding between the input function and the functions which extend it to the variable introduced by the DP.

On the other hand, ordinary indefinite articles such as *a(n)* in English or *un/o* in Romanian impose no such restrictions and because of this there may exist various possible interpretations available for indefinites. As already said, the only contribution indefinites make when used in argument position is that of a variable and of a predicative condition on that variable. The function(s) which assign values to the variable in question depends on the environment in which that variable is to be found (for example, if the indefinite appears within the semantic scope of quantifiers or operators, the variable is assigned a value by these operators).

3.5.1 Scopal specificity

Scopal specificity concerns the question of whether a variable from within a certain expression is interpreted as a result of a variation inducing operator. Thus, an indefinite may introduce a variable *x* which is then assigned values by a quantified expression. Consider the following example:

(31) Every girl wrote a love letter.

In this case we may have two variants. Thus, if the indefinite is within the scope of the quantifier (a dependent indefinite), the variable introduced by it co-varies with the variable introduced by the quantifier. However, the indefinite may also be independent of the universal quantifier in that it may be outside its semantic scope and in this case the variable the indefinite introduces no longer co-varies with the one the universal quantifier introduces.

Let us apply this to indefinite direct objects in Romanian. Consider the following example:

(32) Fiecare parlamentar asculta un cetățean.
 every member of parliament listened a citizen
 ‘Every member of parliament listened to a citizen.’

As already pointed out above, this sentence is ambiguous between a quantificational reading, i.e. when the variable introduced by the indefinite is within the scope of the universal quantifier (dependent indefinite i.e. the variable introduced by the indefinite is dependent on the variable introduced by the quantifier). On the other hand, the indefinite may also be outside the scope of the quantifier and point to a certain citizen. If one applies the preposition *pe* to the indefinite in this case, the interpretation is no longer ambiguous and the balance will be tilted in favour of a referential reading:

(33) Fiecare parlamentar îl asculta pe un (anumit) cetățean.
 every member of parliament CL 3rd M SG ACC listened PE a (certain) citizen
 ‘Every member of parliament listened to a citizen.’

This result is even clearer if one adds to the indefinite modifiers such as *un anumit* ‘a certain’.

3.5.2 Epistemic specificity

When defining epistemic specificity, Farkas (2002) starts from examples similar to (34) below:

- (34) a. Lipsește o păpușă din cufărul cu jucării.
misses a doll from chest-the with toys
'A doll from the toy chest is missing.'
- b. Un student de la drept știe bine latina.
a student from law knows well Latin
'A law student knows Latin well.'

The contexts within which these sentences are employed do not restrict the choice of value for the variable the indefinites introduce to a unique entity, however, the speaker might have a specific individual in mind when uttering such sentences (this may be clarified by means of the context). If this is the case, then the indefinite in question is epistemically specific. In this case the indefinite has a fixed reference relative to the speaker but not relative to the context as a whole. Consider also some examples with indefinite direct objects:

- (35) (L-) am întrebat (pe) un prichidel unde- l puteam găsi pe șef.
CL3rd M SG ACC have asked PE a brat where CL3rd M SG ACC could find PE boss
'I asked a brat where I could find the boss.'

By using *pe* in example b above we clearly point to the fact that the speaker has a certain referent in mind.

However, as pointed out in Cornilescu (2000), the epistemically specific indefinites may also be anchored with respect to another referent introduced in the discourse which may either function as a subject or as an indirect object. Consider:

- (36) O femeie vorbea despre o vrăjitoare în timp ce alta îi sorbea cuvintele
a woman spoke about a witch in time what another CL3rd SG DAT listened word-the
curioasă.
curious F SG
'A woman was speaking about a witch while another one was listening to her curiously.'
- (37) a. O femeie cunoștea o vrăjitoare.
a woman knew a witch
- b. O femeie (o) cunoștea (pe) o vrăjitoare.
a woman CL3rd F SG ACC knew PE a witch
'A woman knew a witch.'

Example a above may point to the fact that the DP functioning as subject may have a certain referent in mind, i.e. the woman might actually think about a specific witch, especially if we are to take into account the contribution of the verb *a cunoaște* 'to know'. The context is clearer in this respect in (37b) due to the contribution of *pe*.

As a partial conclusion at this point, we might say that what the preposition *pe* actualizes is the d-linked, specific (in the sense of Farkas 1995, 1997 and 2002) interpretation which may or may not surface when the indefinite is left by itself. *Pe* thus disambiguates between a d-linked reading (object level) of the indefinite and a non-d-linked one.

However, one also has to take into account the fact that *pe* marking is optional with indefinites in Romanian. Thus, it appears that the speaker has the choice to actualize a certain interpretation of the indefinite (the d-linked one). Naturally this choice may be influenced by certain factors (such as animacy, topicality, etc.), but bottom line, optionality is a matter of speaker's choice. Thus one will never employ *pe* when it comes to a [-person] indefinite direct object, but one can freely choose when the indefinite is [+person]. What favours one choice over the other in this case is one's option for a clear cut d-linked reading of the indefinite. It appears that in this case animacy (more exactly 'personhood') takes priority over specificity (in the sense of Farkas 2003) and this should be indeed so because, as pointed out by Swart and de Hoop (2007), animacy is an inherent feature of nouns, i.e. a feature which cannot be changed. Indeed, what Swart and de Hoop (2007) set out to demonstrate in their paper is that specificity only plays a role when overt case marking is not required by the animacy of the argument. Taking into account the examples we have examined so far with indefinites, we have noticed that *pe* is possible only with animate indefinites (we might even restrict this to [+personal] ones) and impossible with inanimate indefinites. Furthermore, when it comes to those cases where *pe* might occur, overt case marking seems to depend on the intentions of the speaker.

Since animacy is an inherent feature of DPs, i.e. each noun is lexically specified for animacy or lack thereof and this feature cannot be altered as one can do with specificity. Indeed, nouns are not inherently specified for specificity, in fact in many languages we can find various linguistic devices which can render a given noun phrase specific. In Romanian, for instance such a procedure may consist in accompanying the indefinite direct object by words such as *un anumit* 'a certain' as we have proved above.

- (38) a. Am întâlnit un rechin pe când mă îmbăiam în apele
 have met a shark while CL1stSG ACC bathed in waters-the
 Mediteranei
 Mediterranean.GEN
 'I bumped into a shark while bathing in the waters of the Mediterranean.'
- b. (L) – am întâlnit pe un vechi prieten pe când mă
 CL3rdMSG ACC have met PE an old friend while CL1stSG ACC
 îmbăiam în apele Mediteranei
 bathed in waters-the Mediterranean.GEN
 'I met an old friend while bathing in the waters of the Mediterranean sea.'

3.5.3 Conclusions

In the preceding section we analyzed the case of DOM with indefinites. Just like definite descriptions, indefinite DPs contribute a discourse referent and a predicative condition on it. The predicative condition does not fix the choice value of the variable therefore indefinites do not acquire determined reference.

Nevertheless, the issue of variation in value assignments with indefinites comes into discussion when specificity is involved. When indefinites are specific (scopally specific or epistemically specific) they may be marked by means of *pe*, as also pointed out by Dobrovie-Sorin (1995).

A point of warning is necessary at this point: all the examples above where the indefinite object was marked by *pe* also contained a clitic pronoun which resumed the object DP. Therefore the specific reading the indefinite DP acquired in these examples may also be due to the presence of the clitic.

There remains the problem with respect to the optionality of DOM with these DPs. In other words, indefinite DPs may acquire a specific reading in the absence of DOM (the presence thereof however tilts the balance towards a clearcut specific interpretation). This optionality may reside with the speaker who might play a bigger role in DOM assignment than foreseen. Further research is necessary in this respect.

4. When overt case marking is ungrammatical

So far, we have only looked at those cases where overt case marking was possible (whether it was compulsory or merely optional), but Romanian also provided us with some sets of cases where the use of *pe* is ungrammatical. It seems that *pe* can never occur with mass nouns, bare plurals and incorporated DPs.

Mass nouns point to matter in general and not to specific referents. This is why such nouns are never overtly case marked by means of *pe*. Consider:

- (39) a. Măine voi cumpăra (*pe) unt.
tomorrow will buy PE butter
'Tomorrow I will buy butter'.

Consider the difference between sentence (40a) below, where the DP is a bare plural, and (40b–40c), where we used a definite DP:

- (40) a. Am invitat copii la masă.
have invited children to dinner
'I have invited children to dinner.'
- b. (I)- am invitat pe copii la masă.
CL3rd MSG ACC have invited PE children to dinner
'I have invited the children to dinner.'
- c. Am invitat copiii la masă.
have invited children-the to dinner.

Consider also the examples below. As can be seen, bare plurals cannot refer as one cannot use the demonstrative to point to a presupposed referent the DP might introduce, i.e. there are no students such that these students have finished their exams, etc. The same goes for the case where *ceilalți* 'others' is used. Clearly, bare plurals do not have determined reference and therefore cannot be overtly case marked.

- (41) a. Am cunoscut studenți. *Aceștia tocmai terminau examenele.
have known students. These just finished exams-the
'I have known students. They were finishing their exams.'
- b. Am întâlnit copii prietenoși în parc. *Ceilalți n-au vrut să se joace
have met children friendly in park. Others not have wanted să CL play
cu mine.
with me
'I met friendly children in the park. The others did not want to play with me.'

Incorporated DPs do not point to a unique referent, they actually form a semantic unit with the verb and get their interpretation by means of the overall interpretation of the whole VP. Due to this characteristic, they do not have determined reference hence they cannot be overtly case marked by means of *pe*.

- (42) Căutăm profesor/secretară/zidar.
 look teacher/secretary/mason
 ‘Teacher/secretary/mason wanted.’

5. Conclusions

This paper investigated DOM in present-day Romanian. We developed this analysis within the DRT framework along the lines of Kamp and Reyle (1993), with the additions of Farkas and de Swart (2001) and Farkas (2002). The most important tenets of this approach that we employed and along which all distinctions between DPs with respect to DOM were provided, were that each argumental DP contributes a discourse referent (or a value) and a condition on it.

Proper names and definite pronouns differ from definite descriptions in that only the former but not the latter are obligatorily marked by means of *pe*. This difference was captured in terms of the conditions on how variables introduced by DPs are assigned values. Thus, proper names and definite pronouns contribute equative conditions on the variable which they introduce – in virtue of the equative value conditions these DPs contribute, the variables which they introduce meet the determined reference requirement. Hence these DPs are obligatorily marked by *pe*. The only exception in this case is that [–animate] proper names are not marked by means of *pe*, nor is the relative pronoun *ce* ‘what’.

Unlike definite pronouns and proper names, definite descriptions contribute a predicative condition on the variables they introduce. This condition does not fix the reference of the variable in question in the way equative conditions do, therefore this difference with respect to the nature of the value conditions could be taken to account for the optionality of DOM with definite descriptions. Nevertheless, as pointed out by Farkas (2002), there are some cases of special definite descriptions which may acquire determined reference, i.e. if the NP denotes a singleton set relative to the model or a contextually restricted set of entities. According to Farkas (2002), this can be achieved in several ways: if the NP is a superlative (e.g. ‘the first man on the moon’), if it points to unique referents in relation to the model relative to which the discourse is interpreted (e.g. the moon).

Now, if these special types of definite DPs may acquire determined reference, our expectation with respect to their marking by means of *pe* was for DOM to be obligatory with such DPs. The analysis proved, however, that this is only partially true as only [+human, +determined reference] definite descriptions were obligatorily marked by means of *pe*. We needed therefore to weaken our initial hypothesis in accordance with the facts we analyzed.

Thus, the parameter of determined reference still imposes obligatoriness of DOM on those DPs that have determined reference. Nevertheless, in the case of definite descriptions, this parameter is overridden by the animacy scale of Aissen (2003). This accounts for both the obligatory nature of DOM with [+human, +determined reference] definite descriptions (normally DOM is optional with [+human, –def] definite descriptions) and for the behaviour of [–human, +/-animate, +determined reference] definite DPs. The results concerning the interaction between the two parameters are repeated below:

- (43) a. [+determined reference] – obligatory DOM
 [+human] – the highest on the animacy scale – preference for DOM
-
- Result: obligatory DOM
- b. [+determined reference] – obligatory DOM
 [–human, +animate] – lower on the scale, optional DOM
-
- Result: optional DOM
- c. [+determined reference] – obligatory DOM
 [–human, –animate] – lowest on the scale, no DOM
-
- Result: no DOM

We also analyzed a number of definite descriptions which had a kind-generic reading (hence they could not acquire determined reference). In all these cases where definite DPs had a kind interpretation the use of DOM was prohibited. The fact that these DPs could not acquire determined reference was enough to disallow the employment of DOM.

Finally we devoted our attention to indefinite DPs and to their behaviour with respect to DOM. Since these DPs contribute a discourse referent and a predicative condition on this value, we would not expect them to acquire determined reference, hence the lack of obligatoriness with DOM. Indefinites are specific (scopally specific or epistemically specific) and they may be marked by means of *pe*.

Nevertheless, the facts should not be taken at face value: in all the examples we provided, the indefinite object was marked by *pe* but it was also resumed by a clitic pronoun. Therefore the specific reading which the indefinite DP acquires in these examples may also be due to the presence of the clitic.

Another problem which remains unsolved at this point is the one concerning the optionality of DOM with these DPs. Thus, indefinite DPs may acquire a specific reading in the absence of DOM (the presence thereof however tilts the balance towards a clear cut specific interpretation). This optionality may reside with the speaker who might play a bigger role in DOM assignment than foreseen.

Lastly, we presented some cases where the DOM was impossible: *pe* can never occur with mass nouns, bare plurals and incorporated DPs. All these DPs fail to contribute a discourse referent let alone a condition on it.

Alina-Mihaela Tigău
 English Department
 University of Bucharest
 alina_mihaela_tigau@yahoo.com

References

- Aissen, J. 2003. Differential object marking: Iconicity vs. economy. *Natural Language and Linguistic Theory* 21: 435-483.
- Avram, L., Coene, M. 2009. Null objects and accusative clitics in Romanian. *Bucharest Working Papers in Linguistics* 11 (1): 233-252.

- Cornilescu, A. 2000. Notes on the interpretation of the prepositional accusative in Romanian. *Bucharest Working Papers in Linguistics* 2 (1): 9-106.
- Dobrovie-Sorin, C. 1995. *The Syntax of Romanian*. Berlin · New York: Mouton de Gruyter.
- Enç, M. 1991. The semantics of specificity. *Linguistic Inquiry* 22: 1-25.
- Farkas D. 1995. Specificity and scope. In L. Nash and G. Tsoulas (eds.), *Actes du premier colloque Langues et grammaire*, 119-137. Paris: Garland.
- Farkas, D. 2002. Specificity distinction. *Journal of Semantics* 19: 213-243.
- Farkas, D. 1997. Evaluation indices and scope. In A. Szabolcsi (ed.), *Ways of Scope Taking*, 183-215. Dordrecht: Kluwer Academic Publishers.
- Farkas, D., de Swart, H. 2001. *The Semantics of Incorporation*. Stanford, CA: CSLI.
- Farkas, D., von Stechow, P. 2003. Stability of reference and object marking in Romanian. Paper presented at the XV European Summerschool in Logic, Language and Information (ESSLLI), Vienna, 21 August, 2003.
- Kamp, H., Reyle, U. 1993. *From Discourse to Logic*. Dordrecht: Kluwer.
- Kennelly, S. D. 2004a. Quantificational Dependencies. PhD Dissertation, OTS Utrecht University.
- Kennelly, S. D. 2004b. Pragmatics and quantificational dependencies. In D. Bury, K. Froud, R. Horsey, K. Szendroi (eds.), *Lingua* 114: 367-388.
- Leonetti, M. 2004. Specificity and differential object marking in Spanish. *Catalan Journal of Linguistics* 3: 75-114.
- Morimoto, Y. 2002. Prominence mismatches and differential object marking in Bantu. *Proceedings of the LFG02 Conference*, 1-23. Stanford, CA: CSLI Publications.
- de Swart, P. J. F, de Hoop, H. 2007. Semantic aspects of differential object marking. In E. Puig-Waldmuller (ed.), *Proceedings of Sinn und Bedeutung 11*, 598-611. Barcelona: "Pompeu Fabra" University.
- Woolford, E. 1999. Animacy hierarchy effects on object agreement. In P. Kotey (ed.), *New Dimensions in African Linguistics*, 203-216. Trenton, NJ: Africa World Press.