

Generic and Weak Demonstratives: The Realm of Kinds^{*}

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Abstract

In this paper we present a unified analysis of generic and weak interpretations of definite (DEF) and demonstrative (DEM) descriptions. In such contexts, the DEF only denotes the kind, whereas the DEM cannot denote the maximal node of a taxonomy. We claim that this contrast can be explained if we transpose Wolter's (2006) semantics to the domain of kinds, a domain of taxonomies. The paper presents this proposal, which is also an argument against the direct referential treatment of demonstratives.

This paper shows that, in Brazilian Portuguese (BrP), the generic and the weak uses of demonstrative phrases (DEM) contrast with generic and weak definite descriptions (DEF): in both contexts, DEF denotes the kind (never the sub-kind), and DEM denotes the sub-kind (never the kind). Our contribution is an explanation for this phenomenon.

The paper focuses on the contrast between the singular DEF and the singular DEM: 'o cachorro' (the dog) *versus* 'esse/este cachorro' (this dog), respectively. In contemporary BrP, 'esse' and 'este' are variants that contrast with 'aquele': 'esse/este' (this) is near the speaker and 'aquele' (that) is far.¹

^{*} We are very grateful for the feedback given by the audience at the Workshop on Referentiality in Curitiba, 2012. The final version of our paper owes to the comments of the two JoPL reviewers. The second author is also grateful to CNPq for the research grant (Process Nr. 313011/2013)

¹ The translations are rough approximations. There are important differences between English and BrP demonstrative systems, but they are well beyond the aims of this paper. Bowdle & Ward (1995) make similar considerations for English demonstratives, although in a different perspective.⁷

We will not address this issue in this paper, and concentrate on ‘esse/este’ (this). Moreover, we will not deal with plurality, which would certainly pose many other issues. Our aim is to understand the differences between the Definite Singular (DEF) and the Singular Demonstrative (DEM) in generic and weak contexts. The examples below illustrate the contrast in the generic context. Suppose a scenario in which these sentences are uttered while the speaker is pointing to a Labrador:

- (1) a. O cachorro é amigável. (individual or kind interpretation)
‘The dog is friendly.’
- b. O cachorro está em extinção. (kind interpretation)
‘The dog is on the verge of extinction.’

- (2) a. Esse cachorro é amigável. (individual or sub-kind interpretation)
‘This dog is friendly.’
- b. Esse cachorro está em extinção. (sub-kind interpretation)
‘This dog is on the verge of extinction.’

In generic contexts, DEFs are interpreted as about the kind, whereas the generic DEM is about the sub-kind. This is the contrast we aim to explain.

According to Wolter (2006), DEM and DEF phrases are translated by the iota operator – thus, both are definite because they carry a presupposition of uniqueness. The difference between them is that DEM phrases carry a presupposition of non-default situation (a non-maximal situation), whereas the DEF requires a maximal situation. We transpose this idea to the kind domain, which is structured as taxonomies, by re-interpreting the role of situation in this domain. Our analysis proposes that generic descriptions, as well as weak interpretations, are explained by sorting the ontology into a domain of object-level individuals (Krifka *et al.*, 1995), which is structured via sums, and the domain of intensional entities, concepts, which are structured as taxonomies. Thus, the DEF denotes the highest node in the hierarchy, i.e. the maximal individual, whereas DEM must denote a non-maximal node. In our proposal the iota operator also carries a presupposition of familiarity (Heim, 1982), which will help us understand why DEM cannot be rendered as a covert classifier phrase, as ‘tipo de’ (type of). The kind interpretation of DEMs depends on the existence of a presupposed taxonomy. This explains why these constructions are restricted. If DEMs are covert classifier phrases, one cannot explain this restriction.

Section 1, “Generic deixis”, shows that there is a contrast between generic interpretations of definite and of demonstrative descriptions in deictic contexts: the definite generic only denotes the kind, whereas the demonstrative must denote the sub-kind. Section 2, “Weak contexts”, supports the claim that there are weak demonstratives, as proposed by Basso & Vogt (2013), and Basso (2014), and show that they contrast with weak

definites in the same way as in the generic context: the demonstrative only denotes the sub-kind; the definite, the kind. The third section presents our theoretical account of this contrast. It extends Wolter's (2006) theory of demonstrative descriptions to generic and weak uses, by combining it with the Aguilar-Guevara & Zwarts (2010, 2013) proposal that weak definites denote a kind. In the conclusion, we suggest that our proposal is an argument against direct referential treatments of demonstratives, and discuss briefly some loose ends.

1. Generic deixis

BrP definite and demonstrative descriptions can have generic interpretations in deictic contexts, i.e. contexts in which there is a demonstration. In such contexts, they show an interesting difference, as illustrated in examples (1) and (2). The predicate 'é amigável' (is friendly) is an individual level predicate (cf. Carlson, 1977), which is genuinely ambiguous: it may be true of an "object-level" individual (Krifka *et al.*, 1995), and it may apply to a kind: friendliness is a property of a particular dog or of the dog kind. The kind reference is attested in (1.b), where the definite phrase² is combined with a kind predicate 'estar em extinção' (be on the verge of extinction).

If we compare the sentences in (1) with those in (2), we immediately detect a difference: (2.a) is ambiguous in the same way as (1.a), but the DEM denotes the non-maximal individual: in a situation of comparing two particular dogs – Bilu and Salu –, DEM must pick up the non-maximal individual (either Bilu or Salu); in a situation where what is at issue is the kind, one must be comparing subkinds – Labrador and Fox Terrier, for instance. Crucially, with (2.a) one cannot denote the dog kind. The same contrast appears if we compare (1.b) and (2.b): the DEM phrase only denotes the subkind; the Labrador is on the verge of extinction (not the Fox Terrier). In short, in the above examples, demonstratives cannot denote the kind – they must denote a subkind; definite descriptions only denote the kind, not the subkind.³

However, our description is not wholly adequate, because the DEM may denote the kind, if the noun that composes it denotes a higher level in the hierarchy. Consider again the situation of pointing to a Labrador and this time uttering the following sentences:

² Although there are different treatments for the definite generic, we assume that it is the expression of the iota operator and it denotes the kind (Dayal, 2004; Chierchia, 2014). We return to this issue in the theoretical discussion.

³ The same contrast is found in the mass domain, a topic we will not develop in this paper.

- (3) a. *Esse animal é amigável.*
 ‘This animal is friendly.’
 b. *Esse animal está em extinção.*
 ‘This animal is on the verge of extinction.’

In both sentences, ‘*esse animal*’ (this animal) may refer to the dog kind or to a subkind of dog, the Labrador, or to any other subkind, for instance mammals.⁴ Thus, it is not the case that DEM denotes the subkind, but rather that it cannot denote the highest node in a taxonomy which is indicated by the noun in the DEM. In (3), it cannot denote the animal kind, i.e. the top of the hierarchy. Thus, it must denote the non-maximal individual in the animal taxonomy. Compare with the DEF phrase:

- (4) a. *O animal é amigável.*⁵
 ‘The animal is friendly.’
 b. *O animal está em extinção.*
 ‘The animal is on the verge of extinction.’

In the sentences in (4), the definite generic always denotes the maximal individual in the taxonomy, which has as its upmost node the concept of ‘animal’ (animal). In this case, the interpretation is utterly independent of the act of demonstration. This is not true of the sentences in (3), where pragmatic enrichment is required: without it, we do not know what subkind of dog is being referred to. In default situations, as the one we described, pointing plays an important role since it makes a sub-species salient: one is talking about the dog kind or about some sub-kind of dog. The sentence tells us that the individual must be a node below the top ‘animal’ and the pointing suggests that the relevant taxonomy has the dog as the node below animal (one may also be talking about some sub-kind of dog). Crucially, DEM does not allow reference to the top of the taxonomy, which is indicated by the noun in the DEM phrase, whereas the DEF denotes the highest node in the taxonomy denoted by the noun.

This contrast can be highlighted by the paraphrases for each of the constructions: the insertion of ‘*um tipo de*’ (a type of) is only compatible with DEM phrases; DEF is only compatible with ‘*a espécie*’ (the kind):

⁴ As suggested by one of the reviewers, other taxonomies can be accessed in particular contexts. Since mammal is a node below animal in a taxonomy, it may be that the speaker’s intention is to talk about mammals. Probably, the choice for a specific taxonomy is due not only to demonstration but also to other contextual or discourse constraints which we will not address in this paper.

⁵ The definite article is normally marked in a situation of ostension. Robinson (2005) argues that definites in French also are dispreferred in ostension/deictic uses. This is a pragmatic licensing condition about which we have nothing to say.

- (5) a. Esse tipo de cachorro é amigável.
 ‘This type of dog is friendly.’
 b. Esse tipo de cachorro está em extinção.
 ‘This type of dog is on the verge of extinction.’
- (6) a. * O tipo de cachorro é amigável.
 ‘The type of dog is friendly.’
 b. * O tipo de cachorro está em extinção.
 ‘The type of dog is on the verge of extinction.’
 c. A espécie cachorro é amigável.
 ‘The dog kind is friendly.’

In the third section, we come back to the issue of whether the DEM phrase can be understood as a covert expression of a more complex phrase which includes the classifier ‘um tipo de’ (a type of). We shall argue that this is not the case.

In conclusion, in generic uses, the demonstrative does not refer to the maximum individual (the top of the –relevant– taxonomy), and the definite must refer to the top of the (relevant) taxonomy. In the third section, we claim that the restriction to non-maximal nodes raised by the demonstrative is due to its semantics: in the object-level domain, the one structured by sums, DEMs operate only on non-default “situations” (which we will define below). We transpose this idea to the kind domain. In the taxonomic domain, the non-maxim situation translates as not the highest node of the hierarchy. In the case of ‘animal’, the taxonomy has at the top the kind animal. Pointing to a dog suggests that one should consider the hierarchy of dogs, where the dog kind is the next node below animal; thus, the sentence means that the dog is friendly or on the verge of extinction. Before moving to the theoretical explanation, the next section shows that the same contrast happens in weak contexts.

2. Weak contexts

It is not our aim to discuss the different theoretical positions concerning weak definites⁶. Moreover, our analysis relies on Basso & Vogt (2013) and Basso (2014)’s view which shows that there are weak demonstratives. Our aim is to show that weak DEF and weak DEM contrast in the same way as they contrast in generic contexts.

Weak DEFs pose serious challenges to one of the most well established consensus about the semantics of definite articles: the uniqueness associated

⁶ See Beyssade & Pires de Oliveira (2014) for a review of these positions.

with them. Examples such as (7) and (8) seem not to require a unique referent; they also convey “enriched meanings” – the two most distinguishing features of weak definites (cf. Carlson & Sussman, 2005; Aguilar-Guevara & Zwarts, 2010, 2013; Vogel, 2011, among others):

(7) *Maria pegou o ônibus pro trabalho.*

‘Maria took the bus to get to work.’

(8) *João foi para o hospital.*

‘John went to the hospital.’

The violation of the uniqueness presupposition can be detected by the test of ellipses:

(7’) *Maria pegou o ônibus pro trabalho e João também.*

‘Maria took the bus to work and João too.’

(8’) *João foi para o hospital e Maria também.*

‘João went to the hospital and Maria too.’

The identity of the bus in (7) is irrelevant, and there may be more than one bus involved in the situation, as it is attested by (7’). The same is true of (8), which can be used in a context where the participants know that there is more than one hospital involved in the interpretation of the sentence. Thus, one and the same weak definite refers to more than one individual. Moreover, weak definites have enriched meanings: (7) is about the means of transportation, and (8) is about having treatment, being healed.

Three other properties are normally attributed to weak definites. They can have narrow scope:

(9) *Todos os alunos foram para o hospital.*

‘Every student went to the hospital.’

In the narrow reading, each student went to a different hospital; in other words, (9) can be true in a situation where the weak definite ‘o hospital’ (the hospital) denotes more than one individual. Moreover, weak definites only happen with some items, they are lexically restricted; (10) has no weak reading, nor an enriched meaning:

(10) *João foi pra clínica.*

‘João went to the clinic.’

Finally, weak readings are compatible only with modification that operates in the kind domain:

- (11) a. João foi pro hospital psiquiátrico e a Maria também.
 ‘João went to the psychiatric hospital and Maria too.’
 b. João foi pro hospital velho e a Maria também.
 ‘João went to the old hospital and Maria too.’

(11.a) may have a weak reading, according to which they went to the same institution, though to different instantiations of it; in (11.b), they must have gone to the same old hospital.

If we compare (7) and (8) to their DEM counterparts, in (12) and (13) respectively, we are led, at first sight, to conclude that there are no weak demonstratives:

- (12) Maria pegou esse ônibus pro trabalho (e João também).
 ‘Maria took this bus to work (and João too).’
 (13) João foi pra esse hospital (e Maria também).
 ‘João went to this hospital (and Maria too).’

It seems that there is no violation of the uniqueness presupposition; ellipsis seems to indicate that both have taken the same bus in (12), and both have gone to the same hospital in (13); no enriched reading seems to be available, either. So there seems to be no weak demonstratives. However, this is an illusion. Imagine a scenario where one asks what bus Maria took to work, in a situation where there are different lines of bus: blue buses go downtown; yellow buses go north; orange buses go south. This information is depicted in a bus table as below:

	Buses		
	Blue	Yellow	Orange
Downtown		North End	South End

The participants are looking at this table and one of them points to the orange line. All of a sudden, a “kind” reading appears: Maria takes this bus, pointing to the orange line, and João too, but they don’t have to take the same object-level bus; i.e. the demonstrative phrase, ‘esse ônibus’ (this bus), denotes more than one individual. In this situation, there is a violation of the uniqueness presupposition; there is sloppy identity, and enriched meaning (this line of transportation). Thus, there are weak demonstratives. The same strategy can be applied to example (13) and we get the weak interpretation; it is sufficient to imagine different types of hospital.

Thus, if we manipulate the context in order to foreground a kind domain, a weak reading of DEM is detected. Notice that in such a context, the sentences in (12) and (13) can be paraphrased by ‘tipo de’ (type of):

- (12') Maria pegou esse tipo de ônibus pro trabalho.
'Maria took this type of bus to work.'
- (13') João foi para esse tipo de hospital.
'João went to this type of hospital.'

It is also the case that weak DEMs are lexically restricted. There is no weak interpretation for the sentence below:

- (14) Maria foi para essa clínica.
'Maria went to this clinic.'

Thus, suppose there are weak demonstratives, as claimed by Basso & Vogt (2013), and Basso (2014). For our purposes, we want to compare (7), where we have a weak DEF, and (12), which is built with a weak DEM.

In (7), 'o ônibus' (the bus) denotes the type of means of transportation that was used, not a particular bus. The alternatives are trains, and subways, for instance. Thus, coming to work, Maria may have used different buses. The weak interpretation of DEM, exemplified in (12), does not allow for the maximal node; (12) cannot be paraphrased as "she took the bus, not the train". The class of comparison here is not in the maximal nodes, i.e. means of transportation, but the sub-kinds of a taxonomy that has as its uppermost node the individual denoted by the noun, that is, different lines or types of buses. In the weak reading of (12), the DEM cannot denote the top, the bus – it must denote one of the bus lines.

Consider the hospital example, and compare (8) to (13): while the weak DEF, 'pro hospital' (to the hospital) in (8), cannot be paraphrased by 'esse tipo de hospital' (this type of hospital), which means that it does not denote a sub-kind, the weak DEM must be paraphrased by 'esse tipo de hospital' (this type of hospital). Moreover, in (13), DEM cannot pick up the node denoted by the noun 'hospital', it must denote a sub-kind of hospital. In section 1, we showed that, in generic contexts, DEF and DEM differ precisely in this aspect: the DEF points to the maximal individual (the kind), whereas DEM does not denote the maximal individual (the sub-kind). In the next section, we propose a unified analysis for these phenomena.

3. The theoretical explanation

In this section we present the pieces of our hypothesis. We assume Wolter's (2006) semantics for the demonstrative; then, we introduce the idea of a kind domain which is structured by taxonomies, and assume Aguilar-Guevara & Zwarts (2010, 2013)'s proposal for weak definites, according to which it denotes the kind; finally, we show that in order to explain the contrast in

generic and weak contexts between DEF and DEM, one needs to transpose the semantics for the DEM from the object level to the kind domain. In section 3.3, we present some arguments against the idea that DEM has a covert classifier.

3.1 *On the semantics of demonstrative descriptions*

In principle, it is possible to have two different approaches for demonstrative descriptions: (i) the direct referential approach, as proposed by Kaplan (1989), Dever (2001), Braun (2008), and others; and (ii) the indirect referential approach, in which the demonstrative can be treated as a quantifier (King, 2001) or as a determiner (Roberts, 2002; Robinson, 2005; Wolter, 2006; Elbourne, 2008). We assume the latter view, to which our analysis gives further support, as we will discuss briefly in the conclusion.

Wolter (2006) proposes that DEF and DEM descriptions form a class. The author compares the deictic ((15.a) and (16.a)), anaphoric ((15.b) and (16.b)), and descriptive ((15.c) and (16.c)) uses of the DEF and the DEM phrases:

- (15) a. The cat is sleeping. (pointing to a cat)
- b. A man_i walked in. The man_i coughed.
- c. The student who finishes the exam may leave the room.

- (16) a. That cat is sleeping. (pointing to a cat)
- b. A man_i walked in. That man_i waved at another man.
- c. That student who finishes the exam may leave the room.

Wolter proposes that DEF and DEM descriptions share the same assertion content, i.e. they express the same propositional content: there is one and just one individual that has the property in question (the iota operator). If both are rendered by the iota operator, they share the presupposition of uniqueness. The author claims that DEF differs from DEM because they are felicitous in different backgrounds: DEF has as its domain the maximal or default situation, while DEM takes as its domain a proper subpart of a conversational situation or context; i.e., not the maximal situation, but a non-default situation, as its background. Wolter relies on the idea that predicates are indexicalized to situations, which are structured as part-wholes, as we will see below.

To illustrate this point, consider a scenario where there are at least two different paintings in an art gallery; in this context, someone utters, with the help of a pointing gesture, (17) and (18):

- (17) *Eu gosto do quadro.*
'I like the painting.'

- (18) Eu gosto desse quadro.
‘I like this painting.’

(18) is a much more natural utterance in this situation; one could certainly have used (17), but it is certainly dispreferred because in the maximal situation there are two paintings, and this will be a presupposition failure for the DEF. However, imagine someone uttering (17) while pointing to a particular painting which is situated among other paintings. In such a context, (17) is not impossible, though it is less felicitous, in particular given that there is a demonstrative expression. This contrast is predicted in Wolter’s theory, since the pointing gesture associated with demonstratives is used to establish a non-default situation, and the demonstrative presupposes non-default situations which will count as its domain. So, in the above scenario, when someone points to a single painting, a non-default situation is established in which there is only one painting (i.e., the one being pointed at). In this non-default situation, the use of the DEM ‘esse quadro’ (this painting) is felicitous exactly because there is only one particular painting in the non-default situation – this scenario satisfies the uniqueness presupposed by the demonstrative (this uniqueness presupposition is the same one associated with the definite). The definite acts in the maximal situation; this is why (17) is infelicitous even with the pointing: the DEF presupposes a maximal situation, and the pointing directs to a non-maximal situation; the interpretation of the DEF requires re-setting the parameters so that the non-maximal situation is coerced into a maximal situation.

The descriptions of (17) and (18) can be apprehended in Wolter’s semantics for the DEF and DEM (2006, p. 64):

$[[o_n]]/[[the_n]]$: $\lambda P.P(s_n)$ is a singleton set.

If defined, denotes $\iota x.P(x)(s_n)$.

$[[esse_n]]/[[this_n]]$: $\lambda P.P(s_n)$ is a singleton set and s_n is non-default.

If defined, denotes $\iota x.P(x)(s_n)$.

It is important to notice that Wolter indexicalizes the predicate to a situation. Situations are not only numbered, as represented by the subscript n in the above formula, but they are structured mereologically: thus non-maximal situations are proper parts of the maximal situation. If this is so, then we can explain the contrast between (1.a) and (2.a) in the object-level domain as in (19) and (20) respectively:

- (19) a. O cachorro é amigável
Friendly ($\iota x. Dog(x)(s_{\text{maximal}})$)
- (20) b. Esse cachorro é amigável
Friendly ($\iota x. Dog(x)(s_{\text{non-maximal}})$)

DEM descriptions find their referents in smaller situations than the situation used to evaluate the main predicate of a sentence (Wolter, 2006). Much can be discussed about these logical forms; we only need the idea that the difference between DEF and DEM is the (non-)maximal situation. In the next section, we transpose this idea to the kind domain.

3.2 Demonstrating in the kind domain

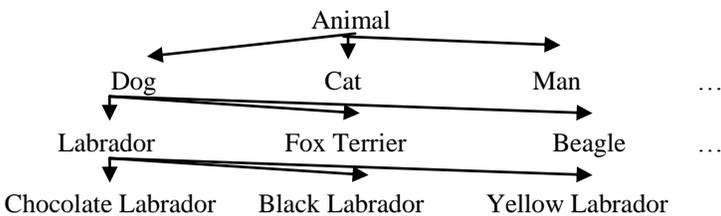
There are different ways of explaining the definite generic, as in (1.b). We assume Dayal’s (2004) proposal that there is just one definite article, which can be rendered as the iota operator. This operator ranges over two different types of predicate: object-level predicates and kind predicates. The difference between the object-level and the kind readings, in example (1.a), for instance, is due to the predicate, which is ambiguous between a property of the kind and a property of the object-level individual.

Kind individuals are organized via hierarchies, or taxonomies, which, in Dayal’s approach, are sums of sub-kinds (this idea is implemented by Chierchia, 2014). They do not have object-level individuals as their instantiations, but sub-kinds. According to this approach, the denotation of the kind is the sum of all its sub-kinds. For instance, $[[dog_k]] = \{Labrador \oplus Fox\ Terrier \oplus \dots\}$.

However, the idea that taxonomies are sums is controversial. Although both taxonomies and sums are part-whole relations, they do not have the same properties. Sums are homogeneous: if something can be described as ‘dogs’, then its parts can also be characterized as ‘dogs’. But this is not so for taxonomies: if something is called the dog kind its parts are not the dog kind. The sub-species are not identical to the species. But a sum that contains another sum is. In sums, the parts are identical. Moreover, the summation of dogs with dogs results into dogs, but the sum of a Campeche Fox Terrier and a Black Labrador does not necessarily result in a sub-species. This is just not so with sums.

Taxonomies are organized bottom up: if something is a Chocolate Labrador, it is a Labrador; if it is a Labrador, it is a Dog; and so on upwardly (cf. Mueller-Reichau, 2011). However, if something is an animal, it does not follow that it is a dog. Thus, entailments downwards do not work in taxonomies, but they work for sums.

Figure I



Whatever the formal apparatus to be developed is, one has to account for the fact that taxonomies do not behave as sums. In our proposal, the ontological domain is sorted into object-level individuals, which are structured via sums, and the kind domain, which is structured via taxonomies.

Assume that kind predicates are represented by a subscript as in λP_k . $P_k(x)$; object-level predicates carry no subscripts. Suppose that DEF and DEM are the iota operator and have the semantics proposed by Wolter (2006). The presuppositions associated with the definite article and the demonstrative select the situation in two different ontological domains. The definite article operates in the maximal situation, whereas the demonstrative selects for the non-maximal situation.

The main predicate may direct towards the domain of interpretation: kind predicates denote in the kind domain, and stage-level predicates (as ‘be in love’) denotes in the object-level domain. Individual-level predicates, as ‘amigável’ (friendly) in (1.a), are ambiguous. The noun in the noun phrase denotes the predicate that constitutes the highest node in the taxonomy. As in the object-level domain, the only difference between (1.a) and (2.a) is that in (1.a) one is considering the maximal individual, whereas in (2.a) the DEM phrase must not denote the maximal individual. The non-default/non-maximal situation presupposition associated with demonstratives bars their access to the highest node in a taxonomy (given by the situation). If we have a structured ontology with taxonomies, and if demonstrative descriptions denote in a non-maximal situation, in generic sentences this means reference to a non-maximal node in the taxonomy (i.e., a sub-kind). The definite article always denotes in the maximal situation, that is, the maximal node in the taxonomy relevant to a particular situation (i.e., a kind). Let’s put these elements together, showing the derivation of (2.a):

(2.a’) Esse cachorro está em extinção.

[[esse]]^s: λP : $P(s_n)$ is a singleton set and s_n is non-default. $\iota x.P(x)(s_n)$

[[cachorro]]^s: λx_k . $\text{Dog}_k(x_k)$

[[está extinto]]^s: λx_k . x_k is extinct

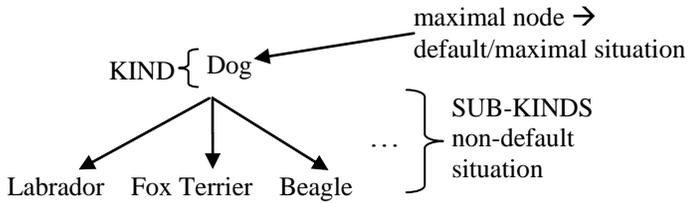
[[esse cachorro_{s_n}]]^s: λP : $P(s_n)$ is a singleton set and s_n is non-default. $\iota x.P(x)(s_n)$ $[(\lambda x_k. \text{Dog}_k(x_k))]$ = $\iota x_k. \text{Dog}_k(x_k)(s_n)$ = d_{ksn}

[[está extinto]]^s ([[esse cachorro_{s_n}]])_k

[[está extinto]]^s (d_{ksn})

The noun ‘cachorro’ (dog) in ‘esse cachorro’ (this dog) denotes the highest node in the taxonomy, the predicate dog-kind. Because of the contribution of ‘esse’ (that), it is evaluated in a non-default situation; the resulting interpretation is that of the non-maximal node in the taxonomy which has the dog kind as its highest node, as represented in figure II below.

Figure II



The non-maximal node means any node below the dog kind. The definition of the non-maximal node depends on inferential processes. Pointing is a way of making a non-maximal node salient: since the speaker is pointing to a Labrador, and Labrador is a sub-kind of the dog kind, which is invoked by the noun, and given that ‘esse’ (this) points to a non-maximal individual, then the conveyed interpretation is “Labradors are on the verge of extinction”. The maximal node depends on the predicate in the DEM phrase. If it is ‘animal’ as in example (3), the maximal node is animal and the sub-ordinate concepts are kinds: the dog, the lion, the whale,..., and their sub-kinds. If the predicate in the DEM phrase is ‘Labrador’, then the sub-ordinate concepts are the sub-kinds of Labrador: Chocolate Labrador, White Labrador,...

There is a lot to be explored about the kind domain, but our aim is to show that the same analysis can account for the weak uses of the DEF and the DEM. Our empirical description points towards a kind interpretation of the weak definites. Aguilar-Guevara and Zwarts (2010, 2013) understand that weak definites denote the kind; this is a strategy to maintain that the weak definite can be rendered as the iota operator and keep the presupposition of uniqueness. Their formalization uses event semantics and does not distinguish between object-level and kind-level predicates. The kind reference is triggered by the weak use. Since weak definiteness is lexically marked, these constructions are “specializations” of meaning, and the authors propose that the lexical entry postulates reference to a set of stereotypical events, represented by *U*. Stereotypically, people go to a hospital, because they need medical help of some sort (a treatment, an emergency,...). This set *U* guarantees the enriched meaning. Moreover, they propose that ‘the hospital’ translates as realizations of the hospital kind.⁷ The operation of Realization, represented by *R*, was first proposed by Carlson (1977), but here it is interpreted as applying to the relation between the object that functions as the location of the event (the concrete hospital) and the hospital kind, represented by *H*:

⁷ Notice that in the logical form there is no translation for the definite article. See Carlson *et al.* (2014) for a different approach, which is compatible with the kind view.

- (21) a. John went to the hospital.
 b. $\exists e[\text{Go-to}(e) \wedge \text{Ag}(e) = \text{john} \wedge \text{R}(\text{Loc}(e), \mathbf{H}) \wedge \text{U}(e, \mathbf{H})]$

The set of stereotypical events related to the location hospital is represented as $\text{U}(e, \mathbf{H})$. There is no quantification over ‘the hospital’, represented by \mathbf{H} , since it denotes the kind, and R is interpreted as a relation between a location and the kind. This explains sloppy identity in anaphora, as well as the necessary narrow scope reading in the scope of quantifiers. The stereotypical events constraint accounts for the lexical restrictions and explains why only kind-level modifiers give rise to the weak interpretation. In principle, these ideas can explain the main properties of the weak definite.

For our purposes, it is important to keep the idea that weak definites can be explained by reference to kinds; ‘the hospital’ in (21) denotes the kind. In our proposal, the DEF denotes the maximal entity. Our analysis is then more fine-grained than Aguilar-Guevara & Zwarts’, because it looks at the contribution of the definite to the noun phrase ‘the hospital’. These are compatible approaches, as shown in the formula below:

- (21'') $\exists e[\text{Go-to}(e) \wedge \text{Ag}(e) = \text{john} \wedge \text{R}(\text{Loc}(e), (\iota x.H_k(x)(s_n))) \wedge \text{U}(e, (\iota x.H_k(x)(s_n)))]$

If our hypothesis about the generic demonstrative is right, then we expect that DEM plays exactly the same role as the DEF in weak contexts except with respect to reference to non-maximal nodes, and this is precisely what we get.

Suppose there is a weak reading for (12), then it must be the case that the DEM denotes a non-maximal individual in the kind domain. Thus, it is synonymous of ‘Maria pegou esse tipo de ônibus’ (Maria took this type of bus). This is certainly the case. The weak reading of (12) must be about a non-maximal entity. On the other hand, we expect that (7) cannot be paraphrased in the weak reading by ‘tipo de’ (type of), and this is certainly the case. Thus, weak DEF must denote the kind.

A prediction is that weak DEMs are possible only when weak DEF occurs, i.e. they are lexically restricted to the kind taxonomies that already have weak uses: thus ‘esse hospital’ (this hospital) has a weak use because ‘o hospital’ (the hospital) has.

Could it be the case that weak DEMs are covert classifier phrases, recovered via pragmatic strategies? Answering this issue goes well beyond the scope of this paper, because it asks for a better understanding of the semantics of this phrase, and this is a topic in itself. In the next section, we briefly argue that, at first sight, the covert solution gives rise to wrong predictions.

3.3 Are generic and weak DEM covert classifier phrases?

In a covert approach, sentence (2.a) could be understood as the superficial manifestation of sentence (22) below. Imagine the same context – the speaker is pointing to a Labrador:

- (22) *Esse tipo de animal é amigável.*
 ‘This kind of animal is friendly.’

(22) is synonymous to (3.a). However, consider the same situation of pointing to a Labrador, which lies on the mat, but this time the speaker utters:

- (23) *Esse labrador com a pata quebrada é amigável.*
 ‘This Labrador with the broken paw is friendly.’

A sub-kind reading of (23) is remote. If it is always possible to insert a classifier, then the prediction is that we could have a kind reading of (23). But this is not the case. Thus, the covert analysis must propose some sort of restriction to rule out the kind interpretation for (23). In our analysis the impossibility of a kind interpretation for (23) is a consequence of the semantics we have proposed. The prediction, according to our analysis, is that (23) can only be about the object-level individual, since ‘labrador com a pata quebrada’ (Labrador with the broken paw) is a stage-level individual; thus, it can only denote in the object-level domain.

The same reasoning applies to the weak interpretation; if DEM always translates as ‘tipo de’ (type of), we get kind interpretations where we normally do not have kind readings. But this is not so. Sentence (24.a) cannot have a weak reading, because it does not show the properties of a weak reading; thus, it cannot be paraphrased by (24.b):

- (24) a. *A Maria pegou esse carro pro trabalho.*
 ‘Maria took this car to work.’
 b. *A Maria pegou esse tipo de carro pro trabalho.*
 ‘Maria took this type of car to work.’

In a word, generic and weak uses of DEM are restricted; the covert view cannot account for restrictions. Our proposal captures the restrictions imposing that generic and weak DEM denote in the kind domain.

4. Conclusion

This paper aims at a unified analysis for generic and weak uses of definite descriptions. It argues that the contrast between (1) and (2) is explained by

the semantics of ‘o’ (the) and ‘esse’ (this) transposed to the kind domain. We propose an ontological distinction between the realm of kinds and the domains of object-level individuals. Kinds are structures in taxonomies. The maximal individual is the highest node of the hierarchy. The DEF always denotes the maximal individual, whereas DEM does not refer to maximal nodes, it looks for sub-kinds. In both DEF and DEM, it is the noun in the phrase that indicates the relevant taxonomy. This shows that the noun plays a role in the identification of the referent, thus it raises a further argument against direct referential analysis of demonstratives.

In Kaplan’s (1989) pioneering work, the noun in a DEM description should be explained away: since DEMs are devices of direct reference, they cannot have any internal composition and the noun that appears in them cannot be part of the proposition expressed by the sentence. In fact, Kaplan claimed that the role of this noun is just to help the audience get to the intended referent, but only the referent is present in the proposition expressed, without any kind of “descriptive material”. Thus, in DEMs the noun acts only on the Kaplanian character, but not on the content; the noun in a DEM is not a propositional constituent. This proposal clearly violates semantic innocence (the principle that says that the semantic behavior, or the semantic contribution, of any given expression is the same regardless of the context in which it appears).

Other referentialists claim that, in a DEM, the demonstrative and the noun play a role in establishing the proposition but they do not form a constituent. This view is fully embraced and advocated by Dever (2001); he claims that the noun in a DEM is an appositive constituent and, as such, gives a semantic contribution, though it does not appear in the same proposition as the demonstrative, but in a secondary/auxiliary proposition, like other appositives. In both analyses, there are no parallels between DEM and DEF with respect to the role of noun – for Kaplan (1989), it simply does not play a propositional role; for Dever (2001), the noun appears in an appositive clause.

However, it seems very difficult to defend any of these proposals against the data shown here. There is a striking parallel behavior with respect to kind reference and generic interpretation, when one compares definite and demonstrative descriptions. It is true that there is a contrast between these two constructions, as we claim, in the sense that DEMs can never refer to maximal nodes, but only to sub-kinds in a given taxonomical structure (or, in other words, DEMs always find their denotation in a smaller domain with respect to the definite description). But the point is that in these two descriptions the noun seems to be doing exactly the same, to be playing the same role, and both descriptions not only have generic interpretation, but also weak interpretations, as well as anaphoric and descriptive interpretations, which makes them even more similar. The data and analyses presented here reinforce the parallels between DEF and DEM descriptions.

It goes without saying that our analysis has many loose ends. Some of them have to do with the nature of kinds and the assumptions about the lexicon, others have to do with the semantics of the demonstratives – for instance, we have considered only the proximal demonstrative ‘esse’ (this), but what about the distal demonstrative ‘aquele’? Does it play any role in the kind domain? The properties of lexical restrictions and modifications in weak definites should also be further investigated. How does lexical restriction work with weak demonstratives? Is it possible to modify a weak demonstrative? What is exactly the role of the pointing gesture as a way to evoke a taxonomy has yet to be better understood.

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