Object Drop and Discourse Accessibility[*]

FRANK KELLER AND MARIA LAPATA
Centre for Cognitive Science
University of Edinburgh

1. Introduction

Object drop constructions are attested in several languages despite the absence of overt verb-object agreement (Cole 1987; Huang 1995). It has been claimed that languages vary crosslinguistically in the conditions licensing object drop: European and Brazilian Portuguese (Farrell 1990; Raposo 1986) and Quiteño Spanish (Suñer and Yépez 1988) license null objects only for definite NPs (cf. (1), (2)), whereas European Spanish (Campos 1986), Modern Greek (Dimitriadis 1994a,b; Giannakidou and Merchant 1997) and Bulgarian (Dimitriadis 1994a) license object drop only for indefinite NPs (cf. (3), (4)).

(1) Quem é   que viu **o filme**? O Manel viu   ∅.
     who   was-3sg that saw-3sg the film   the Manel saw-3sg ∅
     'Who saw the film? Manel saw it.'   (Raposo 1986: 377)

(2) Cuándo quieres que te   mande **las tarjetas**? Puedes mandarme ∅
     when   want-2sg that you send-1sg the cards   can-2sg send me   ∅
     mañana?
     tomorrow?
     'When do you want me to send you the cards? Can you send them to me tomorrow?'   (Suñer and Yépez 1988: 513)

(3)   Compraste **café**? Si compré   ∅.
        bought-2sg coffee yes bought-1sg ∅
        'Did you buy coffee? Yes, I bought some.'   (Campos 1986: 354)

(4)   Nosiš   li **palto**? Nosja   ∅.
        wear-2sg Q coat   wear-1sg ∅
        'Do you wear a coat? I wear one.'   (Dimitriadis 1994a: 159)

Using evidence from Modern Greek (MG), we argue against the view that object drop can be explained in terms of definiteness. Instead, we claim that the anaphoric status of the object determines whether it can be dropped or not. We conjecture that the discourse accessibility of the antecedent NP licenses null objects and show that object drop in MG is sensitive to the distinction between object and kind anaphora (McGivern 1995, 1997). On the basis of this distinction, we explain under which conditions object drop is triggered in MG. We provide a formalisation of this analysis within the framework of Discourse Representation Theory (DRT, Kamp and Reyle 1993) using DRT's notion of discourse accessibility and anaphoric linking.

2. Object Drop and Definiteness

2.1. The Empty Clitic Account
Dimitriadis (1994a,b) uses examples like the ones in (5) to motivate the claim that indefinite object pronouns in MG can be dropped, while definite ones have to be overt. Dimitriadis (1994a,b) does not attempt to give a definition of definiteness and it seems that he uses a syntactic rather than a semantic definition which reduces definiteness to the presence or absence of a definite article. Note that Dimitriadis (1994a,b) exemplifies object drop in MG using question/answer pairs only (cf. (5)). We use declarative discourses instead, so as to factor out possible focus effects that might arise in question/answer contexts.

(5)   a. Vrike   o Kostas **kerasia**? *Ta/∅ vrike.
            found-3sg the Kostas cherries   CL/∅ found-3sg
            'Did Kostas find cherries? He found some.'

        b. Eferes   **to vivlio**? To/*∅ efera.
            brought-2sg the book   CL/∅   brought-1sg
            'Did you bring the book? I brought it.'   (Dimitriadis 1994b)

Dimitriadis (1994a,b) claims that the null object is a "special" object pronoun, i.e., an empty, clitic-like indefinite pronoun, and predicts that clitics and null objects are in complementary distribution. Dimitriadis (1994b), however, does not explain why in a sentence like (6a) the indefinite NP *enan antra* 'a man', similar to the definite NP *ton antra* 'the man' in (6b), does not license object drop. The discourse in (6a) is felicitous only if an overt clitic is present as the object of the verb *filisa* 'kissed'. Another set of counterexamples concerns sentences with generic/habitual readings. In (7a) the definite

NP *ta kerasia* 'the cherries', similar to the indefinite NP *kerasia* 'cherries' in (7b), licenses object drop; the object of the verb *agorasa* 'bought' cannot be cliticized but has to be dropped.

(6)   a.   Gnorisa **enan antra**. Ton/*∅ filisa.
                met-1sg a   man   CL/∅   kissed-1sg
                'I met a man. I kissed him.'

        b.   Ida   **ton antra**. Ton/*∅ filisa.
                saw-1sg the man   CL/∅   kissed-1sg
                'I saw the man. I kissed him.'

(7)   a.   **Ta kerasia** ine   igiina. Htes   *Ta/∅ agorasa.
                the cherries be-3sg healthy yesterday CL/∅ bought-1sg
                'Cherries are healthy. Yesterday I bought some.'

        b.   Troo   **kerasia** sihna. Htes   *Ta/∅ agorasa.
                eat-1sg cherries often   yesterday CL/∅ bought-1sg
                'I eat cherries often. Yesterday I bought some.'

Furthermore, Dimitriadis (1994a,b) does not consider examples like (8) and (9) where both the clitic and the null object are admissible, depending on the interpretation of the antecedent NP: in (8a) the clitic refers to the set of cherries which were bought and which the speaker wanted to eat, whereas in (8b) the dropped object refers to cherries as a kind. In (9a) the clitic refers to the set of ten cherries which the speaker eats and buys every day, whereas in (9b) the null object refers to cherries as a kind.

(8)   a.   Agorase **kerasia**. Ithela   na   ta fao.
                bought-3sg cherries   wanted-1sg SUBJ CL eat-1sg
                'He/she bought cherries. I wanted to eat them.'

        b.   Agorase **kerasia**. Ithela   na   ∅ fao.
                bought-3sg cherries   wanted-1sg SUBJ ∅ eat-1sg
                'He/she bought cherries. I wanted to eat some.'

(9)   a.   Troo   **deka kerasia** tin imera. Ta agorazo kathe proi.
                eat-1sg ten   cherries the day   CL buy-1sg every morning
                'I eat ten cherries a day. I buy them every morning.'

        b.   Troo   **deka kerasia** tin imera. ∅ agorazo kathe proi.
                eat-1sg ten   cherries the day   ∅ buy-1sg every morning
                'I eat ten cherries a day. I buy some every morning.'

2.2. The LF-Copying Account

Giannakidou and Merchant (1997) argue that null objects in MG are indefinite pronouns semantically licensed by weak antecedent NPs (in the sense of Milsark 1979). They suggest that null objects are interpreted via an LF copying mechanism: the dropped object is a copy of an antecedent weak NP and therefore disjoint from it.

Giannakidou and Merchant (1997) treat object drop as an instance of NP-ellipsis. In order to explain why strong NPs cannot be ellided, they assume, following Lobeck (1995), that only XPs identified by strong functional heads can be ellided (i.e., IP, VP, NP). They conjecture that strong determiners occur outside the NP projection and consequently are strong NPs unavailable for copying and thus for licensing object drop.

This account fails to explain why the weak NP *enan antra* 'a man' in (6a) does not license object drop but an overt clitic instead. Giannakidou and Merchant (1997) cannot account for the generic sentences in (7) either. They would, wrongly, predict that the strong NP *ta kerasia* 'cherries' in (7a) has to license an overt clitic. The examples in (9) are also problematic for their account: the weak NP *deka kerasia* 'ten cherries' can license either a clitic (cf. (9a)) or a null object (cf. (9b)), contrary to the assumption that weak NPs license only null objects.[1]

There are also a number of conceptual problems with reducing object drop to NP ellipsis. One would expect the phenomenon to apply to all types of NPs. However, as the authors observe themselves, NP-ellipsis seems to hold only for one type of NPs, i.e., weak NPs. On syntactic grounds the authors do not give any motivation as to why strong determiners occur outside the NP projection. Furthermore, under the assumption that strong NPs cannot be ellided, one cannot explain why VPs containing strong NPs as objects undergo VP ellipsis. We would expect the behaviour of strong NPs to be uniform across all types of ellipsis. Finally, if we claim that object drop is in fact NP ellipsis, we would expect the antecedent weak NP in examples like (8) and (9) to license the null objects only (cf. (8b), (9b)) and could not predict the occurrence of an overt clitic (cf. (8a), (9a)). The fact that object drop in these examples alternates with clitics depending on the interpretation of the antecedent NP is evidence against an ellipsis account.

3. Anaphoric Linking, Accessibility, and Kind Anaphora

3.1. Accessibility Constraints
Discourse Representation Theory puts forward an account of anaphora resolution based on anaphoric linking. An anaphor is anaphorically linked to its antecedent by equating the referent of the anaphor and the referent of the antecedent. As a consequence, the two referents have to be interpreted as co-referential. Anaphoric linking is only possible if the antecedent is accessible from the anaphor, where accessibility is defined as in (10):

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[1]Giannakidou and Merchant (1997) assume that in the default case the dropped object is referentially disjoint from its antecedent. This means that the dropped object in (9b), being a copy of its antecedent NP *deka kerasia* 'ten cherries', introduces a new set of ten cherries. However, we were not able to reproduce this judgement with our informants.

(10)   **Accessibility**
         Let K be a DRS, **x** a discourse referent and γ a DRS-condition. We
         say that **x** is *accessible from γ in* K iff there are $K_1 \leq K$ and $K_2 \leq K_1$
         such that **x** belongs to U_{K_1} and γ belongs to Con_{K_2}.

                                                    (Kamp and Reyle 1993: 120)

Here, U_K denotes the set of discourse referents in the discourse representation
structure (DRS) K, Con_K denotes the set of DRS-conditions in K, and $\leq$ is
the subordination (intuitively, nesting) relation on DRSs.

     The crucial observation for our account is that object drop correlates
with anaphoric linking: in (5b), (6), (8a), and (9a), the object clitic is anaphor-
ically linked to (and thus co-referential with) the antecedent NP. In (5a), (7),
(8b), and (9b), however, no anaphoric link (co-referentiality) is established.
Note that in (5a), the antecedent NP is part of a question, while in (7), it re-
ceives a generic/kind interpretation. In both cases, the antecedent NP is not
accessible from the anaphor, and object drop is obligatory.

     The properties of cliticized and dropped objects can be summarized
as follows:

(11)

dropped object (5a), (7), (8b), (9b)	**overt object clitic** (5b), (6), (8a), (9a)
not co-referential with an- tecedent NP	co-referential with antecedent NP
not anaphorically linked to an- tecedent NP	linked to antecedent NP (stan- dard anaphor)
antecedent inaccessible (ge- neric/kind reading)	antecedent accessible (object reading)

This observation about the relation between accessibility (manifested as
anaphoric linking) and object drop can be formulated in the form of the fol-
lowing generalization:[2]

(12)   **Constraint on Object Drop**
         An object pronoun has to be overt if it is anaphorically linked to its
         antecedent, otherwise it can be dropped.

Note that the antecedent NP can be familiar (and thus definite, as in (5b)
and (6b)) or new (and thus indefinite, as in (6a)). If we adopt a familiarity-
based approach to definites (e.g., based on Heim 1983), then familiarity and
accessibility are orthogonal, and object drop is only sensitive to the latter.

     Crosslinguistically, the constraint in (12) predicts that languages
classified as allowing indefinite object drop in the literature (European Span-

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[2]Here and in the following, we refer to the dropped element as a pronoun. This is
merely for terminological convenience, and should not be taken to make any theoret-
ical claims (e.g., that the dropped element is a *pro* in the sense of Government and
Binding Theory).

ish and Bulgarian) should pattern with MG. For languages classified as allowing definite object drop (Quiteño Spanish, European and Brazilian Portuguese), we expect the inverse of the constraint in (12), i.e., an object pronoun has to be overt if it is not anaphorically linked to its antecedent, otherwise it can be dropped. This predication is born out with respect to Brazilian Portuguese, as we will show in section 4.

3.2. Object Drop and Kind Anaphora

In the last section, we argued that overt object pronouns (clitics) have an accessible antecedent, while dropped objects do not. Intuitively, however, dropped objects also establish some kind of anaphoric relationship to an antecedent NP. This relationship is weaker than the co-referential relationship that holds between an overt clitic and its antecedent: the dropped object seems to refer only to the kind denoted by the antecedent NP. For instance, the dropped object in (5a), (7), (8b), and (9b) is assigned a partitive reading, i.e., it denotes an instance of the substance or the kind referred to by its antecedent NP. This instance can be either a group or an individual (represented by a group referent **X** or an individual referent **x** in DRT). Note that in English, the corresponding kind-denoting anaphor has to be realized overtly, viz., as *some* or *one*.

Going a step further, we can hypothesize that a dropped object *does* actually have an accessible antecedent, viz., the kind introduced by its antecedent. This can be implemented by introducing referents for kinds, which are independently motivated for the analysis of generics in DRT, as argued for by McGivern (1995, 1997). McGivern assumes that certain NPs (e.g., bare plurals) introduce kind referents (denoted as X in DRT), which are anchored in the topmost DRS, and thus are universally accessible. This is motivated by examples like (13), where the kind introduced by *spiders* can be referred to anaphorically.

(13)   a.   I killed spiders last night. They are ugly creatures.

        b.   Spiders are ugly creatures. They have invaded my bathroom.

                                                                    (McGivern 1997)

Our approach to object drop relies on the fact that a kind referent (k-referent) is universally accessible, while an object referent (o-referent) can be embedded in a subordinate DRS, which might make it inaccessible.

To illustrate this consider (14), the DRS for the first sentence of (6a):
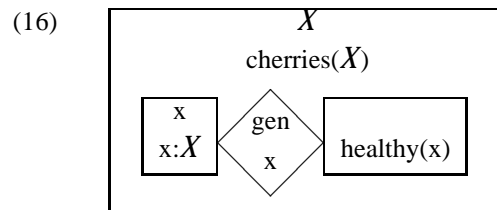
(14)

i x
man(x)
met(i,x)

Here, the referent **x** introduced by *enan antra* 'a man' is accessible, as it is not embedded in a sub-DRS introduced by negation, quantificational structures, or intensional contexts. The anaphor *ton* 'him' in the second sentence

of (6a) then introduces an o-referent **y**, which can be anaphorically liked to **x**, resulting in the following DRS:

(15)

| i x y |
|---|
| man(x) |
| met(i,x) |
| kissed(i,y) |
| y = x |
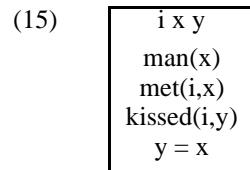
Now consider (16), the DRS for the first sentence of (7a). Here, the antecedent NP *ta kerasia* 'the cherries' receives a generic interpretation, which is represented in DRT (following McGivern 1995, 1997) as a quantificational structure: there is a kind X called cherries and for every instance **x** of this kind, it is typically the case that **x** is healthy. Note that the k-referent X is introduced in the topmost DRS, while the o-referent **x** is located in the restrictor of the quantificational structure.

(16)

$$
\boxed{
\begin{array}{c}
X \\
\text{cherries}(X) \\[1em]
\boxed{\begin{array}{c} x \\ x{:}X \end{array}} \;\diamond\!\!\begin{array}{c}\text{gen}\\x\end{array}\!\!\diamond\; \boxed{\text{healthy(x)}}
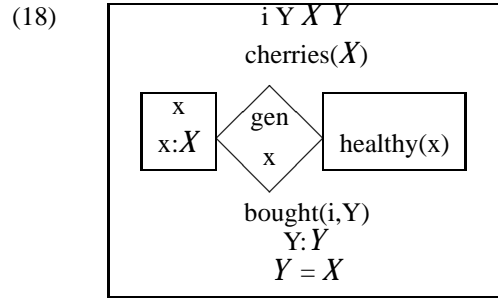\end{array}
}
$$

The next sentence of (7a) introduces an empty object pronoun, whose representation we assume to be (17). To paraphrase, an empty object pronoun introduces a new o-referent η and a new k-referent Y, along with the condition that η is an instance of Y, and that Y has to be resolved to an existing k-referent.

       Note that the o-referent can be either an individual referent or a group referent (as is the case in (18)). This is implemented in (17) by the use of an underspecified o-referent η (Kamp and Reyle 1993: 335), which can be disambiguated into either an individual referent or a group referent.

(17)

$\eta\ Y$
$\eta{:}Y$
$Y = ?$
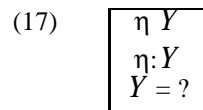
Now consider (18), the DRS for (7a) after anaphora resolution:

(18)

$$\begin{array}{|l|}
\hline
\text{i Y } X \ Y \\
\text{cherries}(X) \\
\boxed{\begin{array}{l} x \\ x{:}X \end{array}} \ \diamond\!\!\begin{array}{c} \text{gen} \\ x \end{array}\!\!\diamond \ \boxed{\text{healthy(x)}} \\
\text{bought(i,Y)} \\
Y{:}Y \\
Y = X \\
\hline
\end{array}$$

The empty object introduces the referent **Y**, which is the argument of *agorasa* 'bought', and the anaphoric referent Y, which can be resolved to X, the k-referent introduced by *ta kerasia* 'the cherries'. (Note that **x** is not accessible for Y, and therefore does not play a role in resolving Y.)

To summarize, our claim is that object drop in MG is sensitive to the distinction between object and kind anaphora. This leads to the following reformulation of the generalization in (12):
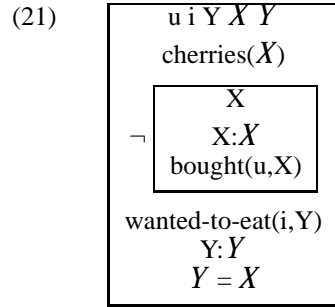
(19)   **Constraint on Object Drop**
         An object pronoun has to be overt if it introduces an o-anaphor, it
         can be dropped if it introduces a k-anaphor.
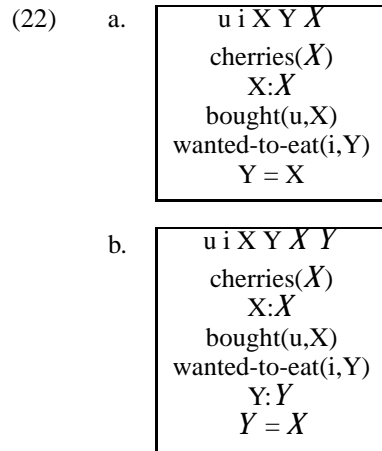
3.3. Predictions

The generalization in (19) makes a number of predictions about when object drop can occur. In particular, it predicts that there are cases where either the overt or the dropped pronoun should be licensed, as some contexts provide both an o-antecedent and a k-antecedent. We illustrate this with respect to negation and intensional verbs.

Negation creates a subordinate DRS that contains the DRS-conditions introduced by the negated phrase. All referents inside this subordinate DRS are inaccessible from superordinate DRSs. As an example, consider the DRS in (21) that represents the discourse in (20). The o-referent **X** introduced by *kerasia* 'cherries' is embedded in a sub-DRS, and thus inaccessible from the top DRS. However, *kerasia* 'cherries' also introduces a k-referent X (referring to cherries in general), which is located in the topmost DRS. Hence X is accessible to the k-referent Y introduced by the empty pronoun. This explains why a clitic is disallowed in (20), while object drop is possible.

(20)   Den agorase **kerasia**, ala ithela   na   *ta/∅ fao.
         Not bought-3sg cherries   but wanted-1sg SUBJ CL/∅ eat-1sg
         'He/she didn't buy cherries but I wanted to eat some.'

(21)

$$\boxed{\begin{array}{c} \text{u i Y } X \, Y \\ \text{cherries}(X) \\[4pt] \neg \boxed{\begin{array}{c} \text{X} \\ \text{X}{:}X \\ \text{bought(u,X)} \end{array}} \\[4pt] \text{wanted-to-eat(i,Y)} \\ \text{Y}{:}Y \\ Y = X \end{array}}$$

In (8), on the other hand, the first sentence of the discourse is unnegated, and therefore both the o-referent and the k-referent introduced by *kerasia* 'cherries' are accessible. This results in an ambiguity: either a dropped object or an overt object clitic is possible in the next sentence, referring to cherries as a kind, or to the cherries that were bought, respectively. As an illustration, consider (22). In (22a), the DRS corresponding to (8a), the object clitic introduces an o-referent **Y** which can be anaphorically linked to **X**, the o-referent already established for the cherries. This is possible because **X** is not embedded under negation and hence is accessible from **Y**. In (22b) then, the DRS corresponding to (8b), the dropped object pronoun is resolved exactly like in (21), i.e., by anaphorically linking it to the k-referent X.

(22)   a.

$$\boxed{\begin{array}{c} \text{u i X Y } X \\ \text{cherries}(X) \\ \text{X}{:}X \\ \text{bought(u,X)} \\ \text{wanted-to-eat(i,Y)} \\ \text{Y} = \text{X} \end{array}}$$

     b.

$$\boxed{\begin{array}{c} \text{u i X Y } X \, Y \\ \text{cherries}(X) \\ \text{X}{:}X \\ \text{bought(u,X)} \\ \text{wanted-to-eat(i,Y)} \\ \text{Y}{:}Y \\ Y = X \end{array}}$$

Another interesting case is intensional verbs. Consider (23a), which contains the extensional verb *hano* 'lose', the argument of which introduces an o-referent, which can be picked up by a clitic in the next sentence. No k-referent is available, therefore no object drop is possible.

     In (23b), on the other hand, *psahno* 'look for' is ambiguous between an extensional and an intensional reading. The intensional reading provides a k-referent (referring to the kind looked for), but makes the o-referent introduced by *ena isitirio* 'a ticket' inaccessible, as it is embedded in a sub-DRS

representing the propositional attitude (Kamp 1990). The extensional reading of *psahno* 'look for' provides an accessible o-referent, just like in (23a). Therefore, we predict an ambiguity between the object clitic and object drop, which is born out.

(23)   a. Ehasa **ena isitiro** gia to theatro. Telika to/*∅ vrika.
             lost-1sg a   ticket for the theater finally CL/∅ found-1sg
             'I lost a ticket for the theatre. Finally, I found it.'

         b. Epsahna   **ena isitiro** gia to theatro. Telika to/∅ vrika.
             looking-for-1sg a   ticket for the theater finally CL/∅ found-1sg
             'I was looking for a ticket for the theatre. Finally, I found it/one.'

Other interesting cases are the discourses in (24), which at first glance seem to be counterexamples to our account:

(24)   a. **Ta kerasia** ine   igiina, ala ta/*∅ miso.
             the cherries be-3pl healthy but CL/∅ hate-1sg
             'Cherries are healthy, but I hate them.'

         b. Troo   **kerasia** sihna, ala ta/*∅ miso.
             eat-1sg cherries often, but CL/∅ hate-1sg
             'I eat cherries often, but I hate them.'

The NP *ta kerasia* 'the cherries' in the first sentence of (24) is generic, but nevertheless, an overt clitic can be used to refer to it. Note however, that the sentences in (24) are analogous to the discourse in (13a) in that the clitic acts as a kind anaphor, i.e., it refers to the kind introduced by the antecedent. A dropped object, in contrast, receives a partitive reading, i.e., it refers to an instance of the kind denoted by its antecedent NP, not the kind proper. This point can be illustrated by comparing the lexical entry for a dropped object in (17) with the lexical entry for a clitic in (25a): the clitic only introduces a k-referent and a co-referentiality condition; it does not introduce an extra o-referent that is an instance of the k-referent. (Note that the lexical entry for a kind-denoting clitic in (25a) is exactly parallel to the one for an object-denoting clitic in (25b); no additional assumptions are required.)

(25)   a.

$$\boxed{\begin{array}{c} Y \\ \hline Y = \, ? \end{array}}$$

         b.

$$\boxed{\begin{array}{c} \eta \\ \hline \eta = \, ? \end{array}}$$

4. Crosslinguistics

The account outlined in the previous sections predicts that languages exhibiting object drop are parametrized in that they license object drop only for

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k-anaphora or only for o-anaphora. More specifically, in Bulgarian and European Spanish, similar to MG, the dropped object is a k-anaphor, whereas in European and Brazilian Portuguese and Quiteño Spanish the dropped object is an o-anaphor. In the latter case one would expect the inverse of the constraint on object drop in (19): an object pronoun has to be overt if it introduces a k-anaphor, it can be dropped if it introduces an o-anaphor.

The prediction seems to be born out in the Brazilian Portuguese (BP) examples given in (26)–(29). In (26) the empty object co-refers with the o-referent introduced by the NPs *um homem* 'a man' and *o homem* 'the man' and object drop is licensed. In (27) the object of the verb *comprei* 'bought' cannot be dropped but has to be overtly realized. As the empty object is an o-anaphor, it cannot co-refer with the k-referent introduced by the NP *cerejas* 'cherries' and object drop is not licensed.

(26)   a.   Encontrei **um homem** e   beijei   0̸.
             met-1sg   a   man   and kissed-1sg 0̸
             'I met a man and I kissed him.'

       b.   Vi   **o homem** e   beijei   0̸.
             saw-1sg the man   and kissed-1sg 0̸
             'I saw the man and I kissed him.'

(27)   a.   **Cerejas** são   saudàveis e   ontem   comprei   algumas/*0̸.
             cherries be-3sg healthy   and yesterday bought-1sg some/0̸
             'Cherries are healthy and yesterday I bought some.'

       b.   Como **cerejas** frequentemente e   ontem   comprei
             eat-1sg cherries   often   and   yesterday   bought-1sg
             algumas/*0̸.
             some/0̸
             'I eat cherries often and yesterday I bought some.'

In (28a) the NP *cerejas* 'cherries' introduces an o-referent which is embedded under negation and hence inaccessible, and a k-referent which is globally accessible. Object drop is not licensed, since an empty object cannot co-refer with a k-referent in BP. Instead, reference to cherries as a kind has to be lexically realized via the pronoun *algumas* 'some'. Note that in (28b) both the o-referent and the k-referent introduced by *cerejas* 'cherries' are accessible and both the overt pronoun and the dropped object are possible.

(28)   a.   Não comprou **cerejas** mas queria   comer algumas/*0̸.
             not   bought-3sg cherries but   wanted-1sg eat   some/0̸
             'He didn't buy cherries but I wanted to eat some.'

       b.   Comprou **as cerejas** por que queria   comer algumas/0̸.
             bought-3sg the cherries because wanted-1sg eat   some/0̸
             'He bought cherries because I wanted to eat some/them.'

Finally, in (29a) the object of the extensional verb *perdere* 'lose' introduces an o-referent and object drop is possible. On the other hand the verb *procurar*

'look for' in (29b) can be ambiguous between an extensional and intensional reading introducing an o-referent in the first case and a k-referent in the latter. Similar to MG, this ambiguity is born out in BP. Note, however, that BP is different from MG in that the overt pronoun *um* 'one' co-refers with the k-referent introduced in the antecedent sentence, whereas the empty object is co-refers with the o-referent.

(29)   a.   Perdi **um ingresso** para o teatro e finalmente encontrei ∅.
            lost-1sg a ticket for the theatre and finally found-1sg ∅
            'I lost a ticket for the theatre and finally I found it.'

          b.   Estava procurando **um ingresso** para o teatro e finalmente,
            was-1sg look-for-1sg a ticket for the theater and finally
            encontrei um/∅.
            found-1sg one/∅
            'I was looking for a ticket for the theatre and finally I found one/it.'

5. Conclusions

In this paper, we argued against an account of object drop based on definiteness (as put forward by Dimitriadis 1994a,b) or in terms of LF copying (as proposed by Giannakidou and Merchant 1997). Using Modern Greek as a test case, we demonstrated that object drop cannot be reduced to purely syntactic factors, but depends on discourse conditions such as the accessibility of an antecedent for the dropped object.

      More specifically, we demonstrated that object drop in Modern Greek is sensitive to the distinction between object and kind anaphora, a dichotomy that is independently motivated for the analysis of generics as proposed by McGivern (1995, 1997). We arrived at the generalization that an object pronoun has to be overt if it introduces an object-anaphor, while it can be dropped if it introduces a kind-anaphor. This generalization correctly predicts the behavior of object drop with respect to negation and intensional contexts, and can be formalized in DRT without requiring the introduction of additional formal machinery.

      Concerning the crosslinguistics of object drop, we predicted that there should be languages that are the inverse of Modern Greek in that they require an object pronoun to be overt if it introduces a kind-anaphor, and allow it to be dropped if it introduces an object-anaphor. We demonstrated that this predication is born out for Brazilian Portuguese, which is the mirror image of Modern Greek in this sense.

References

Campos, Héctor. 1986. Indefinite Object Drop. *Linguistic Inquiry* 17.354–359.
Cole, Peter. 1987. Null Objects in Universal Grammar. *Linguistic Inquiry* 18.597–612.
Dimitriadis, Alexis. 1994a. Clitics and Island-Insensitive Object Drop. In James H. Yoon, ed., *Proceedings of the 5th Annual Conference of the Formal Linguistics*

Society of Mid-America, no. 24.1/2 in Studies in the Linguistic Sciences, 153–170. Department of Linguistics, University of Illinois, Urbana-Champaign.

Dimitriadis, Alexis. 1994b. Clitics and Object Drop in Modern Greek. In Chris Giordano and Daniel Ardron, eds., *Papers from the 6th Student Conference in Linguistics*, no. 23 in MIT Working Papers in Linguistics. Department of Linguistics, Massachusetts Institute of Technology, Cambridge, MA.

Farrell, Patrick. 1990. Null Objects in Brazilian Portuguese. *Natural Language and Linguistic Theory* 8.325–346.

Giannakidou, Anastasia and Jason Merchant. 1997. On the Interpretation of Null Indefinite Objects in Greek. In G. Veloudis and M. Karali, eds., *Studies in Greek Linguistics*, vol. 17, 290–303. Aristotle University, Thessaloniki.

Heim, Irene. 1983. File Change Semantics and the Familiarity Theory of Definiteness. In Rainer Bäuerle, Christoph Schwarze and Arnim von Stechow, eds., *Meaning, Use, and Interpretation of Language*, 164–189. Berlin: de Gruyter.

Huang, Yan. 1995. On Null Subjects and Null Objects in Generative Grammar. *Linguistics* 33.1081–1123.

Kamp, Hans. 1990. Prolegomena to a Structural Theory of Belief and Other Attitudes. In C. Anthony Anderson and Joseph Owens, eds., *Propositional Attitudes: The Role of Content in Logic, Language, and Mind*, no. 20 in CSLI Lecture Notes, 27–90. Stanford, CA: CSLI Publications.

Kamp, Hans and Uwe Reyle. 1993. *From Discourse to Logic: Introduction to Modeltheoretic Semantics of Natural Language, Formal Logic and Discourse Representation Theory*. Dordrecht: Kluwer.

Lobeck, Anne. 1995. *On Ellipsis*. Oxford: Oxford University Press.

McGivern, Patrick. 1995. *Representing Generics in DRT*. Master's thesis, University of Edinburgh.

McGivern, Patrick. 1997. Representing Generic Bare Plurals in DRT. In Harry Bunt, Leen Kievit, Reinhard Muskens and Margriet Verlinden, eds., *Proceedings of the 2nd International Workshop on Computational Semantics*. Tilburg.

Milsark, Gary L. 1979. *Existential Sentences in English*. New York: Garland.

Raposo, Eduardo. 1986. On the Null Object in European Portuguese. In Osvaldo Jaeggli and Carmen Silva-Corvalán, eds., *Studies in Romance Linguistics*, 373–390. Dordrecht: Foris.

Suñer, Margarita and Maria Yépez. 1988. Null Definite Objects in Quiteño. *Linguistic Inquiry* 19.511–519.