OBJECTS AND OBJθ

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Abstract

The notion of object plays an important role in both descriptive and theoretical work, especially so in a theory such as Lexical-Functional Grammar, where a separate functional structure is assumed in which grammatical relations are captured. In spite of the importance attached to the notion, the object is a relatively understudied phenomenon. In this paper, we consider how the function object links to semantic content, in particular to thematic roles. We conclude that unlike subject, object is not associated with any easily definable semantic content, it is a semantically inert grammatical function. To the extent that it is associated with any one thematic role, this is the Theme, the vaguest of thematic roles. We show how languages exploit this semantic vagueness, for instance through the use of cognate object and pseudo-objects and we consider the impact of this for the association between thematic roles and grammatical relations.

1. Introduction

In both typological and theoretical work, the characterization of the core relation object has taken second place to that of subject, with very few studies being devoted exclusively to the properties of objects (Plank (1984b) is an honourable but by now inevitably slightly dated exception).[1] Yet, the term 'object' has been used in talk about language for many centuries (for a summary see Lepschy 1992). It belongs to a longstanding descriptive and language-teaching tradition which derives its core concepts from the grammar of the classical languages, and especially of Latin. As long as this, or indeed any other term, is confined to the classroom and to pre-theoretical discussions and classifications of linguistic data, the principal criteria by which to judge it are practical ones. For those approaches which go further and incorporate the notion of object into their theoretical metalanguage, however, such practical justifications do not suffice. We require instead that the concept be well defined, simple, economical, consistent with other parts of the theory and able to support significant generalizations.

In the present paper we address a number of issues that arise first in relation to delimiting and defining the pre-theoretical notion object and second to the relation between this concept and theoretical construct OBJ in Lexical-Functional Grammar (LFG).[2] We argue in particular for the view that object is the semantically inert

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[1] We are grateful to Miriam Butt, Joan Maling and Grev Corbett for their comments after the presentation of the paper at the International Lexical-Functional Grammar Annual Conference at the University of Sydney on 4th July 2008. We also benefited from comments made at the LAGB meeting at the University of Essex in September 2008, where we presented ideas similar to those contained in this paper. We also thank Miriam Butt and Tracy Holloway King for their comments and suggestions on the first submitted draft of the paper.

[2] The only other modern theory that we are aware of which incorporates 'object' directly as a theoretical primitive is Relational Grammar (RG), whose '2' relation is equivalent to a traditional object in all but name. Some of what we have to say applies within RG, although the fact that the model has never been worked out in full detail and that there are few if any

grammatical relation par excellence and for a revised understanding of the way such a relation links to the thematic roles Patient and Theme. We do not, however, develop a revised formal analysis of the mapping between grammatical relations and thematic roles; this would go well beyond the aim of this paper. We discuss evidence from a range of construction types in a variety of languages though on neither count will, or indeed given the size of the relevant literature could, our discussion be exhaustive.[3]

The structure of the paper is as follows. Section 2 chronicles the role of the OBJ function within LFG, first as a primitive grammatical relation (GR) and second as part of a set of featurally defined GRs within Lexical Mapping Theory (LMT, Bresnan & Kanerva 1989; Bresnan 2001a:Ch 14; Dalrymple 2001:Ch 8). Much of the support for the latter position comes from the cross-linguistic treatment of passives and double-object constructions, and this body of data and arguments is reviewed in section 3. Section 4 moves on to consider a broader range of syntactic phenomena involving objects. Our overall conclusion and the consequences of it for the link between OBJ and semantic roles are discussed in section 5.

2. OBJ in LFG

In early LFG, OBJ was a primitive, one of a set of grammatical relations which also included SUBJ(ect), OBJ2 (second object) and OBL(ique). These relations were used in constructing the f-structure representations of sentences, which lie at the core of LFG analysis of natural language syntax. In this sense its status was very similar to that of the term 2 in Relational Grammar alluded to in footnote 1, although with the difference that LFG does not allow relation-changing or revaluation operations. Work in the late 1980s led to the replacement of these undecomposed relations by a pair of features [± semantically restricted] and [± objective] (abbreviated as [± r] and [± o] respectively) within Lexical Mapping Theory. This permitted the featural decomposition of GRs in (1) and hence the use of syntactic natural classes as in (2):

(1)

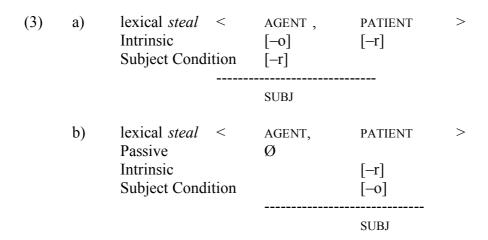|	[−o]	[+o]
[−r]	SUBJ	OBJ
[+r]	OBL$_\Theta$	OBJ$_\Theta$

(2) [−r] = SUBJ, OBJ
     [+r] = OBL$_\Theta$, OBJ$_\Theta$
     [−o] = SUBJ,, OBL$_\Theta$
     [+o] = OBJ,, OBJ$_\Theta$

Lexical entries for predicates are then set up in terms of thematic roles rather than GRs and the mapping from the lexical argument structure to f-structure is achieved by a mixture of intrinsic linking statements (e.g. Agents are inherently [−o]) and general

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current practitioners means that our arguments are of less immediate relevance within that framework.

[3] In particular we will not address here the general problem that the existence of ergative languages — or of ergative constructions within split-ergative systems — poses for theories like LFG which assume a universally applicable set of grammatical relations such as subject and object. For some discussion see Butt (2006:Ch 6) and Farrell (2005:Ch 2.1).

conditions (e.g. that a sentence must contain a SUBJ). Thematic roles are conceived of as forming a hierarchy in terms of which default linkings are stated, such as that the highest ranking theta role in a lexical array is assigned [–r]. Function-Argument Biuniqueness further ensures that every thematic role is linked to exactly one GR and *vice versa*. Grammatical operations such as passive manipulate the theta roles, and thus affect the default assignments. The example in (3a) illustrates these mechanisms and shows the a-structure to f-structure mapping for a sentence such as *The mouse stole the cheese*. In the passive *The cheese was stolen*, on the other hand, the theta-role Agent is suppressed and the mapping therefore proceeds as in (3b).

(3) a) lexical *steal* < AGENT , PATIENT >
        Intrinsic [–o] [–r]
        Subject Condition [–r]

                SUBJ

     b) lexical *steal* < AGENT, PATIENT >
        Passive Ø
        Intrinsic [–r]
        Subject Condition [–o]

                SUBJ

This approach has led to interesting work on the active-passive and the transitive-unaccusative relations as well as on causative constructions. However, since the feature [+objective] is no better defined than was the relation itself, it cannot be said to enhance our understanding of the relation of object or the theoretical construct OBJ. For instance Bresnan & Kanerva (1989:25) describe the feature as follows: 'The intuition behind the feature [+o] is that there are several objectlike functions that appear as arguments of transitive categories of predicators (Verb and Preposition) but not of the intransitive categories Noun and Adjective.'[4] In other words, an object is something that behaves like an object; hence Butt's (2006:127) terse observation that the feature [± objective] is 'more difficult to justify'. An alternative proposal, which has largely been ignored in the subsequent literature, is that of Alsina (1996:19 ff). This avoids the circularity problem by setting up an alternative feature set which has the effect of reducing objecthood to two other properties: [– subject, – oblique]. We will return to this definition of OBJ in section 5.

Returning then to the classical LMT features, the only independently verifiable property of OBJ is that it is [–semantically restricted], a property which it shares with SUBJ. We suggest, however, that even this feature is more problematic than is commonly recognised. Although SUBJ shows a considerable range of semantic freedom, this freedom is restricted to different degrees in different languages (Hawkins 1986:Ch 4). At the same time, there is a strong cross-linguistic preference for subjects to be Agents and to a lesser extent Experiencers. Put another way the

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4 It can be argued that adjectives can also take objects, as in the Swedish example in (i) (see also Mittendorf & Sadler (this volume) and footnote 9):
(i) Han var helt överlägsen de nyanställda.
     he was completely superior the newly.appointed
     'He was completely superior to the newly appointed staff.'

unmarked SUBJ is restricted to certain roles, but in marked circumstances (passive, sentential arguments, etc) may be associated with other arguments or with expletives. The unmarked OBJ on the other hand is, we argue, inherently unrestricted, and thus is capable cross-linguistically of assuming a wide range of functions. Thus, while it is true that both subjects and objects have a degree of semantic freedom that is not shared by oblique arguments, they achieve this state of affairs from opposite ends of the semantic spectrum. Labelling both as [–r] hides more than it reveals about the behaviour of the two relations. We return to this issue in section 5.

3. OBJ and passive

Passivisability is possibly the most commonly used defining criterion for object status and it is indeed used within LFG to identify the OBJ function. Still, it is generally recognised that there are a number of problems associated with the passive, problems which make it both too narrow and too broad as a criterion. There are for instance passive sentences where the corresponding active sentence would generally be assumed not to have an object, as in (4). There are passive sentences with no corresponding active sentence, as in (5) (for description and analysis, see Payne (1985; 1999)). Even though clausal complements — COMPs — are assumed to be distinct from OBJ (but see Alsina, Mohanan & Mohanan (2005) and discussion in Section 4.5), there are clauses containing a COMP which appear to have undergone passivisation, as in (6).

(4) a. Someone has walked on this road.   —   This road has been walked on.
     b. Someone has slept in this bed.   —   This bed has been slept in.

(5) a. He is rumoured to be doing a gig in London tomorrow.
     b. *They/People rumour him to be doing a gig in London tomorrow.

(6) a. People often say that power lies with those who count the votes.
     b. It is often said that power lies with those who count the votes.

When applied to ditransitive clauses, passivisability selects the first noun phrase as the "real" object, in the sense that it behaves in the same way as the object of a monotransitive verb. This is illustrated in (7). In this discussion, we will follow Hudson (1992) and refer to the object of a monotransitive verb as OO, and the two objects of a ditransitive clause as O1 and O2.[5]

(7) a. Oscar gave [the cat]$_{O1}$ [some food]$_{O2}$.
     b. The cat was given some food by Oscar.
     c. *Some food was given the cat by Oscar.

Hudson (1992) argues that passivisation is actually the only criterion for object status which selects O1 as the object in a double object construction; other criteria point to O2 as the grammatical relation most similar to OO. Furthermore, the outcome of the

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[5] OO and O2 are those traditionally referred to as Direct Object and O1 as Indirect Object. Dryer (1986) shows that there are some languages in which OO and O1 behave in similar ways and he uses the terms Primary Object (OO and O1) and Secondary Object (O2). Siewierska (2004:57ff) discusses similar issues as alignment of P (OO) with T (O2) or R (O1).

passive criterion is not entirely consistent; not all O1s can undergo passivisation as in (7b) and some O2s can, unlike (7c) (see Hudson (1992:257) for examples and further references).[6]

Still, it is the behaviour with respect to passive illustrated in (7) which is the reason why *the cat* in (7a) would have the status of OBJ in LFG, whereas *some food* would be an OBJ$_\Theta$. This distinction is then argued to be justified by the fact that the O2 is restricted as to its thematic role; Falk (2001:106) describes it as 'non-Patient Theme in English' and states that this may differ slightly between languages, but will always be restricted to a small set. Dalrymple (2001:21) describes OBJ as 'thematically unrestricted' and OBJ$_\Theta$ as 'thematically restricted'. However, in ditransitive sentences such as (7a), O1 is generally also restricted with respect to its thematic role, a Recipient/Beneficiary role. This is not captured by the use of OBJ and OBJ$_\Theta$ for English ditransitive sentences in LFG.[7] We would argue that there is evidence that the passive is conditioned not just by grammatical relations, but also by a complex interaction between structural position and semantics and hence is not a reliable test for a grammatical relation.

Indeed, Hudson provides a number of ways in which it is actually O2 which shares most properties with OO. Some of the criteria he uses refer directly or indirectly to similarity of thematic roles, for instance the fact that it is O2, not O1, which typically has the same thematic role as the OO when these verbs are used monotransitively, as illustrated in (8).

(8)   a. We gave the children (Recipient) sweets (Theme).
      b. We gave the children sweets (Theme).
      c. *We gave the children (Recipient).

Maling (2001:420–4) argues that alleged similarities between OO and O2 can, in fact, generally be reduced to similarities in thematic role and hence the generalisations are over semantic roles rather than grammatical relations. Indeed, the data she presents to argue against Baker's conclusions on the basis of synthetic compounding show that OOs also behave differently depending on their thematic roles. This might lead one to conclude that the most appropriate LFG representation of the data would be to make all objects, including OOs, OBJ$_\Theta$, as suggested by Butt (1998), an issue to which we will return in section 5 (see also Cetinoglu & Butt, this vol).[8] Maling's criticism is more directly of Baker (1997) than of Hudson. Since Baker sets out to argue for an analysis in which O1 underlyingly consists of a preposition phrase, he is interested in highlighting similarities between O1 and prepositional objects. Hudson's arguments are aimed at showing the similarities between OO and O2 and therefore only partly overlap with those put forward by Baker.

Hudson does refer to some arguments which are more syntactic in nature. Verbs taking two objects (almost) always select for the second object, often they do not for

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[6] Strictly speaking, it is of course the clause as a whole and not a noun phrase that undergoes passivisation, but we will sometimes use this terminological shortcut to mean 'can become the subject of a corresponding passive clause'.

[7] For a discussion of the role of 'restricted' and 'unrestricted' in relation to multiple objects in Bantu languages, see also Bresnan & Moshi (1990).

[8] It should be pointed out that Maling's article is not written within a formal LFG framework and does not draw this conclusion.

the first object, an example was (8).[9] In fact, as Jackendoff (1990a:447) points out, almost any apparently monotransitive verb which involves affecting the object in such a way that another entity can benefit from or receive it can be made transitive in this way. A common example is found in (9a-c) and a less obvious one in (9d).

(9)   a. Oscar peeled me an orange.
      b. Oscar peeled an orange.
      c. #Oscar peeled me.
      d. Oscar kicked Sarah the cat.

A further syntactic argument with respect to which O2 behaves in the same way as OO relates to the ability to be displaced within the sentence. Data used by both Hudson and Baker relate to extraction, but with respect to for instance *wh-*displacement there is substantial variation in acceptability judgements between speakers. The behaviour with respect to Heavy NP shift is less ambiguous: O2, but not O1, can shift in the same way that an OO does; (10) and (11) from Hudson (1992:259) illustrate.

(10) a. Fred met [Ann]$_{OO}$ on Sunday.
      b. Fred met on Sunday [someone he hadn't seen since he was in college] $_{OO}$.

(11) a. Fred gave [Ann]$_{O1}$ [some flowers]$_{O2}$ on Sunday.
      b. Fred gave Ann on Sunday [some flowers that he'd bought in the market the day before]$_{O2}$.
      c. *Fred gave some flowers on Sunday [the girl he had met at the party the night before]$_{O1}$.

In (10), we see how a heavy OO can shift to the right, past an adverbial. An O2 in a double object construction can be shifted in the same way, as (11b) shows, whereas an O1 cannot, as illustrated by (11c). See Hudson (1992) for further arguments relating to for instance idioms, extractability and potential for controlling an adjectival secondary predicate, though Maling (2001) argues against Hudson's (1992) and Baker's (1997) interpretation of the facts relating to secondary predicates.

At the very least, Hudson has shown that there is no clear argument for assigning the same grammatical relation to OO and O1 and a different one to O2. This is true even if we accept Maling's conclusion that 'The picture is obviously far more complex than one would assume from reading Baker or Hudson.' (2001:424) Depending on the extent to which one is convinced that some of Hudson's arguments truly generalise over grammatical relations, rather than semantic relations, he may have shown that OO and O2 should be considered instances of the same grammatical relation, distinct from that exemplified by O1, at least for the English.

4. Aspects of object syntax
It is relatively common in the literature to associate the grammatical function object quite directly to the semantic role Theme, which is the broadest and least well-defined of semantic roles, to the point of being devoid of semantic content. Indeed Levin's

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[9] As Joan Maling pointed out to us, *feed* would appear to form an exception.

(1988) proposal that Theme is unrestricted in the way it maps to GRs is commonly cited as the inspiration for the lexical mapping idea (Dalrymple 2001:203). And in analyses which assume the Uniformity of Theta Assignment Hypothesis, an object with any other thematic role would have to be underlyingly the object of some preposition (see Baker 1988; 1997 and discussion by Maling 2001:424–6). We will return to the connection between the grammatical relation object and particular thematic roles in section 5. In this section, we will show that regardless of the exact link between object and thematic roles, the object function is associated with a very general semantics and furthermore that this fact is exploited in many languages.[10]

4.1. Non-canonical objects and case marking
In languages which have case marking, there is usually an object case and the objects identified by that case are associated with a very general semantic role, as expected. Farrell (2005:14) for example states: 'the prototypical direct object is a patient (or the primary target of an agent's action) and the patient is a direct object in a basic active-voice clause.' The exact semantics of the role is derived from the meaning of the verb. There is also a cross-linguistic tendency to mark objects which have a more specific semantic content with a non-canonical case (Aikhenvald, Dixon & Onishi 2001). Thus in the German and Latin examples in (12) the internal argument of a verb of helping is animate, and it is marked with the dative case, which is typically used elsewhere for animate or human beneficiaries.

(12) a. Er   diente   dem   Köning.   German
         he   served   the.DAT king
     b. Regi   serviebat.   Latin
         king.DAT serve.3SG
         'He served the king.'

Another example of marking for object which are in some sense unexpected or non-canonical involves so-called Differential Object Marking (see Bossong 1985; 1991; Aissen 2003), where objects which are "higher in prominence" (Aissen 2003:436) have marking that differentiates them from other objects. The notion higher in prominence refers particularly to animate and to specific or definite objects, implying that canonical objects are inanimate and indefinite. The latter links in with information-structural properties associated with objects, in particular the fact that objects are often non-topical, they generally represent new information. This may in turn be why in so-called presentational focus constructions, the focused constituent carrying the new information appears in an immediately post-verbal position. The positional properties of such focus constituents has led to them being analysed as objects (for a debate on this issue around Scandinavian presentational sentences, see Lødrup (1999) and Börjars & Vincent (2005)). However, the information structural properties associated with objects have not been well-studied. As Plank (1984a:5) puts it: 'In particular — and this is perhaps surprising in view of the widely regognized pragmatic ingredients of subjecthood — some seem, often tacitly, to dismiss discourse-pragmatic structuring as one potential *raison d'être* for the emergence of direct objects from purely semantic relations.'

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[10] A further example where the use of the OBJ function depends on an assumption of its syntactic presence more than its intrinsic semantic content is to be found in the treatment of objects of adjectives in Welsh by Mittendorf & Sadler (this volume).

4.2. Cognate objects

In the next three sections we consider different types of construction in which the semantic neutrality of the object is exploited in different ways. The first of these concerns the use of cognate objects, that is to say the circumstance in which a normally intransitive verb occurs with what appears to be an object and where that object has to be a cognate noun phrase (cf Horrocks & Stavrou To appear: 'core Cognate Object Construction'). Examples are found in (13).

(13) a. He laughed a cruel laugh.
     b. De   flesta   katterna   dog   trafikdöden.   Swedish
        the   most cat.PL.DEF   died traffic.death.DEF
        'Most of the cats died in traffic accidents.'

The cognate object essentially fulfils an adverbial function semantically; (13a) is interpreted roughly as *He laughed cruelly*. Indeed, Maling (1993: 51) includes 'cognate objects' in a list of types of adverbials which get syntactic case and Melis (2002) argues that similar examples from French should be classed as 'adjuncts'. We would argue that from a syntactic point of view such items conform to the normal behavioural patterns of objects, for instance in their position, case marking (if relevant) and even in extreme instances availability for passive (e.g. *Disturbed dreams were dreamt by everyone who ate the mushrooms*). It is however precisely the semantic neutrality of the object function which permits this use (for recent literature on cognate objects in a range of languages see also Simpson 1991:343–9, Pereltsvaig 1999, Lazard 2003 and Horrocks & Stavrou, to appear).

Simpson, citing Austin (1982), defines cognate objects as ones which 'extend, make explicit or quantify the activity denoted by the verb' (1991:343). A similar link between the cognate object and the aspectual meaning of the verb in English is made by Horrocks & Stavrou (to appear:35), who state that cognate objects in English 'denote only terminative events in their default function, which is to provide terminative "periphrastic" equivalents to non-terminative unergatives'. This can be illustrated by sentences such as those in (14). An intransitive verb like *laugh* is not normally delimited and hence compatible with an adverbial like *for hours*, but as (14c) shows, the introduction of a cognate object changes this.

(14) a. She laughed for hours.
     b. She laughed cruelly for hours.
     c. #She laughed a cruel laugh for hours.

The connection between different object cases and aspect is well-known in the literature, with accusative often associated with boundedness and partitive with unboundedness (other terms used are 'measurer' (Arad 1998) or 'delimiters' (Tenny 1994)). This is the case in Finnish, where the object case marking distinction indicating changes in aspect can also be made on adverbials, with the same aspectual consequences (see Maling (1993) and Kiparsky (1998) and also Nelson (2007) for similar phenomena in Inari Saami). The fact that cognate objects may have the same effect as the core object case in some languages, namely of limiting the activity described by the verb is then not surprising. However, we would argue that it is the general lack of semantic content associated with the object relation that permits this association with aspect.

Simpson (1991) suggests that cross-linguistically cognate objects typically co-occur with verbs of performance (*sing, dance,* etc).[11] In her discussion of their occurrence in Warlpiri she notes that the subject of the construction containing a cognate object is typically ergative (though she also cites one instance of an Abs-Dat verb with a cognate object), that the presence of the cognate object is not registered on the auxiliary unlike with normal objects and that the cognate object is in the absolutive case not in the Dative, which Simpson takes to be the case of the direct object.[12] Furthermore, a cognate object can co-occur with a Dative, all pointing to the cognate object not being the OBJ. Hence she proposes that cognate objects are to be treated as OBJ$_\Theta$. Note however that this is a rather unusual use of the theta restriction, which is normally deployed in circumstances in which a function is associated with a very limited range of theta-roles. Here instead the only restriction imposed is that of the semantic content of the governing predicate.

4.3. Pseudo-objects

So-called pseudo-objects are similar to cognate objects in that they exploit the semantic vagueness associated with the object function. Examples of the use of pseudo-objects in English resultative constructions are provided in (15).

(15) a. Bill shaved his razor dull.   (Jackendoff 1990b:227)
      b. Oscar laughed himself silly.
      c. Oscar laughed his head off.
      d. She worked her fingers to the bone

In (15a), *his razor* appears to be the object of *shave*, though its presence in the sentence is dependent on the presence of the predicate *dull*. *His razor* in (15a) does not have the role normally associated with the object, as in *The barber shaved the first customer*. (15b) contains what has been referred to as a 'fake reflexive' in object position. In (15c) and (15d) we have idiomatic examples of the same type of construction. The interdependence of the presence of a non-canonical object and a resultative secondary predicate has led to these examples being analysed as 'constructions' in the formal sense (see Simpson 1983; Jackendoff 1990b:225–41; Carrier & Randall 1992).

A similar construction is the Swedish directed motion construction, where a reflexive is used to support a directional secondary predicate. The examples in (16) come from Toivonen (2002), who also discusses the difference between this construction type and resultatives. For a construction-based LFG analysis of these sentences, see Asudeh, Dalrymple & Toivonen (this volume).

(16) a. Flickan armbågade sig   in i folksamlingen.
          girl.DEF elbowed   REFL in in crowd
          'The girl elbowed her way into the crowd.'

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b. Han ljög sig   ut   ur   armén.
   he lied REFL out   out   of army.DEF
   'He lied his way out of the army.'

Once again we would suggest that these constructions provide evidence for our argument that the object function has so little semantic content associated with it that the function can be exploited to encompass semantically unorthodox objects, as in (15a), or semantically contentless ones as is the case with the reflexive in all these examples.

4.4 Object expletives

Pseudo-objects involve constructions where an object is required for syntactic purposes — for example to act as the pivot for a secondary predicate — but where it is essential that the apparent semantic content of the object should not be subsumed into the overall interpretation of the sentence. In this respect, pseudo-objects behave in a manner similar to expletives such as the dummy subject in *it seems Bill is ill*, which also are items whose *raison d'être* is syntactic not semantic, and which are excluded from the clause's semantic computation. Subject expletives of course are well attested, as in (17), and have been widely discussed:

(17) a. **It** is raining.
     b. **Der** tales   om   valg.   Danish
        there talk.PASS   about election
        'There is talk of an election'

Object expletives by contrast are unusual. It may not be surprising that an intransitive verb does not require an object expletive, as in (18a). However, an expletive might be expected in (18b), where a transitive verb is used without an object in the syntax, but with a specific interpretation of the role associated with the object; *too much alcohol*. Similarly, why should an expletive not be able to serve as the pivot for a secondary predicate as in (18c)? The element over which *hoarse* predicates is, after all, present in the sentence.

(18) a. *Oscar smiles *it*EXPL / *there*EEXPL.
     b. *Oscar drinks *it*EXPL / *there*EEXPL.
     c. *Oscar sang *it*EXPL / *there*EEXPL hoarse.

As Postal & Pullum (1988) show, object expletives do occur. Typical environments in which they are common is coindexed with a clause, as in (19), and in certain idiomatic expressions, as in (20).

(19) a. I hate it when you do that.
     b. I take it (that) Bill has failed the exam.

(20) a. He has got it made.

b. She is living it up in London.

c. They kept/stopped/prevented it from becoming widely known.

d. I put the misses on one side and perhaps come back to them weeks, or a year later, and battle it out.

Postal and Pullum (1988) show that 'idiomatic' is not quite the right term, since there is a reasonably productive pattern involving for instance 'V *it up*' and there are certain classes of verbs which allow an expletive object, such as 'prevention complements with *from*+gerund', as in (20b). The degree of productivity is not directly relevant to our point here, however. The example in (20) shows that *it* here is not the referential pronoun, since if it was referring to *the misses*, it would be expected to appear in its plural form, as in *come back to them*.

Expletives in object position are not unique to English, as the examples in (21) show ((29c) from Caluianu 2008).

(21) a. Me la   vedo   brutta.   Italian
        me   it.FEM see.1SG ugly.FEM
        'Things look bad to me.'

    b. Hon har   det   jobbigt just   nu.   Swedish
        she   has   EXPL   tiresome right   now
        'She is going through a tough time at the moment.'

    c. Am   luat-o   devale.   Romanian
        aux   take-3S-F-ACC   downhill
        'We started moving downhill.'

The main point to notice with respect to these examples is that where there is an expletive in object position it appears to be selected by the verb, thereby illustrating the dependency of the object function on the individual verb. The difference between the two examples in (22) illustrate this (used by Postal & Pullum 1988:658 to make a different point)

(22) a. I resented it that he was not promoted.

    b. I believed (*it) that he was not promoted.

Indeed it is the fact that these expletive elements occur in a subcategorised position and that this is predicted to be impossible in some theoretical approaches which has made them the subject of theoretical discussion (see for instance for English *it* Postal & Pullum 1988; Stroik 1990; Stroik 1996; Alba-Salas 2004 and for German *es* Rostila 2002).[13]

4.5. OBJ and COMP

The view that OBJ brings no semantic contribution of its own fits neatly with Alsina, Mohanan & Mohanan's (2005) argument for the abandonment of the GR COMP. They conclude that there is unnecessary redundancy in specifying that the clause *that Bill speaks Amharic* in *Sue believes that Bill speaks Amharic* is a CP in categorial terms,

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[13] Similar in a number of respects to pseudo-objects and expletives are subject-to-object raising constructions such as *The police believe John to be a liar*, where once again an object function is syntactically required but then must be excluded from the semantics (Zaenen & Engdahl 1994; Asudeh 2005).

that its grammatical function is COMP, and that semantically it is a proposition. All that needs to be said is that it is an argument of the predicate *believe*. Its propositonal value follows from the fact that it is a CP, and does not need to be respecified further at f-structure through the use of the COMP relation. In other words, the difference between COMP and OBJ follows from the semantics of the predicates they are associated with and the categorial status of the items that realise them. All that is required is one semantically neutral GR to encode the internal argument in f-structure, which is precisely what we have been arguing that OBJ is. In this sense, our proposal reconstructs the traditional designation for *that Bill speaks Amharic* in the above example, namely that is a 'noun clause object'.

5. Linguistic theory and the understanding of OBJ

The idea that there is a single argument in the sentence which is semantically inert and depends for its interpretation on the main predicate goes back at least as far as Fillmore (1968: 25), where the case Objective is defined as 'the semantically most neutral case, the case of anything representable by a noun whose role in the action or state identified by the verb is identified by the semantic interpretation of the verb itself'. There is a telling conflict here between intention and terminology. The aim of Case Grammar in the Fillmorean sense is to provide 'a set of universal, presumably innate, concepts which identify certain types of judgements human beings are capable of making about the events that are going on around them' (Fillmore 1968:24). In other words, cases in this sense purport to provide a universal semantic classificatory framework for natural languages, and yet the label Fillmore chooses for this case is clearly redolent of the traditional terminology of morphosyntactic as opposed to semantic relations. It is partly in order to avoid this confusion between the semantic and the morphosyntactic that in later work Fillmore opted for a different designation for this case, calling it Neutral rather than Objective. Of course, case in Fillmore's sense is a semantic relation akin to what would nowadays be called a thematic role, and indeed from Gruber (1976) onwards a very similar definition has been given for the role Theme as the entity which moves with a verb of motion, the entity which is located by a verb of location and so on. In short the participant in the clause with no role or properties which can be defined independently of the verb.

The arguments in section 4 suggest similar conclusions about semantic neutrality and dependence on the verb hold for the OBJ function as well as for the semantic role Theme. The question therefore arises as to how that parallellism between the OBJ and Theme can be expressed within the theory. Various possibilities present themselves. One would be to retain the existing LMT with its reliance on the feature [± r] and to follow the lead of Levin (1988) in stating that Theme is intrinsically [− r]. This captures the ability of Themes to occur as objects or subjects but at a price since the unrestrictedness of OBJ is intrinsic in a way that it is not for SUBJ. Consider, for example, Hawkins' (1986:53) generalization that 'the class of subjects and direct objects … is larger in English than it is in German'. This holds good but in complementary ways: German subjects are semantically restricted while German objects are less open to additional semantic content. Subjects become non-canonical the more they depart from their core semantic content; conversely, objects become non-canonical the more they add to their intrinsic lack of content. SUBJ has strong cross-linguistic preference for Agents but may show a considerable range of semantic freedom. This freedom is restricted to different degrees in different

languages (see for example the discussions in Hawkins (1986:Ch 4) for German; Müller-Gotama (1994) for Korean; Comrie (cited in Müller-Gotama) for Russian; Svenonius (2002:200) for Icelandic). Thus the contrasting pairs of German and English sentences in (23) to (25) demonstrate a tolerance for non-human, non-agentive subjects in English which German does not share:

(23) a. This hotel forbids dogs.
      b. *Dieses Hotel verbietet Hunde.
           this   hotel forbids   dogs
(24) a. The trial cannot proceed.
      b. *Der Prozeß kann nicht fortfahren.
           the process can   not   proceed
(25) a. This tent sleeps four.
      b. *Dieses Zelt schläft vier.
           this   tent sleeps   four

Conversely, as we have already noted in section 4.1, when an object has special semantic properties such as animacy, a different case marking may be required. Hence, Hawkins' generalization holds true because:

(i)   English allows non-canonical theta-roles (Experiencer, Locative, Instrument, etc) as subjects and thus expands the class of possible subjects;

(ii) German bars certain non-canonical theta-roles (Experiencer, etc) as objects and thus reduces the class of possible objects.

The inability to express this asymmetry is a serious weakness of LMT in its canonical version.

An alternative therefore would be to devise a new version of LMT which retains the notion of featural decomposition of GRs but offers a different set of features. This is the proposal of Alsina (1996), where the features [± subject] and [± oblique] generate the following classes:

(26) [+ subj]   =   subjects

      [+ obl]   =   obliques

      [–subj]   =   obliques and objects

      [– obl]   =   subjects and objects

As we have already noted, this shares with the present paper the idea that the characterization of OBJ is in terms of an absence of intrinsic properties, but does not get us any nearer to achieving a natural statement of the connection between Theme and OBJ. Nor does it obviously allow for the kind of differential behaviour of subjects and objects observed by Hawkins. Thirdly, it represents an undesirable mix of genuine binarity or privativity (a subject is [+ subj] and an object is [-subj]) and monovalence or equipollence (a subject is the only GR which is [+subj] and an oblique is the only GR which is [+obl]). Failing a genuinely viable proposal involving different features, for the present we conclude that the way forward is not to be found by devising new binary feature sets.

A third option is to treat the relation between the semantic emptiness of both Theme and OBJ as a due to the principle of iconicity which privileges parallel content at the levels of a-structure and f-structure. The inspiration for this line of thinking is Bresnan's (2001b) account of the relations between overt and reduced pronouns. The

difference is that in Bresnan's account the link is between discourse function and form, so that a pronoun with reduced discourse prominence is realised by reduced, ultimately even zero, phonetic content. However, if we think of Bresnan's proposal not as being about links between form and content in a pre-theoretical sense, but rather as expressing the relation between two representations — f-structure (or d-structure, cf O'Connor 2006) and p-structure — within LFG's parallel architecture, then the proposal that there could also be similar types of link between a-structure and f-structure carries more force. In those instances in which additional properties intervene, as with the dative marking of animate objects with some German or Latin verbs exemplified in (12), it would then be a relatively straightforward matter to establish a language-particular preference for a higher ranked faithfulness constraint (Aissen 2003; de Hoop & Malchukov 2008). A further step in this direction would be to link the unmarked status of the OBJ-Theme connection to the fact that in many languages these relations are in turn realised by the least marked case, namely accusative. A fuller exploration of these ideas will however have to wait for another occasion.

Perhaps the most radical way to model the parallelism would be to say that OBJ and Theme are the same, that a theta-role without intrinsic content is nothing other than a (minimal) GR. In other words, a-structure and f-structure are not parallel domains, as is standardly assumed, but rather axes that converge at the point of null content. However, Maling (2001:435) refers to, and deplores, 'a widespread tendency to treat Theme as the default theta-role on direct objects', and deploys a range of data from English, German and Icelandic in favour of the view that we need to keep the two notions apart.

That said, an approach which comes close to achieving the same effect is that found within Role and Reference Grammar (RRG) (van Valin & Lapolla (1997) and much subsequent literature, see Farrell (2005:Ch 4) for a convenient summary). RRG does not recognise a designated set of GRs either as primitives or through any form of feature decomposition and it does not have a fixed set of theta roles. Rather it allows for an in principle open set of roles such as Patient, Entity, Stimulus, Content, etc linked to the semantics of particular predicates, and supplemented by two macroroles Actor and Undergoer. Although, as Farrell (2005:139) notes, the macroroles serve to reconstruct much of the content of the traditional notions of subject and object, they do so from an explicitly semantic starting point. Finally, there is a grammatical function Pivot or PSA (privileged syntactic argument), which can vary not only from language to language but also from construction to construction within a language. The system thus accords priority to semantic roles and discards any claim to a universal set of GRs when they do not conform to those roles.

An alternative way to achieve the same end, and one more consistent with the rest of the structure of LFG, would be to maintain the notion of OBJ as a universal grammatical function but to discard Theme as a distinct theta-role. What is standardly called Theme is simply a projection into an internal argument slot of some or all of the lexical semantic content of the predicate. There are thus as many types of Theme as there are (classes of) predicates: *read* requires an object which is in some sense readable, *drink* an object which is drinkable, and so on. Beyond that, the only property such items have in common is that they are OBJs. In this respect they differ from subjects, which are characterised, in the unmarked case at least, by independently verifiable properties such as animacy and volition. Given this approach, the standard distinction between OBJ and OBJ_Θ disappears, in some sense all objects are OBJ_Θ. This in turn removes the uncertainties noted in section 3 over

whether the direct or the indirect object is the one to be characterised as being semantically restricted.

There is obviously much more to be said about the complex tangle of relations between GRs and theta-roles, and indeed much more that has been said in the literature and which we have not been able to take into account in one short conference presentation. Two conclusions, however, suggest themselves at this stage. First, Lexical Mapping Theory as standardly conceived in terms of a binary featural decomposition of grammatical relations is not fit for purpose as far as the GR OBJ is concerned. The reason for this is that OBJ as a general notion is best seen as a GR with no content, the content always being derived from the particular verb of which it is an OBJ. It is from this observation that we derive our second conclusion, namely the need for a reassessment of the connection between OBJ and Theme, since it is at this point of least content that the two notions seem to converge.

References

Aikhenvald, Alexandra Y, Robert M. W. Dixon & Masayuki Onishi (eds) 2001. *Non-canonical marking of subjects and objects*. Amsterdam: Benjamins.

Aissen, Judith. 2003. Differential object marking: iconicity vs economy. *Natural Language and Linguistic Theory* 21.435–83.

Alba-Salas, Josep. 2004. Lexically selected expletives: evidence from Basque and Romance. *SKY Journal of Linguistics* 17.35–100.

Alsina, Alex. 1996. *The role of argument structure in grammar*. Stanford, CA: CSLI Publications.

Alsina, Alex, Tara Mohanan & KP Mohanan. 2005. How to get rid of COMP. *Proceedings of LFG05*, ed. by M. Butt & T.H. King. Stanford, CA: CSLI Publications.

Arad, Maya. 1998. *VP-structure and the syntax-lexicon interface*. London: University College London.

Asudeh, Ash. 2005. Control and semantic resource sensitivity. *Journal of Linguistics* 41.465-511.

Austin, Peter. 1982. Transitivity and cognate objects in Australian languages. *Studies in transitivity*, ed. by P.J. Hopper & S.A. Thompson, 34–47. New York: Academic Press.

Baker, Mark. 1997. Thematic roles and syntactic structure. *Elements of grammar: handbook in generative syntax*, ed. by L. Haegeman, 73–137. Dordrecht: Kluwer.

Baker, Mark C. 1988. *Incorporation. A theory of grammatical function changing*. Chicago: The University of Chicago Press.

Börjars, Kersti & Nigel Vincent. 2005. Position vs. function in Scandinavian presentational constructions. *Proceedings of LFG05*, ed. by M. Butt & T.H. King. Stanford, CA: CSLI Publications.

Bossong, Georg. 1985. *Differentielle Objektmarkierungin den Neuiranischen Sprachen*. Tübingen: Gunter Narr Verlag.

—. 1991. Differential object marking in Romance and beyond. *New analyses in Romance linguistics: selected papers from the XVIII Linguistic Symposium on Romance languages*, ed. by D. Wanner & D. Kibbee, 143-70. Amsterdam: John Benjamins.

Bresnan, Joan. 2001a. *Lexical-Functional Grammar*. Oxford: Blackwell.

—. 2001b. The emergence of the unmarked pronoun. *Optimality-theoretic Syntax*, ed. by G. Legendre, J. Grimshaw & S. Vikner, 113 –42. Cambridge, MA: The MIT Press.

Bresnan, Joan & Jonni M Kanerva. 1989. Locative inversion in Chichewa: a case study of factorization in Grammar. *Linguistic Inquiry* 20.1–50.

Bresnan, Joan & Lioba Moshi. 1990. Object assymetries in comparative Bantu syntax. *Linguistic Inquiry* 21.147–86.

Butt, Miriam, 1998. Constraining argument merger through aspect. In E. Hinrichs *et al* (eds) *Complex Predicates in Non-derivational Syntax*. New Yor: Academic Press, 73-113.

Butt, Miriam. 2006. *Theories of Case*. Cambridge: Cambridge University Press.

Caluianu, Daniela. 2008. Non-canonical sentence patterns in Romanian and the transitive prototype. Paper presented at the The 4th Oxford-Kobe Linguistics Seminar: The History and Structure of the Romance Languages.

Carrier, Jill & Janet Randall. 1992. The argument structure and syntactic structure of resultatives. *Linguistic Inquiry* 53.173–234.

Dalrymple, Mary. 2001. *Lexical Functional Grammar*. New York: Academic Press.

de Hoop, Helen & Andrej L. Malchukov. 2008. Case-marking strategies. *Linguistic Inquiry* 39.565-87.

Dryer, Matthew. 1986. Primary objects, secondary objects, and antidative. *Language* 62.808–45.

Falk, Yehuda. 2001. *Lexical-Functional Grammar: an introduction to parallel constraint-based syntax*. Stanford, Ca: CSLI Publications.

Farrell, Patrick. 2005. *Grammatical relations*. Oxford: Oxford University Press.

Fillmore, Charles J. 1968. The case for case. *Universals in linguistic theory*, ed. by E. Bach & R.T. Harms, 1–88. New York: Holt, Reinhart and Winston.

Gruber, Jeffrey S. 1976. *Lexical structures in syntax and semantics*. Amsterdam: North-Holland Publishing.

Hawkins, John A. 1986. *A comparative typology of English and German*. London: Croom Helm.

Horrocks, Geoffrey & Melita Stavrou. To appear. Morphological aspect and the distribution of cognate objects across languages. *Syntax, lexical semantics, and event structure*, ed. by M. Rappaport Hovav, E. Doron & I. Sichel. Oxford: Oxford University Press.

Hudson, Richard. 1992. So-called 'double objects' and grammatical relations. *Language* 68.251–76.

Jackendoff, Ray. 1990a. On Larson's treatment of the double object construction. *Linguistic Inquiry* 21.427–56.

—. 1990b. *Semantic structures*. Cambridge, MA: MIT Press.

Kiparsky, Paul. 1998. Partitive case and aspect. *The projection of arguments: lexical and compositional factors*, ed. by M. Butt & W. Geuder, 265–308. Satnford, CA: CSLI Publications.

Lazard, Gilbert. 2003. What is an object in a crosslinguistic perspective? *Romance objects. Transitivity in Romance languages*, ed. by G. Fiorentino, 1-16. Berlin: Mouton de Gruyter.

Lepschy, Giulio. 1992. 'Subject' and 'Object' in the history of linguistics. *Journal of the Institute of Romance Studies* 1.1–15.

Levin, Lori S. 1988. *Operations on lexcial forms: unaccusative rules in Germanic*. New York: Garland.

Lødrup, Helge. 1999. Linking and optimality in the Norwegian presentational focus construction. *Nordic Journal of Linguistics* 22.205–30.

Maling, Joan. 1993. Of nominative and accusative: the hierarchical assignment of grammatical case in Finnish. *Case and other functional categories in Finnish syntax*, ed. by A. Holmberg & U. Nikanne, 49–74. Berlin: Mouton de Gruyter.

—. 2001. Dative: the heterogeneity of the mapping among morphological case, grammatical functions, and thematic roles. *Lingua* 111.419–64.

Melis, Ludo. 2002. Objects and quasi-objects. The constellation of the object in French. *The nominative & accusative and their counterparts*, ed. by K. Davidse & B. Lamiroy, 41–79. Amsterdam: John Benjamins.

Müller-Gotama, Franz. 1994. *Grammatical relations. A cross-linguistic perspective on their syntax and semantics*. Berlin: Mouton de Gruyter.

Nelson, Diane. 2007. Events and case in Inari Saami. *Saami linguistics*, ed. by I. Toivonen & D. Nelson, 207–25. Amsterdam: John Benjamins.

O'Connor, Robert. 2006. *Information structure in Lecial-Functional Grammar: the discourse-prosody correspondence*. Manchester: The University of Manchester.

Payne, John. 1985. Accusative and Infinitive Constructions in English. *Proceedings of the Fourth Joint Anglo-Soviet English Studies Seminar*, ed. by M. Murphy, 5–17. London: British Council.

—. 1999. The English Accusative and Infinitive Construction: a categorial analysis. *The clause in English: Festschrift for Rodney Huddleston*, ed. by P. Collins & D. Lee, 187–227. Amsterdam: John Benjamins.

Pereltsvaig, Asya. 1999. Cognate objects in Russian: is the notion "cognate" relevant for syntax? *Canadian Journal of Linguistics/Revue canadienne de linguistique* 44.267–91.

Plank, Frans. 1984a. Introduction: Ces obscurs objets du désir. *Objects. Towards a theory of grammatical realtions*, ed. by F. Plank, 1–8. London: Academic Press.

— (ed.) 1984b. *Objects. Towards a theory of grammatical relations*. London: Academic press.

Postal, Paul M & Geoffrey K Pullum. 1988. Expletive noun phrases in subcategorized positions. *Linguistic Inquiry* 19.635–70.

Rostila, Jouni. 2002. Object expletives as case-marking of sentential arguments. University of Tampere.

Siewierska, Anna. 2004. *Person*. Cambridge: Cambridge University Press.

Simpson, Jane. 1983. Resultatives. *Papers in Lexical-Functional Grammar*, ed. by L. Levin, M. Rappaport & A. Zaenen, 143–57. Bloomington, IN: Indiana University Linguistics Club.

—. 1991. *Warlpiri morpo-syntax. A lexicalist approach*. Dordrecht: Kluwer.

Stroik, Thomas. 1990. Expletive NPs in object position. *Canadian Journal of Linguistics* 35.13–27.

Stroik, Thomas S. 1996. Extraposition and expletive movement: a Minimalist account. *Lingua* 99.237–51.

Svenonius, Peter. 2002. Icelandic case and the structure of events. *Journal of Comparative Germanic Linguistics* 5.197-225.

Tenny, Carol. 1994. *Aspectual roles and the syntax-semantics interface*. Dordrecht: Kluwer.

Toivonen, Ida. 2002. Directed motion in Swedish. *Journal of Linguistics* 38.313–45.

Van Valin, Robert D Jr & Randy La Polla. 1997. *Syntax. Structure, meaning and function*. Cambridge: Cambridge University Press.

Zaenen, Annie & Elisabet Engdahl. 1994. Descriptive and theoretical syntax in the lexicon. *Computational approaches to the lexicon*, ed. by B.T.S. Atkins & A. Zampolli, 181–212. Oxford: Oxford University Press.