THE LICENSING OF GENITIVES

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ABSTRACT

In this paper we attempt to clarify the nature of the relation between the possessor and a possessed concrete noun in an English genitive. It is argued that such a relation cannot be thematic, regardless of whether the head or the genitive marker is considered to be the theta role assigner. A view is outlined of both possession and modification which allows the possessor to be interpreted as a pure modifier. In addition, other cases of genitives are considered where the possessive item is either obligatorily (if present) or optionally coindexed with a Lexical Conceptual Structure (LCS) variable. The domain of the notion adjunct argument is modified to allow for the various relations a genitive may have to a head noun. This work supports a view of the Case Filter which considers case to be required by NPs rather than by arguments, and it is supported by the behaviour of post-nominal genitives.

1. INTRODUCTION

In a theory of syntax such as Government and Binding Theory (GB), sentences are considered to be generated from the lexicon in that basic aspects of sentential structure are determined by lexical properties such as semantic valency. Thus in a sentence such as (1) there are two syntactic arguments because the predicate has a semantic valency of two, or, in other words, assigns two theta roles. All NPs are considered to require semantic licensing, and the NPs in (1) are said to be licensed in the structure by virtue of receiving a theta role from the predicate.

(1) Marshall ate the pablum slowly.

In addition to argument licensing, elements can also be licensed by being modificational. Thus, the adverb in (1) is licensed in essence by assigning a semantic role to the verb. (cf. McConnell-Ginet 1982, Zubizarreta 1987).

In this paper we will consider the status of genitive Noun Phrases such as those italicized in (2) with respect to licensing.

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The majority of generative studies of English genitive structures have concentrated on derived nominals such as (2c), and have developed from the observation that such nominals bear a striking resemblance to sentential counterparts in valency and syntax (cf. Chomsky 1970). The usual conclusion is that such genitive NPs receive a theta role, and this claim is then generalized to include genitives such as in (2a). Here, we will focus on genitives with non-derived nominals such as in (2a) asking the question: How is the possessor licensed? Is it best considered an argument or a modifier? We will conclude that the genitive in (2a) is a modifier, while that in (2b) is a sort of adjunct-argument (cf. Grimshaw 1989) and that the genitive in (2c) is an argument.

The question of whether a given element is an adjunct or an argument may ultimately prove irrelevant: indeed this present exploration points to several of the difficulties in the argument-adjunct distinction. Nonetheless, the issue is of importance for many reasons. First, there is considerable debate as to whether the Case Filter applies to the category NP for morphological reasons or to thematic arguments (cf. Chomsky 1981, Larson 1985, Lasnik 1992, Stowell 1981 and others). If some genitive NPs prove not to be arguments, but to need case regardless, then a morphological version of the Case Filter is to be preferred (eg. Bouchard 1982, Lasnik 1992). Secondly, there are several differences between the genitive NPs in (2a) and in (2c). For example, only the former can appear in post-nominal position with 's. These differences can be explained under a view which considers the genitives to be licensed in different ways.

2. THE POSSESSOR AS THEMATIC ARGUMENT

The possessional relation has been considered to be thematic by Anderson (1983), Chomsky (1986), Culicover (1988), Gruber (1976), and Jackendoff (1986). I would like to show that given certain reasonable assumptions about thematic relations, this cannot be the case in certain genitive structures. Instead, this possessional relation should be considered one of modification (cf. Grimshaw 1989, Zubizarreta 1987). Modification will be discussed in Section 3.
2.1 The Possessor as an Argument of the Head Noun

If the possessional relation is thematic, the theta role must be assigned by some element. One possibility is that it is assigned by the head noun. This would mean that such a noun would be listed in the lexicon with its optional possessional theta role as in (3a), along the lines of lexical entries for other argument-bearing elements such as in (3b). (The parentheses show optionality.)

(3)  
   a. MOUNTAIN: (possessor)  
   b. BREAK: (agent), patient

Recent work on the lexicon by authors such as Hale and Keyser (1987) among others, has argued that arguments should not be represented by labels, but rather should be represented as variables within a lexical conceptual structure (LCS) which spells out relevant parts of the meaning of a word. Following this view, we would represent the lexical entry of mountain as in (4a), parallel to verbal entries such as in (4b).

(4)  
   a. MOUNTAIN: large hill...etc...(related to x)  
   b. BREAK: (y, taut or rigid entity, develop separation in material integrity) (cf. Hale and Keyser 1987)

The main problem with the idea that possession is a theta role assigned by the head noun is that the relation of possession in (2a) does not meet the criteria for thematic relations which are informally assumed by many linguists. While there is no single formal definition in the literature of a theta role or argument, there appear to be two components which make up a thematic relation.

First, thematic arguments are those which cannot freely occur with any given verb, but which are selected by a specific verb. Thus a goal is not possible in (Sa) since the verb does not select a goal/ whereas a temporal is possible, being an adverbial. In (Sb), on the other hand, the goal is possible since it is selected by the verb.¹

¹ The problem here, as McConnell-Ginet (1982) points out, is that not all adverbials are possible with all verbs. Thus it appears that elements we usually consider to be adverbials are somewhat like arguments in this respect.  
(i) Bob weighs 120 pounds (*elegantly/heavily/for his mother)  
However, adverbs of particular types are arguably restricted to verbs of certain broad aspe ctual types (eg. eventive, stative) rather than to verbs with certain particular meanings.
(5)  
   a. Fred liked Tina (*to Bill) yesterday.
   b. Fred ran (to the store) yesterday.

   A second component of a thematic role is that it is semantically obligatory in the sense that even if the argument is not there, it is implied by the meaning of the verb. In this way, the verb *eat* such as in (1) and (6) has a thematic patient argument since in both sentences it is implied that something was eaten.

(6) Colette has eaten.

We can thus define an element with a theta role as below.²

(7) **Thematic element**: An entity involved in an event or state, the participation of which is necessarily implied by the particular nature of the event or state denoted by the predicate.

A possessor such as *Hilary* in (2) is not implied by the meaning of *mountain* and is in general (with one set of exceptions to be discussed below) possible with any nominal, and hence does not qualify as a thematic element.³

A secondary problem with considering the possessor/possessed relation to be thematic is that possession is an extremely vague relation, as has been noted by all who have worked with it. (cf. for example, Shumaker 1975.) Since the relation between *Hilary* and *mountain* in (2a) can be one such that Hilary owns the mountain, likes it, talks about it a lot, sees it from his living room window, has painted it, etc., it does not seem possible to define the notion of possession in the same way as is possible for roles such as agent and patient. These latter roles can be clearly defined. For ex-

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² We include the term ‘particular nature’ so that elements which are implied by all verbs will not be considered thematic. For example, for almost any verb it is implied that it took place somewhere in space, but such locatives are not usually considered arguments. A reverse problem is that there are elements usually considered to be arguments which seem nonetheless semantically optional, as in (ii) discussed by McConnell Ginet (1982).

(ii) Joan spoke (to someone).

Thus, *speak* can be a verb of communication or a verb of creating a verbal noise. It is unclear to me, however, that the goal is truly semantically optional, since in the latter case it is usually true that one is speaking to oneself.

³ Note that this view means that the causative argument of *break* is also not thematic. This seems right, since causer is an essentially aspeccual role which is optional in most cases (see Ritter & Rosen 1993b for the development of this idea).
ample a theme is that which undergoes motion, a patient is that which undergoes a change of state, etc., (cf. Gruber 1976, Jackendoff 1974). Even in the common usage of the term theme to mean little more than direct object, the interpretation of the theme of a particular verb is not open to the enormous variation in possible meaning as is the possessor of a nominal.

Given these problems in defining the relation between a possessed element and its possessor, it seems all that can be said is that there is a relation. This idea is expressed by Seiler (1983: 4), who says that 'POSSESSION consists of the representation of a relationship between a substance and another substance ... [within a] biocultural domain.' The asymmetry of the relation is expressed by Hewson (1988), following Curme (1931) in his consideration of the possessed as an element 'within the sphere of influence' of the possessor. This asymmetry is accounted for semantically in that we tend to see objects in relation to animate beings and not the other way around so that 'the man's mountain' is preferable to '#the mountain's man'. When neither element is animate the phrase has intermediate status, for example, '#the school's roof'.

We have argued that possessor is not a theta role assigned by the head noun in structures such as (2a), assuming the definition of theta role in (7). Another possibility, if we want to consider the genitive NP in (2a) to be a thematic argument of the head noun, is to consider the notion of thematic argument to be much more abstract than the definition in (7) allows. Following Higginbotham (1985) and Williams (1981), for example, we could consider that nouns contain an open position (i.e., a variable) which must be coindexed with another element in order to be filled. It is this open position which allows nominals to act as predicates (as does an aria in (8), as well as allowing them to enter into other relations such as nominal/determiner relations and nominal/modifier relations.

(8) I consider this an aria.

It is important to note, however, that all the relations into which a nominal enters involve the fixing of reference or identity. The open position is never referentially distinct from the reference of the nominal itself. Coindexing with this position is parallel then to the relation between two elements coindexed across the verb be. This is a very different process from theta role assignment, which results in a situation where the relation can be essentially anything but coreference. It appears then that the open position cannot be used in a straightforward way to assign argument status to a possessor.
2.2 The Possessor as an Argument of 's

Our conclusion so far, then, is that concrete nouns do not assign theta roles, even though they do contain an open position which allows them to enter into other relations such as determination, modification and identity. If the head noun does not assign a theta role to the possessor, we are left again with the question as to how the possessor is licensed. A possible answer is that the theta role of possessor is assigned, not by the head noun, but by the 's element. This is proposed by Anderson (1983) in order to account for the differences between derived and concrete nominals. This view would create a parallel between the predicate have and the element 's, where have might be represented as in (9). (cf. Pollock 1989 who considers possessive have to assign theta roles.)

(9) a. Silas has a lot of gold coins.
   b. HAVE: x be related to y

There are many parallels between the have relation and the 's relation. For example, as seen in (10), the relation between the post-verbal and the pre-verbal NPs can be as varied as the relation between a head noun and a genitive noun. In addition, the relation seems to be specified more by the two nouns than by the verb have. (cf. Cowper 1989, Grimshaw and Mester 1988, Kearns 1989, Ritter & Rosen 1993a, Wierzbicka 1982.)

(10) a. Mitzi has this thing about Siamese cats.
    b. I have a hearing defect.
    c. John has an exam.

It might be considered that since we have a possessor theta role for a verb as shown in (9), we could use this same possessor theta role for nouns. However, it appears that (9) is not the right view for verbs such as have. Those who have examined have in detail conclude that it in fact assigns no theta role. Ritter & Rosen (1993a) consider that while the verb seems to mean something, this meaning is not part of the lexical representation of the verb, but is derived from syntactic structure. Cowper (1989) discusses the fact that to consider possessional have to assign specific theta roles leads us to posit multiple lexical entries for the verb have. (cf. Pollock 1989.) She argues that this is neither necessary nor desirable. Instead she develops a theory of thematic underspecification to account for have. In both of these studies, it becomes clear that the positing of a possessional theta role is unwarranted.
In addition, there are other problems for the view that \( 's \) assigns a possessor theta role. An initial problem (similar to that of have) is that in some cases (as in 2c) \( 's \) would be considered a theta role assigner and in other cases (as in 2a) it would not be so considered since here the theta role is assigned by the nominal (In Anderson 1983, \( 's \) is considered to assign a theta role in some cases and not in others.) There are more serious problems also. Given certain current views it is impossible in principle to consider \( 's \) a theta role assigner. In (11) we present the tree structure for nominals argued for by Fukui and Speas (1986), Fukui (1986) and Speas (1986) (cf. also Abney 1987). (The movement of the possessor is not posited in these sources.)

(11) a. $$\begin{array}{c}
\text{DP} \\
\downarrow \\
\text{DET NP} \\
\downarrow \\
\text{the} \\
\downarrow \\
\text{N'} \\
\downarrow \\
\text{mountain}
\end{array}$$

b. $$\begin{array}{c}
\text{DP} \\
\downarrow \\
\text{Hilaryi D'} \\
\downarrow \\
\text{DET NP} \\
\downarrow \\
\text{'s} \\
\downarrow \\
\text{DP} \\
\downarrow \\
\text{NP} \\
\downarrow \\
\text{tj} \\
\downarrow \\
\text{mountain}
\end{array}$$

In this view, \( 's \) is a functional category, similar to a determiner, and is not a lexical category. Since part of the definition of a functional category is that it does not have a semantic argument structure (i.e., does not assign theta roles), it is impossible to consider \( 's \) both a functional category and a theta assigner. An additional problem is that given the structure in (11b), the possessor is not a sister to the \( 's \) at D-structure, nor is it in a specifier/ head relation with it, and hence \( 's \) could not be considered a theta role assigner for the possessor.

A further problem with positing \( 's \) as the licenser of the possessor which is independent of the particular structure assigned to NP is that while we may thus have solved the problem for English, we are left with the same problem for other languages where there is no such element as \( 's \). In Haitian Creole, for example, the possessor is a bare NP (cf. Gilles 1988).

(12) a. foto Jann nan b. dra nef manman Pol yo

- photo Jeanne Det
- cloth new mother Paul Det-pl

'\text{the photo of Jeanne}' 'Paul's mom's new cloth'

Given the above then, \( 's \) is best analyzed as a definite determiner which assigns Case to the left, as do other functional categories, and which does not participate in the semantic licensing of the possessor. (It may, how-
ever, due to its phonological relation with the possessor, be said to connect the definiteness of the head to the fact that it is related to the possessor.)

3. THE POSSESSOR AS A MODIFIER

If the possessor is not licensed by theta theory, then how is it licensed? The answer to this is to be found in the traditional term possessive adjective, which suggests that the possessor is to be seen as a modifier rather than as an argument. (This is also proposed in Zubizarreta 1987 and Grimshaw 1989). In this section we will consider the implications of this view.

There have been several formalized views of modification proposed recently, such as those of McConnell-Ginet (1982) and Zubizarreta (1987) (cf. also Higginbotham 1985 and Travis 1988). Let us first consider the view of Zubizarreta (1987). She proposes that modification is as below.

(13) RULE OF MODIFICATION (Zubizarreta 1987: 23)
A modifies B in the context: \[C \ldots A \ldots B\ldots\]
iff C immediately dominates A and B, C is a projection of B, and B is not a head.
If A is an adjunct predicate which contains a variable x, then B or the head of B contains an arg-variable with lexical index i and x is assigned the value i.
If A is an adjunct argument with lexical index i, then B or the head of B contains an variable x and the value i is assigned to x.

For Zubizarreta, modification, whether by a predicate or an argument, is like theta marking in that it involves a variable which receives the index of an argument. Possession for her involves the coindexing of a poss-variable at the N' level with the possessor, with the poss-relation being a general one comprising relations such as ownership and creation.

For Zubizarreta the poss-variable exists at the N' level of non-eventive NPs so that it is a property of a phrase, not of a noun. A question raised here is: Where does the poss-variable come from? A partial answer can be found by examining McConnell-Ginet's theory of modification. She argues that modifiers are elements which supply heads with variables, which they then satisfy. Thus we could consider the poss-variable to be assigned to the N or the N' by the possessor. The problem for us is that the head of the possessor is itself simply a noun and does not contain the semantics of modifiers, i.e., the ability to assign a variable, which is a lexical property of
adverbs, adjectives and arguably, prepositions. The solution is to posit that the variable arises as a result of the modificational configuration itself.\(^4\)

We can now provide a picture of possessive modification. While in the case of an adjectival modifier, the variable provided by the modifier to the nominal will have relevant features such as colour, size, and so on (so that the variable provided by an adjective such as *white* will be interpreted as a variable of colour), in the case of a nominal modifier, there is no semantics to provide the parameters of the variable. This means that the interpretation of the modification is undefined and is open to any number of possible relations, which will be fixed in an extra-grammatical component. Thus while a *white wall* is one which is specified for colour, *Hilary's wall* is under-specified in the sense that the exact relation between *Hilary* and *wall* is left open.

Our view of the licensing of possessors is thus complete. The possessor is a modifier, the presence of which creates (by virtue of the configuration) a variable at the N' level which is then satisfied by the possessor. This so far is true for any modifier. The possessor differs from other modifiers in that it lacks a modificational semantics which would provide information as to the details of the modificational relation, hence this relation remains unspecified. It also differs in that it is not an adjective, but a noun, and therefore requires Case (assuming the Case Filter of Chomsky 1981: "NP if it has no Case"). In order to get Case it must move to the SPEC of DP position. The Case requirement ensures that possessors are limited to one per phrase, and that this one must occur leftmost in the string of modifiers.

4. THEMATIC POSSESSORS

We now turn to possession structures where there is a more tightly specified relation between the genitive NP and the N'. An example is given in (14) where the genitive NP is the agent of the event of the N'.

(14) The Romans' destruction of the city.

*Destruction*, as a nominalization, has an LCS as in (15) (where the semantic details are left out).

(15) destruction: \( \ldots x \ldots y \ldots \)

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\(^4\) This idea is compatible with the work on construction grammar (cf. Goldberg 1992 and references therein). Others too, such as Ritter & Rosen (1993b), Ghomeshi & Massam (1992) are exploring the role that constructions play in semantic interpretation.
b. *that examination of the patient of Daniel’s

To account for this we consider that ‘s can attach to an item in the lexicon as well as in the syntax.\(^5\) (See Cowper 1992 for analysis of other cases of affixation at different levels.) If it attaches lexically, it acts as a morphological case marker to show genitive case. This case is not assigned by ‘s, however, but rather by the preposition of. The claim that the ‘s serves a different function here is supported by the fact that it has a different morphological realization in some cases, as seen in (20).

(20) a. my/your/her/(his)/our/their book
    b. a book of mine/yours/hers/(his)/ours/ theirs.

The post-nominal ‘s in all instances co-occurs with the preposition of, where the PP gets no theta role. It can thus be said that non-thematic of assigns genitive case. This case is realized as ‘s. This serves to support the claim that ‘possessors’ are non-thematic, while prenominal agents are thematic. The adjunct arguments discussed above predictably are underdetermined as to whether or not they can appear with postnominal ‘s.

(21) a. a sister of Clare’s
    b. a sister of Clare.

6 CONCLUSION

We have attempted here to clarify the nature of the relation between the possessor and a possessed concrete noun in an English genitive. It has been argued that such a relation cannot be thematic, regardless of whether the head or the genitive marker is considered to be the theta role assigner. A view has been outlined of both possession and of modification which allows the possessor to be interpreted as a pure modifier. In addition, other cases of genitives were considered where the possessive item is either obligatorily (if present) or optionally coindexed with an LCS variable. The domain of the notion adjunct argument was modified to allow for the various relations a genitive may have to a head noun. This work supports a view of the Case Filter which considers case to be required by NPs rather

\(^5\) We reject the view expressed in Anderson (1983), Aoun, Hornstein, Lightfoot & Weinberg (1987), Lasnik & Saito (1992) that postnominal genitives are determiners of empty NPs (a book of Mary’s ec). As well as presenting technical problems related to the distribution of empty categories, such a view leads to a false interpretation, as discussed by McCawley (1988) and references therein.
than by arguments, and it is supported by the behaviour of post-nominal genitives.

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