

THE EXPRESSION OF COGNITIVE CATEGORIES



THE EXPRESSION OF **POSSESSION**

EDITED BY WILLIAM B. MCGREGOR

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The Expression of Possession



The Expression of Cognitive Categories

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Introduction

William B. McGregor

The nine papers constituting *The Expression of Possession* deal with a range of issues concerning the expression of the relation of possession in human languages. It is not intended to present a comprehensive overview of what is known about the topic, but rather to provide some flavour of what is interesting descriptively and theoretically about the expression of possession, to present fresh perspectives on this well-researched topic, and to suggest viable prospects for future research. Thus most of the papers show a strong descriptive orientation, and present detailed and nuanced accounts of possessive constructions in particular languages or areally/genetically constituted groups of languages. Many of them also address issues of current relevance, and/or question widely presumed knowledge.

If we are to investigate the ways of expressing possession we are immediately confronted with the question: What is the possessive relation? A good deal has been written on this topic – see for instance, Seiler (1983); Taylor (1989: 202–203); Tsunoda (1995); Heine (1997: 3–6, 33–41); Herslund and Baron (2001: 1–4). For present purposes it is sufficient to say that it is a relational concept that potentially covers a wide range of conceptual relations between entities, including, for human beings, between persons and their body-parts and products, between persons and their kin, between persons and their representations (e.g. names, photographs), between persons and their material belongings (animate and inanimate items they own), between persons and things that they have usership-rights to or control over, between persons and cultural and intellectual products, and so on. For other animates and inanimates a more restricted range of conceptual relations is generally available.

Most linguists – including the present author and the contributors to this volume – would probably agree that the definition should be couched in terms of linguistic factors, rather than purely conceptually. If this approach is adopted, it becomes apparent that different notions of possession are generally invoked in different linguistic constructions. For instance, a number of languages show different constructions depending on how ‘close’ the possessive relation is. Many languages distinguish between *inalienable possession* and *alienable possession*, where the former is associated with

the ‘closest’ and most inherent relations (e.g. body parts, kin), the latter with less close, less inherent relations (e.g. owned material objects). (See further Chappell and McGregor 1995.)

To assist the the reader track their way through the volume and to identify the main issues, we now provide detailed summaries of each of the papers. It is hoped that these summaries will whet the reader’s appetite for the detailed discussions and arguments in the individual papers, which of necessity can be at best hinted at here.

But before we begin, it is necessary to establish some basic notions and terminology. Throughout the book the term *possessum* (abbreviated PM) is used in reference to that which is possessed; it is also sometimes used of the linguistic expression that denotes this item. Correspondingly, the term *possessor* (abbreviated PR) is used in reference to the person, animal, or whatever, that possesses the PM.

Three primary and general types of possessive construction are usually distinguished, attributive, predicative, and external. As it is usually used, the term *attributive possession* refers to constructions in which the PM and PR expressions form an NP, as in *my dog*, *the king of France’s bald pate*, and *Cliff’s ankle*. These constructions are also termed *adnominal possession*. By contrast, *predicative possession* is used of constructions in which the possessive relation is expressed in a predicate, often by a possessive verb, as in *I have a dog* and *The king of France has a bald pate*. *External possession constructions* (EPCs) are constructions in which the possessive relation is not specified either by the lexical verb or within the NP – the PM and PR expressions, that is, do not belong to an NP – but rather at the level of a clausal construction, as in *The dog bit Cliff on the ankle* (see further Payne and Barshi 1999). Sometimes the term *internal possession construction* (IPC) is used instead of adnominal possession, especially when a contrast is being drawn with EPCs.

In the first paper, *English possessives as reference-point constructions and their function in the discourse*, Peter Willemse, Kristin Davidse and Liesbet Heyvaert enquire into the information status of the PM referent in English adnominal possessive constructions with prenominal possessors (PRs), as in *Greta Garbo’s knickers*. Based on corpus data, they argue that the standard analyses of possessives as mere definite NPs (as per e.g. Quirk *et al.* 1985; Lyons 1999; Rosenbach 2002), or as NPs presupposing the identifiability of their referent (Du Bois 1980; Martin 1992) are problematic. At the same time, Taylor’s (1996) contrary prediction – based on the theory of possessive NPs as reference-point constructions (as per e.g. Langacker 1995; Taylor 1996) – that PM referents will be overwhelmingly discourse-

new and anchored to a given PR, is also problematic: in most instances PM referents turn out to be discourse-given at least to some extent. Willemse, Davidse and Heyvaert argue that a taxonomy of discourse statuses must be recognised ranging from fully discourse-given, through text reference, inferable, ‘anchoring’, ultimately to fully discourse-new. They show that PM referents of adnominal possessive NPs in English may have discourse statuses at any point on this taxonomy.

This paper adds a needed discourse dimension to the reference-point theory of adnominal possessive NPs. It demonstrates that it is not sufficient to study these constructions in isolation; account must be taken of the discourse context in which they occur. More generally, the need for discourse studies of adnominal possessive constructions in other languages is indicated.

Jan Rijkhoff’s *On the co-variation between form and function of adnominal possessive modifiers in Dutch and English* deals with adnominal possessive modifiers of common nouns denoting concrete objects that are introduced by *van* ‘of’ in Dutch and *of* in English. He argues that these adnominal possessives can fill three of the five modifier functions distinguished in his Functional Grammar-inspired layered model of the NP (Rijkhoff 2002). In particular, they can serve a classifying function (indicating the kind of entity being referred to, as in *a man of prayer*), a qualifying function (indicating a property of the entity, as in *a woman of great beauty*), and a localizing function (indicating a location of the entity either in physical or conversational space, as in *the bicycle of his father*). Possibly in some languages adnominal possessives can serve discourse referential functions as well (e.g. if the third person singular possessive pronoun is used as a definiteness marker); however, it seems that in no language do they fill the fifth, quantifying function.

Rijkhoff identifies three grammatical parameters with respect to which *van* ‘of’ and *of* adnominal possessives vary: modification (whether or not the possessive can be modified), predication (whether the possessive can occur in predicate position), and reference (whether the possessive can be referential). He argues, on the basis of usage data garnered from the internet, that the variation in grammatical and semantic properties found in expressions involving these markers correlates with the grammatical role of the modifier in the NP.

It emerges clearly from Rijkhoff’s contribution that adnominal possessive constructions marked by *van* ‘of’ in Dutch and by *of* in English do not serve a unique modifying function in either language. An important consequence is that attributive possession is not – at least in Dutch and English – a unitary

category, but embraces a range of emically distinct subtypes. The extent to which this applies in other languages as well demands investigation – cf. below on van Staden’s chapter for a different problem.

In her contribution *Is possession mere location? Contrary evidence from Maa*, Doris Payne addresses the question of whether possession is conceptually identified with location, as has been widely presumed in typological and cognitive linguistic literature: the “possession-is-location” view, as she dubs it. She argues – on the basis of elicited and corpus examples in the Nilo-Saharan language Maa (Tanzania and Kenya) – that (at least in Maa) possession is cognitively distinct from location, and consequently that Possessor and Locative are distinct roles. Payne demonstrates that the verb *tii* ‘be at’ has locational and existential uses in particular constructions, while the verb *ata* ‘have’ has possessive and existential uses in particular constructions. However, there is no evidence that *tii* ‘be at’ can be used to predicate possession, or that *ata* ‘have’ can be used to predicate location. The non-overlap in locative and possessive senses for these two roots would be surprising if possession and location were conceptually indistinguishable.

What the Maa verbs *tii* ‘be at’ and *ata* ‘have’ share is use in existential constructions. This leads one to suspect that in languages in which possession and location are represented by the same verb or construction the cognitive connection might be indirect, via the existential sense. This indicates the need for careful typological and historical investigations to test whether there might be closer connections between possession and existence, and location and existence, than between possession and location. Recent research on Nyulnyul (non-Pama-Nyungan, Australia) lends plausibility to the hypothesis. Nyulnyul has two formally similar negative constructions, a negative possessive and a negative existential/presentative; there is no evidence of any diachronic link via a locative construction, sense or use.

Payne accepts that the fact that various languages use a single lexical item to express both possession and location is indicative of the existence of conceptual connections between the two domains; this does not, however, imply that they are conceptually identical. Indeed, in many languages where the same lexical item is used for expressing both location and possession, different constructions are employed, as Payne shows for Jakaltec and Amharic. This observation further underlines the need to go beyond mere lexical identity, and to recognize the relevance of constructions, a point made in other contributions to this volume.

Learning to encode possession, by Sonja Eisenbeiß, Ayumi Matsuo, and Ingrid Sonnenstuhl deals with the acquisition of the expression of possession. Its main focus is on the acquisition of adnominal, predicative, and ex-

ternal possession in German, although English and other languages are also mentioned. In contrast to many acquisition studies, this one focusses on the encoding of possessive relations, rather than merely uses examples of possessive constructions as instances of morpho-syntactic phenomena to be acquired. It is based on a corpus of children acquiring German monolingually, which includes data elicited utterances by stimuli designed to elicit possessive relations; child-directed speech is also included.

It is shown that the target constructions emerge step by step, and that similarly the range of possessive functions encoded in the constructions increases over time. In the earliest stages, adnominal possession constructions appear not to exist. In the first stages, possessive relations need not be spoken of at all; when they subsequently are, it may begin with single word utterances that just identify the PR, even if the child is in the two-word stage. Prepositional possessive constructions involving *von* 'of' emerge later, the *-s* genitive construction even later. One of the interesting issues in the acquisition of the genitive *-s* concerns the acquisition of language specific constraints: in German, its restriction to unmodified PR nouns. The child acquiring German appears not to generalize the genitive to nominals with modifiers; instead, they adopt a strategy such as the omission of a required modifier (even where otherwise they would use the modifier), or omission of the marker itself. The developmental stages may overlap: constructions involving target morphemes obligatory in the adult language may alternate with constructions lacking them in the child's speech. Moreover, there are often lexical restrictions, whereby the morphemes are initially restricted to particular lexical nouns, and only later generalize.

Less well studied is the acquisition of predicative possession constructions and EPCs, especially the latter, and comparatively little data is available. This paper thus presents significant new data on the acquisition of these constructions. Eisenbeiß, Matsuo, and Sonnenstuhl show that HAVE-constructions emerge prior to BELONG-constructions, and show fewer deviations from the adult norm, consistent with the notion that HAVE-constructions are less marked. The German child language data shows EPCs only rarely, and quite late. In many circumstances in which adult speakers prefer a dative EPC, children often employ IPCs. Where they do produce something different, it often differs from the target dative EPC. Interestingly, Japanese children show no tendency to extend the Japanese dative construction to EPCs. How and when the double subject and double object EPCs of Japanese (e.g. Tsunoda 1995) are acquired is not known. More generally, research on the acquisition of predicative possession and EPCs in a wider sample of languages is called for.

In *Plain vs. situated possession in Czech: a constructional account*, Mirjam Fried discusses the motivation for use of IPCs rather than the dative EPC in Czech. Two genitive IPCs are distinguished in Czech which show possessive marking of the PR, but differ in the relative order of the PM and PR expressions. In the EPC, the PM and PR are denoted by syntactically separate NPs, with dative marking of the PR NP.

Fried argues that the genitive IPCs and the dative EPC contrast not just formally, but also semantically and pragmatically. She shows, using corpus data, that IPCs can be used for virtually any possessive relation, while the possessive relation in EPCs is more constrained. EPCs, she argues, are strongly associated with the inalienability of the PM and the affectedness of the PR (hence her label “affected PR”), as is widespread cross-linguistically (e.g. Payne and Barshi 1999). More precisely, Fried shows that the PM in an EPC is an entity associated with the personal domain of the PR, as per Bally (1926/1995). The possessive relation between the PM and PR in EPCs cannot be pinned down precisely in terms of the semantic features of the PM and PR; rather, what is relevant is the way each is construed in context – hence Fried’s label “situated possession”, in contrast with “plain possession” of the IPCs. Genitive IPCs and dative EPC, Fried argues, encode distinct conceptualizations of possession.

The formal, semantic and pragmatic differences between the genitive IPCs and the dative EPC indicate that they represent separate constructions in the Construction Grammar sense (e.g. Goldberg 1995). Fried proposes Construction Grammar analyses of the constructions which represent their formal characteristics and meanings. The dative EPC is situated with respect to other nearby constructions, including the genitive IPCs and the Dative of Interest construction, thus demonstrating that they occupy overlapping domains in the functional space of attributive possession. The paradigmatic relations among the constructions is relevant to their meanings and uses.

Frank Lichtenberk’s *Attributive possessive constructions in Oceanic* shows that Oceanic languages typically distinguish two main types of attributive possession construction which are semantically and pragmatically distinct. In one type, the direct type, the PM carries an affix cross-referencing the PR; in the other type, the indirect type – which falls into a number of subtypes – the cross-referencing affix is carried by a possessive classifier element. In both types the affix cross-referencing the PR is most commonly a suffix, and the PR may be also realized by a full NP in addition; in some languages cross-referencing is reduced to an invariant third person singular affix if the PR is also represented by a full NP. (Further

complexities are identified and discussed in Lichtenberk's article; these need not concern us here.)

As expected given its morphological simplicity (see e.g. Chappell and McGregor 1989, 1995), the direct type of possession construction strongly tends to be used in expressing inalienable possession; the indirect types strongly tend to be used for alienable possession. In the indirect types, the possessive classifier indicates what category of possession the PM represents. As Lichtenberk observes, the possessive classifier categorises the PM in respect to the relation of possession it exhibits to the PR. Possessive classifier systems show properties characteristic of classifier systems generally, including fluidity (the possibility of assignment of items to more than one category with accompanying meaning differences), and the existence of unpredictable classifications (exceptions to regularity in meaning, where choice of possessive classifier is semantically and/or pragmatically unexpected or irregular).

A system of three possessive classifiers can be reconstructed for proto-Oceanic, distinguishing PMs for eating, drinking, vs. general. In some languages (particularly Micronesian languages) the system has been elaborated to make more distinctions. In other languages it has remained a ternary system, or has been reduced to a binary system. In a few languages, the possessive classification system has eroded completely, leaving a single possessive construction marked by a reflex of a former classifier (which may or may not contrast with a direct construction). Lichtenberk argues that the classifier system arose in the context of alienable possession due to their wide range of possible interpretations. For inalienable possession, by contrast, the relation between PR and PM is far more predictable, and there is thus less motivation to distinguish categories.

In *Possessive clauses in East Nusantara, the case of Tidore*, Miriam van Staden shows that the Papuan language Tidore is typologically unusual in that it does not distinguish between attributive and predicative possession, contra the widespread belief that the distinction is universally maintained (e.g. Heine 1997: 26). All five possessive constructions in Tidore behave not as NPs, but as clauses. Four of them express predicative possession exclusively, while one construction, the focus of the paper, expresses etically both predicative and attributive possession. This rather simple construction consists of a bare noun expressing the PM and a prefix specifying the PR in terms of person and number; an NP denoting the PR may also occur initially.

Tidore is fairly typical of the languages of the East Nusantara region: in both Austronesian and Papuan languages the possessive constructions in-

volve verbal elements and retain some clausal characteristics. Thus in some languages the possessive construction involves a ligature deriving from a 'have' verb, while in others the possessive construction involves attachment of a marker cross-referencing the PR to the PM nominal, this marker being identical or almost identical with the corresponding verbal subject or object marker. Languages differ, however, in the extent to which the construction is grammaticalised; in some languages the possessive marker is clearly verbal, in others it is a 'ligature'. The word order in possessive constructions is PR–PM rather than PM–PR as elsewhere in Indonesia and throughout the Austronesian world; this is also a reflection of the verbal/clausal nature of the construction. Showing as it does that the distinction between predicative and attributive possession need not always be systematically maintained, van Staden's paper nicely complements Jan Rijkhoff's paper, which, it will be recalled, argues that adnominal attributive possession in Dutch and English do not constitute a single (emic) construction type.

In *Possessive expressions in the Southwestern Amazon*, Hein van der Voort discusses adnominal possession constructions in eight unrelated languages of the linguistically diverse southwest Amazon region: three language isolates and five languages belonging to different genetic families. van der Voort identifies two general types of adnominal possessive construction (each of which occur in a range of subtypes): Type I in which a general possessive marker is added to the PR; and Type II in which the PM hosts PR agreement or person marking morphemes. In Kwaza and Aikanã (both isolates), both types of marking are found, though Type I predominates, and Type II is reduced and used only with third person singular PRs. Baure is also unusual in that it has a full set of PR marking morphemes, as well as a general possessive marker that is attached to optionally possessed nouns (but not to obligatorily possessed or unpossessable nouns), and not to the PR as in Type I.

The main focus of van der Voort's paper is on Kwaza. Kwaza is interesting not just because it shows both types of possessive construction, but also because of the way Type I possession is marked, by the form *-dyhỹ*. The analysis of this form is somewhat uncertain. The balance of evidence seems to indicate that it is synchronically unanalysable. However, it is possible that it is analysable, at least diachronically, into a possessive marker *-dy-* (homophonous with a range of morphemes with related meanings, including causative/benefactive) and a nominalising derivational morpheme *-hỹ*, which is also used as a neutral classifier (see van der Voort 2004 for discussion of the classifiers). Interestingly, in possessive constructions *-hỹ* can

be replaced by a specific classifier. (This situation is not to be confused with the type of possessive classifiers found in Oceanic languages which categorise the PM in regard to the possessive relation itself, as discussed in Lichtenberk's contribution to this volume – see above. In Kwaza, the classifier categorises the PM independently of the possessive relation, and is not restricted to possessive constructions.)

Another unusual feature of Kwaza is that there is a semantically empty dummy lexeme *e-* which is either homophonous with a 'have' verb, or can be used to express predicative possession (van der Voort inclines to the second possibility). Such semantically empty lexemes are found in other languages of the region, though not with the 'have' sense.

The final paper deals with a topic that has not received a great deal of attention in the literature on possession, the expression of possession in sign languages. In this paper, *Possession in the visual-gestural modality: how possession is expressed in British Sign Language*, Kearsy Cormier and Jordan Fenlon focus on the expression of attributive and predicative possession in British Sign Language (BSL), and make some comparative remarks on similarities to and differences from other sign languages.

Attributive possession is expressed in two main ways. In pronominal possession it is indicated by a set of possessive pronouns that differ in form from the cardinal possessive pronouns, and which precede the PM expression. In nominal possession PR and PM NPs are linked by a free possessive pronoun serving as a possessive copula, a pattern also found in spoken languages (see e.g. McGregor 2001). Interestingly, the PR may be omitted if it is inferable (see also Fried's paper in this volume). Older signers also use a finger-spelled *S*, borrowed from signed English systems, as a clitic at the end of nominal PR expressions. This mode of expression, obsolescent in BSL, is still viable in Australian Sign Language (Auslan) and American Sign Language (ALS).

Cormier and Fenlon also examine whether the expression of possession in sign languages is comparable with its expression in spoken languages. They draw out a number of commonalities, including the distinction between attributive and predicative possession, the existence of an optional alienable-inalienable contrast in BSL, and the existence of both HAVE and BELONG verbs. They also observe that there are connections between possessive expressions and locative expressions, and a tendency for possessive morphemes to grammaticalise, which has happened to a limited extent to possessive pronouns in BSL. As this paper makes clear, sign languages must be taken into account in serious typological investigations of possession.

As the above summaries indicate, a diverse range of genetically and typologically different languages are discussed in the volume; these languages are also quite widely spread geographically, languages from Europe, South America, the Pacific region, and Africa being represented. Familiar languages such as English, Dutch, and Czech are included as well as less well known languages such as BSL and Kwaza. The papers dealing with the former set reveal that we still have a lot to learn about possession even in the best described languages.

The papers of this volume are all strongly empirically oriented, and many are based squarely on usage data, including (where possible) instances from corpora. Constructed examples also play an important role in many of the papers, in some cases by necessity (e.g. where the bulk of the available data consists of elicited utterances), in some cases to fill gaps in usage data or to identify what is grammatically impossible. The orientation to usage is augmented by deep concern with meaning. Thus contributions are on the whole not content with just identifying formal construction types, but also make serious attempts to determine what differences in meaning might be encoded or implicated by the alternative modes of expression.

The empirical orientation of the contributions does not mean that theory is eschewed. Indeed, the majority of papers in the volume are concerned in one way or another with linking empirical observations with theoretical concerns. Thus some papers explicitly confront theory with empirical data; some use theory in an attempt to explain empirical observations; and some use theory to account for the semantics and/or pragmatics of possessive constructions. Granted the concern with meaning and usage, it is not surprising that theories from the functionalist end of the spectrum are most strongly represented; however, the contribution by Eisenbeiß, Matsuo, and Sonnenstuhl shows that there may be some chance of approachment between formalist and functionalist theories – and that in some domains at least, similar predictions are being made.

The need for further study of the means used by languages to encode relations of possession is manifest: we are a long way from having a complete knowledge and understanding of the formal modes of expression. In his contribution van der Voort mentions that the Amazonian isolate Movima expresses inalienable and predicative possession by reduplication (Haude 2006: 238ff.); one wonders what other unusual modes of expression might remain undetected in the thousands of undescribed languages of the world. It is hoped that the papers in this volume will stimulate readers to investigate possession in more languages, spoken and signed. It is also hoped that they will stimulate further research on the well described languages.

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English possessives as reference-point constructions and their function in the discourse

Peter Willemse, Kristin Davidse and Liesbet Heyvaert

1. Introduction

In this article we will be concerned with the discourse status of the posses-sum (PM) referent of prenominal¹ possessive NPs such as *his car*, *John's car*.² With regard to this issue we find two opposed, indeed paradoxical, claims in the literature: (a) possessive NPs are definite NPs (e.g. Quirk *et al.* 1985; Lyons 1999; Rosenbach 2002) or they presume the identifiability of the PM referent (e.g. Du Bois 1980; Martin 1992), and (b) possessive NPs introduce overwhelmingly new, previously unknown, PM referents into the discourse by linking them to typically given possessor (PR) referents (Taylor 1996). In this article we will argue, basing ourselves on real usage data,³ that the analysis of possessive NPs as either mere definite NPs, or as NPs which typically introduce new referents in the discourse, cannot be maintained. We will propose that (a) possessive NPs have an identification mechanism different from that found in NPs with definite articles or demonstratives, and (b) the question of the discourse status of PM referents of possessive NPs cannot be reduced to a binary distinction between new or given in the discourse. On the basis of a qualitative and quantitative analysis of a corpus of possessive NPs in extensive discourse contexts, we will argue that many PM referents have a discourse status in between fully given and fully new. For this range of discourse statuses we will propose a continuum-like classification.

¹ As per Taylor (1996: 2), we use the term *prenominal possessives* to refer to possessive NPs in which a genitive or a possessive determiner precedes the head noun, as opposed to 'postnominal' possessives such as *a friend of John's*.

² This excludes NPs with 'classifying' or other non-determining genitives like *the lion's share*, *a mother's boy*.

³ The data we used were extracted from the COBUILD *Bank of English* corpus (examples are marked 'CB') and the Lancaster-Oslo-Bergen corpus (examples are marked 'LOB'). The data from the COBUILD corpus are reproduced with the kind permission of HarperCollins Publishers Ltd.

2. English prenominal possessives in the literature

2.1. Alleged definiteness of possessive NPs and presupposed identifiability of their referents

Possessive NPs have predominantly been associated with definiteness in the literature. Abbott (2004: 122), in her chapter on definiteness in the *Handbook of Pragmatics*, states that possessive NPs “are almost universally considered to be definite”. Specifically with regard to English, many descriptive grammars classify possessive NPs as belonging to the paradigm of definite NPs, implying a far-reaching parallelism between possessive determiners and genitives on the one hand, and definite determiners such as the definite article on the other. Quirk *et al.* (1985: 326) analyze “the genitive construction [i.e. the prenominal possessive, *PW/KD/LH*] as a noun phrase embedded as a definite determinative within another noun phrase”. Biber *et al.* (1999: 271) claim that “possessive determiners make NPs definite”. Huddleston (1988: 90–91) classifies possessives as “determiners that mark the NP as definite”. Besides grammars of English, other accounts have classified possessive NPs as definite. Lyons (1999: 23ff.) also holds that in English, “possessives render the noun phrase which contains them definite”. He supports this claim with the argument that it is generally possible to paraphrase possessive NPs with NPs marked by the definite article, for instance:

- (1) *my cousin* → *the son/daughter of my aunt and uncle*
the man next door's car → *the car belonging to the man next door*

Rosenbach (2002: 14) proposes a similar analysis of possessive NPs as definite on the basis of definite paraphrases, and claims that this holds true even if the genitive has itself indefinite marking, as illustrated by the following examples:

- (2) *the king's daughter* → *the daughter of the king*
a king's daughter → *the daughter of a king*

In addition to claims classifying possessive NPs paradigmatically with definite NPs, some scholars have linked possessives to the concept of ‘presupposed/presumed identifiability’ of referents, which is generally assumed to be the meaning signalled by the definite article (see e.g. Chafe 1976; Gundel, Hedberg and Zacharski 1993, 2001; Langacker 2002: 33). Du Bois (1980: 218), whose early analysis of possessive NPs has been rather influ-

ential, proposes that “[p]ossessive noun phrases (...) presuppose identifiability”.⁴ In his characterization of NPs in the ‘Pear Stories’ data, Du Bois characterizes several examples of possessive NPs as definite. The NP *his hat* in the following example is described as a definite initial mention of a referent:

- (3) ... *when he turns around his hat flies off.* (Du Bois 1980: 243)

It is added that “[h]is is similar to *the* in that it demands (presupposes) identifiability, but different in that it supplies some extra information that may help make the identification possible” (Du Bois 1980: 243). Martin (1992: 132) situates possessive NPs within the general class of ‘phoric’ NPs, i.e. NPs coding their referent as in some way retrievable. He bases his claims about possessive NPs on Du Bois (1980) as well as on Halliday and Hasan (1976: 70), who analyze possessives as realizing a type of specific deixis similar to that construed by the definite article and the demonstratives *this/that/these/those*. Importantly, the identifiability of the referent is considered by Martin (1992) to be *coded* by the possessive NP; in other words, there is something about the use of a possessive NP to refer to a referent that signals its identifiability. The key to the identification of the PM referent is said to be the PR: “[t]his is after all literally what the grammar of the English nominal group argues: ‘recover the identity of the possessed participant here through its possessor’” (Martin 1992: 133). Martin also pays explicit attention to the questions how the referents of possessive NPs are embedded in the discourse and how they participate in the reference chains which are construed by NPs with anaphoric and cataphoric deictics. He recognizes that possessive NPs have two discourse referents, the possessed and the PR, and he considers the question whether the possessed has an identifiability status of its own. However, following Du Bois’ (1980: 243–245) claim that “*a frog of his* or *a friend of John’s* do not alternate with *his frog* or *John’s friend* to introduce participants” (Martin 1992: 132–133), he concludes that “possessive deictics *are* the deixis of the participants they possess” (Martin 1992: 132). Consequently he (1992: 133) proposes that “possessive nominal groups ... only be coded once for phoricity”. In his actual text analyses of phoric relations, he systematically analyzes possessive deictics as referring back to the PR, leading to reference chains such

⁴ It is not fully clear whether Du Bois uses “presupposed identifiable” in the technical sense of ‘already available in the discourse context as a singled-out entity’ (Langacker 2002: 33).

as: *the cat* ← *she* ← *her dinner* (1992: 143), *the boy* ← *his frog* (1992: 144). His phoric chains, in other words, track the identifiability status of the PR, not of the PM referent.

We can now sum up the main elements in the tradition that views possessive NPs as definite and their referents as identifiable, and formulate our main criticisms with regard to them. Firstly, linguists adhering to this analysis of possessive NPs often invoke systematic alternation of possessive NPs with definite NPs as a grammatical argument for according definiteness to the former. However, there is textual evidence that this alternation is not as systematic as claimed. Possessive NPs in predicative copular sentences, for instance, do alternate with indefinite NPs, e.g. *You're my friend* – *You're a friend of mine* (see also Declerck 1986: 32). Likewise, NPs with indefinite genitives such as *a friend's friend* in (4) can, against Rosenbach's (2002: 14) claim, alternate with indefinite NPs, e.g. *a friend of a friend* in (5).

(4) *It is not to be wondered at [...] that a friend's friend, described by letter, should turn out an unrecognizable stranger.* (CB)

(5) *Jimmy was a referral, a friend of a friend.* (CB)

Our data contained other examples in which possessive NPs alternate with indefinite NPs, such as the following:

(6) *On Monday, Christie's in New York is to sell Greta Garbo's knickers.* (CB)

In this example, the prenominal possessive *Greta Garbo's knickers* alternates with indefinite (*a pair of*) *knickers of Greta Garbo*. In view of this, it is hard to maintain that English prenominal possessives code definiteness, since a subset, viz. those alternating with indefinite article + noun + *of* + PR, are functionally indefinite. In this context, it can be recalled that other languages, such as Italian and Spanish, code (in-)definiteness and prenominal possession separately, making a distinction between, for instance, *il mio libro* ('the my book') and *un mio libro* ('a my book') (Lyons 1999: 24). In English prenominal possessives, the contrast definite – indefinite remains covert, but it can be made explicit in the corresponding complex NPs in which the PR is expressed by postmodifier *of* + NP.

Secondly, if a functional definition of possessive NPs is given, it is observed that the PM is retrievable through the PR (Martin 1992: 133). This explanation refers to the identification mechanism *internal* to possessive

NPs. However, this NP-internal identifying relation has to be distinguished from the *external* relations which the two discourse referents may maintain with other elements in the surrounding discourse. If we look more closely at the latter, two distinct perspectives can be taken. On the one hand, as illustrated by Martin's (1992) text analyses, possessive NPs can be viewed as partaking in reference chains keeping track of the PR referent. As the PR is typically given, co-reference to the PR will account for a large part of the reference chains construed by possessive NPs. However, in some – admittedly fewer – cases, the PM referent may also be coreferential with a discourse referent, as in the following example, where *Fleming's cardboard booby* refers back to 'Bond'.

- (7) *Goldfinger, the third **Bond** movie, was released in December of that year, and with it was founded an industry that would turn Fleming's cardboard booby into a product that 30 years later rivals Mickey Mouse in terms of global penetration.* (CB)

In other words, the PM referent can already be present as a singled-out instance in the discourse, and need not be discourse-new. This shows that the two referents of possessive NPs insert themselves into the discourse with distinct given-new statuses, which have to be studied in actual discourse.

Martin's (1992) observation that the PM referent is recoverable through the PR hints at the internal identifying relation present in possessive NPs, but he does not explore it in more detail. The internal identification mechanism of possessive NPs and its 'anchoring' of referents has been at the core of the analysis of possessives as *reference-point constructions*, developed within the framework of Cognitive Linguistics by Langacker (1993, 1995) and Taylor (1996). Taylor (1996) also discusses certain properties of *both* the PR and the PM referent from a discourse perspective. We will turn to this account in the next section.

2.2. Alleged newness of PM referents as targets of reference-point constructions

Langacker (1993, 1995) proposes that possessive NPs should be analyzed as reference-point constructions, i.e. as constructions motivated by the relation between two entities, one of which functions as the 'reference point' giving mental access to the other. More specifically, in possessive NPs, the PR functions as a reference point for the identification of the PM, which func-

tions as the ‘target’ needing identification. For instance, in the possessive NP *Sarah’s car*, the PR, ‘Sarah’, functions as the reference point for the identification of the ‘car’ which is ultimately being referred to; when processing this NP, the addressee will initially make mental contact with the entity ‘Sarah’ and subsequently identify the ‘car’ in question as the one associated with Sarah (e.g. the one she owns or drives). Since the reference point serves to give mental access to the target, a reference point is normally cognitively more easily accessible than the target that is being linked to it; an entity is, then, chosen as a reference point for another on the basis of the fact that it has “a certain cognitive salience, either intrinsic or contextually determined” (Langacker 1993: 6).

The reference-point analysis thus offers a detailed account of the identification mechanism set up within possessive NPs. However, the PR (reference point) and PM (target) are themselves also *discourse referents* embedded in the discourse in which the possessive NP is used. Taylor (1996), who further develops Langacker’s (1993, 1995) reference-point analysis specifically in relation to pronominal possessives, formulates a number of predictions for PR referents as well as for PMs with regard to their givenness or newness in the discourse. In order to make these predictions, he is led by what he perceives to be the inherent logic of the reference-point relation. Since the aim of using a reference-point construction is to make a target entity more accessible by tying it to a reference point, Taylor argues, it is to be expected that the reference point should be more easily mentally accessible than the target, as “it would be perverse indeed to invoke a less accessible entity to aid the identification of a more accessible entity” (Taylor 1996: 210). Conversely, “were the target as easily accessible as the reference point, there would be no point in using the reference point for its identification” (ibid.). This line of reasoning leads Taylor (1996: 218) to posit that PRs and PMs are “maximally differentiated” in terms of their (typical) discourse properties. PRs, on the one hand, overwhelmingly have ‘given’ status in the discourse, since given entities (i.e., entities already present in the discourse and known to the addressee) are more cognitively accessible than newly introduced entities. More specifically, Taylor (1996: 212) predicts that PRs will typically be “entities mentioned in recently preceding discourse”, that discourse or text topics will frequently occur as PRs and that PR nominals will frequently be definite. By contrast, as entities that need anchoring to a reference point for identification, “possesseees overwhelmingly introduce new, previously unnamed entities into the discourse” (Taylor 1996: 217).

2.3. Overview and research questions

To sum up, existing accounts of English prenominal possessives have tended not to fully recognize their complexity as constructions referring to two discourse referents between which an NP-internal relation of identification is set up and which at the same time maintain external relations with the surrounding discourse context. The discourse status of the PR is relatively straightforward, since it either (in the case of a genitive) has explicit definite or indefinite marking or (in the case of a possessive determiner) is realized by an inherently definite pronominal form. New PR referents are therefore normally realized by an indefinite genitive,⁵ whereas given PRs have definite marking or a pronominal form. What is more, the PR referent has convincingly been established to be overwhelmingly discourse-given (see Taylor 1991, 1996). By contrast, the discourse status of the PM referent is controversial and underresearched – both conceptually and empirically. On the one hand, within the tradition that includes possessive NPs in the paradigm of definite NPs, the PM referent tends to be viewed as ‘presumed identifiable’. On the other hand, within the reference-point approach to possessive NPs, Taylor (1996) assumes that PM referents, as the target of identification, are overwhelmingly new. Given such opposed claims, closer investigation of the discourse status of PM referents imposes itself.

Since the PM referent does not have direct definite or indefinite marking, its discourse status cannot simply be deduced from the form of the NP. In order to uncover it, possessive NPs must be studied in extensive discourse contexts, which make it possible to trace the PM referent’s givenness or newness throughout the discourse context preceding the possessive NP (Willemse 2005: 106–133). For the present study, 400 instances of possessive NPs have therefore been studied in extensive discourse contexts. The aim of the analysis was to investigate the ‘external’ relations of the PM referent to the surrounding discourse context, i.e. to determine whether the possessive NP was used to introduce a new referent into the discourse or to refer to a given discourse referent. Carrying out this analysis involved two steps. Firstly, a theoretical-descriptive framework had to be set up to account in a precise and systematic way for the various degrees of discourse givenness/newness displayed by the PM referents. Secondly, this description had to be applied to the data-base and the results quantified. Analytically, these are two distinct steps, but in practice the descriptive categories were

⁵ It should be noted that indefinite grounding genitives are by no means anomalous; see Willemse (2005: 183–200).

set up not only with reference to the literature, but also by shunting between the description and the data to ensure optimal coverage of the patterns emerging from the latter.

The remainder of this article is structured as follows. In section 3, we will look more closely at functional equivalents of (in)definiteness discussed in the literature. We will focus in particular on the important distinction between recoverability (relevant to the reference point analysis of possessive NPs) and that of first – subsequent mention (relevant to the discourse status of the PM referent). In section 4, we will present the qualitative and quantitative results of the data analysis. In the first place, this involves setting out our descriptive classification of the different discourse statuses, ranging from fully given (coreferential), over a number of statuses in between given and new, to fully new. Secondly, we also report on the quantitative results of Willemse's (2005) corpus study, i.e. on the relative frequency with which these different statuses occur in the data-base. Finally, we will also situate our descriptive analysis in a broader discourse perspective: possessive NPs turn out to serve a variety of specific discourse functions such as reiteration of the PR as a central discourse participant or reclassification of the PM referent, which cautions against viewing them *only* as referential identification mechanisms along a strict reference point logic. In section 5, we will summarize our main findings and point to their implications for the analysis of possessive NPs as reference point constructions and as so-called 'definite' NPs.

3. The functional dimensions of definiteness and possessive NPs

As observed by Lyons (1999), there is less unanimity about the functional definition of definiteness than is often assumed. In his formally-oriented study of definiteness, Lyons (1999: chapter 1) includes two main components in its semantic definition. The first one is *identifiability*, understood as an extended version of the so-called 'familiarity hypothesis'. The use of a definite article signals that the hearer should be able to identify the referent of the NP it occurs in. This may mean that the hearer is familiar with the actual referent or that he can be directed to it via other mechanisms such as anaphora and bridging or associative uses, as in *a taxi – the driver*. The second meaning component is *uniqueness*: the definite article signals that there is just one entity corresponding to the description given, relative to a particular context. Following Hawkins (1978), uniqueness is extended to *inclusiveness* to include plural and mass NPs, for which the definite article

signals that reference is made to the totality of objects or mass in the context satisfying the description. ‘Inclusive’ reference is treated as secondary to identifiability by Lyons and as an implicature, rather than a meaning component, of definiteness by Hawkins (1978) and Declerck (1986).

Martin (1992) uses the notion of *recoverability*, rather than identifiability, which more clearly suggests that other processes than actual knowledge of the referent may be involved. According to Martin (1992: 98) “every time a participant is mentioned, English codes the identity of that participant as recoverable from the context or not”. When the grammatical resources used in a specific NP signal that the identity of its referent is in some way recoverable, the NP is said to be phoric. Phoric NPs are, consequently, different types of definite NPs (proper names, pronouns, NPs grounded by the definite article or by a demonstrative) which all embody “directives indicating that information is to be retrieved from elsewhere” (Halliday and Hasan 1976: 31). Like Lyons, Martin also stresses that ‘this information’ may pertain to the referent itself or to another referent with which it is indirectly associated. It is in accordance with this logic that Martin (1992: 133), despite recognizing that possessive NPs refer to two referents, codes them only once for phoricity, as the PM referent is recoverable through the PR referent. Whilst this is reminiscent of the reference point analysis, it has to be pointed out that Martin’s recoverability analysis is restricted to functionally definite possessive NPs, and does not apply to examples such as (4) and (6) above. By contrast, the reference point analysis is broader – at least as a theoretical concept, rather than in Taylor’s (1996) interpretation of it in relation to possessive NPs. It foregrounds the conceptual relation between reference point and target and can also be applied to functionally indefinite possessive NPs.

As recoverability of a referent via *association or bridging* is not discussed much in general reference works, we will consider the specialized literature on it more closely. When a bridging relation holds between two elements, it may be motivated by one of several types of conceptual relations, i.e., the ‘source’ of bridging may differ. Generally speaking, the basis for bridging is some sort of *strong associational* relationship between entities, one which is strong enough to allow the identification of one entity on the basis of an earlier mention of the other, associated entity. This translates to several more specific relation types, the most important one of which is the *part-whole relation*, e.g. (8):

- (8) *Peter has bought a new car. There is much more room in the boot than there was in his old car.*

In example (8) the part ‘boot’ can be marked as recoverable on the basis of its relation with the whole that it forms part of, ‘car’. The processing of bridging reference thus requires some inferencing on the part of the addressee, who needs to retrieve the conceptual relation which forms the basis for the identification of the referent from background knowledge (cf. Ariel 1990: 185), while the role of the immediate discourse context is to provide an element which activates this inference (a ‘trigger’, Hawkins 1978: 123).

Besides part-whole relations, other relations of strong and habitual *association* between two entities may be strong enough to motivate bridging, as in (9).

- (9) *He was very interested in buying **that old house up the road**, but the owner wouldn’t sell.*

Although an owner is of course not a part of a house, it is an entity typically associated with a house, which can hence be introduced with the definite NP *the owner*. Brown and Yule (1983: 257) emphasize the similarities between part-whole relations and relations of strong, stereotypical association by classifying both under the heading of relations of ‘having’ (compare: ‘a car has a boot’ – ‘a house has an owner’).

Both part-whole relations and relations of strong association are relations between entities. Definite reference to an entity based on its relation to an event, activity or situation described in the preceding context occurs frequently as well. For instance, in the following example, the referent ‘killer’ is realized with a definite NP, since the event of a murder involves a killer as the agent of the described action:

- (10) *It was dark and stormy the night the millionaire was murdered. The killer left no clues for the police to trace.* (Brown and Yule 1983: 258)

In the literature, the invoking of events to make a referent recoverable has been discussed in terms of notions such as *frames*, *scenarios* and *schemata*. With reference to Chafe (1972), Du Bois (1980: 235ff.) develops the concept of *event-frames*, which are “composed of a network of related actions, along with the people and objects involved in those actions” (Du Bois 1980: 246), and are therefore rather hard to delineate. He notes that definiteness can be used as an indication to decide what elements make up a particular frame. The notion of *schema* is used by Chafe (1996) to capture the way in which a referent may be inferred from contextual information about events. He gives the example of someone who is describing the advantages of eating

cream cheese out of a carton and introduces the referent 'spoon' with a definite NP.

- (11) *and if you just sort of rinse the spoon off afterwards, you don't really have to wash dishes [...].* (Chafe 1996: 39)

The treatment of 'spoon' as an identifiable referent, Chafe argues, is due to the fact that it was "indirectly shared because of its association with the eating-out-of-the-carton schema" (Chafe 1996: 39). The notion of *scenarios*, finally, was developed by Sanford and Garrod (1981, 1998). Scenarios are defined as representations of situations and of the roles involved in them, which are activated by text input (i.e. by explicit 'clues' in the text) and retrieved from long-term memory. Entity tokens (i.e. discourse referents) are mapped onto the roles which are part of the invoked scenario in a specific context. Thus, when an appropriate scenario has been activated in a specific context, discourse referents filling role 'slots' in the scenario can be referred to with a definite NP. Sanford and Garrod (1981: 112ff.) support this analysis with psycholinguistic evidence that reading times for sentences containing a definite NP which introduces an entity in the discourse are not longer when an appropriate scenario has been invoked than when the entity has been introduced explicitly in the preceding discourse (i.e. when the definite NP is an anaphor).

The question of which types of relations and associations are apparently strong enough to motivate bridging has been speculated on a lot in the literature. Chafe (1972: 63), for instance, suggests that in the case of part-whole relations, the obligatoriness of a part influences the possibility of bridging – i.e., the more optional the part is, the less likely it is to be coded definitely. Ariel (1990: 184–185) points to a number of factors which may govern the 'inferability' of an entity, such as the stereotypical nature of the entity to another entity in the context and the prominence of the 'antecedent' in the discourse. However, she also remarks that much of what determines the inferability of specific (types of) entities is probably governed by language-specific conventions.

Returning to the functional definition of definiteness, then, a third basic functional dimension of definiteness has been identified in the text-based studies of Du Bois (1980) and Fraurud (1990), viz. that of *first versus subsequent mentions*. Du Bois (1980: 220ff.) and Fraurud (1990: 413ff.) both point out that it is traditionally assumed that indefinite NPs involve the first mention of a referent: they are said to establish a new discourse referent and to instruct the hearer to open a new file in their consciousness. Definite NPs,

by contrast, are thought of as involving the retrieval of previously established discourse referents, i.e. non-initial mentions, and as instructing the hearer to update an old file. Du Bois and Fraurud both also show that this assumed correlation between indefiniteness – first mention and definiteness – subsequent mention is confirmed only to a certain extent by actual text analysis. In their data, there are considerable portions of definite first mentions and (smaller) sets of indefinite subsequent mentions. The first-subsequent mention distinction applies only to NPs designating specific referents (Du Bois 1980: 207); it does not apply to generic NPs and to proper names.

Du Bois discusses three main types of definite first mentions: (i) ones marked by an unstressed demonstrative; (ii) ones containing identifying information in a postmodifying relative clause; (iii) ones due to association with a frame.

In Du Bois' spoken data unstressed demonstratives *this/these* were commonly used for initial mentions, and by most speakers even restricted to first mentions, as in *he could possibly see this little boy [1st] coming on a bicycle* (Du Bois 1980: 219). The clash that we find here between the definite determiner and the introduction of a new discourse referent has generally been noted.

NPs containing specific and new information in the presupposed format of a restrictive relative clause may also make a definite initial mention "acceptable", as Du Bois (1980: 223) puts it, e.g. *she knocks the hat that he's wearing [1st] off on the ground* (Du Bois 1980: 222). That the identifying information provided by defining relative clauses may motivate the use of a definite article for the whole NP is, again, well-established.

Finally, a larger whole or a specific activity may serve as the 'frame' enabling the definite initial mention of referents typically associated with them, as with *living room – the wall* (Du Bois 1980: 233), *sell – the money* (Du Bois 1980: 215). Here we are up against the mechanism of bridging again. However, whereas bridging has generally been discussed in the context of explaining the definite form of the NP and glossing its meaning as 'recoverable', Du Bois also stresses that, in spite of the definite form, we have initial mentions here.

Given Du Bois' incisive comments about the first mention status of referents of bridged NPs, it is perhaps surprising that he does not extend this observation to PM referents of possessive NPs, which, in a considerable number of cases, are also first mentions with inferential relations to the context. As we will see in section 4.4, possessive NPs may designate instances that, in a strict sense, are mentioned for the first time in the discourse, even though they are indirectly related to other elements in the discourse, from

which they are inferable such as *the handbrake to the Mitsubishi Starwagon* in (12).

- (12) *Police prosecutor Snr-Sgt Geoff Jackson told the court Pizzino was one of eight passengers in **the Mitsubishi Starwagon** which crashed on Robina Parkway at the Gold Coast about 5.10am on Wednesday. Snr-Sgt Jackson said Pizzino activated the vehicle's handbrake, causing the driver to lose control.* (CB)

In fact, in many cases the prenominal possessive can be replaced by the definite article, showing that the conceptual relation between the frame evoked by the context and the inferred referent is the same as that underlying bridging anaphora, e.g.

- (12') [...] *Snr-Sgt Jackson said Pizzino activated the handbrake, causing the driver to lose control.*

Moreover, PM referents may also be 'more new' to the discourse than inferable first mentions: they may have some link to a conceptual 'anchor' in the discourse that makes their occurrence not entirely unpredictable, but is not strong enough to *intrinsically* convey uniqueness/inclusiveness on them so as to make them 'recoverable'. This can be illustrated with possessive NPs referring to clothes and other alienable possessions, which have a certain conceptual link to their 'owners'. If the possessions referred to are *contextually* unique or include all the instances in the given context, then such NPs are functionally definite. In (13) the detective is wearing only one hat, and (14) is concerned with all of Paxman's ties.

- (13) *An Irish detective arrested a wanted criminal in a Dublin street. Just as he was about to slap the handcuffs on him, a gust of wind blew the detective's hat down the street. "Shall I go and fetch it for you?" asked the criminal.* (CB)
- (14) *Most of Jeremy Paxman's ties don't go with his shirts.* (CB)

However, if this is not the case, then they are functionally indefinite, as in example (6) above, *Christie's to sell Garbo's knickers*, and example (15), in which Ruth has been stealing some, but not all (**the*), clothes, jewellery and accessories of Elizabeth's. These examples show that the conceptual relation of alienable possession is not in itself strong enough to make a referent inferable.

- (15) *Raven-haired Ruth is a statuesque woman consumed with envy for the blonde Elizabeth, who Ruth's parents took in after she was left orphaned. All her life Ruth has been secretly stealing Elizabeth's clothes, jewellery and accessories and dressing up as the girl she alternately idolises and hates.* (CB)

Finally, some PM referents are 'fully new' in the discourse, unpredictable from any elements in the context. This is, for instance, the case with actions (and aspects of actions such as results) expressed by nominalizations or deverbal nouns, which can scarcely be predicted from the link to their agent or patient in the preceding text, as in (16), in which *Milner's prints* refers to 'prints of Milner's'.

- (16) *Point two, Milner was the only person who entered Stevens's apartment the night of the murder – he was positively identified by the hallman. Point three, we found Milner's prints [sic] four places in the apartment including the library.* (CB)

From this brief discussion of first-mention PM referents it transpires that different degrees of discourse newness can be distinguished for them. As we will see, we can also observe a difference in the degree of discourse givenness for PM referents that are subsequent mentions. The typology of discourse statuses of PM referents that we will set out in the next section will therefore be couched in terms of degrees of discourse-newness and discourse-givenness.

4. Data analysis

We pointed out in section 2 that one of the most important remaining questions in the literature on possessive NPs pertains to the discourse status of their PM referent. In section 3, we linked up the notion of discourse status with the discussion of initial-subsequent mentions, but we differentiated this contrast into degrees of discourse newness and givenness. Thus, we are now in a position to tackle the discourse status of PM referents in real usage. We compiled a set of 400 instances of possessive NPs, composed as listed in Table 1.

Table 1. Overview of the data base

<i>NP type</i>	<i># of instances</i>	<i>Source</i>
Genitive + N	200	COBUILD Bank of English (CB)
Total Genitive	200	
<i>its</i> + N	50	Lancaster-Oslo-Bergen corpus (LOB)
<i>their</i> + N	[30] + [20]	[LOB] + [CB]
<i>my</i> + N	50	CB
<i>her</i> + N	50	CB
Total Possessive Det.	200	
Total	400	

The central question of our analysis was whether the PM entity is a subsequent mention of a discourse referent or a first mention. Seeing the importance of distinguishing a range of discourse statuses, we propose five categories which form a continuum from discourse-given (coreferential possessive NP) to discourse-new (possessive NP introducing a new referent).

Table 2. Discourse statuses of the PM referent

COREFERENTIAL	the PM referent has been mentioned in the preceding discourse and is referred back to
TEXT REFERENCE	the PM referent is a text referent which is construed on the basis of the preceding discourse
INFERABLE	the PM referent is inferable from an associated referent or a scenario in the preceding context
ANCHORED	the PM referent is 'anchored' to (an) element(s) in the preceding discourse, which reduces its 'newness'
NEW	the PM referent is newly introduced by the possessive NP

Table 2 gives an overview of these five discourse statuses, which, in the rest of this section, will be discussed in more detail along with the quantitative results of the corpus study for each of these categories.⁶

⁶ From the genitive sample, a few tokens had to be removed because the PM was a proper name, e.g. *The electro sound, which grew out of Bambaataa's pioneering*

4.1. The possessive NP is COREFERENTIAL with another NP in the preceding discourse

As we saw in section 1, Taylor (1996: 217) proposed that PM referents are overwhelmingly new entities that are being introduced into the discourse. Our data show, however, that in a relatively small, though not insignificant, number of cases, the PM is a referent which has been mentioned in the preceding discourse and is referred back to by the possessive NP. In such cases, the PM is, in Chafe's (1994) terminology, an 'active' referent, i.e. a referent which is given in the discourse and therefore readily available in the addressee's consciousness. The possessive NP is thus, in such cases, coreferential with another NP and may even form part of a longer reference chain. In addition to the PR referent, which, in case of a definite genitive or a possessive pronoun, is explicitly marked as being retrievable, the PM may thus be a subsequent mention as well. Table 3 shows how frequent coreferential or given PM referents were in our data.

'Planet Rock', kept the street end of rap cooking (CB). As noted in the previous section, proper names do not construe the contrast between initial – subsequent mention. Another small set of tokens of the dataset was left out of the classification, because the possessive NP in these cases functioned as part of a fixed expression (often a prepositional phrase), e.g.

- (i) *If Laurie noticed she chose not to comment, but she was curious in her way.* (CB)
- (ii) *In a stern reply, he reminded him that 'Our troops are elated and confident; those on the enemy's side cannot but be depressed.'* (CB)

These expressions are not processed compositionally and, as a result, they do not have a distinct PM referent with a discourse status of its own. For each category, the number of data left out of the classification was the following: genitive (15); *its* (2); *their* (4); *my* (4); *her* (4). The percentages in the tables are calculated on the basis of the number of tokens included in the classification.

Table 3. Results for the category coreferential

<i>data set</i>	<i># of tokens</i>	<i>percentage</i>
Genitive [CB]	28/185	15.14%
Total Genitive	28/185	15.14%
<i>its</i> + N [LOB]	1/ 48	2.08%
<i>their</i> + N [LOB]	4/ 46	8.70%
<i>my</i> + N [CB]	8/ 46	17.39%
<i>her</i> + N [CB]	3/ 46	6.52%
Total Poss. Det.	16/186	8.60%
Grand total	44/371	11.86%

Coreferential possessives account for about 10% of the total data. Still, in a comprehensive account of the discourse status of possessive NPs, this makes them a non-negligible category. Let us consider some examples:

- (17) *Mr Ashby, a former name who suffered substantial losses at Lloyd's, had sought damages over an article in January last year alleging that he shared a double bed with another man on holiday in Goa. And when the jury found against him in a majority verdict, he put his head in his hands and wept. [...] After the verdict, the newspaper's solicitor, Alistair Brett, said he would expect the present editor, John Witherow, to see the case as 'a tragic family problem' and be sensible about what to do now. [...] Senior Tories expressed their determination to help him after the verdict and launched a campaign 'to keep him buoyant' that was immediately evident in his reception in the Commons. [...] He has 28 days to appeal against the jury's verdict and it is then likely to take up to nine months for his costs to be determined by taxation proceedings.* (CB)

The referent 'verdict' is first introduced by the NP *a majority verdict* and subsequently referred back to twice with the definite NP *the verdict*, before finally being taken up again by the possessive NP *the jury's verdict*. The possessive NP is in this case clearly part of a reference chain in the discourse and the PM referent is not a new referent.

The relation between the PM and the PR is usually already established in the preceding context, before the two are actually constructionally linked up in the possessive NP. This is the case in (17), where the link between

‘verdict’ and ‘jury’ is made clear in the preceding context (*the jury found against him in a majority verdict*), as well as in the following example:

- (18) *Britain's leading arms manufacturers secretly liaised with ministers, civil servants and the CIA on ways to silence the Saudi opposition leader Muhammed al-Masari, it was claimed last night. [...] **Lawyers acting for Dr. al-Masari** were preparing yesterday to appeal against his removal. [...] Dr. al-Masari's lawyers also allege that the home secretary decided to push ahead with the removal of the dissident in spite of a written pledge by the Home Office that his application to stay in Britain would be considered substantively.* (CB)

The indefinite NP marked in bold type introduces the referent ‘lawyers’ while the postmodifier describes the link with the PR ‘Dr. al-Masari’. In some cases, the direct antecedent of the possessive NP is itself a possessive NP, as in the following example:

- (19) [...] *Her salvation was also a cause for celebration among the 60 volunteers and 12 staff who run Britain's only national charity set up to find missing people. This Christmas, the runaway was one of 14,000 people on **the charity's computer database**, which is housed in a spartan, donated office above a supermarket in East Sheen, southwest London. [...] A lot of adolescent girls aged around 14 and 15 do not get on with their parents. [...] Some fall prey to prostitution and others, among the most urgent on the charity's database, become caught up in paedophile rings.* (CB)

In such cases, the reference chain which the possessive NP forms part of consists of several possessive NPs, in which not only the PR (in this case ‘charity’) is linked up with all its previous mentions, but the PM (in this case ‘(computer) database’) as well (this use of possessive NPs is mentioned by Barker (2000: 214)).

The coreferential use of possessive NPs has important implications for the reference-point model in its application to possessive constructions, and underlines the importance of studying their discourse context, instead of treating them as isolated syntagms and looking at their internal identification mechanism only. In actual usage, the reference-point mechanism can be adapted to specific discourse needs and used for particular ‘rhetorical’ purposes. Thus, the use of a possessive NP to refer to a given referent appears to be often motivated by the desire to ensure non-ambiguity of the referent in contexts where there is potential confusion. For example, in (17),

the possessive construal makes it clear that reference is to those lawyers acting for al-Masari, and not to lawyers working for someone else.

Another ‘rhetorical’ use of coreferential possessive NPs involves employing a *different lexical classification* to refer to a given referent. This may be a synonymous classification or it may (and often does) entail a more or less drastic recategorisation of the referent. Such cases are treated as coreferential because, despite the use of a different lexical classification, or ‘type specification’ as Langacker (1991: 144–148) calls it, the same referent is referred to. Blanche-Benveniste and Chervel (1966) have described such cases as *anaphore infidèle* (‘unfaithful anaphora’), as opposed to *anaphore fidèle* (‘faithful anaphora’), the latter being restricted to cases in which the referent is not recategorized. It is interesting to note that when a different type specification is used, it often incorporates additional contextually specified information about the referent. For instance, in (20), the underwear being referred to is first described as *knickers* whereas in the possessive NP, the type specification *silk panties* is used, which incorporates the information that the garment in question is made of silk, as indicated in the preceding context.

- (20) *On Monday, Christie’s in New York is to sell **Greta Garbo’s knickers**. They are described with proper dignity. ‘A pair of silk, cream-coloured ladies’ briefs’ [...] In fact they are a souvenir of what Christie’s delicately call ‘a night of romance’ between Garbo and the Mexican star Roland Gilbert. [...] When they parted, Roland gave Garbo the gold ring he was wearing and was given the actress’s silk panties in exchange.* (CB)

Such incorporation of contextual information confirms the idea that reference is not only about referring ‘back’ to the previous textual mention of a referent, but rather about activating a mental representation of the referent, which naturally evolves and is enriched as the discourse progresses and new information is added (see, among others, Emmott (1997: chapter 7) and Brown and Yule (1983: 201–204)).⁷ Additionally, the use of a different

⁷ Brown and Yule (1983: 202) give the following example (involving pronominal reference):

(i) *Kill an active, plump chicken. Prepare it for the oven, cut it into four pieces and roast it with thyme for 1 hour.*

In such cases, they argue, although the identity of the referent ‘chicken’ does not change, its description does: “A reader who simply went back up the endophoric

type specification to refer to a referent which is already present in the discourse can also be used to categorize that referent according to the subjective evaluation of the speaker. This is the case in (21), where the referent ‘Bond’ is classified as a *cardboard booby*:

- (21) *With the **Bond** books, as his friend Ernest L. Cuneo wrote, Fleming’s ‘objective was the making of money’ and he succeeded. But it wasn’t until after his death in August 1964 that Bondmania erupted and the money really began to flow. Film was responsible. Goldfinger, the third **Bond** movie, was released in December of that year, and with it was founded an industry that would turn Fleming’s cardboard booby into a product that 30 years later rivals Mickey Mouse in terms of global penetration.* (CB)

4.2. The PM referent is a TEXT REFERENT construed from the preceding discourse context

As observed by Halliday and Hasan (1976: 52), anaphoric retrieval relations are not restricted to “an entity that is encoded linguistically as a participant” but may also involve “any identifiable portion of text”. Possessive NPs naming a referent which has been construed over a preceding stretch of text can also realize text reference, as in the following examples:

- (22) *One bae insider said last week that there could be no formal discussions until Daimler and the Dutch government had resolved the problems of Fokker, the ailing short-haul aircraft maker that will collapse unless it receives an emergency cash injection of almost £ 1.4 billion. [...] But Fokker’s crisis is only one contributor to the problems of Daimler-Benz Aerospace [...]* (CB)
- (23) *Students may soon be offered American-style loans at cheap rates by leading banks and building societies, after the government promised lenders generous subsidies to enter the student-loan market. The plan [...] aims to shift most of the cost of financing student loans on to high-street lenders. The Department for Education and Employment*

chain and substituted the expression *an active plump chicken* for it in the last clause would, in a significant sense, have failed to understand the text” (Brown and Yule 1983: 202).

is urging financial institutions to tender ‘up to four’ licences to lend to students in return for loan finance at discounted rates of interest. The government would also pay the lenders a share of running costs and a percentage of unrecoverable debts. [...] But the banks and building societies are unimpressed. None has said it would take up the government’s offer to lend to students. (CB)

Examples (22) and (23) illustrate a distinction between two kinds of text reference in relation to possessive NPs. In one type, illustrated by (23), the possessive NP contains a *metatextual* noun, that is, the possessive NP summarizes and categorizes something which has been described in the preceding discourse as a semiotic phenomenon, i.e. a symbolically processed phenomenon. The second type, illustrated by (22), summarizes and categorizes something which has been described in the preceding discourse as a non-semiotic phenomenon, i.e. as a phenomenon (event, state, activity, etc.) in reality. Following Takahashi (1997: 63), we will call this the *summative* type. Table 4 shows how many of the possessive NPs in our database have text reference, either metatextual or summative.

Table 4. Results for the category text reference

data set	# of tokens		Percentage	
	metatextual T.S.	summative T.S.	metatextual T.S.	summative T.S.
Genitive [CB]	10 / 185	12 / 185	5.41%	6.49%
Total Genitive	10 / 185	12 / 185	5.41%	6.49%
its + N [LOB]	0 / 48	0 / 48	0%	0%
their + N [LOB]	1 / 46	3 / 46	2.17%	6.52%
my + N [CB]	1 / 46	0 / 46	2.17%	0%
her + N [CB]	4 / 46	1 / 46	8.70%	2.17%
Total Poss. Det.	6 / 186	4 / 186	3.22%	2.10%
Grand total	16 / 371	16 / 371	4.31%	4.31%

While the number of tokens for this category is relatively small in our corpus, the cases which occur shed an interesting light on possessive NPs, as they reveal their potential to categorize complex referents built up over longer stretches of text. Again, this demonstrates the rhetorical versatility of possessive NPs in interaction with the surrounding discourse.

Possessive NPs containing a *metatextual type specification* typically contain ‘semiotic nouns’, i.e. nouns which designate linguistically processed phenomena, such as *decision*, *claim*, *remark*, etc. Some examples are the following:

- (24) *The Government has called on housing associations to raise more of their funds through the private sector and announced that housing association grants will be cut next year. John Battle, Labour’s Shadow Housing Minister, warned that Black pensioners will be badly hit by increasing housing association rents if Government grant cuts go ahead. [...] Mr Battle, who addressed the National Conference on Housing Black and Minority Ethnic Elders last week, said added rents will soar, hitting pensioners already facing huge hikes in their fuel bills as a result of the VAT increases already announced in the Budget. A National Federation of Black Housing Organisations spokeswoman echoed Mr Battle’s sentiments.* (CB)
- (25) *Thanks to the federal prosecutor in Munich, Compuserve subscribers no longer have access to 200 dubious and distinctly sad Internet newsgroups catering for people who think sex is an activity that can be pursued through a mouse and a modem. The Germans, in a fit of prudishness, told Compuserve it would be prosecuted if it did not stop allowing their citizens to leapfrog through the commercial service into the internet which is quite beyond the company’s control and read the poison on their pcs. [...] The prosecutor’s decision was plain stupid.* (CB)

In (23), *offer* in the possessive NP *the government’s offer* refers back to the special advantages and conditions offered by the British government to banks and building societies willing to grant loans to students, which have been described in the preceding discourse. In (24), *sentiments* in the possessive NP *Mr Battle’s sentiments* refers back to the opinions and ideas of John Battle which have been represented explicitly through indirect speech in the preceding discourse. Note that the possessive NP not only refers back to what has been stated in the text, but also *categorizes* (parts of) the preceding text *as* a text referent. Thus, a possessive NP realizing text reference not only refers back to a preceding stretch of discourse, but also actively construes a text referent in the sense that it categorizes and ‘labels’ the text it refers to. This is also the case in (25), where more inferencing is required from the addressee than in (23). The *decision* referred to by the possessive

NP *the prosecutor's decision* is not directly represented, but rather indirectly rendered through the description *thanks to the federal prosecutor in Munich, Compuserve subscribers no longer have access* (...). From this it can be inferred that what the prosecutor decided was to order Compuserve to remove offensive newsgroups from their network, and it is this *decision* which is referred to by the possessive NP.

Possessive NPs with a summative type specification generally require some inferencing on the part of the addressee as well. Consider examples (26), (27) and (22) above:

- (26) *A little over a month ago the Federal Government announced a \$ 17.8 million grant to **Indonesia to help combat a HIV/AIDS epidemic which may infect 2.5 million people by 2000**. [...] I spent a few weeks in Thailand in 1989 and am convinced bureaucrats misled the population into thinking the virus did not infect Asians, largely to protect their rich international sex-tour industry. If Thailand was lulling the population and the rather stupid sex tourists into a false sense of security, why not other Asian countries? So now we have to cough up \$ 17 million to **Indonesia alone trying to hold back the scourge**. The irony is that a month after our generous grant was announced, Indonesian President Suharto's son, Mr Tommy, bought a majority stake in Italy's glamour sports car maker, Lamborghini. [...] What he paid is anyone's guess, a trifle more than our \$ 17 million, I would think. Sounds mighty like he is in a position to match our generosity in his country's fight against AIDS, does it not?* (CB)

- (27) *Among the regions, London heads the list as the centre with the lion's share of venture-capital deals; 35 of companies involved in raising money last year were based in the capital. Scotland showed a high level of activity with 13 of the deals, closely followed by northwest England. The northeast, despite its high levels of inward investment, is not, on these statistics, generating much fresh entrepreneurial activity; it accounted for 2 of the deals. The capital's dominance is confirmed by the regional breakdown for flotations.* (CB)

In (26), *fight against AIDS* summarizes in a relatively straightforward manner information given in the preceding discourse, indicated in bold type in the example. In (27), more inferencing is needed: the preceding text contains the statement that *London heads the list* [among the regions] and explicitly elaborates on the number of companies involved in venture-capital

deals based in London in comparison with such companies based elsewhere in Britain. This information is summarized by *dominance*, the interpretation of which at the same time requires the addressee to infer that the information given earlier implies that London is dominant in this particular area. In (22), finally, the information that Fokker needs a vital cash injection in order not to collapse, is categorized as a *crisis*, which requires the addressee to make the inference that for a business, such a situation qualifies as a crisis.

As has become clear from the examples we have discussed, text reference involves a fair amount of inferencing on the part of the addressee. It is therefore a separate category in the classification of discourse statuses, distinct from coreferential possessives in which the PM refers back to a preceding nominal realization of a referent. On the continuum of discourse statuses text reference is right next to coreferential possessives, however, since it involves a PM referent corresponding directly to a stretch of text in the preceding discourse.

4.3. The PM referent is INFERABLE from the preceding discourse

Table 5 lists the number of cases in which the PM referent is inferable from a referent or another element in the preceding discourse.

Table 5. Results for the category inferable

<i>data set</i>	<i># of tokens</i>	<i>percentage</i>
Genitive [CB]	37/185	20.00%
Total Genitive	37/185	20.00%
<i>its</i> + N [LOB]	23/ 48	47.92%
<i>their</i> + N [LOB]	12/ 46	26.09%
<i>my</i> + N [CB]	12/ 46	26.09%
<i>her</i> + N [CB]	16/ 46	34.78%
Total Poss. Det.	63/186	33.87%
Grand total	100/371	26.95%

The conceptual relations causing inferability of a PM referent overlap to a considerable degree with those enabling *bridging* or *associative anaphora*, coded by NPs with definite articles (see section 3). The latter involve definite reference to a referent (signalling its recoverability) based on an indirect anaphoric relationship, i.e. a relation with another element (and not a

previous mention of the same referent) in the preceding discourse. This preceding element is thus an ‘indirect antecedent’, three subtypes of which were discussed in section 3. Firstly, the antecedent can be another entity referent (i.e. a ‘thing’), which allows the inference of another entity on the basis of a part-whole relation (e.g. *a car* → *the steering wheel*) or a more general association (e.g. *a house* → *the owner*). The antecedent may also be an event or activity, from which an entity typically involved in it can be inferred (e.g. *he has been murdered* → *the police haven’t found the killer yet*). Finally, the ‘antecedent’ may be a scenario or frame, evoking entities fulfilling specific roles in it (e.g. [*eating at a restaurant*] → *the waiter forgot to bring us the menu*).

In the case of bridging, the definite article signals that the referent of the NP is presumed to be recoverable by the addressee, and for the addressee to retrieve it, the link with the indirect antecedent needs to be grasped. The same conceptual relations of inferability between referents and discourse contexts can also motivate the use of a possessive NP, which, however, makes explicit that there is a link between two entities (the PR and the PM referent), and is thus in a sense an alternative for the construal with a NP with definite determiner.⁸ Thus, while in (28a), the relationship between ‘book’ and ‘pages’ is made explicit through the use of the possessive determiner *its* (referring back to *the book*), in (28b) the connection has to be inferred by the addressee in order to resolve the reference of the definite NP *the pages*.

- (28) a. *As she sprang to her feet and ran to Alistair, the book fell to the floor, face downwards, its pages doubling up in disorder.* (CB)
 b. [...] *the book fell to the floor, face downwards, the pages doubling up in disorder.*

If we want to recognize different degrees of discourse-newness of possessive NPs, PM referents inferable from other entity referents, activities or larger scenarios evoked by the context, can be viewed as constituting the first, lowest degree of discourse newness. The possibility of designating such inferable referents with NPs containing a definite article is evidence of this relatively low degree of newness, and it can also be used as a formal indication of which referents to include in this category. This can be illustrated with the following example:

⁸ We are not claiming that there is *free* variation between these two possible realizations of the inferable referent. Different semantic and pragmatic restrictions apply to NPs with prenominal possessives and definite determiners, and many instances of bridging have no possessive alternative and vice versa.

- (29) *The Leviathan of Parsonstown, said to be the world's largest telescope, was built in 1845 by the 3rd Earl of Rosse at **Birr Castle**, Co Offaly. It will form the centrepiece of Ireland's new Historic Science Centre which will be based at **the castle**. [...] The rest of the scientific centre, which will include an exhibition of the astronomical work of the 3rd and 4th Earls and scientific galleries in the castle's moat, will be completed by the end of the century.* (CB)

The PM referent of the possessive NP, 'moat', even though strictly speaking new, has a relation of strong association with the referent 'castle' which is mentioned in the preceding context (a castle is very often surrounded by a moat). On the basis of this conceptual relation the PM referent 'moat' is immediately recoverable in the sense that it can be inferred from the referent 'castle'. In fact, in this example, the 'moat' could also have been referred to with a definite NP:

- (29') [...] *an exhibition of the astronomical work of the 3rd and 4th Earls and scientific galleries in the moat.*

In cases like these, the possibility of replacing the prenominal possessive by a definite article can be used as formal test to establish the inferability of the PM referent.

A question which immediately springs to mind when one is confronted with such examples is why the speaker chooses to use a possessive NP, rather than an NP with a definite article, to refer to a referent which is inferable from the discourse context. There are a number of possible pragmatic factors which motivate the use of a possessive in such contexts. In general, these have to do with the speaker aiming at more *clarity*: the inferential relation or 'bridge' that is there in the discourse is made explicit by the possessive NP. Speakers thus seem to choose the possessive in order to avoid potential confusion about the antecedent, as illustrated by (29), in which there are four clauses between the nearest mention of the referent 'castle' and the introduction of the referent 'moat', so that the link between the two might not be sufficiently salient at the moment when 'moat' is mentioned. Moreover, the referent 'castle' is not topical at the moment when 'moat' is introduced, since the four intervening clauses deal with the Victorian telescope located at the castle. *Non-topicality* of the indirect antecedent is indeed a second factor which influences the choice of a possessive rather than a definite NP in cases where bridging is possible. This also seems to be the main reason for the use of a possessive in (30):