

The Marker of the English “Group Genitive” is a Special Clitic, not an Inflection

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THE ENGLISH POSSESSIVE CONSTRUCTION (and its relatives in related languages), which is the focus of the present volume, has been of interest for some time — at least since the work of traditional grammarians like Jespersen (1942). Several distinct analyses have become more or less standard in different theoretical communities, with the logic of the differences among them not always made clear in theory-neutral terms. I will argue below for one of these, essentially the picture presented in Anderson 2005, but the issues involved are of wider interest than the specific study of this one construction. I believe that the correct analysis of the English possessive indicates something much more general about a range of grammatical categories.

I The “Group Genitive”

THE BASIC DESCRIPTIVE PROPERTIES of the English possessive are well known. The construction is often referred to as the “Group Genitive,” following Jespersen’s usage, because although it clearly goes back to an inflectional property of individual words (the genitive case) in earlier English, in the modern language its characteristic overt expression is a marker (’s) found at the right edge of an entire phrase, as illustrated in (1).

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- (1) a. [Fred]’s opinion about the English genitive is different from mine.
 b. [The man on the Clapham omnibus]’s opinion about the English genitive is poorly thought out.
 c. [Every linguist I know]’s opinion about the English genitive involves functional categories.
 d. [That young hotshot who was recently hired at Princeton that I was just telling you about]’s opinion about the English genitive is simply wrong.
 e. Even [that colleague who shares an office with you]’s opinion about the English genitive is not to be trusted.

As can be seen from these examples, when the possessive phrase consists of a single word (*Fred*), its relation to the following material is marked on that word. When the possessor is represented by a multi-word phrase, however, marking occurs on whatever occurs at the right edge of that phrase. The word bearing the overt indicator of possession, therefore, can be subordinated in various ways within the phrase: as the object of a preposition in a post-nominal modifier, as a verb occurring at the end of a modifying relative clause, or a stranded preposition at the end of such a clause, or a noun in some other position within the phrase which does not itself stand in a possessive relation to what follows.

Within the Germanic languages, this sort of marking of possessors is somewhat isolated, although it is not unique to English. Robust instances of the Group Genitive are found in Swedish too, as illustrated in (2), as well as some forms of Norwegian. For discussion, see Norde 1997, Börjars 2003 and references cited in those works.

- (2) a. [[Professorn i tyska]_{DPS} fru]_{DP} är berusad
 professor.DEF in German.GEN wife is drunk
 ‘The wife of the professor of German is drunk.’
 b. i [[nån som jag tycker om]_{DPS} hem]_{DP}
 in someone that I care about.GEN home
 ‘in the home of someone I like’
 c. [[en vän till mig]_{DPS} företag]_{DP}
 a friend of me.GEN company
 ‘a friend of mine’s company’

The history of this construction, and especially the relation of the marker *’s* to earlier genitive inflection, has been the subject of fairly close scrutiny in recent years (see Allen 2008). In addition to the interest presented by the historical facts themselves, some of this attention has come because they seem to bear on the validity of claims of

so-called “Grammaticalization Theory.” In the present context, however, our concerns are solely with the synchronic analysis. In those terms, we are dealing with a grammatical feature of the sort I have described as a “Phrasal Property” in previous work (Anderson 1985, 1992), and I turn next to the characteristics of such properties and the devices available in grammatical theory for their description.

2 Phrasal Properties and Their Analysis

PHRASAL PROPERTIES ARE GRAMMATICAL FEATURES that are meaningfully assigned not to individual words, but rather to entire phrases (typically, maximal projections or XPs). In some languages, these are overtly marked by elements that are obviously discrete, such as the final particles *o*, *no*, *wa*, *ga* and *ni* that mark case in Japanese. In other languages, however, properties that logically inhere in a phrase are marked by the specific forms of individual words in that phrase, as in the marking of case (a property of DPs) by the inflection of words in a language like Latin or German.

Descriptions often pass over this difference of detail, but it is important to ask how the properties of a phrase are marked, such that both discrete particles obviously taking the phrase as their scope (as in Japanese) and the forms of individual words (as in German) can serve the same grammatical function more or less as equivalents.

The realization of phrasal properties shows cross-linguistic variation, but the range of possibilities is limited, and we can give a substantive typology of them. Languages may mark such properties at the right edge of a phrase, as Japanese does, or at the left edge, as in the case marking particles of Polynesian languages. As a variant of left edge marking, the property may be marked in second position, at the end of the phrase-initial word (or sometimes, an initial multi-word constituent of the phrase), as is the case for definiteness marking in several Balkan languages. Marking may also appear only on the head of the phrase: thus, case is sometimes marked only on the head noun. In many languages, a consistent head final (or head initial) order may make it difficult to distinguish this from right (or left) edge marking, but in some instances peripheral relative clauses or adpositional phrase modifiers allow us to see that it is really the head of the phrase that bears the marker for the phrasal property.

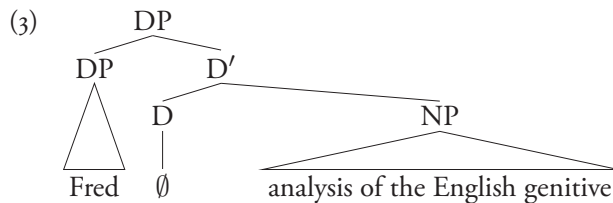
Phrasal properties may also be marked on all of the words of a phrase, but it is possible to regard that as an instance of head marking combined with phrase-internal agreement. In German, for instance, we can say that case is marked on the determiner (as head of DP) and the noun (as head of NP), and that case inflection on modifying adjectives is by agreement with the head noun in that category (along with gender and number) and not as a direct reflection of the case assigned to the phrase.

Ignoring the special case resulting from such phrase internal agreement, we can see that the attested possibilities (initial, post-initial, final and head marking) are just

those that exist word internally for the location of affixes (or non-concatenative modification), as I have argued in various places including Anderson 1992. This suggests that the realization of phrasal properties constitutes a close analog, at the phrase level, of the realization of the morphological properties of words at the word level, and thus that it is appropriate to speak of this as “phrasal morphology.” I will return to this point below.

2.1 The Group Genitive and its Realization

The relevance of this discussion to the English Group Genitive should be apparent. This refers to the marking of possessors within English nominals, and the possessors in question are typically phrases. I assume a DP analysis of English nominals (Abney 1987), and that possessors occupy the position of Specifier of DP, with the nominal constituting a NP that is the complement of the determiner. This determiner, I will assume, is normally phonetically unrealized; an exception, perhaps, is furnished by the construction *Fred's every waking moment*, but this is apparently quite isolated.¹ The structure underlying *Fred's analysis of the English genitive* is thus as given in (3) below.



The details of this structure do not matter, apart from the fact that a possessor is identifiable as a DP that itself occupies the position of Specifier within a larger DP. In that event, the possessor DP is assigned a property which I will represent as ‘[Poss]’ by

¹I return below in section 6.1 to the possibility that the possessive marker itself constitutes the determiner, an analysis which I will argue should be rejected. A more likely candidate for filled determiner positions in the presence of possessives is suggested by John Payne’s observation that there are some pre-nominal phrases, characterized as ‘minor determiners’ by Huddleston & Pullum 2002: 355,357, that do not bear possessive marking; Payne suggests that this compromises the configurational assignment of such marking assumed below. As detailed by Huddleston and Pullum, the expressions in question include elementary properties such as size, shape and color (e.g., *they don’t stock that size shoes*), weekday names and temporal pronouns (e.g., *Sunday morning*), and prepositional phrases indicating cardinality (e.g. *around ten thousand copies*). I suggest tentatively that all of these ‘minor determiners’ are in fact really determiners, and occupy the D position within DP rather than the specifier position. This is consistent with the fact that a possessive phrase co-occurring with them precedes, as in *my Sunday mornings are quite precious to me* and *Sarah Palin’s nearly two million Facebook friends all want her to run*. If this is the correct analysis of ‘minor’ determiners, they pose no problem for the purely structural nature of rule (4) below.

the rule in (4),² resulting in the association of [Poss] with the other properties of the DP node dominating the possessor phrase.

(4) English possessive (**Morphosyntax**):

$$\text{DP} \rightarrow [\text{Poss}] / \left[\begin{array}{l} \text{DP} \\ \text{[—]} \end{array} \right] \text{ D X}$$

I will return later in section 6.2 to another environment in which this feature is introduced. The question I wish to examine now is how this property of some phrases is overtly realized. There are two primary views in the literature as to how this phrasal property is to be realized, either as a (special) clitic at the right edge of the DP, or as ‘EDGE Inflection’ on the last word of the phrase. I examine each of these in turn.

2.1.1 Special Clitics

One way in which a phrasal property such as [Poss] can be realized is through the introduction of a particle or clitic. As elaborated in Anderson 2005, the class of clitics that appear in specific positions within a phrase can be identified roughly with what Zwicky (1977) called “special clitics,” and the best account of these is given by rules that modify the phonological shape of a phrase — typically, by introducing affix-like phonological content, usually called a clitic or particle, at a determinate point within the phrase. Such rules constitute a rather exact analog at the phrasal level of the rules of Word Formation that realize morphological properties of words at the word level.

One account of the English Group Genitive, then, is to treat it as a special clitic, introduced at the right edge of a DP bearing the feature [Poss]. Suppose, for example, that we wish to describe the phrase *the man on the omnibus’s opinion*. The DP *the man on the omnibus* here appears in the Specifier position of the larger DP, and is thus assigned [Poss] by the rule of English morphosyntax in (4). This results in the introduction of an affix: specifically, the adjunction of /z/ (phonologically identical with the regular plural ending or the 3SG Present tense ending of verbs, and like these subject to phonological adjustments which will be discussed in section 5.2 below). The ‘special clitic’ rule involved is that given in (5).

(5) English Possessive (**Phrasal Morphology**):

Adjoin /z/ to the final syllable of a DP bearing the feature [Poss]

²The precise formulation of this rule, as well as that of (38) below, probably would not pass muster within any current theory of syntax. Nevertheless, its intent should be clear: it requires that a phrasal node in a particular configurational position bear a specific feature, and any theory of the morphology-syntax interface on which phrasal nodes are complexes of properties indicated by features must have some way of enforcing such associations. The details of the formalism in which these are expressed are not material here.

Later, the post-lexical phonology of English restructures the resulting sequence of coronal strident consonants by inserting an epenthetic vocalic transition (realized as [ə] or [i]) between them.

Since the rule of phrasal morphology in (5) is insensitive to the presence or absence of any syntactic or semantic relation between the word to whose final syllable the /z/ is adjoined and the *possessum*, the result is the “promiscuous” kind of attachment that is characteristic of the English — and Swedish — Group Genitive.

2.1.2 EDGE Inflection

There is, however, an alternative way of looking at such phenomena, one which is in principle quite different. In work that originates in proposals of Arnold Zwicky and his student Joel Nevis and continued within the frameworks of GPSG and HPSG (cf. Nevis 1986, Zwicky 1987; Lapointe 1990, 1992; Miller 1991), it was proposed that the English Group Genitive is actually word level inflection of a special sort called “EDGE Inflection.”

On this view, certain features are identified as (right or left) EDGE features. A feature of this kind is transmitted, by convention, to the left- or right-most daughter of the phrase; and from there, to the daughter of that phrase on the same side, and so on until it reaches a terminal node (typically a word) and can go no further. It is then realized through the inflectional morphology of that word, just like any other word level morphological property.³

Applying this notion to the English possessive construction involves the feature definition in (6), including the rule of word level inflection affixing /z/ to words bearing the feature [Poss] (exactly like the rule for regular plurals).

(6) English Possessive (Edge Inflection version):

Type: [EDGE:LAST]

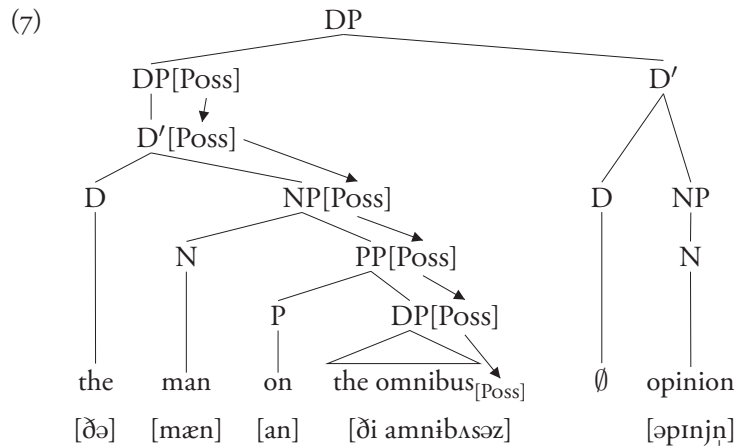
Value: [POSS]

Word-level Morphology: /X_[Poss]/ → /X+z/

Applying this analysis for *the man on the omnibus’s opinion*, we again assign [Poss] to the DP *the man on the omnibus* on the basis of its position in the Specifier of the

³Miriam Butt points out to me that in HPSG analyses typified by that of Tseng 2003, the treatment of EDGE-features is the reverse of this: such features must be generated lexically as properties of individual words, and then propagated up along the appropriate edge to phrasal nodes. The discussion of such mechanisms in the analysis of the English possessive found in the references of the preceding paragraph, seems clearly to assume the downward propagation described here. I do not think the difference has material consequences for the analytic points to be made here, though it does seem to me that the intuitive content of the upward-propagating account would be rather problematic for cases such as *the woman you introduced me to’s phone number* and others where no possessive relation exists between the word on which the ’s ending is realized and the *possessum*.

larger phrase. Then, by virtue of the fact that [Poss] is defined as a right EDGE feature, it propagates to the NP *man on the omnibus*, from where it spreads to the rightmost daughter of that phrase, *on the omnibus* and from there to *the omnibus* to eventually become an inflectional property of the word *omnibus*. As a result, the word-level morphological rule in (6) inflects *omnibus* by adjoining a /z/, with the same phonological consequence of epenthesis as in the analysis of section 2.1.1. This is illustrated in (7).



3 Distinguishing the Two Approaches to the Group Genitive

BOTH THE SPECIAL CLITIC ANALYSIS of section 2.1.1 and the EDGE inflection analysis of section 2.1.2 produce the correct facts for the English Group Genitive, but it is reasonably clear that they are distinct approaches, and so the question arises of how to distinguish them. Mechanically, they proceed in quite different ways, with the clitic account introducing a single marker at the edge of the entire phrase, and the EDGE feature account propagating the feature to be realized through a succession of intermediate constituents so as ultimately to make it a property of an individual grammatical word. This is related to a difference in scope that has figured in the grammatical literature: the difference between phrase-level clitics and word-level affixes. That contrast provides a point of entry for an argument differentiating the two.

3.1 Clitics vs. Affixes in General

There are a number of symptoms of the difference between clitics and affixes that could be explored, some of which have gained a kind of definitional status in the literature since the work of Zwicky in the early 1980s, especially Zwicky & Pullum 1983. In that work, however, the properties discussed have something of the status of unexplained and essentially stipulated postulates. Anderson (2005) tries to show that the

best established of these actually follow as theorems from the basic difference between word-level and phrasal affixation, within the specific architecture of grammar assumed in Anderson 1992 and subsequent work.⁴

Three differences of this sort can be of use to us in identifying the proper characterization of the English possessive. These are summarized in (8), repeating Zwicky & Pullum's (1983) formulation of them as tendencies.

- (8) a. Clitics have a low degree of selection with respect to their hosts; affixes a high degree of selection.
- b. Affixed words are more likely to have accidental or paradigmatic gaps than host+clitic combinations.
- c. Affixed words are more likely to have idiosyncratic shapes than host+clitic combinations.

The differences in (8) can be shown to be more than tendencies, however, since they can be derived from the difference between word level and phrasal affixation. Within the architecture assumed here, that developed in Anderson 1992, 2005, rules of word-level inflection apply to specific classes of words on the basis of their morphosyntactic, phonological, and lexical properties, but do not have access to the syntactic structure in which they appear except to the extent this is reflected in their morphosyntactic properties. Rules introducing special clitics, on the other hand, have access to the syntactic structure of phrases, including the morphosyntactic properties of words, and also to their phonological shape, but not to strictly lexical properties of words (declension class, individual lexical exceptionality). These differences in the information to which rules of one type or the other have access have a number of concrete consequences, including those in (8).

When we consider the general class of phrasal properties discussed above in section 2, it becomes clear, as argued by Anderson et al. (2006), that we need to recognize both special clitics and EDGE inflection as mechanisms for the peripheral marking of such a feature on a phrase which it characterizes.

3.2 Phrase Marking by Special Clitics

As an instance of marking by special clitics, consider the examples from Heiltsuk ("Bella Bella"; cf. Rath 1981) given in (9).

⁴In recent work, Spencer & Luís (2009) argue that a systematic distinction between clitics and affixes cannot be made, and that examples exist which show essential combinations of the properties that should differentiate them. A discussion of the full range of their claims would take us too far afield here and must be deferred to another time and place.

- (9) a. p'ála wísm=**á**=**xí** la ux°λiás=**a**=**xí**
 work man-DET₁-DET₂ on roof-DET₁-DET₂
 The man worked on the roof
- b. p'ála p'ác'uá=**ya**=**s** wísem=**xí** la ux°λiás=**a**=**xí**
 work diligent-DET₁-CONN man-DET₂ on roof-DET₁-DET₂
 The diligent man worked on the roof
- c. p'ála 'wála=**ya**=**s** p'ác'uá=**s** wísem=**xí** la ux°λiás=**a**=**xí**
 work really-DET₁-CONN diligent-CONN man-DET₂ on roof-DET₁-DET₂
 The really diligent man worked on the roof

The clitics in these sentences are associated with DPs, and fall into three types. One of these, =**a** or =**ya** (depending on the preceding phonological context), glossed here as 'DET₁', appears after the first phonological word of the DP in second position, regardless of the word's lexical category. The other appears at the right edge of the DP. Since DPs in this language always end in the head noun of the included NP, this final clitic always attaches to nouns, but we can still identify it as phrase-final by the fact that in one word DPs, the final clitic (always =**xí** in these examples, glossed as 'DET₂') follows the second position clitic. Together, DET₁ and DET₂ constitute a determiner and identify the deictic status of the DP. The third clitic type is the connective =**s** glossed 'CONN' which follows all non-final words in a multi-word DP.

These elements are completely general, and their appearance is dependent only on the category they express and the phonological shape of the word to which they attach. As such, they are true special clitics. Their placement is governed (within the theory of Anderson 2005) by the system of Alignment constraints in (10).

- (10) a. **Align**(DET₂, R, DP_[+Def], L)
 b. **Align**(DP, L, LexWd, L) » **Align**(DET₁, L, DP_[+Def], L)

The constraints in (10) express the fact that the right edge clitics prefer to be at the right edge of the DP they are associated with, while the second position ones prefer to be at the left edge. The further requirement that DPs begin with actual lexical material, however, outranks this latter preference, and means that the closest to the left edge that they can be placed is in second position.⁵

3.3 Phrase Marking by EDGE Inflection

Anderson (2005) expressed the hope that phrasal properties realized in a peripheral position within the phrase could always be treated as special clitics, but further examination made it clear that this was too restrictive, and that cases exist for which

⁵I ignore here the constraints governing the placement of connective =**s**.

treatment as an EDGE inflection is required. One of the examples of this sort discussed by Anderson et al. (2006) is the marking of the Ergative in the Australian language Kuuk Thaayorre (Gaby 2006).

In this language, ergative marking can occur on nouns and on adjectives. There are a number of different ways in which the ergative is marked, some of which are exemplified in (11); the choice among them is not predictable from the shape of the word. That is, a word has to be lexically specified as to which of these (and other) affixes it takes in the ergative form.

(11)		Nominative	Ergative		Nominative	Ergative
	‘meat’	minh	minh-al	‘good’	min	min-thurr
	‘dog’	kuta	kuta-ku	‘woman’	paanth	paanth-u
	‘eye’	meer	meer-e	‘cat’	thok	thok-un
	‘crocodile’	pinj	pinj-i	‘child’	parr_r	parr-an
	‘boomerang’	werngr	werng-arr			

As illustrated in (12), ergative marking appears on only one word in the DP: the final word. This is true whether that word is a noun, an adjective, or a pronominal possessor (formally, a subclass of adjectives). The form taken by ergative marking is determined by the lexical characteristics of the word on which it appears.

- (12) a. [minh kothon-thurr] pam nhaanham
 MEAT wallaby-ERG man.ACC see.REDUP.NPAST
 The wallaby is looking at the man
- b. [wa’ar pam.thaawarr-an] nhul kar paath-thurr thaathi-rr
 jellyfish dangerous-ERG 3SG like fire-ERG sting-PST.PFCTV
 nganh yangkar
 1SG.ACC leg.ACC
 The (venomous) jellyfish stung me like fire on the leg
- c. [ngan pumun ngathan-thurr] kuta theernga-rr
 RELATIVE younger.brother my-ERG dog.ACC hit-PST.PFCTV
 My younger brother hit a dog

When the last word of the DP is a demonstrative determiner, however, ergative marking appears on the penultimate word of the phrase instead of the final word, as illustrated in (13). This is evidently a consequence of the fact that demonstratives (and non-possessive pronouns) do not have ergative forms, so the marking is displaced onto a preceding word on which it can be realized.

- (13) a. [pam-al ith] nhul may carrots yak-ake-rr
man-ERG DEM.DIST he.3SG VEG carrots.ACC cut-REDUP-PST.PFCTV
The man(, he) cut up the carrots
- b. [parr_r paanth-u ith] may mular washm
child female-ERG DEM.DIST VEG yam.ACC wash.VERBALIZE
rirk ngok-eln
do.NPAST water-LOC
The girl washes the yam

Here, then, we have the diagnostic properties of a word-level affix, rather than a clitic: in particular, lexically specific shapes and lexical gaps in expression. Since ergative marking is only possible for nouns and adjectives, we can say that the property is selective in what it attaches to, as opposed to a clitic which would be expected to appear following any word at the appropriate edge.

If the Kuuk Thaayorre ergative is an affix, then, it must be introduced at the word level rather than phrasally. It realizes a property of the phrase, but only on a single, peripheral word of that phrase. In this case, as well as in Somali and the Austronesian language Nias Selatan as discussed in Anderson et al. 2006, we have to recognize the existence of EDGE inflection in addition to that of special clitics.

If EDGE inflection exists, we need a way to describe it. Within the theories of GPSG and HPSG where it has been discussed, the approach seems to be simply to stipulate that “Left-Right EDGE” is a possible place for features to dock, in addition to heads. This seems less than satisfactory, though, because the relations between phrases and their left/right edges in general is somewhat different from the special status of their heads. For instance, we do not find phrases inheriting their gender or number from whatever happens to be at their edge in the way this is commonly determined by a phrase’s head. This difference suggests that we should look for another way to describe edge phenomena.

In fact, the general Optimality Theoretic framework of Anderson 2005 provides a natural way to get this result, one that is parallel to the description of special clitics. A set of constraints as formulated and ranked in (14) will have the correct effect in Kuuk Thaayorre.

- (14) a. ***D**_[ERGATIVE]: “Nouns and Adjectives, but not Demonstratives or Pronouns, can bear [ERGATIVE]”
- b. **Align(DP**_[ERGATIVE]**, R, W**_[ERGATIVE]**, R)**: “The Right edge of a phrase bearing [ERGATIVE] should be aligned with the Right edge of a Word bearing [ERGATIVE].” [gradient, with more serious violations the further from the right edge ergative marking appears and where no marking at all counts as the worst case]

c. * $\mathbf{W}_{[ERGATIVE]}$: “Do not inflect words for the feature [ERGATIVE]”

Ranking: a \gg b \gg c

Recall that only nouns and adjectives can realize the feature [ERGATIVE]. Ideally, that ought to follow from the fact that neither the lexicon nor the morphology provides realizations for this feature in any other category, but it is represented here (anticipating other aspects of the analysis) by saying that Determiners, including demonstratives and non-possessive pronouns, cannot bear this feature.

The generalization about marking is that the right edge of a DP should bear the case feature if the phrase does — a standard alignment requirement. This requirement interacts with a general requirement that, other things being equal, words should not be inflected for [ERGATIVE]. Of course, other things are not always equal: we definitely *do* want the rightmost word of the phrase to bear the feature when the phrase it terminates does. To achieve this effect, we rank the constraints as shown. This ranking says: do not inflect a word for [ERGATIVE] *unless* you must because it is rightmost in a phrase bearing this property.

Even more important, however, is the requirement that demonstratives do not inflect. If the rightmost word in an [ERGATIVE] phrase is a demonstrative, the most harmonic solution within the constraints of (14) is to inflect the penultimate word in the phrase. Notice that this account involves no percolation of features, as in the description in section 2.1.2: there is simply a principle for the relation between a phrase bearing [ERGATIVE] and the inflection of individual words, using constraints of a familiar sort.

Having observed that both special clitics and EDGE inflection exist as mechanisms for the realization of phrasal properties, we return in the next section to the analysis of the English possessive.

4 Is the English Possessive a Clitic or an Affix?

IN ASKING HOW THE ENGLISH POSSESSIVE should be analyzed, one notable consideration that has been raised in the literature as an objection to the EDGE inflection account has some immediate force, in favor of the clitic analysis. This is the fact that in order to treat the Group Genitive as uniformly an instance of EDGE inflection, we are required to say that *any* word that can appear in an English sentence can be inflected for the feature [POSS], at least to the extent it can be final within a possessive DP. This includes not only nouns and pronouns, but also verbs and prepositions (as illustrated in (1)), and adjectives, adverbs, foreign words quoted and even animal noises and other sounds, as illustrated in (15).

- (15) a. The theory that the earth is flat’s most ardent adherents have formed a new society.
- b. The theory that the world is coming to rotate more slowly’s foundations in physics are secure.
- c. The French word *ling erie*’s pronunciation in English is quite different.
- d. That guy who keeps saying *ssh*’s days are numbered if he goes on making it hard to hear the film.
- e. The animal that goes [whinnying sound]’s foot is called a hoof.

Such indiscriminate assignment of a putatively inflectional property is quite a bizarre result. On the special clitic account, of course, no such consequence ensues, because the DP-final phonological material to which the possessive clitic attaches is not thereby claimed to be ‘inflected’ for the feature [Poss].

In search of further arguments to distinguish the two analyses, we recall the diagnostic properties discussed above in section 3.1. Table 1 summarizes the apparent facts in these areas for Heiltsuk, Kuuk Thaayorre, and English. When we look at Heiltsuk, we find none of the idiosyncrasies that are associated with word-level inflection, and this is clearly a case involving special clitics. When we look at Kuuk Thaayorre, on the other hand, we find the hallmarks of word-level inflection, and this is a good candidate for an EDGE inflection analysis, along the lines of the one offered above. When we look at English, most of the facts seem to conform to what we expect of a special clitic, but there is one sticking point: the possessive form of pronouns.

	<i>Heiltsuk</i> <i>Determiners</i>	<i>Kuuk Thaayorre</i> <i>Ergative</i>	<i>English</i> <i>Possessive</i>
Selection:	none	Nouns & Adjectives	none
Gaps:	none	Demonstratives (Pronouns?)	none
Idiosyncratic shapes:	none	several	pronouns

Table 1: Special Clitics *vs.* EDGE Inflection

4.1 The Analysis of (English) Pronouns

Pronouns actually present a problem for both accounts, though in different ways. For the special clitic analysis, the problem is that pronouns have idiosyncratic forms when they appear in possessive position. That is, they do not consist (as we might have expected) of the plain pronoun plus the same /z/ that appears with other DPs, as illustrated in (16).

- (16) a. my lunch, your lunch, her lunch, our lunch;
 b. *I's/me's, *you's, *she's/her's, *we's/us's lunch
 c. That lunch is mine/yours/his
 d. *That lunch is I's/me's/you's/he's/him's

The shape of possessive pronouns thus appears to be determined as a lexical matter, which is the sort of thing we associate with word-level inflection and not with phrasal inflection by clitics.

On the other hand, the EDGE inflection account also runs into problems with pronouns. Consider the form in which these appear when occurring in different positions within a possessive DP, as illustrated in (17).

- (17) a. My bad habit
 b. The woman who loves me's bad habit
 c. A bad habit of mine
 d. A friend of mine's bad habit

On the EDGE inflection account, the underlined words in (17) should all consist simply of a first person pronoun with the feature [Poss] ($[me_{\text{POSS}}]$), but in fact we find four distinct forms.

The brute facts do not appear to provide an obvious advantage in either direction. Since the relevant evidence apart from the form of pronouns seems to favor the special clitic analysis, however, let us see what is necessary to accommodate the facts about pronouns within that account.

I approach this question by asking what structure ought to be assigned to pronouns. Following a suggestion originally due to Postal (1966) and revived in recent syntactic discussions, let us assume that a pronoun (in English, at least) is not really a special kind of Noun, or Noun Phrase, but rather a special kind of Determiner: a DP consisting solely of a Determiner bearing features of person and number, as in (18).

- (18) Pronoun: $[_{\text{DP}} [_{\text{D}} [\pm\text{ME}, \pm\text{YOU}, \pm\text{PL} (\pm\text{male})]]]$

Ignoring the gender feature (which is only relevant to third person forms designating appropriate animate entities), we arrive at the analysis of first person pronominal forms in (19). The special set of pronouns *mine*, *yours*, *hers*, *theirs*, etc. that we find in English represent the case where a DP contains no content besides the pronominal Specifier, but where “something possessed” is implied. We can represent that as in (19a) with an empty D' (including an empty NP).

- (19) a. *mine*: $[_{DP} [_{DP, +POSS} [_D +ME, -YOU, -PL]] [_D' [_D \emptyset] [_{NP} \emptyset]]]$
 b. *my*: $[_{DP, +POSS} [_D +ME, -YOU, -PL]]$
 c. *I/me*: $[_{DP} [_D +ME, -YOU, -PL]]$

As shown in (19b), possessives in English are just pronominal DPs appearing in a Determiner position, where they get assigned the feature [Poss] (by rule (4)) like any other possessive DP. Note that in some languages, possessives are a special set of Adjectives, instead. This must be the case for Kuuk Thaayorre, as well as for at least some Slavic languages. Other pronouns, as shown in (19c), are simply DPs consisting solely of a Determiner with person and number (and, where relevant, gender) features.

I suggest that the lexical entries for pronouns are essentially just as given in (19): that is, these are words that lexicalize not just a single terminal node, but an entire DP of appropriate form. The entries in (19) are given in order of decreasing specificity, and so should be related by some form of the ‘Elsewhere’ Condition: where one entry is applicable, the remaining, less specific ones are to be disregarded. Furthermore, such a listed lexical entry also takes precedence (again, by the ‘Elsewhere’ Condition in all of the forms one finds in the literature) over the simple realization of $DP_{[Poss]}$ as $DP+/z/$ to the extent $DP_{[Poss]}$ is pronominal.

Simply listing the possessive (and other pronominal) forms in the lexicon, which must be done in any event, thus immediately accounts for the fact that forms like **me’s* do not occur as possessives, although they are perfectly possible in the case of a possessor DP containing a relative clause ending in *me*. Since the pronoun forms are thus accounted for in this way, there is no longer a barrier to adopting the special clitic analysis for the possessive forms in */z/* (including, of course, the Group Genitive). This provides an immediate account of the variation in form in (17) which is much more straightforward than anything which seems available on the EDGE inflection analysis.

Instances of a DP consisting only of a Determiner are not limited to pronouns: demonstratives, numbers, and other quantifiers, at least, can also appear in this structure. Interestingly, when this is the case, the corresponding possessive form seems unacceptable, as illustrated in (20a,b). It seems that the lexicon simply does not supply a way to lexicalize determiners like *this*, *these*, *those*, *two*, *some*, *many* etc. when they bear the feature [Poss] and exhaust the DP — as opposed to pronouns, for which the possessive entries in (18a,b) are available.

- (20) a. **This’s* illustrations are more competently drawn than *those’s*.
 b. **Of the books I lent you, two’s/some’s/many’s* covers were soiled when you brought them back.
 c. ... *one’s* cover was soiled.

Oddly, *one* is an exception to this, as possessives like that in (20c) are well formed.⁶ One possible explanation of this fact might be that unlike other numbers, *one* also has a use as an indefinite pronoun (*One should keep one's hand on one's wallet when arguments like this are presented*), and thus is provided with a full paradigm in the lexicon unlike other determiners. The fact that the possessive form *one's* is exactly what would be produced by the regular rule makes this account less than satisfying, but the facts in (20) remain in any case.

But now consider, in this light, what happens when one of these Determiner-only DPs happens to occur at the right edge of a larger possessive DP, as in the examples of (21).⁷

- (21) a. The man who brought you this's car is still in the driveway.
 b. We look at their high school records for failing grades, and any applicant who has two's/some's/many's chances of admission are quite poor.

Under these circumstances, *this's*, *two's*, etc. no longer ungrammatical, demonstrating that there is nothing wrong with these forms *per se*. This fact is quite mysterious on the EDGE inflection analysis of the possessive, since e.g. *this's* in (20a) and in (21a) ought to be indistinguishable (both being instances of *this*_[POSS]). On the special clitic account, in contrast, there is no difficulty, since there is no need in (21a) for the special lexical form that would be required to lexicalize $[\text{DP}, [\text{POSS}] \text{ this}]$ in (20a).

I conclude that there are good reasons to prefer the special clitic analysis of the English possessive to the *Edge* inflection account, and that the facts provided by the special forms of pronouns do not provide counter-evidence. I turn now to questions related to the phonological realization of the possessive clitic.

5 Some Phonology

IN GENERAL, OF COURSE, the phonetic realization of the possessive marker is identical with that of a variety of other /z/ elements in English, varying among [s], [z] and a syllabic form [Vz] depending on the properties of the final sound in the preceding word. This is illustrated for regular plurals, third person singular present forms of verbs, the reduced forms of the auxiliaries *is* and *has*, and the possessive in (22).

- (22) a. packs ([s]), pals ([z]), passes ([əz])

⁶Payne (2009) notes that the reciprocal pronoun *each other* and the determiners *another* and *each* behave similarly.

⁷John Payne informs me that the contrast between determiners as hosts for possessive marking in head and phrasal genitive is noted in Miller & Halpern 1993, though I have not had access to that paper to confirm that the difference they note is the same as that indicated here.

- b. infects ([s]), cleans ([z]), induces ([əz])
- c. Pat's ([s]) left, but Kim's ([z]) here, and Chris's ([əz]) coming later.
- d. Pat's ([s]), Kim's ([z]), or Chris's ([əz]) corkscrew

Under some circumstances, however, the possessive appears to have no overt realization, and since the facts surrounding this have been taken to bear on the choice between analyses, I address that here.

5.1 Null Realization of the Possessive

An obvious problem is presented by the fact that the possessive remains phonetically unrealized when it would be added to a noun that already bears the regular plural marker, as illustrated in (23).

- (23)
- a. the three boys' [bojz] caps.
 - b. *the three boys's [bojziz] caps
 - c. the three children's/women's/deer's/mice's *etc.* feet

That this is an issue affecting sequences of two /z/ affixes, rather than an incompatibility between the categories of plural and possessive, is shown by the fact that when the plural is marked in some other way, as in (23c), possessive marking is regular.

The phonetic disappearance of the possessive is not limited to regular plurals. Zwicky (1987) claims that the possessive is not realized overtly when added to any phrase that happens to end in a word inflected with any of the /z/ endings. He provides instances of DPs ending in relative clauses or prepositional phrases that have a word with a /z/ ending at their right edge, and says that the possessive marker is not realized in any such case. Some of Zwicky's examples of this are quoted in (24).

- (24)
- a. anyone who likes kids' (/ *kids's) ideas
 - b. people attacked by cats' (/ *cats's) reactions to them
 - c. anyone who hurries' (/ *hurries's) ideas
 - d. everyone at Harry's (/ *Harry's's) ideas
 - e. a friend of my two kids' (/ *kids's/ *kids's's) ideas

Not all speakers agree with Zwicky's judgments here; Carstairs-McCarthy (1995), in particular, provides a different opinion, a point to which I return below in section 5.3.

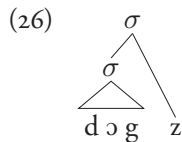
This cannot be a fact about the phonological sequence /zz/ alone, but must reference the affixal status of the elements involved, because other words ending in phonological material homophonous with the regular plural (and other /z/ endings) do get an added /z/ in the possessive, as illustrated in (25).

- (25) a. the fuzz's old cars; at Buzz's
 b. the bus's doors; at Cass's
 c. the terrace's tiling; at Thomas's

A brute force statement to the effect that “[Poss] is realized as \emptyset when immediately following a morphological element consisting of /z/” is obviously unsatisfactory. To improve on that, we must examine the phonology of the /z/ endings a bit more closely.

5.2 The Phonology of /z/ (and /d/)

An approach to these matters must begin with the issue of just how the /z/ endings are introduced into phonological form. Anderson (2005) suggests that the correct analysis of the English word-level inflectional endings (those with the form /z/ or /d/) is, as I have already hinted above, to treat them as adjoined to the final syllable rather than incorporated into it directly. As such, they are structurally “syllable affixes” and not directly part of the syllable coda. When the regular plural rule applies to the stem /dɔg/, therefore, the result is as in (26).

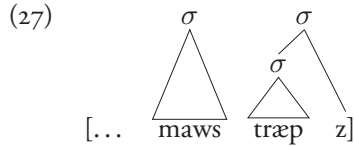


On this account, the inflectional endings /z/ and /d/ are not really part of the structure of the syllable, at least at the lexical levels of the phonology, which accounts for the fact that syllables ending in one of these elements commonly violate otherwise valid phonotactic regularities of the language.

The assumption that some segmental material is adjoined to a syllable as an affix (or appendix) rather than being part of its core content has been invoked by a number of authors for a variety of languages (e.g. Fujimura & Lovins 1978, Selkirk 1982, Booij 1995) as an account of the structural anomalies often found at syllable edges. For English, violations of maximal coda cluster length and segment class sequencing such as are found in a plural or 3SG PRES. form like *thirsts* can reasonably be described in this way. Since there is no reason to believe that the structural change effected by the possessive rule in (5) is any different from that of the rule introducing the regular plural or the third person singular present ending, this analysis extends directly to the forms with which we are concerned here.

As a result, when the possessive clitic is introduced into a structure in a position following a syllable ending in the segment /z/, we can distinguish non-affixal /z/s (as in the forms in (25)) from affixal /z/s (as in (23)) in structural terms: the latter are adjoined to a base syllable, while the former are part of the coda of the base syllable.

The input to possessive marking in a phrase such as *My three mousetraps^(*) only contents...*, then, is something like (27).

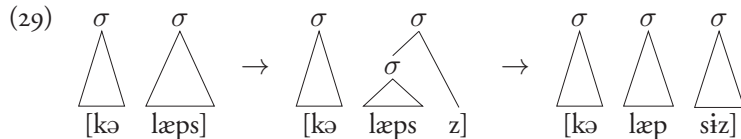


We might then say that the absence of overt marking for the possessive in such examples is that “/z/-adjunction” blocks in case it would apply to a syllable already containing an adjoined /z/, or else that two instances of /z/ adjoined to the same syllable collapse to one. Alternatively, we might revise the affixation rule, so that instead of actively adjoining a /z/ to the final syllable of DPs bearing the feature [Poss], it merely requires that such an affix be present, a constraint formulated as in (28).

- (28) English Possessive (**Phrasal Morphology**, revised):
 The final syllable of a DP with the feature [Poss] must end in adjoined /z/.

Where the form already contains a /z/ affix, the constraint is satisfied without further change; while in the absence of such an affix, one must be added to avoid a violation. I take no stand here on which of these alternatives is correct — my interest is solely in arguing that structural differences between the forms in (23) and those in (25) make it possible to avoid the purely stipulative description of the possessive forms of regular plurals.

When the form to which possessive marking applies ends in a non-affixal sibilant, as in *the recent stock market collapse's major consequence...*, the rule applies normally to adjoin /z/ to the final syllable. The resulting form is adjusted in the post-lexical phonology to provide a vocalic transition between the two sibilants and resyllabify them, a process illustrated in (29).



5.3 Some Problems with Proper Names

As we explore the issues raised in section 5.1 more closely, the facts become quite complex. For instance, although ordinary words ending in a sibilant are marked normally in the possessive, as in (25), many speakers (and books on written English style) feel that the possessive should be phonologically omitted with proper names like *Jones*,

Williams, etc. As Zwicky (1987: 140, fn. 6) puts it, “POSS is occasionally suppressed in speech (as it regularly is in writing, according to at least some style sheets) after proper names ending in /s z/: *Jones*, *Nevis*, *Jeeves*.”

I propose that we accommodate these facts by saying that speakers who suppress the possessive in such examples do so as a result of a lexical representation for such names that treats the final sibilant as adjoined, structurally parallel to a plural marker. Perhaps this is a matter of treating such names as structurally, though not semantically, plural; or perhaps adjoined /z/ is simply a derivational element that appears in (some) proper names (compare *Toots*, *Snookums*, *Babs* etc.). The structural contrast between speakers who suppress the possessive in these cases and those that do not would then correspond to a difference in the lexical representation of a name like *Jeeves* as one or the other of the forms in (30). This difference would then control whether or not the possessive was overtly realized on such words.

- (30) a. $[\sigma \text{ } [\sigma \text{ } \text{jijv}]z]$
 b. $[\sigma \text{ } \text{jijvz}]$

Of course, even though from the point of view of the lexical phonology, syllable affixes like /z/ (and /d/, marking the regular past and past participle) are not part of a core syllable, by the time we get to the surface phonetics, they have to be pronounced as part of some syllable. That means that at some point in the post-lexical phonology they must be incorporated into a syllable. In the case of sibilant sequences, as illustrated in (29), a new syllable is created out of the two consonants, with a minimally specified nucleus. Where no such special factor obtains, incorporation is presumably by some straightforward process like (31).

- (31) **Syllable-Affix Incorporation:**
 $[\sigma \text{ } [\sigma \text{ } X]C] \rightarrow [\sigma \text{ } XC]$

Simple and direct as it is, the presence of a rule like (31) in the grammar allows us to give an account of the difference between Zwicky’s judgements of examples like (24) and those of Carstairs-McCarthy, who feels that such phrases with two /z/s are sometimes possible.

To account for this difference, we could say that rule (31) is indeed always post-lexical for Zwicky, and thus that for him, words ending in a /z/ affix always have this element identified as an affix wherever the possessive marking rule ((5) or perhaps (28)) applies. For Carstairs-McCarthy, on the other hand, we might say that (31) applies — at least sometimes — within a cycle of the lexical phonology, perhaps at the end of a Phase in Minimalist terms. As a result, on subsequent cycles, the originally adjoined

nature of the /z/ will no longer be visible, and thus possessive affixation will not be blocked. Obviously, much more detailed study of the differences involved here among structures and speakers is necessary to flesh out this suggestion, but it seems to provide at least a path to a solution.

6 Loose Ends

THE DISCUSSION ABOVE provides good reason to accept the analysis of the English possessive marker as a special clitic introduced at the right edge of a DP in the position of Specifier of DP, as opposed in particular to an EDGE inflection account. This is not the only possibility, however, and before concluding I would like to mention another alternative view, and also another position in which possessive marking appears.

6.1 [Poss] as a Determiner?

An analysis of the possessive which is relatively common in the recent literature, especially among syntacticians, differs significantly from both of those that have been the focus of attention here. On this view, instead of treating [Poss] as a phrasal property associated with a DP in the position of Specifier of DP, the possessive is treated as the Determiner itself. Instead of (3), with a \emptyset Determiner and a rule assigning [Poss] to the DP in Specifier position, this account offers a structure like that in (32).

(32) $[_{DP} [_{DP} \text{Fred}] [_D \text{'s}] [_{NP} \text{analysis of the English genitive}]]$

This treats the possessive marker not as morphology (either of phrases or, as on the EDGE inflection account, of words) but rather as syntax. The 's in *Fred's* on this view is not a special clitic but rather a simple clitic, a (prosodically deficient) weak element occupying the structural position of the Determiner.

Apart from the reasoning above which appears to support the special clitic account, there are at least two mechanical problems with this analysis. The first of these is the need to specify how possessive forms of pronouns, including *my, your, his, her* etc., *mine, yours, his, hers* etc. as well as forms like *me's, mine's, you's, him's, her's* etc where appropriate as seen in (15) above from sequences of a pronoun followed by what is supposed to be a simple clitic, 's. This is the sort of problem that is commonly relegated in syntactic discussion to trivial detail, but it is necessary to give a principled account of it. I have argued above that on the special clitic account, these forms follow without further stipulation from the lexical entries for the pronominal forms. It is not obvious that the same conclusion obtains on the “possessive as Determiner 's” analysis.

More serious, perhaps, is the fact that possessive marking also appears in a position where there is no plausible Determiner position following the possessive marked item, and thus where it is not possible to treat it as an element 's occupying such a position.

6.2 The 'Descriptive Genitive'

The clearest example of this is found in a construction known in the traditional grammatical literature as the "Descriptive Genitive,"⁸ exemplified by the underlined phrases in (33).

- (33) a. Buy one men's shirt, get one at half price.
 b. Elk Lake has one children's playground and two beaches.
 c. How many old man's faces can you see? [about an optical illusion illustration]
 d. [It costs close to \$100 per person for a family at Disney World.] Do you honestly think that Disney gives two mouse's asses for 'affordable for families'?
 e. The actors in this film do not display the kind of old established couple's pleasurable anticipation of one another's responses and desires that might have made their performances more natural.

Although well-known in the descriptive literature, I know of no explicit formal analysis of this construction in the syntactic literature. It is cited in the recent comprehensive grammar by Huddleston & Pullum (2002: 469f.), but most syntactic discussions of the genitive mention it only to indicate that this is not the sort of genitive they intend to talk about. As Huddleston & Pullum observe, some examples have a rather stereotyped character (*old people's home*, *women's wear*) and variations on these are often of questionable acceptability (cf. *a summer's day*, but ??*a spring's day*). Nonetheless, the construction is far from limited to a small set of lexicalized examples, and new instances can easily be created that are perfectly grammatical.

We can see from the fact that the noun and a preceding determiner need not agree in number that this determiner is related to the larger phrase (*one shirt*) and not to the possessive expression (i.e., not **one men*). The descriptive genitive expression follows, and does not precede the Determiner within the DP. It is necessarily non-referential, as illustrated by the impossibility of constructions such as those of (34).

- (34) a. *I have a women's_i bicycle for sale. She_i/they_i can't ride it any longer.

⁸Other names include "classifying" and "attributive" genitive.

- b. *The Jets won because Darrelle Revis intercepted three straight Peyton Manning's underthrown passes.

While a DP can only contain a single possessor phrase, a descriptive genitive is not incompatible with the presence of a possessor, as shown in (35).

- (35) Oxford's women's colleges are fairly recent innovations.

On the other hand, two descriptive genitives are not possible, as shown in (36).

- (36) *Macy's boys' children's wear department is tiny.

The structure of the descriptive genitive phrase is limited to that of NP consisting only of N' (not a DP, since it cannot contain a Determiner, or a full NP, although adjectival modifiers are allowed).

I propose that descriptive genitives are to be analyzed as bare NPs in the position of Specifier of another NP. On this account, the structure of e.g. *Oxford's womens' colleges* is as in (37).

- (37) $[_{DP} [_{DP} \text{Oxford}] [_D \emptyset] [_{NP} [_{NP} [_{N'} \text{women}]] [_{N'} [_{N} \text{colleges}]]]]]$

In this structure, rule (4) assigns [Poss] to the DP Specifier of DP (*Oxford*), resulting in the adjunction of 's at the right edge of this word. I suggest that the same feature is assigned to the NP Specifier of NP (*women*) by a straightforward generalization of (4) as in (38).

- (38) English Descriptive Genitive (**Morphosyntax**):

$NP \rightarrow [\text{Poss}] / [_{NP} [_] N X]$

Assuming a similar generalization of rule (5) (or (28)) to adjoin /z/ at the right edge of NP (as well as DP) bearing [Poss], the surface forms are obtained. The generalizations of the rules for assigning and interpreting [Poss] in this way are presumably to be understood in the terms of something like Grimshaw's (2000) notion of "Extended Projection," although I leave the details of this analysis to be worked out.

Some writers (e.g. Taylor 1996) have suggested that the descriptive genitive is actually (together with the noun head that it modifies) a kind of compound, rather than a phrasal formation.⁹ Arguments against that account, however, have been offered by

⁹Booij's (2005: 83) position is more difficult to characterize. He refers to these constructions as "possessive compounds," but proposes a structure in which the descriptive genitive is a phrase. His characterization of the structure as a "constructional idiom" seems to imply that it falls outside the descriptive scope of the normal syntax of English, a move I do not think is necessary. I am grateful to Amira Alshehri for drawing my attention to Taylor's analysis.

Rosenbach (2006) and Willemse (2007), and it seems that the phrasal analysis is to be preferred.

In favor of the phrasal analysis, it is possible to adduce (following the work cited above) the fact that coordinated descriptive genitives are possible as in (39).

(39) You'll find the men's and boys' clothing on the third floor.

The feature [Poss], when assigned to a coordinate expression, can distribute over the conjuncts or not, resulting in a potential difference of meaning. In the case of ordinary possessives, we can compare *Fred and Ethel's houses* with *Fred's and Ethel's houses*: the first refers to the intersection of the houses associated with Fred and with Ethel, while the second refers to the union of these two sets. Similarly, *women and girls' clothing departments* refers to departments offering clothing suitable for females of all ages, while *women's and girls' clothing departments* refers to the union of the departments offering clothing for women and those offering clothing for girls. The descriptive genitive in this case behaves just like other phrases under coordination.

Since the descriptive genitive phrase can be internally complex at least by containing further modifiers, that is also suggestive that it is phrasal in nature. Furthermore, it can be separated from the associated noun by other modifiers, which would be difficult to accommodate within the compound analysis.

(40) Those sad little basset hound's dark eyes and floppy ears endeared Bowser to us immediately.

The phrasal analysis seems even harder to avoid for “measure genitives,” another type of attributive genitive not explored here in detail, as in *Captain Haddock's two and a half years' absence from home* (Huddleston & Pullum 2002: 470).

One might cite the fact that many descriptive genitive expressions display “compound” (penultimate constituent) stress, as in *wómen's wèar* as evidence for the compound analysis, but many others bear “phrasal” (final constituent) stress, as in *chil-dren's pláyground*, and in any event it is well known that this stress difference is quite unreliable as an indicator of syntactic structure. On the other hand, the rather free occurrence of plurals in descriptive genitive phrases is at odds with the well-known tendency for this category not to occur in true compounds.¹⁰ Furthermore, if we were to treat the descriptive genitive as a compound rather than as a phrasal construction, it would be unique in English in making use of an empty structural marker (the *ʔ*).

¹⁰Unfortunately, it is only the presence of irregular plurals that can be conclusively demonstrated in descriptive genitives, since the descriptive genitive /z/ is phonologically null with regular plurals in /z/, just like the regular possessive /z/ as discussed above in section 5. Nonetheless, I think it is uncontroversial that *boys' wear* contains a genitive marker just as *men's wear* does.

Other Germanic languages, of course, have noun-noun compounds with such purely formal markers (cf. German *Schwanengesang* ‘swan song’), but English does not.

A full analysis of the descriptive genitive (and other attributive genitives) will have to await further work, but for our purposes here, that is not necessary. What matters to the present paper is the fact that there is good reason to believe that some instances of the possessive marker *’s* (/z/) arise in structures where *’s* attaches to a constituent which is not plausibly followed by a Determiner position which could host it as a simple clitic. These constructions have a natural account in terms of a special clitic introduced at the right edge of a phrase with the feature [Poss], as argued above, but there is no obvious way to analyze them if possessive *’s* is treated as a Determiner, as suggested in section 6.1.

7 Conclusions

The analysis of the English possessive *’s* as a special clitic, an affix marking grammatical content and associated with a syntactic phrase rather than with an individual word, is one of the classics of the literature on clitics in modern linguistics. Nonetheless, some have argued for alternative views on which either (a) *’s* is not an affix, but a syntactically autonomous element filling a Determiner position and attaching to preceding material as a simple clitic, or (b) *’s* is an affix, but one realizing the (EDGE) inflection of an individual word. The demonstration above that the more traditional view of *’s* as a special clitic (a phrasal affix) is to be preferred also makes some more general points about the organization of grammar.

While I have argued for the special clitic analysis of [Poss] in English, it is also apparently the case that some phenomena in some languages are more appropriately treated as instances of EDGE inflection. Since the descriptive coverage of the two approaches overlaps to a significant extent, it is important in any particular case to examine the details of realization of the category in question in order to make a choice between them.

The morphology of phrases is really a lot like the morphology of words. Both consist largely (but not exclusively) of affixation, at one of a limited set of positions: initially, finally, post-initially, and preceding or following an internal head. In addition, we can note that in both sorts of morphology, the productive case can be preempted by lexically specific realizations. In the phrasal case, of course, that requires that we have a lexical listing for the realization of a phrasal category — something that is rather rare (outside of phrasal idioms), but which occurs in English in the case of pronouns, whose definition hinges on their analysis as DPs consisting only of a Determiner with person/number features.

The analysis advocated here involves the assignment and expression of functional

content (here case, in the form of [Poss]) without positing syntactically autonomous hierarchical structure projected from that content analyzed as a head. As such, it contributes to a somewhat subversive agenda, one that wants to avoid claiming that functional content is always introduced in the form of functional heads that project their own additional syntactic structure. It seems reasonable to see functional content, at least in many instances, as simply featural additions to the complex symbol representing a phrasal category, with no further structure (and concomitant displacement) involved. To maintain that position, of course, it is necessary to develop an account of how those features are introduced and realized, something I have offered here for the specific case of the English possessive.

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