's 's Meaning:

A Historical Study of the English Genitive,
as Compared to other Western Germanic Languages

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Orthographic Notes:

This paper discusses extensively the genitive ending of Old English. Old English used certain writing symbols from its Germanic past, known as runes, which we no longer have in our contemporary writing system. In giving examples of Old English, I have chosen to type p and d for the runes used to represent the sounds we now represent as th, known as "thorn" and "eth" respectively. Each of these runes could stand for either the voiced or the voiceless interdental fricative. To distinguish these sounds from [p] and [d], I have typed (th) after the runes.

Following the conventions of linguists, asterisks (*) in this paper mark two completely different concepts: ungrammatical phrases (for example, *go you?), and reconstructed words and phrases (in this paper, anything from Proto-Germanic or Proto-Indo-European).

In a study of diachronic linguistics, most conclusions must be based on literature and not speech. Although linguists would certainly prefer to base all of their conclusions on speech, historical linguists are rarely able to do so. Writing mirrors language in various ways, providing "clear evidence of linguistic change in gross outline" (Anttila, 35). For example, obvious changes in language are observable between Beowulf, Chaucer, Shakespeare, the King James Bible, and contemporary texts.
For various reasons, the language which has been called English for the past 1500 years has undergone some major morphological and syntactic changes that other Germanic languages have not. Apparently, English has been the extreme in some developmental trends applying to the Germanic languages.

Very early in its history, English shifted from being a highly inflected language to one with very few inflectional endings. This is generally recognized as the cause of the loss of a case system in English. Case relationships in modern English are for the most part indicated by means other than noun case inflection.

I am defining the existence of a "case system" as the occurrence of different forms of a given noun, depending on the role of the noun in a sentence. A case system exists when inflectional affixes are used to mark distinctions in syntactic role. The term "case" is also used in some modern linguistic literature just to point out the relationships between nouns and other parts of the sentence, regardless of whether they are overtly marked. There is a fundamental difference between case as form and case as function, but unfortunately, both concepts are sometimes given the name of "case."

Has English completely lost its case system--its use of different forms of nouns (and pronouns) to indicate the roles of those words in sentences? Contrary evidence commonly cited is the "genitive"'s and objective pronouns (me, him, her, us, them, whom). Solely a genitive/non-genitive case distinction for nouns is unheard of in all languages of the world which have been studied (Janda, 1979, 245), with the exception of the continuing hypothesis of just such a situation in modern English.
No other language in the world has such a two-case system where the genitive is opposed to all other cases conflated into one, and, even if English alone does have this case inflectional system, then it has acquired it by undergoing the extremely peculiar historical development of retaining precisely its most marked case while losing (i.e., syncretizing) all of its less marked cases (Janda, 1981, 60).

If English has lost all noun case inflection save that of the genitive case, then English runs against possible linguistic universals. Such a potentiality raises the intriguing questions of whether the potentiality is an actuality, and how and why it came to be if it is.

This paper investigates the history of the English genitive, in an attempt to determine whether the contemporary 's is an inflectional case marker, or whether it is something else. If English does still have a limited system of case, why was the genitive left intact, while other cases declined, and is this system continuing to deteriorate today?

In this project, I look at the ways 's is used today. Why does it attach to noun phrases 1 instead of nouns?

the boy in the room's hat
*the boy's in the room hat

Why does the noun phrase with 's precede the noun phrase it modifies2?

the man's shirt
*shirt the man's

1 A noun phrase is a syntactic unit consisting of the noun head and all of its modification: [the [boy]N [in the room]P"]N"

2 This is the question that first led me into researching the expression of genitive relationships in English. Since the noun phrase with 's has a descriptive or determinative function, the word order at first does not surprise us. However, English is an anomaly among its Indo-European relatives with this word order. Other contemporary Indo-European languages most commonly use prepositional phrases or genitive constructions, both of which follow the noun phrase they modify.

la camisa del hombre (Spanish)
lacamiciadell'uomo (Italian)
das Hemd des Mannes (German)
Is use of 's different with plural nouns than with singular nouns?

- the boy's hat
- the boys' hats
- the child's hat
- the children's hats

Is use of 's restricted to the expression of certain meanings, and what other ways are there to express a "genitive"? Is the genitive a case in English today, as it was in the history of English? Several of these questions are quite interesting because they address unique characteristics of English.

This project also looks at some of the languages closely related to English, specifically Western Germanic languages. From a comparative/historical linguistics perspective, I will try to determine the state of the English genitive and case system today and compare its development with that of the analogous structures in closely related languages.

**A Further Discussion of Case**

In order to determine whether there is a case system in English today, if any cases are marked by inflectional (case) endings, it is necessary to discuss further the notion of case. Case is the grammatical category expressing relationship between nouns and noun phrases (Quirk, 1972, 192), and usually their relationship to a verb. The relationship which case signals is not always possible to specify (Hathaway, 287). The typically cited case roles of Indo-European languages are (Bright, I, 217):

- nominative=subject
- accusative=direct object
- dative=indirect object
- instrumental= instrument or means
- genitive=adnominal attribute.
There are many instances in both Indo-European and non-Indo-European languages where a noun grammatically takes the inflection of a case but fulfills another role than the one traditionally associated with that case.

The traditional case roles may be questionable in modern English, where sentences such as the following are common and grammatical for many native speakers (Quirk, 1985, 337):

It's me.
Mary and him are going.
Me and Mary are going.
Let's you and I do it. 3

Another example is the following quote: "you give Al Gore and I a chance to bring America back" - Bill Clinton (Safire, 1992, 12).

Such exchange of objective and non-objective case pronouns apparently occurs most easily when there are two referents in a noun phrase, joined by and. Mary and him are going is a common sentence in modern American English, but if just Mary's male companion goes, the sentence will be

He goes.
*Him goes.

Usage of objective pronouns is questionable and seems to be in flux, perhaps evidence that the English case system continues to deteriorate.

Objective/non-objective case for English pronouns is often determined simply by location of a pronoun in the sentence, rather than by any fixed role. Grammatical passive sentences in English have long been as follows, because case is assigned after the object of the verb is moved by a transformation into the subject position.

3People often say "let's you and I do it", but for a prescriptive grammarian, this sentence is probably quite terrible. Let's means 'Let us,' so to have any pronouns after it is redundant. Let's you and me do it would be deemed bad for the same reason, unless the meaning were 'Let us, you and me, do it.'
He was injured by the crowd.

The objective pronoun whom is used by a steadily declining number of contemporary speakers of English, and many people are confused about its usage, further illustrating how English pronominal case distinctions are becoming blurred.

That is the boy who I like.

That is the boy whom I like.

Linguists who study Japanese, a non-Indo-European language, find that particles -ga and -o can be interpreted as marking subject and object respectively,

Sono kodomo-ga tokei-o mita. (SOV)
Tokei-o sono kodomo-ga mita. (OSV)
'\text{That child saw the watch}'

but they also find contradictory evidence to this conclusion (Napoli, personal correspondence). "In many-but by no means all-occurrences...[the] relationship [marked by -ga ] coincides with what is often termed a grammatical subject" (Jorden, 89). "In many-but by no means all-occurrences...[the] relationship [marked by -o ] coincides with what is usually termed a direct object" (Jorden, 91). Case form/meaning relationships are not always one-to-one.

The Genitive as a Special Case

The genitive case is different from other cases in that it often signals some kind of connection between nouns, without need of a verb (Prokosch, 230). Still, the connection which may be signaled is not only of one kind. The genitive is often referred to as the "possessive," but this is an inadequate title. In modern English, the genitive relationship may be possession (the girl's toy), origin (France's wines), description (doctor's
appointment), measure (ten days' absence), attributive (the party's policy), partitive (the earth's surface), appositive (Dublin's fair city), subjective/agent of action (the boy's application ['the boy applies to something']), or objective/theme of action (the family's support ['something supports the family']) (Quirk, 1985, 322). As is obvious from these examples, genitive relationships are often difficult to classify and might have multiple interpretations: in Mary's photo, Mary may own the photo, have created the photo, or be the subject of the photo.

Other ways to express genitive relationships--e.g. of, compounding--have developed, sometimes with the hope of reducing ambiguity. These alternatives will be further discussed later.

With their various possible meanings, genitive relationships are different from relationships expressed by other cases. Genitive relationships do not necessarily center around the action of a verb. Genitive nouns frequently modify and delineate other nouns. The genitive is in this way a special case. It might be prone to evolve differently.

The Marking of Case

By a standard definition, a language with a case system marks case by inflection. Inflections are morphemes that do not create new words but rather indicate the grammatical status of existing words. The statuses indicated differ from language to language, but typical across languages are such qualities as number, tense, definiteness, animateness, possession, size, and shape (Bolinger, 57), as well as role in a sentence. Clearly, English only chooses to represent a few of these qualities. The

4The partitive genitive is usually expressed with an of-phrase in modern English; a glass of wine is a much better example of a partitive meaning, the designation of a part of the whole.
English plural marker -s is one of our inflectional endings. It changes only the number of a noun.

Inflectional affixes contrast with derivational affixes. Derivational affixes change the grammatical category of a word. An example from English is -ness, as in [[kind]Aness]N; -ness changes adjectives into nouns and gives the new noun the meaning of "the state of being (the adjective)." English has many derivational affixes but, as will be pointed out more fully later, a very small number of inflectional affixes. Derivational affixes always outnumber inflectional affixes. What is important to note about English is how few inflectional affixes there are.

Parts of speech can be defined according to which derivational and inflectional suffixes they may take (Sledd, 80). In modern English, nouns take plural inflection and (questionably) case inflection. The common definition of a noun in descriptions of modern English grammar is usually something like "a form class that has two-term variation for number, two-term variation for case, or both" (Bolton, 58). One question this project seeks to answer is whether there is any actual variation due to case inflection among English nouns.

If inflections are not chosen to represent case, word order and function words will often express relationships between words. A function word is a free morpheme, meaning that it constitutes a word by itself, whereas any affix is a bound morpheme and can only be used when attached to another element. Affixes may be prefixes or suffixes in English (e.g. de-regulate, hospital-ize), and there are languages which have infixes and circumfixes. All English inflections are suffixes, but English derivational affixes may be either prefixes or suffixes.
Function words, like inflections, have almost no meaning of their own, other than the ability to express relationships between other words. Function words are so named because they primarily show grammatical function, rather than meaning (Robertson, 283). Prepositions are generally cited as function words, but it is hard to say that some prepositions, such as the antonyms above and below, have no meaning of their own. A preposition that does seem to clearly fit into the function word category is of. Its primary function in English is the expression of traditionally genitive relationships. Inflectional morphemes and function words can often do each other's jobs (Bolton, 60).

Modern English can represent traditional genitive relationships by means of 's or of, although there is distinction in their respective uses, as will be discussed later. Although function words can do the job of inflections, occasionally a language can represent a property with either an inflection or a function word. An example from English, due to the influence of French, is -er and more to represent the comparative degree of adjectives. When both an inflection and a function word play the same role, one difference in their use is that other words may be inserted between the function word and the word to which it belongs (Bolinger, 57).

the prettier dress
the more excitingly beautiful dress

Since "group genitives" ('s on noun phrases instead of nouns) are grammatical and mandatory in modern English, this is a point against 's

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5It is definitely arguable that function words have some sort of meaning, perhaps "grammatical meaning."

6The rule for use of -er and more is: -er with monosyllabic adjectives (sicker); more with polysyllabic adjectives (more important); -er with some disyllabic adjectives, more with others (crazier, more graceful). This may be slowly changing, as -er is expanded to other adjectives (curiouser).
as an inflection: there are often several words between the head noun of the noun phrase and the 's.

\[
\text{the boy I go out with's car}^7 \\
\ast \text{the boy's I go out with car}
\]

In this way, 's acts like a function word and not an inflection. However, being neither an independent word nor prepositive, like prepositions, 's cannot actually be a function word.

If 's is not a case inflection, such a status could very reasonably be due to a major shift occurring in the history of English grammar: many grammatical relationships which had been expressed by inflections came to be expressed by other methods. Before such developments are discussed, however, it is necessary to establish a few more pertinent definitions.

**Language Typological Classification by Word Structure**

All affixes and simple words (words with no affixes) make up the class of small, meaningful sounds known as morphemes. "There are systematic differences in the ways in which individual languages combine morphemes to form words" (O'Grady, 229). Languages can be typologically classified according to their word structure.

If a language marks several grammatical categories with one affix at the same time, then the language is classified as inflectional, or synthetic. An example of such a language is German. In the German word *Mannes* ('of a man'), -*es* simultaneously means genitive case, masculine gender, and singular number. If a language has most words consisting of one morpheme, then it is classified as analytic, or isolating.

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7This phrase is admittedly part of informal speech.

8German is an Indo-European language, and Indo-European languages have historically been inflectional.
Mandarin Chinese is a commonly cited example of an analytic language.

"In Mandarin, for instance, tense is indicated by a free morpheme whose position with respect to the other elements is variable" (O'Grady, 229):

\[
\begin{align*}
\text{Ta chi fan le} \\
\text{he eat meal past} \\
\text{'He ate the meal.'}
\end{align*}
\]

\[
\begin{align*}
\text{Ta chi le fan} \\
\text{he eat past meal} \\
\text{'He ate the meal.'}
\end{align*}
\]

If a language uses many affixes, each marking one grammatical category, then it is classified as agglutinating. In the Hungarian word *hazakban* (‘in houses’), *haz* means 'house,' *ak* is the plural marker, and *ban* is a case marker meaning 'in.' Finally, if a language forms words which may translate into an entire English sentence, it is classified as polysynthetic. Several Amerindian languages are polysynthetic. In Huichol, an Uto-Aztecan language spoken in Mexico, the word *peti?uki* means 'are you a man?'; the morpheme *pe* - represents our pronoun 'you,' -*ti* - , our verb 'to be (interrogative),' and -?uki , our noun 'a man.' 10 "No language fits any of these types perfectly" (O'Grady, 229).

Referring to these typological classifications, the two types of languages important for the history of English are inflectional and analytic. By definition, inflectional languages make extensive use of inflections to express relationships between words, while analytic languages must rely chiefly upon word order and function words. Indo-European languages are often synthetic languages. Modern English, while demonstrating some inflectional characteristics, is very analytic,

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9For my introduction to Hungarian, the only non-Indo-European language I have tried to learn to speak, I am thankful to Professor Kevin Moss, Middlebury College.

10This example comes from notes taken in Introduction to Language, Harvard Summer School, 1991, Mark Hale, Professor. In my transcription, ? is a glottal stop.
observable from its very small number of inflections. Indo-European is the
great language family to which English belongs\textsuperscript{11}, so it is logical that
English was at some time a highly inflected language.

\textbf{Language Families}

A language family is a group of languages for which there is enough
evidence of genetic relationship to be considered conclusive. Genetic in this
sense refers to genus, or source, not genes. Languages in a language
family are believed to have descended from a common "ancestor" language,
and such a classification in no way pertains to relations between speakers
of these languages. The Indo-European languages are considered to be
related because of both their common word stock and their tendency to use
inflectional endings to mark various grammatical properties. The
similarities are so numerous that they cannot likely be due to chance or
borrowing, and descent from a common language was long ago
hypothesized\textsuperscript{12}.

Proto-Indo-European, the hypothetical common ancestor, spoken
perhaps 4000 years ago (Arlotto, 236), was apparently a synthetic language.
Now, many of her daughters are, too. However, because languages
constantly change, the extent to which each Indo-European language uses
inflections differs by the period of a given language. For example, Sanskrit
had eight cases, Latin had six, Old French had two, Proto-Germanic had
six, and Modern German has four (Gray, 201). There seems to be a general
trend among Indo-European languages of decreasing the number of cases,

\textsuperscript{11}See Indo-European tree in appendix.

\textsuperscript{12}Sir William James of Britain first proposed a common source for Greek, Latin,
Sanskrit, Germanic, and Celtic in 1786 (Indo-European Languages, 296).
grammatical roles of nouns indicated by inflection; the number has almost never increased.

Proto-Germanic\(^{13}\) is of special interest in this paper because it is the daughter of Indo-European from which English stems. The Germanic branch is commonly accepted to be distinguished from other Indo-European languages by the sound changes known collectively as Grimm's Law (Muller, 7): voiceless stops became voiceless fricatives; voiced unaspirated stops became voiceless stops; and voiced aspirated stops became voiced unaspirated stops—

<table>
<thead>
<tr>
<th>Latin</th>
<th>English</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>pater</em></td>
<td><em>father</em></td>
<td>(p-&gt;f)</td>
</tr>
<tr>
<td><em>labium</em></td>
<td><em>lip</em></td>
<td>(b-&gt;p)</td>
</tr>
<tr>
<td>Sanskrit</td>
<td><em>bhrater</em></td>
<td>(bh-&gt;b)</td>
</tr>
</tbody>
</table>

As well as this consonantal sound change, Germanic languages share other phonological and grammatical features. Other common patterns of sound change include umlaut (Gray, 349), the influence on the vowel of one syllable by the vowel of another syllable:

Proto Germanic *gastiz* → English *guest* \(^{14}\)

Germanic languages tend to have word stress fixed on the root syllable (Bloomfield, 113), as opposed to the free accentual system of Indo-European. Resulting from this development is the Germanic tendency to weaken and lose inflectional endings (Quirk, 1957, 3). As will be seen, many unaccented inflectional endings have been lost in Germanic languages, including English.

\(^{13}\)Archaeological evidence suggests that the Proto-Germanic people lived around 750 B.C. (Hall, 660).

\(^{14}\)The [i], a front vowel, caused the [a], a back vowel, to become a front vowel, [E]. Umlaut is a form of assimilation: the vowel of one syllable assimilates to the vowel in another syllable; the syllable causing the change is often later lost.
Another common feature among Germanic languages is the existence of only two forms of verb inflection, present and past, with other tenses marked by auxiliary verbs:

<table>
<thead>
<tr>
<th>English</th>
<th>I walk</th>
<th>(present)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I walked</td>
<td>(past)</td>
</tr>
<tr>
<td></td>
<td>I will walk</td>
<td>(future)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>German</th>
<th>Ich gehe</th>
<th>(present)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ich ging</td>
<td>(past)</td>
</tr>
<tr>
<td></td>
<td>Ich werde geben</td>
<td>(future)</td>
</tr>
</tbody>
</table>

Germanic languages historically have two forms of adjective inflection as well—strong and weak (Bolton, 88):

<table>
<thead>
<tr>
<th>German</th>
<th>der rote Lippenstift</th>
<th>'the red lipstick'</th>
<th>(weak)</th>
</tr>
</thead>
<tbody>
<tr>
<td>German</td>
<td>roter Lippenstift</td>
<td>'red lipstick'</td>
<td>(strong)</td>
</tr>
</tbody>
</table>

The genitive case in Germanic languages has been historically marked by [s] (Bloomfield, 90). Germanic languages also share common vocabulary features (Bolton, 87).

Proto-Germanic is divided into three smaller groups, North Germanic, East Germanic, and West Germanic. North Germanic includes Icelandic, Norwegian, Danish, and Swedish. East Germanic is what we know as Gothic, a dead language existing only in records such as a fourth century Bible (Bourcier, 21). West Germanic is further divided, again based on divergent consonantism (Gray, 346): High German is what we know today as Modern German, and Low German includes Dutch, Frisian, Flemish, Afrikaans, certain dialects of German, and English. The Anglo-Saxon invaders of what was to become England spoke Low German dialects.

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15 The first migrations causing these splits occurred in around 250 B.C. (Hall, 660).
Low German languages have tended to level inflections more quickly than High German (Emerson, 20). A suggested cause of this is High German's relative isolation within the European continent (Robertson, 34). Other than a difference in rate of change, West Germanic languages have developed along similar lines. English has had some divergent developments due to such factors as isolation from other Germanic languages and influx of less related foreign elements (Lockwood, 1965, 2). It may seem to be a contradiction that High German has been more conservative with regard to loss of inflection, and English has lost inflection to an extreme degree, both because of isolation. However, no condition ever has a guaranteed linguistic outcome. I will further discuss and compare the development of the genitive in English to that of the genitive in other Western Germanic languages later in this paper.

**Linguistic Change**

All languages change constantly. This is a major premise in modern linguistics. I have already said that English long ago ceased to be a highly inflected language, and I join other contemporary linguists in trying to determine which grammatical properties are still marked by inflection. My specific question regards genitive relationships.

There are certainly very few inflectional endings left in modern English, no matter whose count is regarded as correct. The current number is especially startling when compared to the numerous inflectional possibilities of Old English which will soon be discussed. Most contemporary grammars, that is those falling somewhere between the current extremes of conceptualizing grammar, Chomskian
transformational grammar and prescriptive grammar,\textsuperscript{16} cite the following inflectional endings for modern English: -\textit{ed} (past tense and past participle), -\textit{er} (comparative), -\textit{est} (superlative), -\textit{ing} (present participle), -\textit{s} (noun plural, and third person singular of verb), and -'s (genitive). In addition are the English pronouns, several of which have a separate objective case and two "genitive" forms: \textit{I, me, my, mine; you, your, yours; we, us, our, ours; he, him, his; she, her, hers; it, its; they, them, their, theirs}.

Disregarding for now the pronouns, inflection seems to remain where no other means of expressing the idea develops (Krapp, 83), although it is definitely possible for both constructions to remain. How does 's fit into this generalization? As will soon be discussed, 's had its origin in an inflectional ending but was not lost when most other inflectional endings of Old English were, although it had of to take its place. I wish to determine whether 's is an inflectional ending in modern English; this status has already been established as questionable.

Why are inflectional endings ever lost at all? What has happened to inflectional endings in the histories of English and other Indo-European languages? For various reasons, there have been differing degrees of phonetic decay (Gray, 201), loss of syllables. Causes particular to each

\textsuperscript{16}Noam Chomsky is renowned among his colleagues as the scholar who revolutionized the discipline of linguistics in the 1950's. His theory is that all humans have an inborn set of linguistic principles, universal grammar. Transformational rules produce the utterances of each specific language by moving the parts of speech in the deep structure, produced by the universal grammar. Chomskian theory is an example of a descriptive grammar. Descriptive grammar is based on the idea that all language is rule-governed, regardless of dialect. The job of the linguist is to study native speakers' utterances and explain rules which might produce the utterances. Prescriptive grammar is the opposite extreme: imposed rules for standard speech. The belief is that people are unable to communicate properly without instruction, and they are thus instructed in school. This paper is based on descriptive grammar.
language eventually lead to the deletion of the endings. Deletion of one sound at a time is a common phonological process. It occurs everyday in rapid speech, when, for example, parade is pronounced [preyd]. Typical kinds of deletion are apocope, the loss of a vowel in the final syllable;

Old English stanæ 'stones' -> Modern English [stonz]
syncope, the loss of a vowel in a medial syllable;

Middle English wednesdei 'Wednesday'
-> Modern American English [wEnzdey]17

and aphaeresis, the loss of a vowel in the initial syllable.

arithmetic -> 'rithmetic

It is not uncommon for a word to lose a syllable over time. Loss of syllables is often related to lack of stress.

When lost, inflections are often replaced by some combination of function words and word order; "languages don't become simpler; they merely exchange one kind of complexity for another" (Roberts, 41). English is not unique among Indo-European languages for its inflectional leveling. It was apparently just more rapid and thorough (Robertson, 114).

Old English Inflection

The history of English is traditionally divided into three eras for convenience of study: Old English; Middle English; and Modern English. Old English (c. 450-1150) has been called the period of "full inflections,"18 Middle English (c. 1150-1550), the period of "leveled inflections," and Modern English (c. 1550-today), the period of "lost inflections" (Krapp, 62). "The general effect of inflectional loss and substitution has been to change

17In this phonetic transcription, [E] represents the mid, front, unrounded, lax vowel.

18As well as having more noun inflection, Old English had more varied verb inflection than Modern English. Verb inflection is not discussed in this paper, however.
to a considerable extent the structure of the English language" (Krapp, 94), and this is why English may be divided into periods of different structure.

Gender, number, and case were all relevant in the declension of Old English nouns. There was obligatory agreement; in a noun phrase that consisted of a determiner and a noun, the determiner had to agree in case, gender, and number with that noun (Bynon, 149):

\[
[([D']) \ N']N'
\]

\[
D \to [\text{a case, b gender, c number}]N
\]

The above rule says that all Old English nouns were inflected for case, gender, and number, and when an Old English noun phrase was made up of a determiner and a noun, the determiner was inflected for the same case, gender, and number as the noun it preceded.

\[p \ (\text{th})\varepsilon s\]

\[cyninges\]

Old English Demonstratives (Quirk, 1957, 39)

"the/that"

<table>
<thead>
<tr>
<th>Case</th>
<th>Masculine</th>
<th>Neuter</th>
<th>Feminine</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>se</td>
<td>p (th)æt</td>
<td>seo</td>
<td>p (th)a</td>
</tr>
<tr>
<td>Accusative</td>
<td>p (th)one</td>
<td>p (th)æt</td>
<td>p (th)a</td>
<td>p (th)a</td>
</tr>
<tr>
<td>Genitive</td>
<td>p (th)æs</td>
<td>p (th)æs</td>
<td>p (th)ære</td>
<td>p (th)ara</td>
</tr>
<tr>
<td>Dative</td>
<td>p (th)æm</td>
<td>p (th)æm</td>
<td>p (th)ære</td>
<td>p (th)æm</td>
</tr>
<tr>
<td>Instrumental</td>
<td>p (th)ý</td>
<td>p (th)ý</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

"this"

<table>
<thead>
<tr>
<th>Case</th>
<th>Masculine</th>
<th>Neuter</th>
<th>Feminine</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>p (th)æs</td>
<td>p (th)is</td>
<td>p (th)eos</td>
<td>p (th)as</td>
</tr>
<tr>
<td>Accusative</td>
<td>p (th)ísne</td>
<td>p (th)is</td>
<td>p (th)as</td>
<td>p (th)as</td>
</tr>
<tr>
<td>Genitive</td>
<td>p (th)ísse</td>
<td>p (th)ísse</td>
<td>p (th)ísse</td>
<td>p (th)íssa</td>
</tr>
<tr>
<td>Dative</td>
<td>p (th)íssum</td>
<td>p (th)íssum</td>
<td>p (th)íssum</td>
<td>p (th)íssum</td>
</tr>
<tr>
<td>Instrumental</td>
<td>p (th)ýs</td>
<td>p (th)ýs</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Old English was, however, already a much less inflected language than Proto-Indo-European had been. There were four inflected cases in Old English (nominative, genitive, dative, accusative) with remnants of a fifth (instrumental), as compared to Indo-European's eight (nominative,
genitive, dative, accusative, instrumental, vocative, ablative, locative). Both Old High German and Old Low German had the same cases as Old English, while Proto-Germanic, spoken approximately 1200 years before Old English, had six cases--nominative, genitive, dative, accusative, instrumental, and vocative (Heyne, 227).

Proto-Germanic noun inflections were not as ambiguous as those of Old English will soon be shown to have been (Bolton, 121), but weakening of the unstressed inflections, because of the characteristic Germanic stress (fixed stress on root), still caused some loss of inflection. The following is an example of a word in Old English which no longer had the inflectional ending that its Proto-Germanic predecessor had (Bourcier, 87):

<table>
<thead>
<tr>
<th>Proto-Germanic: *flod(th)-uz</th>
<th>Old English: flod</th>
</tr>
</thead>
<tbody>
<tr>
<td>'flood'</td>
<td></td>
</tr>
</tbody>
</table>

The Proto-Germanic word is hypothetical and reconstructed, and its Old English descendant is found in literature. In the nominative singular of this Old English word there was no inflection (no specifically nominative, masculine, singular ending), but there had most probably been inflection there in Proto-Germanic. The Old English form contrasted with other cases which still had inflection, but as fewer cases were inflected, as more case endings were lost, there was less contrast.

Case syncretism occurred in the establishment of Old English (Bourcier, 143): several differently inflected forms merged under one. For example, the functions of the Indo-European genitive, ablative, instrumental, and locative\(^{19}\) merged under the genitive (March, 153). The

\(^{19}\)In modern English, can 's have a locative meaning?

We'll meet at Bill's.
genitive was something of a default case. The same process occurred in the development of modern German when the former genitive and ablative collapsed into the genitive (Bynon, 60). Perhaps we have so many different uses for 's today because so many different cases came to be expressed by the genitive in the history of English.

Case inflection decreased in Old English, and by Middle English, most of case was gone. The complexity of the system of Old English paradigms begged to be lessened. There was an extraordinary number of paradigms for a speaker to acquire. Depending on how much emphasis is given to variations, one can count from 8 to 20 noun paradigms and from 6 to 9 adjective paradigms (Nist, 119). Of course, no one speaker ever used all of these paradigms in her speech. Loss of case inflection was not so much the result of numerous paradigms but rather the overlap of forms which having so many paradigms caused, along with the result of phonological processes.

Many of the paradigms included only a small number of lexical items (Alexander, 52). Inflections also differed by dialect (Bourcier, 143). Not counting such irregular inflections, there were two noun classes, vocalic/strong and consonantal/weak; there were four vocalic declensions and one consonantal declension.

A noun class is a group of nouns in a given language that share some phonological, semantic properties, or syntactic properties. In the instance of Old English, linguistic class distinctions were made by the

---

Ellipsis can be argued here, e.g. "Bill's house/place/office," and the construction would be similar to "I'll read John's book; you read Bill's." However, we speak sentences like "we'll meet at Bill's" without introducing and then deleting a specific place name into the discourse.
sound with which a noun stem originally ended, a vowel or a consonant. A declension is a specific nominal paradigm.\(^{20}\)

In Old English, paradigm membership was determined by the final sound of the original stem. The vowel declensions were -a (masculine and neuter nouns), -o (feminine nouns), -u (masculine and neuter nouns), and -i (all genders).

Possible noun endings of West Saxon (i.e. standard) Old English, between the years 800 and 900, are as follows (Krapp, 65):

<table>
<thead>
<tr>
<th>Case</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>nominative</td>
<td>-a, u, e, o</td>
<td>-a, as, u, e, o</td>
</tr>
<tr>
<td>genitive</td>
<td>es, e, an</td>
<td>a, ena</td>
</tr>
<tr>
<td>dative</td>
<td>-e, an, o</td>
<td>um</td>
</tr>
<tr>
<td>accusative</td>
<td>-e, an, o</td>
<td>-a, as, u, e, o</td>
</tr>
</tbody>
</table>

These include strong (vowel) and weak (consonantal) declensions, declension membership being determined by the final sound of the noun stem. There was also the instrumental case, existing only for the masculine and neuter singulars. Which endings went with which nouns was decided by the class in which a noun was found. Specific breakdowns of declensions can be seen in the appendix.

The considerable overlap of use among most of these endings, observable in the above chart, led to ambiguous case forms. Nominative and accusative forms of nouns were often the same, e.g. in the plural and in the masculine and neuter singular.

\(^{20}\)When many people think of declensions and paradigms, they think of Latin or Greek. The following is an example of a declension from Koine Greek (Machen, 226):

<table>
<thead>
<tr>
<th>Case</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominitive</td>
<td>-os</td>
<td>-oi</td>
</tr>
<tr>
<td>Genitive</td>
<td>-ou</td>
<td>-wn</td>
</tr>
<tr>
<td>Dative</td>
<td>-w</td>
<td>-ois</td>
</tr>
<tr>
<td>Accusative</td>
<td>-ov</td>
<td>-ous</td>
</tr>
</tbody>
</table>

**note:** o =omicron; s =sigma; i =iota; u =upsilon; w =omega; v =nu


*stan* 'stone (masculine, nominative or accusative)'

Declensions of masculine and neuter nouns differed very little in general, as tends to happen in other Indo-European languages. In Old English, masculine and neuter were often in exactly the same declension. Declension of all genders of weak nouns also differed very little, e.g. *-an* for most singular non-nominative cases. Overlap of forms assisted in the loss of cases in Old English. It was often impossible to distinguish the case of a given form.

Declensions began to lessen in number when smaller classes of nouns were assimilated by larger ones. The feminine *-o* declension took over for many feminine *-i* stem nouns, and the masculine/neuter *-a* declension took over for many masculine and neuter *-i* and *-u* stem nouns (Bourcier, 142). The basis of choice of declension for a noun shifted from final vowel of its original stem to gender. Because of this, there were fewer declensions, and the genitive singular *-es* and the nominative/accusative plural *-as*, both of the *-a* declension, became the predominant endings for those properties.

**Phonological Changes in Old English**

The demise of the inflectional system continued with the weakening and loss of the endings, phonetic decay. The inflectional endings at first had different vowels, but none were accented (stressed) syllables. Most of them consisted of a vowel and possibly a consonant and were thus monosyllabic. They were phonetically similar (Bolton, 122). In Old English, there was the strong accent on the root of a word (Germanic stress), and in Middle English the stress tended to shift to the first syllable of a word. The unstressed syllables were weakened, and the various vowels
collapsed into schwas. Cases were then even harder to distinguish, and the number of paradigms was further reduced. "Levelling of unaccented vowels...affected by far the greatest number of inflectional forms and resulted in the greatest modification of inflectional patterns" (Moore, 1928, 240).

\[ (1) \quad V \rightarrow \text{schwa} /+\quad [+\text{-stress}] (e) \]

This phonological rule says that all unstressed vowels following morpheme boundaries became schwa (most often written e). Schwa is the lax, mid, unrounded vowel, and it is termed the "reduced vowel" because of the properties it demonstrates (O'Grady, 29).

Unstressed vowels are generally unstable and prone to weaken. This is why schwa is the most frequent vowel in modern English (Bryant, 171). It is today both a phoneme, in such words as cut, and an allophone of other vowels occurring in unstressed position. Schwa still occurs, in the speech of native speakers of English, before many occurrences of -s plural and 's.

The phonological process given above did not occur all at once. Vowel weakening began as early as the seventh century (Wright, 67), with most of it occurring in the tenth century and finishing by the twelfth century (Baugh, 195). Spelling confusions in manuscripts demonstrate the changes (Bloomfield, 184).

In spoken Middle English, often represented orthographically by the "silent e", schwa was deleted at the end of words (Mossé, 35):

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21A modern English example of a vowel becoming pronounced as schwa in unstressed position is the vowel of the second syllable in democrat, as opposed to the same vowel in democracy. In democrat, this vowel is unstressed and pronounced as schwa, but in democracy, it is stressed and pronounced [a].
This occurred after 1300 (Moore, 1928, 238). The dative plural inflection (-um) was lost earlier due to the following phonological processes (Wright, 116):

\begin{align*}
(3) & \text{m} \rightarrow \text{n} + V \\
(4) & \text{n} \rightarrow \emptyset + V
\end{align*}

Through a sequence of two steps, nasals of inflectional endings were deleted. The s of the genitive singular was not lost by any such phonological process. Nasals have tended to be unstable in other Indo-European languages, if not universally. However,

the loss of n was more complete in some grammatical forms than in others...[and the loss of n] was not the result of sound change alone...some other non-phonetic process operated along with or subsequent to sound-change. This factor we may call in general terms analogy (Moore, 1927, 233-234).

The loss of case, by means of various changes, facilitated the loss of grammatical gender, the assignment of nouns to a group of nouns with the same grammatical behavior. Grammatical gender was already becoming less fixed due to borrowing of foreign words and natural gender (Brunner, 46). Natural gender is the classification of a noun according to the sex or lack of sex of its referent:

- man, masculine, pronoun he
- woman, feminine, pronoun she
- thing, neuter, pronoun it

**Word Order**

Loss of case also facilitated the emergence of a fixed English word order. There was originally flexibility of noun position in Old English, but ambiguous case forms caused word order to gradually become fixed. When it was not possible to differentiate properties such as subject and object by
means of the inflections, word order naturally became more important. Various word orders existed in Old English, but coming to be preferred were Subject-Verb-Object (SVO), Verb-Subject-Object (VSO), and Subject-Object-Verb (SOV): subject before object (Bourcier, 113). SVO tended to predominate. Example sentences, representing two of these word orders, from an Old English (West Saxon) translation of the Bible include:

SVO-he hierde p(th)one sweg ond p(th)aet werod
   'he heard music and dancing' (Luke 15:25)
VSO-p(th)a daelde he him his aehta
   'and he divided between them his wealth'
   (Luke15:12)

SVO, VSO, and SOV are the most common word orders for declarative sentences among languages of the world that have been studied (O'Grady, 231). The fact that Old English chose them when it was in need of word order is not a surprise. "There are a few VOS languages...there are a very few OVS languages" (O'Grady, 232). The best-known example of a VOS language is Malagasy, spoken on Madagascar; all known OVS languages are spoken in the Amazon basin, South America. (O'Grady, 232) "It has been suggested that the subject appears at a relatively early point in the utterance because it usually encodes the topic; that is, it indicates what the rest of the sentence is about" (O'Grady, 232).

Old English fixed word order in turn facilitated the loss of inflections. Old English literature suggests that word order became fixed before noun inflections decayed (Clark, 28). If word order had not become fixed, inflections would have had to be preserved, either through secondary stress or replacements (Bourcier, 167).
The Upheaval in English

The reduction in inflections ("deflexion" [Gray, 155]) was the most significant change in grammar as Old English became Middle English.

The period from 1050 to 1300...was characterised by very extensive morphological changes that transformed English from a rather highly inflected language to one having the relatively few and simple inflections of late Middle English (Moore, 1928, 238).

Changes in vocabulary were not the major changes (Clark, 92). English has never again had such a major revolution in its grammatical structure (Baugh, 194). Most, though certainly not all, changes since Middle English have been in pronunciation (Clark, 19). "The period from 1300 to the present has been characterised by very extensive changes in the phonetic form of English...but not by correspondingly great changes in the morphological pattern of English speech" (Moore, 1928, 238). However, some grammatical changes are overcoming this trend of conservativism.

As is commonly the case, Middle English syntactic change was a result of other changes (Anttila, 356). "The rapid and extensive morphological development that took place between 1050 and 1300 was the result of a highly complex cooperation of sound changes, syntactic changes, and analogical changes" (Moore, 1928, 238). Analogical changes occur when words or constructions which have not undergone certain sound changes or syntactic changes become more like similar words and constructions that have undergone the previous changes.

After a period of both systems being at work, English syntax (word order and prepositions) took over the role of morphology (word form) in expressing grammatical relations. The earliest Old English relied almost exclusively on inflection to express relationships between words, late Old English was definitely a mixture, and Middle English relied almost
exclusively on word order. Uniform word order resulted from loss of case contrast. Relationships formerly expressed below the word level (the realm of morphology) became expressed in the realm of syntax. Such a major upheaval in the structure of a language does not occur very often.

Did 's at some point cease to be an inflectional morpheme and become a part of syntax, too? If so, the upheaval in English would be especially unique, because it is more common for syntactic relationships to become expressed by morphemes (Janda, 1979, 246), than the other way around. For example, common developments cross-linguistically are words becoming inflectional endings (Krapp, 57), and clitics becoming inflectional endings (Janda, 1981, 60). This does not contradict the steady analytic developmental trend in Indo-European languages but only points out the uncommon event of a morpheme becoming an element of syntax, something closer to a word. Word order often replaces inflections; inflections less often become words.

English has had some unique developments. How has the word order of genitive noun phrases been affected?

**Changes in Placement of the Genitive**

In Old English, the genitive usually preceded the noun it modified, but followed it when the noun was determined by other qualifiers (Quirk, 1957, 89):

\[ w\text{e}d\text{e}r\text{a} \text{ ceadost} \ '\text{coldest of winters}' \]
\[ \text{but} \]
\[ o\text{n} \text{ od} \ (\text{th})\text{e} \text{ healfe} \ p \ (\text{th})\text{e} \text{s} \text{ mores} \ '\text{on the other side of the moor}' \]

Because it was less common following the noun, this position eventually dropped out (Mitchell, 1985, I, 548). It may also be that it became increasingly possible to place the genitive before the noun it modified as the
pre-positive adjectives lost their inflection, and there were simply fewer morphemes in front of the noun. Another contributing factor to the establishment of the word order was probably the analysis of the genitive as having the meaning of modification, like adjectives or determiners.

The genitive almost always preceded the noun qualified in Middle English (Brunner, 47),

\[ p \text{ (th)e beres dep (th)} \] 'the bear's death'

although the inverse word order was still possible (Mosse, 124).

\[ a \text{ mayde Cristes} \] 'a virgin of Christ'

A linguistic universal has been posited that if the adjective precedes the noun, so will the genitive, and if the adjective follows the noun, thus will the genitive (Gray, 197). I do not know how well this universal holds up cross-linguistically, but it was the direction of development in English.

Another important change in the placement of 's occurred in the history of English. Through Old and Middle English, to say "the king of this country's sister," an obligatory transformation occurred (Janda, 1979, 246):

DS: \[ ([p(th)aes [kyning]-es] [p(th)isses landes]] sweoster \rightarrow SS: \[ [p(th)aes [kyning]-es] sweoster [p(th)isses landes]

Janda is hypothesizing that in the deep structure of Old and Middle English, the genitive noun phrase might follow the noun phrase it modified, but when the modified noun phrase was also in the genitive, its modifier was moved to the end of the entire phrase. This is because the "group genitives" we now obligatorily use ('s on a noun phrase rather than a noun) were then impossible. Ambiguity developed (Janda, pg. 247):

surface structure became "the king's sister this land's/of this land," and it was not possible to know who was modified by "this land."
This is more evidence that 's might have at some point been forced from morphology into syntax: morphology was not capable of unambiguously expressing genitive relationships. Modern English 's still serves the same function that a morpheme once did, but since it allows other words in between itself and the noun with which it belongs, in group genitives, it seems to belong in syntax, like function words.

the boy in the room's hat
the hat of the amazingly intelligent boy

There is "vagueness and disputability of...the morphology/syntax boundary...Hence the frequent use of the neutral, all-inclusive term 'morphosyntax" (Janda, 1981, 98).

As already noted, function words in English tend to be prepositions, while inflections are suffixes; 's is post-positive\(^{22}\) and not an independent word. It still remains unique. With the upheaval that occurred in the

\(^{22}\)Janda (1981) believes that 's "does not form a syntactic constituent with the possessor NP, but, instead, is a Determiner of the possessed NP" (60). Semantically, this is certainly accurate; phrases containing an 's are always deictic. Historically, it is reasonable, as well, if one accepts that the modern 's arose from his. However, I question Janda's syntactic evidence. He likens the syntactic structure which he chooses for phrases containing 's --[NP] ['s NP]--to the syntactic structure of John, the director --[[John]NP [[the]Det [director]NP]NP]NP. If this is true, why can we say:

It is John's.

but not

*It is John the.

Janda sensibly rejects the 's as a constituent with the possessor NP--[NP 's] [NP], because if this were the situation, then we would have to have a separate syntactic category: NPposs. The other structural possibility he discusses, which he does not reject on any syntactic grounds, is the 's as a separate constituent, "the sister of both the possessor and the possessed NP's" (71)--[NP][''s][NP].

This third possibility may be an accurate portrayal of the syntactic structure of phrases containing 's. It makes the 's post-positive and allows for the isolated phrase the boy in the room's. "To the best of...[Janda's] knowledge, this...possibility for the analysis of English possessive-constructions has never before been explicitly proposed--or even considered" (71). "All three possibilities...have typological support, and the synchronic considerations which lead to the provisional selection of the...analysis...where -'s is the Determiner of the possessed NP...are slight" (61).
structure of English, analyzing 's as a part of syntax is conceivable, but what exactly is 's, if it is part of syntax? Further discussion of this question will follow later in this paper.

Effects of Invasions on English

The Norman Conquest of 1066 is traditionally credited with bringing an end to Old English and beginning Middle English, due to the changes in vocabulary it caused (Roberts, 40). It was also a contributing factor in the reduction of inflections. The sudden forced contact of Norman French with Late Old English caused changes that were already occurring in English to be carried out even more quickly and completely. The following types of effects are observable in changes in English literature after 1066.

Contact with both French and Scandinavian, from earlier invasions, caused speakers to simplify inflections in order to facilitate communication. This is another cause of speakers of Old English abandoning inflectional endings and turning to word order as a substitute. Pidginization is the creation of a simplified grammatical structure, for communication purposes, when two or more languages come into contact. It may be that some form of pidginization, albeit incomplete, occurred in the development of English. In this manner, the Scandinavians had more influence than Norman French.

Evidence for this is that inflections were lost in northern England, where the Danes invaded, half a century before they were lost in the South (Pei, 34). Both Germanic languages, Old English and Danish shared many common roots in words but did not share inflectional endings. A speaker of Old English and a speaker of the contemporary form of Danish could communicate if they spoke with bare stems and relied on word order to
express syntactic relationships. Morphology is universally more difficult than syntax for non-native speakers to master. French had effects here, too. Due to the more distant relationship between English and French, as compared to English and Danish, French words would not fit with English inflections (Bolinger, 118), and word order was preferred. The effect of Danish was more prolific here, but French played its part.

French affected the grammar with its tendency to use an SVO word order (Mitchell, 1982, 133). English word order was in a state of flux, but leaning towards SVO, and the French helped it to settle in SVO. There were other effects from French. Remarkably, several French constructions resembled constructions that were already developing in English. One reason why the changes occurring in English continued quite well after the Norman Conquest is that the resulting speech was similar to that of the French upperclass.

French expressed genitive relationships with a preposition (de) (Mosse, 90), and this construction became the source of a calque in English, namely, increased use of of, in place of a true genitive construction:

- **men of p (th)e land** 'men of the land'
- **of alle men fæherest** 'fairest of all men'
  (where adjective had formerly required the genitive)
- **men sturven of hunær** 'men died of hunger'
  (where verb had formerly required the genitive)

Old English had had its own analytic genitive construction with of (+dative) before the Norman Invasion, and exposure to the French de construction caused a dramatic increase in the use of this construction.

French used an -s plural (Mitchell, 1982, 133), facilitating the spread of that ending for all plurals. The French plural was likely attached to English nouns by analogy. It coincided with the already existing English plural -as.
The suppression of West Saxon as the standard dialect by the French caused more variant inflectional forms to ascend. A language is more prone to change when it lacks a standard dialect. In English, the appearance of more inflectional endings surely increased the preexisting confusion which was a cause of loss of inflection and reliance on word order. No longer the language of books, education, or the upper classes, English was free to develop at will.

The old standards of conventional priority and correctness were more or less forgotten, the [English] language followed the free and unregulated impulses of the people, and consequently when it rose again to the position of a stable and classical literary language in the time of Chaucer and his predecessors, it was a very different language from what it had been in the time of Alfred and Ælfric. (Krapp, 76)

The sudden change to the French orthography system also made sound changes, which had previously occurred but were not yet reflected in the conservativism of the Old English writing system, appear to have occurred very quickly; literature before 1066 indicates inflections that had probably ceased to be used (Clark, 112). Manuscripts were written under the influence of a very strong literary and orthographic tradition. None of them probably reflect accurately the speech habits of the scribes who wrote them...departures from the orthographic tradition...reveal the speech habits of the scribes which the 'correct' forms conceal (Moore, 1928, 239).

If the conquests had not occurred, sound changes in inflectional endings and increased reliance on word order and prepositions would have probably continued, but the conquests facilitated the changes. "None of the...forces [i.e., the situations that led to the loss of inflections] can be demonstrated to have causal efficiency. At most, one can say they make the changes that did occur seem reasonable" (Bloomfield, 184). Apparently,
Czech and Irish, two other Indo-European languages distantly related to both each other and English, maintain greater use of inflections than English, in spite of having strong accent on the root of words and having encountered interference from invaders' languages. English just happened to lose its dependence on inflections upon experiencing these conditions.

**Middle English Inflection**

Adjective declensions of Old English (found in the appendix) naturally suffered a similar fate to that of the nouns. Strong and weak declensions first became one and then were altogether lost, first in northern England and then in the South (Mossé, 65). This was the common directional trend for many changes in the history of English. Often, linguistic change first occurs among a certain group of people and then diffuses into other areas.

Very few of the Old English paradigms have any traces left in English. This was true starting with Middle English, when there were fewer inflections than in Old English. Middle English had only two cases (nominative and genitive), with rare survivals of the dative. The nominative form of nouns, which had for a long time often resembled the accusative form, became the common form of nouns, standing in place of...

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23 What sort of language the invaders speak certainly makes a difference for the effect rendered; speakers of Irish have been invaded by speakers of English, and English is not a very inflected language, but Czech has been influenced by Russian, which is highly inflected.

24 It is well documented that this was the common directional trend, but this trend is confusing in that it seems to contradict the French influence. Since the Normans first invaded Southern England, why were changes not first there?
all former cases, except the genitive. What is commonly referred to as mature Middle English was first seen in fourteenth century London.

**Middle English Noun Inflections (Krapp, 79)**

<table>
<thead>
<tr>
<th>Case</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>nominative</td>
<td>-, e</td>
<td>es, en</td>
</tr>
<tr>
<td>genitive</td>
<td>es, e(n)</td>
<td>e, es, (en)e</td>
</tr>
<tr>
<td>dative</td>
<td>(e), e(n)</td>
<td>es, en</td>
</tr>
<tr>
<td>accusative</td>
<td>-, e(n)</td>
<td>es, en</td>
</tr>
</tbody>
</table>

**Case in Pronouns**

Case in pronouns developed somewhat differently from case in nouns. From the time of Old English to the present, pronouns have maintained a three-term contrast of person and a three-term contrast of gender in the singular. Old English pronouns made a three-term contrast of number (singular, dual, plural), and a two-term contrast is maintained today. More of a case system is also maintained for pronouns. There is today a four-term contrast: subject, object, and two genitive forms.

---

25 London is in southeastern England, but the fact that a southern dialect could be called the standard dialect does not contradict the fact that many linguistic changes were occurring in northern England. London became culturally and politically important, and so its dialect came to be taken as standard.

26 The first form in each pair was the more common form, having derived from the vowel class of nouns; the second form of each pair was common in southern England, having derived from the consonantal class. The development of the endings of the genitive plural will be discussed later. Parentheses mean that this form or part of a form was lost by Late Middle English, leaving either an -e, or as in the instance of the dominant form of the dative singular, no ending.

27 I do not know why an objective case is maintained for English pronouns. It may be an unanswered research question.
Old English Personal Pronouns

| 1st person | Nominative | ic | wit | we |
| Genitive | min | uncer | ure/user |
| Dative | me | unc | us |
| Accusative | me | unc | us |

| 2nd person | Nominative | th | git | ge |
| Genitive | th | in | inc | eower |
| Dative | th | e | inc | eow |
| Accusative | th | e | inc | eow |

| 3rd person | Nominative | Masculine | Feminine | Neuter |
| Genitive | he | heo | hit | hi/hie |
| Dative | his | hiere | his | hiere |
| Accusative | hine | hie | hit | hi/hie |

His as the genitive, neuter singular was discarded in Middle English because of its identity with the genitive, masculine, singular. Its was formed from the uninflected nominative plus the genitive ending which was becoming the most common, -s. Overall, however, Middle English pronouns retained more genitive endings than did nouns (Mossé, 88).

First and second person genitive forms without the final -n first developed in Middle English before words beginning with consonants (Krapp, 69). This was an unsurprising phonological development: a consonant preceding another consonant was deleted. Then at some later time, apparently, the -n was also lost before vowels.

Genitive pronouns have always been used both attributively before nouns and as predicates. In Old English, the demonstrative could precede the possessive in attributive position, and the possessive then was inflected as an adjective (Mitchell, 1985, I, 119). Mitchell (1985, I, 153) theorizes that

---

28"Thorn" and "eth" were unvoiced at the beginning of a word, at the end of a word, or between a vowel and an unvoiced consonant, voiced between two vowels or between a vowel and a voiced consonant (Diamond, 12).
this is the source of the Early Modern English construction "these my gifts."

**Modern English Inflection**

Noun inflection and adjectival agreement in modern English are sparse. The only modification which agrees with nouns is number agreement with *this* and *that* (plurals, *these* and *those*), and arguably with *another* (singular) and *other* (plural). Nominative/non-nominative is visible only in the pronouns. "Cases" are virtually only marked by word order or preposition (March, 35):

<table>
<thead>
<tr>
<th>Case</th>
<th>Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>nominative</td>
<td>no sign</td>
</tr>
<tr>
<td>vocative</td>
<td>independent</td>
</tr>
<tr>
<td>accusative</td>
<td>no sign; object position</td>
</tr>
<tr>
<td>locative</td>
<td><em>in, at, on...</em></td>
</tr>
<tr>
<td>dative</td>
<td><em>to/for</em></td>
</tr>
<tr>
<td>ablative</td>
<td><em>from</em></td>
</tr>
<tr>
<td>instrumental</td>
<td><em>by/with</em></td>
</tr>
<tr>
<td>genitive</td>
<td><em>'s or of</em></td>
</tr>
</tbody>
</table>

Hypothetically, inflections could exist in zero forms (Hathaway, 27), but the use of the majority of the Indo-European case names, "traditional grammar's analysis of the (Modern) English nominal case system" (Janda, 1981, 60), is inappropriate for modern English. The noun simply does not take different forms. Traditional case distinctions are in the same way often inappropriate for modern English pronouns. Various case names have remained in some linguistic discussions due to the disagreement among grammarians as to whether case should refer primarily to the form or function of a word (Kufner, 66). In discussing the case system of English, I am referring to different case forms existing due to inflectional endings. This is the meaning I have established for case. Obviously, there is no noun case inflection in contemporary English, except for the remaining question of *'s*, upon which doubt has already been cast.
Declensional Transfers

When the vast majority of inflectional endings were lost from Old English, there were various declensional transfers. There were shifts in case "feeling" (Bourcier, 142), understanding of when various cases should be used. For example, masculine, singular, dative pronouns began to be used where the masculine, singular, accusative pronouns had formerly been used, and eventually, the accusative pronouns became obsolete. This was a development of Late Middle English (Moore, 1928, 240).

Many other shifts involved changes in the case a verb required for its necessary complement. Accusative forms came to be used with verbs that had formerly required genitive forms as complements. Similar shifts are occurring in German today, and they will be discussed later in this paper.

Shifts in case feelings facilitated other inflections' assuming the duties of inflections which had been lost in Middle English (case syncretism). Loss of declensions was increased by irregular declensions joining with other declensions by analogy (Wright, 146).

Genitive in Middle English

In Middle English, a few remaining divergent inflections in dialects remained. The most important instance of these is the weak declension's predominance in southern England. The weak declension's genitive singular and common plural endings (both at one time -en) were the only competition ever for the emerging as resistant -es and -as, strong masculine/neuter genitive singular and masculine nominative/accusative plural endings respectively. The plural ending -as had been reinforced by French. The weak declension's endings were the only endings that ever

---

29 For examples of these verbs, see page 41.
looked as if they might remain, instead of, or in addition to, -es and -as. In southern England, there were even "numerous examples of analogical -en plurals of nouns that were not weak in Old English" (Moore, 1927, 233):

\[ scip \quad 'ship' \]
Old English plural: \( scipu \)
Analogical -en plural: \( scipan / scipen \)

The nouns of the weak declension finally merged under the predominant system of inflection when two phonological developments already mentioned occurred. First, final \( n \)'s of all inflections were lost, and later, final \( e \), already schwa, became silent (Mosse, 48). In Late Middle English, plural -s was extended to nouns by analogy (Moore, 1928, 240). We still, however, have a few plural nouns such as children, brethren, and oxen. No deviant forms remain from the genitive: 's is the only trace of the genitive case.

We do see relics of other genitives in modern English, but we no longer analyze them as expressing genitive relationships. From Old English Monan daeg, Frig daeg, and Sunnan daeg, we now say Monday, Friday, and Sunday (Gray, 110). Apparently, not all nouns which had their various genitive endings deleted received -es by extension.

Having been previously extended to many masculine and neuter nouns, -es and -as were eventually extended to the vast majority of remaining nouns. Extension was aided by the loss of grammatical gender and the substitution of natural gender (Wright, 135). Only some uses of 's can be traced phonologically to -es. The genitive ending was spelled in various ways, including -is, -ys, and later, -hys (Janda, 1981, 80-81).

<table>
<thead>
<tr>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>adame-is sune (c. 1250)</td>
</tr>
<tr>
<td>Harlesdon ys name (1467)</td>
</tr>
<tr>
<td>a child hys brouch (1387)</td>
</tr>
</tbody>
</table>
These spellings are evidence of an important development in the history of the English genitive, to be discussed later.

**Distinctive Qualities of the Genitive in the History of English**

Why did -es and -as not drop out immediately, like the other inflections? Plural number, first of all, cannot be replaced with word order as case endings can, and English considers number to be "important enough to be automatically tagged to the word" (Bolinger, 57). Second, there was the influence of the French plural. As for the genitive singular ending, I would still like to argue that the genitive case is a case with special meanings, so it might not be lost as quickly.

The genitive of Old English was used to express all the relationships described earlier as well as some uses that have been lost or taken over by analytic constructions in Modern English, for example, quality (*faegeres hipes men 'men of fair aspect*) and age (*lamb anes geares 'lamb of one year*) (March, 154). The Old English genitive was also governed by some adjectives (e.g. *wigges hremige 'exultant of war*') (Bloomfield, 157), verbs (e.g. *Godes hi forgeaton 'they forgot God*'), and prepositions (e.g. *andlang 'along*, *wid (th) 'towards*, and *to 'until*) (Bloomfield, 157). Adjectives and verbs with the genitive tended to express feelings and intellectual states, or separation (*fata hine bereafian 'rob him of his goods*'), or to require two objects, or be usually intransitive (*p (th)aes sod (th)es ansaced (th) 'deviate from the truth*) (March, 156). Extremely few Old English prepositions required the genitive (Quirk, 1957, 64), and such constructions

---

30 The Old English genitive noun could precede or follow the noun it modified.

31 The equivalents of some of these prepositions take the genitive in some modern Indo-European languages.
were even already archaic (March, 159). The few prepositions that still might require the genitive case had instrumental, ablative, or locative meanings (March, 158). Examples of Old English prepositions that sometimes governed the genitive are $p$ (th)urh 'through;' of $^{32}$of, off;' innan $^{33}$within;' utan 'from out;' and wana 'less;' "mostly in old phrases" (March, 159).

Use of the genitive singular ending was also common in the formation of adverbs, a construction of which we have remnants in modern English, e.g. Old English $upweardes$ , Modern English $upwards$ . Actually, there are many examples of this formation in Modern English; we however no longer analyze it as a genitive.

- forwards
- downwards
- backwards
- towards
- afterwards
- westwards
- besides
- anyways
- sideways
- sometimes
- etc.

**Rule Ordering**

There are also simple phonological reasons that -es and -as did not drop out when the other inflections did. They were the phonetically heaviest inflections (Samuels, 155)$^{34}$; they were more resistant to deletion trends than inflections ending with a vowel or a nasal. The consonant $s$

$^{32}$Of usually governed the dative.

$^{33}$Innan is probably related to the German preposition binnen.

$^{34}$Presumably, they received more stress.
was never deleted but did undergo a change in pronunciation through Middle English (Brunner, 38; Janda, 1981, 105):35

\[ (5) \quad s \rightarrow z/(V_{\#}, V_{\neg \text{str}} [+\text{vd}]) \]

Genitive singular -es and plural -as were also not lost by early Middle English because they were two of three distinctive Old English inflections; together with the dative plural -um, their use was never ambiguous because they were not used to signal other cases or numbers36. Through ordering of the phonological processes that were earlier mentioned, a concept alluded to previously, it is clear why the former two survived while the latter one did not37:

unordered: 1 & 5
ordered: 3 -> 4 -> 2

After a series of two steps through which word final nasal consonants were deleted (rules 3 and 4), schwas were left bare at the end of words. All inflectional vowels were weakened to schwa; to Moore (1928, 247) "it seems fairly clear that levelling of unaccented vowels was later than the change of

---

35 Today, the pronunciation of final plurals or 's (and also s of third person singular of verbs) depends on the preceding sound. This is due to a sound change which occurred for these endings in modern English. Because of their phonetic similarity, 's and plural s have had similar developments. A difference between them is that no irregular "genitive" endings ever remained. It is curious that the s of third person singular verb followed the same phonological development, because generally, pronunciation of word final s is not due to any rule, e.g. bus, Ms.
Briefly, the conditioning features for the modern phonological development of inflectional s are voicing and sibilancy. Voicing refers to producing sounds with vibrating vocal cords. Sibilants are coronal (produced with the front of the tongue), strident ("noisy" affricate or fricative) consonants. Native speakers of English say /s/ after voiceless, non-sibilant sounds (e.g. "Pop's"), /z/ after voiced, non-sibilant sounds (e.g. Bob's), and /schwa-z/ after sibilants (e.g. "church's").

36 -as did mark both the nominative and the accusative plural.

37 Samuel Moore, in "Earliest Morphological Changes in Middle English" (1928), concludes roughly this same order. I came up with this order independently, by solving a phonological problem with techniques of contemporary phonology. I then read Moore's article. He uses techniques which a modern transformational grammarian never would. It is fascinating that he arrives at the same results.
m to n." At any rate, only those unaccented vowels left immediately at the end of a word were deleted. The plural and genitive endings were not deleted by means of Old English phonological processes because s was never deleted.

Uninflected Genitives

This perfect phonological solution is sufficient only for a period. It explains why -es and -as were not lost at the time all other Old English inflectional endings were. By Late Middle English and Early Modern English, some uninflected genitives were apparent. They could especially be found in northern England (Brunner, 47), the area where several developments towards modern standard English seemed to begin. Sometimes the genitive ending was omitted for no apparent reason (Wyld, 317), but much of the time there were obvious causes.

Nouns which had been feminine in Old English, having had the genitive inflection -e, were sometimes left uninflected in the genitive, for example, from 1520, our lady day (Wyld, 317). Nouns which had been of the weak declension in Old English and had had their endings deleted by phonological processes, but not replaced by -es, were left uninflected.

Nouns which expressed familial relationship and ended in -r, a group of nouns whose own particular declension in Old English was without ending for the genitive, could also be left uninflected, for example, from 1420, his fader wyffe (Wyld, 317). Group constructions were found left uninflected as well, for example, from the 1550's, bishop of London palles (Wyld, 317).

Finally, nouns which ended in [s] or [ch] or preceded nouns beginning with [s] were often found without genitive inflection.
The latter occurred for obvious phonological reasons. We sometimes still see in modern English *for conscience sake* or *for God sake* (Pyles, 184),\(^{38}\) and definitely *for goodness sake* and *for gosh sake*, but *for safety's sake* and *for mercy's sake*. In other expressions, the *s* is found on *sake*, perhaps added to the end of the phrase by analogy with adverbs, after the original genitive *s* preceding *sake* had been lost: *sakes alive*; *land sakes*.

**Genitive Plural Inflection**

The genitive plural has had a slightly different history than that of the *-es* genitive singular. In early Middle English, the genitive of plural nouns could be marked by *-e*; the weakened form of Old English *-a* (masculine/neuter) had been extended to other nouns. There was the rivaling *-ena* / *-ene*, especially in southern texts (Brunner, 51),

\[
\begin{align*}
\text{englene} & \quad \text{'of angels'} \\
\text{kingene} & \quad \text{'of kings'}
\end{align*}
\]

which had been extended to other nouns from weak nouns. By late Middle English, these endings had been lost through means of obvious phonological processes. Deletion of the *-en* of *-ena* occurred first, leaving *-a* / *-e*. If the final vowel had been deleted first, there would have been at some time a genitive plural inflection of simply *-en*, which there apparently was not. It is not odd for a syllable to occasionally drop out in a language, although it is a bit odd for English.

When final schwas were deleted, genitive plurals were left unmarked. The same is true for other plural cases (Mossé, 50),

\[
\text{alle p(th) wa p(th)ing}
\]

\(^{38}\)How to orthographically represent phrases like these today is actually controversial, due to condensing of *s*’s in modern English speech. I would write *for God's sake*, but not *for conscience's sake*. The latter looks like it should be pronounced with a final schwa-z syllable.
'all the bad things'

until -as was extended to them. Various forms of the genitive plural (e.g. -re, -e, -ene) survived longer than the forms of other plural cases (Mosse, 52),

wintre 'of winters'
od(th)er monne p(th)inges 'other men's things'
richest alre kinge 'most powerful of all kings'
Englene loande 'England (land of the Angles)'
suggesting again that the genitive is a "special case." Some method of marking the genitive kept being retained.

It has been posited that the universally most common pattern of expressing genitive relationships is genitive marked word, followed by unmarked word (Ultan, 36). A question to be answered about the contemporary "genitive" plural is whether its endings are plural -s + genitive -s, with one -s being deleted upon two coming together, or plural -s + a plural genitive ending of Ø. The answer to this question seems obvious to me.

After the regular -s plural in modern English, 's is written as simply an apostrophe and is unpronounced:
girls' dresses

There are two possible explanations for this. A phonological rule may occur,

s->Ø/s__

and what is for English awkward repetition of a sound is avoided. Or, there may be a zero-morph ending on plural nouns where there is 's for singular nouns. The second situation could easily have developed, given the phonological and morphological developments that were occurring in the history of English, but the first explanation is the more probable due to
irregular plurals. Words with irregular plural endings still take the 's ending, and not a zero-morph ending.

\[
\begin{align*}
\text{children's books} \\
*\text{children(-} \emptyset \text{)} \text{ books} \\
\text{women's studies} \\
*\text{women(-} \emptyset \text{)} \text{ studies}
\end{align*}
\]

Why would there be a different "genitive" ending for different plurals?

The double s in regular genitive plurals is degeminated (presumably via deletion of the second, genitive s; cf. also the orthography; \(-s' = -s' \emptyset\)) by some phonological rule of English, perhaps the same one that produces \textit{Moses'}, \textit{Doris'}, etc. (vs. \textit{Moses's}, \textit{Doris's}, etc., for some speakers) (Janda, 1981, 96).

Confusion about which of the two identical endings is which does lead to problems, such as how to write "Dean of Students' Office" and possessives of singular nouns ending in s.

The nominative plural -\textit{as} was extended to most of the formerly inflected plural cases. Apparently, an additional step then occurred. The -\textit{es} genitive ending, which had already been extended to all singular genitive nouns, was extended to plural genitives as well.

\section*{Early Use of of}

Uninflected plural genitives of Late Middle English and Early Modern English facilitated another development. Use of \textit{of} became common with these uninflected plural nouns, more so than with the still...
inflected singular nouns (Brunner, 51). Something had to indicate the
genitive relationship.

*Of*, followed by a noun in the dative case (Mitchell, 1985, I, 509), had
been used in various circumstances in Old English, when the genitive was
predominantly used. It overlapped with the genitive in expressing origin,
material (Mitchell, 1985, I, 509), and partitive (March, 157). Scholars debate
whether Old English *of* was used to indicate possession (Mitchell, 1985, I,
509).

\[
d \text{(th)ære sunnan} \quad \text{‘of the sun (genitive)'}
\]
\[
of \text{d (th)ære sunnan} \quad \text{‘of the sun (dative)'}
\]

Mitchell, who believes *of* did not indicate possession in Old English,
"find[s] it difficult to resist the conclusion that, when Ælfric penned those
phrases, they did not imply the same relationship" (Mitchell, 1985, I, 510).
Use of *of* certainly increased in Middle English and had been steadily
increasing through Old English. As will be seen later, this is similar to
recent developments in other Germanic languages' use of *von*.

Use of *of* spread from indicating certain meanings to general use
with nouns representing things or ideas; the genitive remained common
with proper names (Brunner, 48). Eventually, even the genitive singular
was rare with inanimates, and *of* was used instead (Bourcier, 141). The
general underlying process was an increased use of prepositions as the use
of case endings decreased, from the Old English period to the Middle
English period. This is another example of the overall increased reliance
on syntax rather than morphology. Free morphemes, prepositions, were
taking the former role of bound morphemes, inflectional endings. A role
which various endings had formerly fulfilled was in many cases being
shifted to one word. This, however, led to more words to express the same
concept (Clark, 27). Historically, function words often take the place of inflectional forms (Robertson, 283).

The use of *of* also increased because of the influence of the French *de* construction (Mossé, 90). Middle English syntax usually placed *of* post-positively (Mossé, 123). There had, of course, been an *of* construction all along, parallel to German *von*. The borrowing of a literal translation of the French construction, called a "calque," caused an increased use of the *of* construction.

**The *his*-genitive**

If the *-es* genitive singular inflection was often absent in northern Middle English, and genitive plural inflections could be absent as well, due to both phonological and morphological processes, how was an *'s* ever preserved to the present? One possible explanation involves the fact that genitive relationships were expressed yet another way in the history of English. A hypothesis supported by a few linguists, most enthusiastically by Richard Janda (1979, 1981), is that an alternative mode of expression of genitive relationships caused important changes for the conceptualization and use of the genitive ending.

The alternative way to express genitive relationships has been identified as "possessive dative with post-posed possessive pronoun" (Brunner, 48). This construction was used occasionally but rarely in Old English (*Leone p (th)aem papan his tungan* 'Leo the pope his tongue' [Janda, 1981, 83]), more commonly in Middle English, and widely in early modern English. In the fourteenth century, it was more common in southwest England than in the rest of the country, but use spread between the fifteenth and seventeenth centuries (Janda, 1981, 80). Existence was
always simultaneous to that of the -es inflection. The construction was lost by the mid-eighteenth century (Janda, 1979, 247).

Chaucer wrote "The Wyf of Bath Hir Tale" and "The Miller His Tale." Shakespeare wrote "the count his galleys" (Twelfth Night, Act 3, Scene 3) and "as red as Mars his heart" (Troilus and Cressida, Act 5, Scene 2). Samplers displayed phrases such as "Meggie Rose her sampler" (Lockwood, 1968, 21). The construction was always more common with proper names (Alexander, 127).

Mitchell (1985, I, 121) suggests that this construction began in Old English with proper names, due to the difficulty of inflecting some proper names. Another suggested source of the construction is sentences such as (Janda, 1981, 84)

\[
\text{Her Romane Leone p (th)aem papan his tungan forcurfon}
\]
\[
\text{'Here Romans cut out to Leo the Pope his tongue'}
\]
\[
\rightarrow \text{Leone p (th)aem papan his tungan}
\]
\[
\text{'Leo the pope's tongue}
\]

The construction was always more common with the masculine his. Found with various variant spellings, his was sometimes used with non-masculine nouns (Janda, 1979, 249). It was often found after feminine nouns, as the following example from 1467 demonstrates (Janda, 1981, 81):

\[
\text{the quene ys modyr}
\]
\[
\text{'the queen's mother'}
\]

It never occurred with its.

Because of the phonetic similarity to the genitive inflection, commonly suggested as the source of this construction (e.g. Pei, 86) is popular etymology, confusing -es, spelled alternatively -is and -ys, with his. Janda (1979, 1981) is one who supports this source of the "his-genitive."
"The absence of phonetic [h] in his can be inferred...from the extremely frequent spellings of that word as is or ys" (Janda, 1981, 85).

Apparently, his was often pronounced without /h/ in unstressed position and sounded like the genitive ending, an unstressed schwa-z. In Middle English,

-(e)s and the unstressed form of the possessive adjective his became homophonous, and the former was, as a result of this phonological accident, reinterpreted as the latter, so that later...texts commonly show (a spelling of) invariant his in possessive constructions; e.g., my moder ys sake" (Janda, 1981, 61).

Notably today, "unstressed his is likewise usually pronounced without an initial consonant (especially in an environment like that in, e.g., He hit his head)" (Janda, 1981, 85).

Speakers of English reanalyzed the genitive inflectional ending as the possessive pronoun his. By this theory of source of the "his -genitive," the construction was later extended to use of her and even their, possibly in Early Modern English (Janda, 1981, 81). An example of use of their, from a 1645 letter, is "Canterberry and Chillingworth their books" (Alexander, 127).

However, the possessive dative with post-posited pronoun construction did exist in Old English. In Old English,

foreign names (and unassimilated foreign nouns, in general) could take neither foreign nor native...inflectional endings, and so periphrastic...pronominal forms were added to express case-relationships overtly: e.g., Enac his cyren 'Enoch his progeny' (Janda, 1981, 83).

I believe the genitive inflection could have been confused with his due to the previously existing construction. When the genitive inflection and his came to be homophonous, speakers of English could easily consider uses of
the genitive inflection to be further examples of the possessive dative with post-posed possessive pronoun construction.

I am not alone in this assertion. Other linguists "see the...[Middle English] his-genitive as a (mere) continuation of...[the Old English] construction" (Janda, 1981, 83). Janda (1981, 83) disagrees:

There are compelling reasons to believe otherwise. First of all, it is unlikely that such a restricted construction, attested only sporadically in...[Old English], could have spread so mightily to become the dominant way of forming the genitive in [Middle English and early Modern English]...But, even more tellingly, although the...[Old English] construction in question was used with feminine and plural possessive adjectives—cf., e.g., *Nilus seo ea hire aewielme* 'Nile the river her source,' *Asia and Europe hiera land-gemircu* 'Asia and Europe their (land-) boundaries...this is not at all the case for...[Middle English], where only his is so used.

Janda does not believe the Middle English/Early Modern English construction is an example of the possessive dative with post-positive possessive pronoun, but rather that it was an innovation. He admits, however, that there is "no evidence against" (Janda, 1981, 83) the Middle English/Early Modern English construction being a continuation of the Old English construction; the Middle English/Early Modern English semantically dative noun has no inflection!

There is some question as to whether this his was ever pronounced as such, or whether it was just a writing convention. Gabriel Harvey, an Elizabethan poet and thus contemporary of this his-genitive, complained that spelling did not express pronunciation (all of Harvey's spellings have been preserved):
But see what absurdities this yl fauored Orthographye, or rather Pseudographye, hathe engendered, and howe one errour still breedeth and begetteth an other. Haue wee not *Mooneth* for *Moonth*, *sithence* for *since*, *whilst* for *whilste*, *phantasie* for *phansie*, *euen* for *even*, *Duel* for *Diuel*, *God hys wrath* for *Goddes wrath* and a thousande of the same stampe (Krapp, 87).

Robert Lowth, an eighteenth century prescriptive grammarian, also said that people pronounced the inflection "-is," not "his" (Burchfield, 96).

This case answers to the genitive case in Latin, and may be still so called; though perhaps more properly the possessive case: thus, "God's grace;" which may also be expressed by the preposition, as "the grace of God." It was formerly written, "Godis grace;" we now always shorten it with an Apostrophe; often very improperly, when we are obliged to pronounce it more fully; as, "Thomas's book," that is, "Thomasis book," not "Thomas his book," as is commonly supposed (Lowth, 17).

The opinion of a prescriptive grammarian may be dispensable, because it often represents how people "should" talk, rather than how they actually do, but in this instance, Lowth is trying to get orthography to match pronunciation.

If speakers of early modern English pronounced the genitive ending as schwa-z, it is not a major linguistic question how they represented it orthographically. It is more important to ask how they regarded this ending. Did they think of it as meaning "his"?

A possessive dative construction exists in other Germanic languages.

```
dem Hans sein Vater
'Hans' father'
```

It is very possible that the possessive dative construction existed at first alongside the inflectional genitive construction, and that remaining
occurrences of the genitive inflection were reanalyzed as the possessive dative construction, due to the phonological similarity.

If we accept that the genitive inflection was reanalyzed as "his," the schwa-z inflection can be seen to have no longer been thought of as such, but rather regarded as an entity above the word level, a part of syntax. With this new status, the former inflection came to be attached to noun phrases instead of nouns. It was then attached to all noun phrases in the genitive position, even those where nouns had become uninflected. If the his was ever considered to be a separate word, it has obviously ceased to be so. Speakers of modern English cliticize 's onto noun phrases, so it seems as if's is a phrase-final particle (Janda, 1979, 243).

The Group Genitive

The reanalysis of an inflectional ending, a morpheme, as a syntactic particle seems to be the best explanation as to why 's is now attached to theoretically indefinitely long noun phrases. What is commonly called the "group genitive" first became common when the his genitive was most common. Before the Renaissance, people usually said "the king's crown of England," although there were sporadic uses of the group genitive (genitive "inflection" on a noun phrase rather than a noun) in Middle English (Pyles, 183). Chaucer wrote a few group genitives

: the grete god of Loves name

but mostly split genitives.

the Wyves Tale of Bathe

For a brief time, as already noted, group genitives were sometimes found without marking. Starting about 400 years ago, when 's became a
phrase final particle, the grammatical construction became "the king of England’s crown" (Hook, 160). Shakespeare wrote many group genitives

- the Duke of Gloucester’s purse -Richard III

and only a few split genitives.

- the Archbishops grace of York -Henry IV, Part I

The now mandatory use of the group genitive is one of the major developments in the grammar of modern English. A current related development is the allowance of increasingly longer noun phrases in all constructions (Kufner, 67).

The group genitive "would be difficult to find in most other languages" (Alexander, 127). It is not at all characteristic of inflectional constructions, as case inflections should attach to nouns, not noun phrases. "Inflections are always suffixed to the head of the phrase whose grammatical relationship to (the) other parts of the sentence they indicate" (Janda, 1981, 68). The fact that pronouns themselves are marked for the genitive is not problematic, because pronouns actually replace noun phrases, not nouns.40

Incidentally, the reanalysis of the genitive inflection also further explains the loss of postnominal genitives, that is the expression of genitive relationships with noun+inflected genitive noun word order. As previously discussed, there were at one time both word orders, i.e. prenominal and postnominal genitives. Prenominal genitives, genitive noun first, quickly became dominant. This was partially due to the fact that if the genitive was

40The linguistic definition of a pronoun is that it replaces noun phrases. Substitution can be used to demonstrate this quality:

the boy in the room is my friend
*he in the room is my friend
he is my friend
not followed by a noun phrase, it could not be analyzed as *his* (Janda, 1979, '248); that is, "John-is apple" could be reanalyzed as "John his apple," but "the apple John-is" could not be so analyzed and in this way became meaningless.

The conclusion from the *his* -hypothesis is that in Early Modern English, i.e. in the sixteenth and seventeenth centuries, the last of noun case inflection was lost. A new way was found to express the genitive relationship. "Genitive case-inflection did not simply disappear without a formal trace, like the other case-endings, but was, rather, replaced by--or turned into--the genitive particle -‘s " (Janda, 1981, 69). This completed the shift from morphology to syntax for expression of relationships between nouns, a powerful example of how language constantly changes.

Now, "English nouns do not inflect for case at all" (Janda, 1981, 60). "The English genitive-marker -(e)s survived (metamorphosed from an inflectional suffix into an enclitic particle) only because it could be reanalyzed...whereas the other...inflections could not" (Janda, 1981, 61).

### 's Is No Longer an Affix

The fact that ‘s attaches to noun phrases and not nouns defeats the following analysis of ‘s . Bryant (347) and Sweet (I, 51) hypothesize that no case system is found in English if ‘s is a derivational affix, added to nouns to form adjectives. The basis for this hypothesis is that the noun with ‘s designates and limits the meaning of the following noun, just like an adjective does.

the boy’s hat
the red ball

Ideas of other linguists can be used to argue against this hypothesis. Hathaway, in his transformational grammar of modern American
English, says that the class of adjectives does not include determiners nor nouns or pronouns in the "genitive" (105). Sledd (92) defines an adjective as "any form which stands under second stress between a weakest-stressed determiner and a strongest-stressed noun, unless that form itself is a noun." Kennedy (322) points out that adjectives cannot modify other adjectives:

one man's interests

Any adjective inserted in the spot in which the adjective one is located modifies the head noun of the noun phrase (man) to which the's is attached.41

As these factors demonstrate, adjectives are not formed from noun phrases42. Phrases ending with 's have the function, but not the form, of an adjective, and sometimes of a determinative43 (Quirk, 1985, 289):

Is your Jennifer still at school?

41It is possible for there to be ambiguity as to which noun an adjective in this position modifies:

other men's interests

Are they "interests of other men" or "other interests of men"?

42Nouns can be used as adjectives:

fruit juice
computer program
baby carriage

It is often pointed out that English freely allows this type of construction, whereas other languages do not, because English adjectives do not have inflections.

43People have problems in deciding whether to say "John's and Mary's children" or "John and Mary's children." The former is ambiguous: John and Mary may each have children of their own, or they may have collective children. The latter must refer to collective children. The ambiguity occurs when 's is attached to each noun phrase in a larger noun phrase, because each noun then functions as a modifier.

[[John]-'s and [Mary]-'s] children
[John and Mary]'s children
Granny is delighted with Peter’s Jane.

They limit and qualify the following noun, although they are not truly adjectives or determinatives, but rather noun phrases.

The modern English genitive cannot be either an inflectional or a derivational suffix. It is not part of morphology. As an enclitic phrase final particle, attaching to noun phrases rather than nouns, it is probably the only such entity in modern English.

Modern Uses of of and ’s

The status of phrase final particle for ’s is curious because it causes genitive relationships to be expressed by two different analytic constructions, ’s and the function word of. Both occur with theoretically indefinitely expandable noun phrases, rather than with bare nouns. Prepositions are followed by noun phrases.

There are at least two grammatical differences between the two constructions. First, ’s has lesser autonomy than of (Meillet, 94); ’s must be cliticized to a noun phrase, while of is a free morpheme. Second, the order of elements is different: of is a preposition, while ’s is post-positive (Quirk, 1985, 328).

Like ’s, of does not always indicate possession (Quirk, 1972, 885). For example, the funnel of the ship is a possessive relationship, but the city of Rome is not.

Just as was true in the history of English, there are lexical differences in the use of of and ’s. The synchronic differences seem to be similar to the historical ones, but use of of has increased immensely44.

44The of-construction becomes increasingly necessary as we put together longer and longer noun phrases:

the travel plans of the parents of one of our students
Although sometimes 's and of are interchangeable (Burchfield, 152), 's is used more with personal nouns and collective nouns with personal gender characteristics (Quirk, 1985, 323):

the boy's shirt  
the group's favorite activity

In Old English, the genitive inflection could be attached to any noun.

Despite the obligatory attachment of 's to the end of a noun phrase, the head noun of a phrase is obviously the contemporary deciding factor as to which construction will be used. Nouns that tend to call for the 's construction include proper names (Joe’s box) and personal nouns (the girl’s party) and also names for animals which are of special concern to people (the dog’s leash) and nouns which represent collectives of individuals (the couple’s love) (Quirk, 1985, 324). Hence, we find the following grammatical and ungrammatical English phrases (Quirk, 1985, 321):

the ship's name  
the name of the ship  
John's school  
?the school of John  
Mrs. Brown’s Mary  
*Mary of Mrs. Brown  
the front of the house  
*the house's front

Ship is an impersonal object, but it also may be interpreted as a collective of the people aboard or assigned personal characteristics (She is a beautiful

----

*?the parents of one of our students' travel plans

45 Even with modern so-called complex prepositions, of can be replaced by an 's construction (Quirk, 1985, 672):

for the sake of X/for X's sake  
on behalf of X/on X's behalf  
at the expense of X/at X's expense
ship! ). John and Mrs. Brown are both proper nouns, but John may be slightly more ambiguous. House, in reference to its structural characteristics, such as front, is an object.

A unique rule in English is that genitive pronouns are used with parts of the body and personal belongings (Quirk, 1985, 213). This follows from the tendency to mark personal items with 's. It is however not the rule in several other languages.

I raise my hand.
Ich hebe die Hand. (German-'I raise the hand')
Levanto la mano. (Spanish-'I raise the hand')

Of is preferred with partitive and appositive meanings (Quirk, 1985, 323) in modern English, because these tend to involve non-human entities. This is visible in the following expressions of quality and quantity (Quirk, 1985, 703):

- a kind of wood
- a lot of people
- a loaf of bread
- a cup of tea

An issue discussed among several contemporary linguists is how subjective and objective genitives are today constructed. These constructions use a "genitive" with deverbal nouns and express the subject or object of the former verb.

Until Early Modern English, a true genitive, that is an inflectional ending, was used for both subjective and objective constructions. Today, the feeling is that objective genitives are usually represented by an of-phrase (Hathaway, 244):

- a wave of the wand
- *the wand's wave
- the wink of an eye
- *an eye's wink
A distinction necessarily developed, because even in Old English, it was
difficult to distinguish between subjective and objective genitives (Mitchell,
1985, I, 540).

A good example of the contemporary distinction is the following
(Quirk, 1985, 1279):

\[
\text{the love of power} \\
\ast \text{power's love}^{46}
\]

In the first of these two, power is the loved object; the second is
ungrammatical, unless power has some love of its own. Basically, the
appointment of Bill Clinton would now usually refer to Bill Clinton being
appointed to something, while Bill Clinton's appointment can refer to
someone appointed by Bill Clinton. The subjective genitive may, however,
be represented by either of 's, especially if the verb was intransitive
(unable to take an object): arrival of the train (Quirk, 1985, 1280).

Quirk (1985, 1356) argues that end-focus, the linear presentation of
low to high value information, further affects choice between 's and of.
Use of of puts more emphasis on the head noun, while use of 's puts more
emphasis on the second noun phrase.

More distinctions of meaning are possible with of-constructions
(Quirk, 1985, 1277):

\[
\text{the funnel of the ship= the ship's funnel} \\
\text{the funnel of a ship= a ship's funnel} \\
\text{a funnel of the ship= one of the ship's funnels}
\]

The 's construction mandatorily has a deictic meaning. It indicates a
definite person or object. A funnel of the ship is indefinite, and there can
be no real 's counterpart. An of-construction is the only construction of

\footnote{Both the power of love and love's power are grammatical, but these are different constructions.}
genitive meaning in modern English that permits indefinite reference (Quirk, 1985, 1283).

This is true for so-called "double genitives" as well (Quirk, 1985, 331).

*a friend of my brother's

This construction is unique to modern English, as opposed to older forms of English and other languages. There are descriptive rules for its use (Quirk, 1985, 1283). The noun in the prepositional phrase must be definite and human.

*an opera of a composer's
an opera of the composer's

a light of the room
*a light of the room's

The head noun must be indefinite

*the daughter of Mrs. Brown's
a daughter of Mrs. Brown's

unless the definite determiner is stressed.

that' daughter of Mrs. Brown's

The head noun cannot be a proper noun.

*Mary of Mrs. Brown's

This construction may be the indefinite counterpart of the definite construction Mrs. Brown's daughter. In the same way, a friend of mine would be the indefinite counterpart of my friend.

The 's in this position was a development of Late Middle English, when people started saying the pronouns hers, yours, and theirs. At approximately the same time, some speakers were using, in this position, ourn, yourn, and theirn, analogous to mine and thine. Ourn, yourn, and theirn exist in some dialects of English today (Krapp, 88), such as some dialects of Southern (U.S.) English.
Requiring 's today are some fixed compounds. *Their money's worth* is a compound, as evidenced by the stress on "money's." It is ungrammatical to say, with the same meaning intended, *the worth of their money* (Quirk, 1985, 326).

The same 's /of rules apply for pronouns as well as noun phrases. It "runs against the grain of modern usage to provide analytic equivalents for many of the genitives of personal pronouns" (Hathaway, 35), as pronouns often have people as referents. Reciprocal pronouns (Quirk, 1985, 364) and compound pronouns (indefinite pronouns) behave like all noun phrases (Quirk, 1985, 378):

- each other's
- everyone's
- everyone else's
- *everyone's else

Certainly almost no native speaker of English would generate the final of these examples, but it is a construction found in some prescriptive grammars.

Descriptive rules are the same for relative pronouns, as the following examples suggest (Quirk, 1985, 367):

- the lady whose daughter you met
- *the lady of which the daughter you met
- ?the house whose roof was damaged
- the house of which the roof was damaged

*Whose* is more commonly used with animates than with inanimate nouns, paralleling the use of 's.

Use of of and 's continues to develop. Today, in place of of -phrases, there are often compound phrases (Hathaway, 40). *Table leg* is a compound*. This is known by the fact that stress is on table. The first

---

47This kind of compound neutralizes the opposition of prepositions such as of and for. Another example is *tool box*. 

63
noun becomes an adjective in that it loses the singular plural contrast which is marked in nouns but not adjectives.

In a similar phrase with an animate noun, 's is used: boy's leg (stress is on leg). At one time, a genitive inflection was used for almost all genitive relationships. Use of of increased with inanimate nouns as the genitive inflection became a syntactic particle. Of has been the predominate way to express genitive relationships in general since Middle English (Janda, 1981, 95). Now, 's remains in use, for the most part with humans and animates, and although of is very common today, some uses of of are being taken over by compounding.

One structure from which 's is falling out of use in popular speech is sentential gerunds (Quirk, 1985, 1063). At one time people commonly said "I was happy about his coming," but now "I was happy about him coming" is probably more common. In the same way, "I was happy about John coming" is newer, and "I was happy about John's coming" is older. "The less formal the language, the fewer possessive subjects...the more formal the language, the greater the number of possessive subjects" (Nunnally, 365).

These are two very different structures:

I was happy [(about]P [his coming]NP]PP
I was happy [(about]P [him]NP [coming]VP]PP

The former structure is becoming less common for several reasons, including the following (Nunnally, 363). The "genitive" s follows [s] with great difficulty:

The child was excited about Santa Claus coming.
*? The child was excited about Santa Claus' coming.
Some pronouns have no genitive form:

We should have enough to eat with some bringing food.
*We should have enough to eat with some’s bringing food.48

Inanimates seldom take 's:

She fainted at the sight of the car hitting the child.
*She fainted at the sight of the car's hitting the child.

Apparently, sentential gerunds follow similar descriptive rules as those other "genitive"/’s constructions.

The Orthographic Symbol ’s

Various theories have been advanced about why the orthographic symbol ’s is used to represent the genitive relationship. Some linguists believe that orthography is not a proper subject of study for them to engage in, but in this situation there are some interesting diachronic observations.

Use of ’s was customary by the end of the seventeenth century (Bolton, 181). Krapp (86) believes that it arose in printing, to distinguish genitives from plural forms. Alexander (127) and Emerson (177) believe that it represents a contraction of his, due to the popular etymology. Robert Lowth, the eighteenth century prescriptive grammarian, believed that it was an "improper" shortening of inflectional -is (Burchfield, 96). Bolton (181) believes that it marks a morpheme boundary, between the noun and the genitive inflection. This paper has of course come to support the conclusion that ’s is not an inflection of modern English. No matter what, ’s is certainly no more than a modern graphic convenience (Bryant, 383). If ’s is a phrase final particle, it would be just about the only one in English, and thus could be written a special way.

48Nunnally (364) further points out that when subjects of gerunds follow certain words, they are less likely to take ’s. Two of these words are the prepositions with and without.
Probably, the apostrophe marks a deletion. However, the apostrophe does not occur in the same construction in *hers*, *ours*, and so on. Pronouns do not seem to take 's. This leads to confusion between *its* and *it’s* 49.

Whatever reasons the inventors of the orthographic convenience 's had have now been very much forgotten, as evidenced in the confusion of how to use it. Robinson (118) lists the following "misuses:"

- Teachers College
- Womens Club
- Jacks Hamburger's

According to traditional orthographic rules, *Teachers' College*, *Women's Club*, and *Jack's Hamburgers* are correct50.

Native speakers of English certainly understand the difference in meaning between spoken plural -s and 's. There is no difference in pronunciation, but use of -s and 's is completely different: -s on nouns, 's on noun phrases. There is no room for confusion in synchronic speech, so the orthography is not necessary and may decay51.

49 In elementary school, I taught myself to distinguish between these two words by saying that because the apostrophe was already used for a contraction (it is -> it's), it could not be used in this instance to mark possession; I am not sure how much linguistic validity this rule has.

50 An example much closer to home is "the Independent Scholar Committee meets annually to review the progress of Independent Scholar's" (personal correspondence from the Dean's Office).

51 In some cases, people may not be sure what they mean. There is often confusion regarding use of plurals or possessives in referring to people's houses, for example on mailboxes. Mailboxes may read-

(1) the Smiths
(2) the Smith's
(3) the Smiths'

(1) might mean that the Smiths live in the house, (3) that it is the Smiths' house, and (2) that the house belongs to the Smith family collectively. (2) is probably the most commonly chosen of these three options, but it is the most difficult to justify. And how often do people think about what they mean to say before labeling their mailboxes?
The simple orthographic symbol 's sums up much of the history of the English genitive. The apostrophe in the 's suggests deletion of a former form. Probably the only entity seen attached to noun phrases, 's suggests unique development and status for that which it stands. Genitive relationships are in no way marked by case inflection in modern English, but the former inflection could not just drop out as that of other cases did. A new syntactic entity was left. Confusion of when to write 's and (plural) -s flows from the long-existing phonological similarity between the two endings and the fact that the orthography is generally no longer necessary to distinguish between their meanings.
Comparison of Germanic Genitives

The development and demise of the English "genitive" can be profitably compared and contrasted with the analogous structures in other Western Germanic languages. My comparative discussion will emphasize High German, as this is the Germanic language of which I am most knowledgeable.

There were many similarities among Old English, Old High German, and Old Low German. Noun declensions were similar. All three languages declined nouns according to the final vowel of their (hypothetical) Proto-Germanic form (Lockwood, 1965, 16). Thus, a -stem nouns were always masculine and neuter, o -stem nouns were always feminine, and i -stem and u -stem nouns could be masculine, neuter, or feminine. Consonantal stem nouns also had members from every gender (van Dam, 144).

Old English, Old High German, and Old Low German all had the same inflected cases: nominative, accusative, genitive, dative, and the occasional instrumental. Older Proto-Germanic had the instrumental case. Only Modern High German, that is, what we call "standard German" today, has preserved four cases, namely nominative, accusative, dative, and genitive. German has preserved many of the old inflectional endings which English has lost. This is an example of how High German languages have been less open to change than Low German languages.

Despite more conservativism in High German, all Germanic languages have undergone reduction of vowels, loss of endings, and increased use of prepositions (Lockwood, 1968, 19). All Germanic languages have changed greatly in their case forms and uses (Meillet, 95). Gothic is the oldest preserved Germanic language and had more inflection
than Old English, (Robertson, 111), but weakening and loss of inflections occurred in Gothic, and Old Norse\textsuperscript{52}, as well (Meillet, 61).

As mentioned previously, Germanic languages have had somewhat similar endings for the genitive singular. Gothic had -\textit{is}, Scandanavian languages have -\textit{s}, and Western Germanic languages have -\textit{es} or -\textit{as}. Germanic genitive singular endings developed from (reconstructed) Indo-European *\textit{-e} /\textit{o} - (Meillet, 92)\textsuperscript{53}.

\textbf{Low Western Germanic Languages}

It has already been established that English had some unique developments, due to isolation from the continent and to invasions. Other Low Western Germanic languages have an English-like morphology of greatly reduced use of inflections but are more like High German in their phonology and syntax (word order). Examples of preservation of a more Germanic syntax can be seen in Dutch and Afrikaans, where word order is like German; the verb always has the second position in the linear order of a sentence (Muller, 21).\textsuperscript{54}

\begin{center}
\begin{tabular}{ll}
Ik ga morgen. & Morgen ga ik. \\
'I am going tomorrow.' & (Dutch)
\end{tabular}
\end{center}

English most often maintains its SVO word order:

I write a letter.

\textsuperscript{52}Among Modern Northern Germanic languages, Norwegian, Swedish, and Danish only have singular, plural, and possessive inflection and one gender. Icelandic, however, due to isolation, has a full declensional system and three grammatical genders (Muller, 23).

\textsuperscript{53}*-\textit{e}-o and *-o-o are the sources of the Germanic genitives.

\textsuperscript{54}It has been suggested by transformational grammarians that the source of this word order is the verb's being at the end of the sentence in deep structure and its being moved when there is no complementizer.
Today I write a letter.
*Today write I a letter.

Dutch

Dutch\textsuperscript{55}, Flemish, Afrikaans, and Frisian, Low German languages, all have very little inflection. Dutch has retained three genders (Muller, 22) and a common adjective inflection (-e) for attributive position (Lockwood, 1965, 192):

\begin{itemize}
  \item de goede zoon
  \hspace{1em} 'the good son'
  \item een jonge moeder
  \hspace{1em} 'a young mother'
\end{itemize}

There are a great variety of dialects of modern Dutch (Hook, 28).

Differences between Dutch and Flemish are largely only phonemic (Muller, 20)\textsuperscript{56}.

Dutch makes very little use of the genitive case today, except in fossilized idioms and in some literature (Lockwood, 1968, 21). The articles in modern Dutch for all former cases are (Lockwood, 1965, 192):

\begin{itemize}
  \item masculine & feminine \textit{de}
  \item neuter \textit{het}
  \item plural \textit{de}
\end{itemize}

Seldom used are genitive articles, the same as those of Modern High German (Lockwood, 1965, 192):

\begin{itemize}
  \item masculine & neuter \textit{des}
\end{itemize}

\textsuperscript{55}I am grateful to Marie Henderson, for her knowledge of Dutch speech and willingness to comment on and provide examples of the expression of genitive relationships.

\textsuperscript{56}There are various opinions about the status of Flemish in relation to Dutch: it is a closely related language; it is a dialect; it is something of a lingua franca for Belgium. As to whether this is resolvable, linguists have a joke about the difference between dialects and languages: "a language is a dialect with an army and a navy!"
feminine  \( der \)
plural \( der \)

The articles of modern Dutch arose from a more complicated system of three genders and four cases in earlier Dutch (Donaldson, 163)

Use of the actual genitive inflection/articles is more common with feminine and plural nouns (Lockwood, 1965, 191):

\[
tegen \text{ het einde der eerste Meiweek}
\]

\[
\text{'towards the end of the first week in May'}
\]

Use of \( der \) is still somewhat productive (Donaldson, 58), while \( des \) is found only in set expressions. An example of a set genitive phrase is (Lockwood, 1965, 191):

\[
\text{het teken des kruises}
\]

\[
\text{'the sign of the cross'}
\]

A formerly genitive \( s \) is also found in frozen compounds, for example (Roorda, 152):

\[
\text{een ontdekkingsreis}
\]

\[
\text{'a journey of discovery'}
\]

Analytic constructions are more commonly used to express genitive relationships in modern Dutch (Lockwood, 1965, 191):

\[
\text{het geld van zijn zuster}
\]

\[
\text{'his sister's money'}
\]

This is true with proper names as well:

\[
\text{het baard van Daantje}
\]

\[
\text{'the beard of Danny'}
\]

\( Van \) means 'of.' The Dutch \( van \)-construction is used more than the English \( of \)-construction. It is the usual way of marking genitive relationships in Dutch\(^{57}\) (van Dam, 136), although for pronouns, genitive

\(^{57}\text{This analytic tendency is also observable in the fact that the usual way of marking dative relationships is with the preposition } \text{aan} \text{ (van Dam, 136).}\)
pronouns are used, for example, *zijn* 'his'. Use of genitive articles is no longer very productive.

In colloquial language (Lockwood, 1965, 191), Dutch speakers may also say

\[
\text{zijn zuster d'r geld} \\
\text{'his sister her money'}
\]

\[
\text{de duivel z'n ouwe moer} \\
\text{'the devil his old nut'}
\]

The possessive (*d'r, z'n*) is always unstressed (Donaldson, 58). This construction is of the same sort which existed in the history of English (the *his* -genitive) and exists today in German:

\[
\text{dem Mann sein Hut} \\
\text{'the man his hat'}
\]

It is less common than use of *van*.

Another option is -s on words (Lockwood, 1965, 191), a remnant of the genitive case. This occurs infrequently with a few everyday words (Lockwood, 1965, pg. 191):

\[
vaders huis \quad \text{'father's house'} \quad \text{(also het huis van vader)} \\
moeders tuin \quad \text{'mother's garden'} \quad \text{(also de tuin van moeder)}
\]

It is more common with proper names than with other nouns (Donaldson, pg. 58):

\[
\text{Piets dochter} \\
\text{'Piet's daughter'}
\]

As in English and also German, there is an adverbial *s* in Dutch, having arisen from old genitive constructions. Some of these Dutch adverbs parallel those in German (van Dam, 440):

<table>
<thead>
<tr>
<th>Dutch</th>
<th>German</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>bereids</td>
<td>bereits</td>
<td>already</td>
</tr>
<tr>
<td>doorgaans</td>
<td>durchgehends</td>
<td>throughout</td>
</tr>
<tr>
<td>stracks</td>
<td>stracks</td>
<td>straight</td>
</tr>
</tbody>
</table>
Some of the Dutch adverbs do not have parallel genitive adverbs in modern German (van Dam, 441):

<table>
<thead>
<tr>
<th>Dutch</th>
<th>German</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>aanstands</td>
<td>gleich</td>
<td>equally</td>
</tr>
<tr>
<td>dwars</td>
<td>quer</td>
<td>crossways</td>
</tr>
<tr>
<td>elders</td>
<td>anderswo</td>
<td>elsewhere</td>
</tr>
<tr>
<td>omstreeks</td>
<td>um</td>
<td>around</td>
</tr>
<tr>
<td>onverwachts</td>
<td>unerwartet</td>
<td>unexpectedly</td>
</tr>
<tr>
<td>reeds</td>
<td>schon</td>
<td>already</td>
</tr>
<tr>
<td>slechts</td>
<td>nur</td>
<td>only</td>
</tr>
<tr>
<td>terloops</td>
<td>beiläufig</td>
<td>approximately</td>
</tr>
<tr>
<td>thans</td>
<td>jetzt</td>
<td>now</td>
</tr>
<tr>
<td>veels</td>
<td>viel</td>
<td>a lot</td>
</tr>
<tr>
<td>'s winters</td>
<td>im Winter</td>
<td>in the winter</td>
</tr>
<tr>
<td>'s zomers</td>
<td>im Sommer</td>
<td>in the summer</td>
</tr>
</tbody>
</table>

In the final two, the remnant of the genitive definite article is visible (Donaldson, 58). A few of these Dutch and German adverbs clearly have a common origin, but the genitive -s has been lost in the German, while others among these come from different origins.

With other adverbs, German has preserved the formerly genitive -s, and Dutch has lost it (van Dam, 441):

<table>
<thead>
<tr>
<th>Dutch</th>
<th>German</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>bijzonder</td>
<td>besonders</td>
<td>especially</td>
</tr>
<tr>
<td>onderweg</td>
<td>unterwegs</td>
<td>on the way, underway</td>
</tr>
</tbody>
</table>

Further examples of formerly genitive German adverbs will be discussed later.

In Dutch, the s also appears on some adjectives (van Dam, 441):

<table>
<thead>
<tr>
<th>Dutch</th>
<th>German</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>dwars</td>
<td>quer</td>
<td>all over</td>
</tr>
<tr>
<td>hedendaags</td>
<td>heutig</td>
<td>contemporary</td>
</tr>
<tr>
<td>links</td>
<td>link</td>
<td>left</td>
</tr>
<tr>
<td>onerwachts</td>
<td>unerwartet</td>
<td>unexpected</td>
</tr>
<tr>
<td>rechts</td>
<td>recht58</td>
<td>right</td>
</tr>
<tr>
<td>vergeefs</td>
<td>vergeblich</td>
<td>futile</td>
</tr>
</tbody>
</table>

58German does have the adverbs links and rechts.
Dwars, links, and rechts are commonly used adjectives.

Dutch also apparently has adverbs formed with the analytic genitive equivalent van. Examples are (Roorda, 194):

- vandaag: 'today'
- van avond: 'this evening'
- van morgen: 'this morning'
- van nacht: 'tonight'

These express specific time, while -s adverbs express general time:

- 's morgens: 'mornings'
- 's nachts: 'nightly'

English has its own adverbial constructions formed with of, its preposition of genitive relationships:

- of a winter's day
- all of a sudden (=suddenly)

Expressions of content in Dutch, very long ago expressed with the genitive, are in modern Dutch articulated with both nouns unmarked (Roorda, 79):

- een stuck brood: 'a piece of bread'
- een glas wijn: 'a glass of wine'
- een aantal vogels: 'a number of birds'
- een pond suiker: 'a pound of sugar'
- viif voet lang: 'five feet long'

If the noun of quantity is a plural amount, that noun remains in the singular:

- drie pond kersen: 'three pounds of cherries'
- drie paar handschoenen: 'three pairs of gloves'

This is a very fixed construction.

**Afrikaans**

Afrikaans was formed from Dutch, native African languages, and various immigrant languages, from English to languages of the Indian subcontinent (Gray, 349). Most of these influences have resulted solely in
loan words in the Dutch base; some speakers of Dutch view Afrikaans as improper, imperfect Dutch.

Afrikaans has only one gender and almost complete loss of inflection, except for plural inflection. Articles and adjectives are for the most part invariable (Lockwood, 1965, 209). There is no true genitive case. Genitive relationships of Afrikaans are indicated analytically (Lockwood, 1965, 209):

die sleutel van Pieter
'Peter's key'

Once again, a "his"-genitive is possible, using the masculine possessive pronoun (Lockwood, 1965, 209):

Pieter se sleutel
'Peter his key'

Anna se pop
'Anna "his" doll'

There are possessive pronouns for every person and number in Afrikaans (Lockwood, 1965, 209), but they are apparently not used in this construction.

Frisian

Frisian, as the most closely related language to English, has always been noted to be much like English, even with respect to word order (Muller, 22). The two languages are said to make up the Anglo-Frisian branch of Low Western Germanic languages (Gray, 346). Modern Frisian has variants of its own, but in all of them, case endings have been lost. There is occasional use of genitive endings such as -s and -e (Lockwood, 1965, 223):

Many linguists lament the fact that Frisian is a quickly dying language, because it is so closely related to English, and an important subject of study is being lost. Frisian is an official language of Friesland, the northern coast of and islands off of the Netherlands, but it is being replaced by Dutch.
Analytic constructions are more common. In Modern West Frisian, \textit{fan} is the preposition used (Lockwood, 1965, 223), and in Modern North Frisian, it is \textit{foon} (Lockwood, 1965, 229). Once again, the following type of construction is used (Lockwood, 1965, 223 & 229):

\begin{itemize}
\item \textit{ús beppe har hus} 'our granny her house' (West Frisian)
\item \textit{di bóre sin hâne} 'the father his hens' (North Frisian)
\end{itemize}

The only inflections that have been retained at all among these languages are genitive inflections. They have been the last lost in all Low German languages, and I return to my hypothesis about the genitive (genitive's ?) being a "special case." However, even the genitive eventually for the most part gives way to analytic constructions, and they are apparently always of two different types: one with a preposition, and a second with a genitive pronoun. The second construction no longer exists in English, because it evolved into the 's particle. Other developments of genitives among Low German languages are strikingly similar. However, more frozen genitive constructions exist in the other Low German languages.

\textbf{High Western Germanic}

High German is less clearly, more distantly, related to English than the Low German languages are, so similarity of grammatical development between English and High German is naturally not as extensive as between English and the Low German languages. Similarities are still easy enough to find, though. German usually has a SVO word order, like English.
German can deviate from this word order to a greater extent than English can. Different word orders, such as OVS, may arise when a certain noun phrase is stressed.

Ich kenne den Mann.  
'I know the man'  
Den Mann kenne ich.  
'I know the man.'

This occurs sometimes in English but is quite restricted\(^{60}\). More word order possibilities and inflections exist in modern German.

German is a more highly inflected language than English, and one suggested explanation is that German never underwent a "conquest" (Roberts, 40). Still, inflection of the noun itself is only residual: -(e)n, dative plural; -(e)s, masculine/neuter genitive singular; -e, masculine/neuter dative singular.

Die Mutter gibt den Kindern das Essen.  
'The Mother gives the children (dat.) the food.'  
Der Hut meines Vaters ist grün.  
'My father's (gen.) hat is green.'  
Ich gehe nach Hause.  
'I go (to) home.'

Nach Hause is a German idiom and has preserved the neuter dative singular -e. The masculine/neuter dative singular -e can be found in non-idiomatic constructions but is rare in modern German. The dative singular -e occurs most often with masculine and neuter nouns which meet one of the following conditions: being monosyllabic; ending in ich, ig, ing, nis, sal, or tum; or beginning with a prefix and ending with a stressed syllable, for example Gebet (Asher, 14).

---

\(^{60}\)Sentences of other word orders in English often sound like the language of an ethnic minority group, for example, "Candy you like, but chicken soup you'll eat."
There has been the familiar trend of weakening and loss of inflections in German (Asher, 14). Determiners are still always inflected for case, gender, and number, and adjectives are still likewise declined (agreeing in case, gender, and number with the noun) when in attributive position, but not in predicate position:

Das Mädchen ist gut.
'The girl is good (predicate adj.)'

Das ist ein gutes Mädchen.
'That is a good (attributive adj.) girl.'

High German is commonly divided into three historical periods—Old German (to 1050), Middle German (1050-1500), and Modern German (1500 to the present) (Müller, 17). Just as in English, case inflection greatly decayed between its "Old" period and its "Middle" period (Besch, §314). In Late Old High German, vowels in inflections became reduced and several distinct genitive endings were subsequently lost (Lockwood, 1968, 19). However, more inflection remained at the end of the Old German period than at the end of Old English. Morphological change has been drawn out over a much longer period in German than in English.

In Middle German⁶¹, articles from various declensions became unified under one article per case/gender/number, and genitive plural and

---

⁶¹ Aspects of Middle German can be observed by studying Yiddish. Spoken by East European Jews and their descendants, Yiddish is derived from the fourteenth century Franconian dialect of High German (Gray, 350). Yiddish phonology closely resembles that of Medieval German (Müller, 19). Yiddish has preserved much of its inflection. As observable in the following summary of articles and adjective inflection, Yiddish still has three genders and four cases, just like standard High German (Lockwood, 1976, 251):

<table>
<thead>
<tr>
<th>Gender</th>
<th>Masculine</th>
<th>Feminine</th>
<th>Neuter</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>der guter man</td>
<td>di gute froy</td>
<td>dos gute kind</td>
<td>di gute menen, froyen,</td>
</tr>
<tr>
<td></td>
<td>kinder</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accusative</td>
<td>dem gutn man</td>
<td>di gute froy</td>
<td>dos gute kind</td>
<td>di gute menen, froyen,</td>
</tr>
<tr>
<td></td>
<td>kinder</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Genitive</td>
<td>dem gutn mans</td>
<td>der guter froy</td>
<td>dem gutn kinds</td>
<td>di gute</td>
</tr>
<tr>
<td></td>
<td>meners, froyens, kinders</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
feminine *i*-stem nouns lost their inflection (Behagel, I, 1928, 480). Further morphological simplification occurred in Early Modern German, such as the extension of genitive -(e)s to the majority of masculine and neuter nouns (Tschirch, II, 193), and the loss of dative feminine singular inflection (Robertson, 117).

\[ e \rightarrow \emptyset/+\_# \]

\[ [+\text{dat}, +\text{fem}] \]

The genitive plural ending was lost either due to the deletion of inflectional \(-e\) by phonological rule or to analogy and reanalysis. The following are examples of the analogical process which may have occurred (Besch, 1315):

<table>
<thead>
<tr>
<th></th>
<th>Nominative Sg.</th>
<th>Nominative Pl.</th>
<th>Genitive Pl.</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>a</em>-stem nouns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle High German</td>
<td>wort</td>
<td>wort-(\emptyset)</td>
<td>wort-(e)</td>
</tr>
<tr>
<td>Modern German</td>
<td>Wörter</td>
<td>Wörter-(e)</td>
<td>Wörter-(e)</td>
</tr>
<tr>
<td><em>o</em>-stem nouns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle High German</td>
<td>gebe</td>
<td>gebe-(\emptyset)</td>
<td>gebe-(n)</td>
</tr>
<tr>
<td>Modern German</td>
<td>Gabe</td>
<td>Gabe-(n)</td>
<td>Gabe-(n)</td>
</tr>
</tbody>
</table>

The Yiddish genitive is now basically a possessive, most of its other functions having been lost (Weinreich, 791).

Many Germanic traits come together in Yiddish. Possession by a human is marked by a suffix (sometimes with an apostrophe, although Yiddish is written in Hebrew) which is pronounced [s] or [z]. If the human possessor has a definite article, then the definite article is dative. It is the understood object of a preposition. Nonhuman possessors are marked with the preposition (Katz, 100). In Yiddish, the object of any preposition is in the dative case (Katz, 76).

With possessive pronoun, much more inflection is observed. Yiddish possessive pronouns may precede or follow nouns (Katz, 108), usually with the same meaning (Katz, 112). When preceding, they are inflected for the number of the possessor and the number of the possession (four possibilities); gender only appears with third person singular possessors (his/her) (Katz, 108). When following, pronouns are inflected for number of possessor and possession, gender of possessor and possession, and case (Katz, 112). With such complicated inflection, possessive pronouns are replaced by definite articles where context allows (Katz, 108).
The plural marker was Ø, and the genitive plural marker was -e. The
genitive plural marker was reanalyzed as the plural marker, and the
genitive plural marker was analyzed as Ø.

For a brief period in the thirteenth century, German a-stem nouns
had a genitive plural ending of -en, perhaps due to influence of the dative.
The only trace of this ending today is in adverbs such as (van Dam, 152):

allерorten everywhere
vielerorten in many places

Adverbs of this sort are antiquated and in many cases obsolete (Collins).
Sometimes there are alternate forms which follow the pattern of other
adverbial genitives:

allerorts <- allerorten
vielerorts <- vielerorten

More discussion on the general formation of German adverbial genitives
will occur later in this paper.

Most weak nouns lost their inflection in early Modern German as
they were taken over by strong inflections. Feminine weak nouns became
inflected as o-stem nouns. Neuter weak nouns were likewise taken over by
a strong inflection (Besch, 1314).

Masculine weak nouns had three sorts of development. First, some
became declined as strong nouns; (e)n, the oblique case inflection, was lost,
and genitive nouns took on the inflection of strong genitive nouns,(e)s.
Second, some took the -(e)n case ending as part of the noun, at the expense
of a singular/plural distinction, with -s on genitive singulars. This is the
source of Modern German nouns such as the following:
The third group of weak masculine nouns kept their weak form and developed a genitive ending of -(e)ns. Examples from Modern German include:

<table>
<thead>
<tr>
<th>nominative</th>
<th>genitive</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buchstabe</td>
<td>Buchstaben(s)</td>
<td>letter</td>
</tr>
<tr>
<td>Friede</td>
<td>Friedens</td>
<td>peace</td>
</tr>
<tr>
<td>Gedanke</td>
<td>Gedankens</td>
<td>thought</td>
</tr>
<tr>
<td>Wille</td>
<td>Willens</td>
<td>will</td>
</tr>
<tr>
<td>Same</td>
<td>Samens</td>
<td>seed</td>
</tr>
</tbody>
</table>

Some examples of the third type of masculine noun have slowly developed into the second type (Besch, 1314). For example, the Collins German Dictionary (1980) lists Friede and Same as old, literary forms of Frieden and Samen (genitives Friedens and Samens).

The end result was a genitive -s extended to all masculine nouns, regardless of their stem (Besch, 1503). In early modern German, the genitive -(e)s inflection was relatively stable but occasionally missing, especially after dentals (Besch, 1315). Today, some examples of the third type of masculine weak noun take an -s genitive only questionably and are often cited as having a genitive singular ending of just -en. Examples include:

<table>
<thead>
<tr>
<th>nominative</th>
<th>genitive</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graf</td>
<td>Grafen(s)</td>
<td>count</td>
</tr>
<tr>
<td>Fürst</td>
<td>Fürsten(s)</td>
<td>prince</td>
</tr>
<tr>
<td>Prinz</td>
<td>Prinzen(s)</td>
<td>prince</td>
</tr>
<tr>
<td>Held</td>
<td>Helden(s)</td>
<td>hero</td>
</tr>
<tr>
<td>Monarch</td>
<td>Monarchen(s)</td>
<td>monarch</td>
</tr>
<tr>
<td>Gesell</td>
<td>Gesellen(s)</td>
<td>companion</td>
</tr>
<tr>
<td>Soldat</td>
<td>Soldaten(s)</td>
<td>soldier</td>
</tr>
</tbody>
</table>
It is today possible to construct a rule saying that masculine nouns whose plural inflection is -(e)n often have -(e)n inflection in the accusative, dative, and genitive (Griesbach, 116):

<table>
<thead>
<tr>
<th>Nominative Singular</th>
<th>Nominative Plural</th>
<th>Genitive Singular</th>
</tr>
</thead>
<tbody>
<tr>
<td>der Mensch 'person'</td>
<td>die Mensch-en</td>
<td>des Mensch-en</td>
</tr>
<tr>
<td>der Bote 'messenger'</td>
<td>die Bote-n</td>
<td>des Bote-n</td>
</tr>
<tr>
<td>der Herr 'lord'</td>
<td>die Herr-en</td>
<td>des Herr-n</td>
</tr>
</tbody>
</table>

Genitive case inflection for nouns has remained longer than other noun case inflection in German, but it has undergone several somewhat recent changes. In the sixteenth century, Martin Luther wrote *reines Herzens* 'of pure heart,' but today the phrase would be *reinen Herzens* (Brinkmann, 55). When not preceded by any article, a singular, masculine/neuter genitive adjective usually ends in -en, although -es still occurs occasionally (Asher, 18).

In 1774, Goethe wrote *die Leiden des jungen Werthers* ('the sufferings of young Werther'), and in 1804, Schiller wrote *des edeln Ibergs Tochter* ('daughter of the nobel Iberg'). In both cases, the proper name has an article and is inflected as a genitive. Today, if another word, such as an article, marks the genitive, the proper name is uninflected (Tschirch, II, 192):

- Goethes Werke 'Goethe’s works'
- Schillers Briefe 'Schiller’s letters'
- die Oden des späten Klopstock ‘the odes of the late Klopstock’

A development in the early twentieth century was greater use of the genitive singular as compared to the plural (Behagel, 1928, I, 479).

Despite changes in form and use of the genitive in German, it is still formed with much more inflection than the comparable structure in English. In English, we would write *Frederick the Great’s policy*, while in
German, it is *Friedrichs des Grossen Politik* (Kufner, 67), reminiscent of an earlier stage of English.

Formation of the genitive of contemporary German is usually very easy to describe. Word order is predominately genitive second. Contemporary word order places the genitive first only with names (*Fritzens Haus* 62 'Fritz's house'), literary and set expressions (*in meines Herzens Unschuld* 'in the innocence of my heart'), and compound words (*das Königsschloß* 'the king's castle' *des Königsschloß* 'of the king castle). Genitive first is no longer productive (Lockwood, 1968, 18).

The genitive was generally first until Middle High German (e.g. *in des Walfisches Bauch* 'in the whale's stomach'). In Modern High German, the word order came to be predominately genitive second (*der ging von dem Stuhl Gottes und des Lammes* 'he went from the chair of God and of the lamb'). Genitive first is the older word order (Lockwood, 1968, 17). Actually preserved in English, it was dropped in modern standard German.

Genitive proper names in modern standard German take -s, regardless of gender, and precede the noun they modify (Zorach, 29):

- *Inges Mutter* 'Inge's mother'
- *Feminine names must take -s, because there is usually no marking on feminine nouns. Feminine names may alternately occur with the article,*
- *das Buch der Maria* 'Maria's book'

especially when there is a last name. Titles are inflected too, if they can be (Griesbach, 118):

- *Frau Meiers Sohn* 'Mrs. Meier's son'
- *Herrn Schmidts Sohn* 'Mr. Smith's son'

62 This competes with *das Haus von Fritz*.
In 1928, there was a prescriptive rule of grammar taught in German schools that historical names took the genitive ending on the first part, while contemporary, newer names took the genitive ending on the second part. Behagel (1928, I, 163) believed this to be insufficient as a descriptive rule and stated simply that the inflection seems to go on the part of the name nearest to the noun modified by the noun in the genitive:

- Wilhelm von Humboldts Werke
- die Werke Wilhelms von Humboldt
- 'William of Humboldt's work'

Because of the phonological condition, proper names ending in -s, -β, -x, -z, or -e take the genitive inflection -ens (Griesbach, 118):

- Hansens Bruder  'John's brother'
- Maxens Vater   'Max's father'
- Schulzens Haus 'Schulz's house'
- Mariens Hut    'Marie's hat'

Foreign names ending with -s, however remain uninflected (Brinkmann, 54):

- der Tod des Sokrates 'the death of Socrates'

All other genitive nouns usually follow the noun they modify. The main exception to this rule appears when the speaker talks about someone to whom the speaker has a close relationship, for example,

- Vaters Zimmer, 'father's room.'

Singular feminine nouns and plural nouns are uninflected but take an inflected article:

- der Mantel der Frau 'the woman's coat'

Singular masculine and neuter nouns take an inflectional ending of -es or -s and an inflected article:

- der Hut des Mannes 'the man's hat'
- der Motor des Autos 'the motor of the car'
(Zorach, 29). The -es inflection is threatened today, however, because it very often must drop the e and be shortened to -s.

The shortened form of the masculine/neuter genitive singular inflection occurs with polysyllabic words. Thus, *eines Montags* ('of a Monday') is grammatical, but with a monosyllabic word, -es is used: *eines Tages* ('of a day') (Erben, 103). There are many instances in which monosyllabic words take only -s. *Lärm* ('noise') and *Schirm* ('umbrella') take a genitive inflection of -s (Griesbach, 115). Nominalized words take -s as their genitive singular inflection: *Grüns* ('of green'); *Ichs* ('of the self'). Proper nouns take only -s: *Bachs* ('of Bach); *Manns* ('of Mann'). Borrowed words tend to take only -s: *Sports* ('of a sport'); *Golfs* ('of golf'). Borrowed words take -es when it is required for phonological reasons (des *Omnibusses* 'of the bus') or desired for stylistic reasons (Meister des *Sportes* 'master of the sport'). For phonological reasons, words which end in a vowel take only -s: *des Sees* ('of the sea') (Erben, 103). The same rule follows if there is a final orthographic h, because the final sound is still a vowel63: *der Schuh*, *des Schuhs* (Griesbach, 115).

For other phonological reasons, the -es inflection may be added. Most masculine and neuter nouns ending in s, β, x, tsch, z, or zt, whether they are monosyllabic or polysyllabic, take -es as their genitive inflection (Griesbach, 115):

63 A written but unpronounced h in a German word often marks vowel lengthening; thus, *Schuh* = [Ju:].
The exceptions to this rule are a few borrowed words, such as *Rhythmus* ('rhythm'), genitive singular *Rhythmus*.

Problems with inflection are often solved in modern German through use of *von* , 'of.' *Von* (+dative) was a possibility in Old High German, alongside the genitive (Behagel, 1902, 136). As soon as some inflectional endings had been lost, use of the unambiguous preposition *von* (also then written *fon* [Behagel, 1928, II, 62]) increased (Lockwood, 1968, 19). Eventually, the genitive came to occur mostly in literature, while *von* became more common in speech. Dialectal differences remain (Lockwood, 1968, 20).

Today, *von* is used where formation of a genitive may be difficult, as with proper names:

- die Mutter von Inge  `Inge's mother`
- die Gärten von Paris  `the gardens of Paris`\(^{64}\)

It is the preferred way to express the creator of a work (Griesbach, 250):

- Drama von Schiller  `drama by Schiller`

Place names especially may use *von* (Griesbach, 118):

- die Hauptstadt von Deutschland `the capital city of Germany`
- die Geschichte Deutschlands `the history of Germany`

\(^{64}\)Notably, attaching an ending to *Paris* is as awkward in English as it is in German. Is it *Paris's* or *Paris'?* A prepositional construction is more convenient in either language.
Plural nouns tend to use *von*, while the genitive continues to be used with singular nouns (Griesbach, 188). Nouns without articles are particularly apt to occur with *von* rather than a true genitive (Griesbach, 250):

Kleider von Kindern 'clothing of children'

Frequently, genitive pronouns are replaced with *von* (Feist, 278):

eine von denen 'one of those'

*Von* (+dative) is further popularly used colloquially, while the genitive is used in writing and formal language (Zorach, 30). A specific genitive meaning that has come to be expressed with *von* is the expression of material (Griesbach, 188):

ein Kleid von Seide 'a dress of silk'

Partitives also are formed with *von*, similar to modern English with *of* (Griesbach, 250):

eine Stadt von einer Million Einwohnern 'a city of one million residents'

Of course, another option in the expression of genitive relationships is the possessive dative.

Various regional dialects of German— as well as colloquial varieties of the standard dialect (Modern Standard German) -- allow (and, in instances where the genitive case has been lost, even require) possessive constructions with a dative possessor and a possessive Determiner/adjective initially in the possessed NP; in addition, the Determiner must agree in gender with the possessor (NP) (Janda, 1981, 73).

*Meinem Vater sein Haus* 'my father's house' is a very old construction, existing since Old High German (Lockwood, 1968, 21). It has been theorized that its origin was a sentence such as *Meinem Vater hat er sein Haus abgekauft* 'He (my father) bought for himself his house' (Behagel, 1902, 136); or *Er hat meinem Vater sein Haus genommen* 'He (my father) received for himself his house' (Feist, 278); or *Ich habe meinem
Vater sein Haus wiedergegeben 'I gave my father back his house' (Brinkmann, 64).

This way of replacing the genitive has always occurred only sporadically and in popular speech. Das Haus meines Vaters is more common than meinem Vater sein Haus. Occurring most seldom is a combination of the two forms: meines Bruder sein Haus (van Dam, 137).

Several formerly genitive constructions now appear as compound words or with adjectives in German. An obvious example of compounding is Geburtstag 'birthday,' from Geburt-s-tag (Erben, 104). In expressing relationships between people, however, the genitive is still required (Brinkmann, 75)65:

   ein Bruder meiner Mutter *Mutterbruder  'a brother of my mother's'
   ein Freund des Vaters *ein väterlicher Freund  'a friend of the father'

Use of the genitive has been generally declining and an analytic tendency has been likewise developing since Middle High German. This is a major trend in historical German syntax, and in Germanic syntax in general.

Meanings expressed by the genitive in German have always paralleled those in English. Just as in English, some uses of the German genitive have disappeared. Some fossilized constructions with the genitive exist. For example, the genitive remains in expressions which are always colloquial and not literary, for example die Pflege der Zähne 'the care of the teeth' (Lockwood, 1968, 20).

---

65 Some relationships between people can be expressed through compound words: Schwestersohn and Schwestertochter are dialectal words for Neffe 'nephew' and Nichte 'niece.'
Also as in English, it has become common to say "Wir gehen heute zu Meyers," ('We're going to the Meyers' today'), omitting "Haüs" ('house'), or the like (Feist, 277).

Non-governed uses of the genitive, such as the genitive of means, were common in older German (Behagel, 1928, I, 601),

\begin{quote}
   ein selich man luder stimmen antworten began
\end{quote}

but adverbial genitives ceased to be as productive in Middle High German and early modern German (Erben, 104). Today they appears in many fossilized forms, e.g. nachts 'nightly,' abends 'evenings,' tags 'daily'.

As in English, the former genitive -s is a marking for adverbs; these are "genitives" and not plurals. In English, such adverbs are easily analyzed as plurals, because plurals are marked with -s, but German can be used to prove that they are "genitives." The plurals of the German nouns are different: Nächte 'nights (pl.);' Abende 'evenings (pl.);' Tage 'days (pl.).'

There are formerly genitive adverbs of place (allerseits 'on all sides'), time (mittwochs 'Wednesdays'), and manner (allerdings 'to be sure'). The genitive of time expresses indefinite time (Asher, 36):

\begin{quote}
   Eines Tages werde ich mit, meiner Arbeit fertig.
   One day I will have finished my work.
\end{quote}

The formation of genitive adverbs underwent the same developments as that of other genitives. For example, jedesfalls of Early Modern High German became jedenfalls ('in any case').

Some antiquated or formal adverbs display older genitive endings. Examples include (van Dam, 442):

\begin{itemize}
   \item dermalen \quad 'presently' \quad (= of these times)
   \item einigermaßen \quad 'rather' \quad (= of some extent)
   \item mittlerweile \quad 'in the meantime' \quad (= of mean-while)
   \item derweilen \quad 'in the meantime' \quad (= of this while)
\end{itemize}
unnötigerweise 'unnecessarily' (← of unnecessary ways)
allerorten 'everywhere' (← of every place)

The use of the genitive to indicate contents has been modified and is limited in productivity (Behagel, 1902, 135):

<table>
<thead>
<tr>
<th>Middle High German</th>
<th>ein glas wazzers</th>
<th>ein stücke brotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modern German</td>
<td>ein Glas Wasser</td>
<td>ein Stück Brot</td>
</tr>
</tbody>
</table>

This is the old partitive, expressed with of in modern English. In modern German, the "genitive" noun is unmarked. It has been suggested that what was a nominative-genitive construction became a nominative-accusative construction (Feist, 276), but because there is no inflection on the German accusative noun itself, this hypothesis is untestable.

Evidence of how fixed a construction this is in modern German is that the first noun always appears in the singular (Brinkmann, 12):

\[
zwei Glas Kognak
\]

'two glasses of cognac'

The construction is identical to the analogous Dutch construction and also like the construction of some speakers of English, two foot of rope.

In the history of German, many verbs governed the genitive. Interestingly, the number of verbs governing the genitive increased from Old High German to Middle High German (Lockwood, 1968, 9). In the Middle Ages, both the genitive and the accusative were common as objective cases (Brinkmann, 65). Then, in the nineteenth century, well into the Modern High German period, as use of the genitive case was generally decreasing, the genitive case ceased to be heavily used as an objective case.

Verbs which had required the genitive were related by category of meaning. Verbs expressing loss or attainment of a goal governed the genitive; this was a Germanic development (Behagel, 1928, I, 568). *Missen* 'to miss' took the genitive until the Early Modern High German period.
Lessing wrote "eine Tragodie, die ihres Zweckes verfehlt" ('a tragedy that misses its purpose') (Lockwood, 1968, 11).

Verbs of asking, expecting, waiting, or wishing took a genitive object until Middle High German. Until Early Late High German, verbs of thinking, perceiving, and caring governed the genitive. "Ich denke der alten Zeit, der vorigen Jahre" ('I think about the old times, about the former years') wrote Luther (Lockwood, 1968, 11).

Verbs expressing eating/enjoyment or self-denial could take the genitive or the accusative until the eighteenth and nineteenth centuries. An example of this type of verb is *kost*en* (Old High German *koston*) 'to taste' (Behagel, 1928, I, 572). This type of verb's government of the genitive came from Indo-European (Behagel, 1928, I, 572). If verbs required objects with a partitive character, then they governed the genitive. Luther, in Early Modern High German, wrote "der Priester... soll des Bluts auf die Hörner des Altars tun" ('the priest should put some blood on the horns of the altar'). Today this would be expressed with a circumlocution, such as "der Priester streiche etwas von dem Blut an die Hörner des Altars" ('the priest spreads something of the blood on the horns of the altar') (Lockwood, 1968, 10).

Negative verbs also required the genitive: "wenn ich mit Menschen- und Engelzungen redete, und hätte der Liebe nicht" ('if I were to speak with human and angel tongues, and did not have the love') wrote Luther (Lockwood, 1968, 10). Verbs that were generally without an object required the genitive case when an object did occur (Lockwood, 1968, 11):

---

66 These sorts of verbs take a genitive object in Russian, too.

67 Again, these sorts of verbs take a genitive object in Russian. These may be characteristics of Indo-European!
Wir wollen nicht frohlocken seines Falles
'We do not want to exult about his situation'

The verbs which had required a genitive complement have for the most part begun to take accusative complements or a prepositional phrase. A small number of verbs still do take the genitive (Kufner, 43), although they are only relics. The genitive with verbs is not at all productive (Brinkmann, 403).

Verbs still governing the genitive include (Erben, 89):

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>gedenken</td>
<td>'think of'</td>
</tr>
<tr>
<td>bedürfen</td>
<td>'be in need of'</td>
</tr>
<tr>
<td>entraten</td>
<td>'be devoid of; dispense with'</td>
</tr>
<tr>
<td>s. entsinnen</td>
<td>'remember'</td>
</tr>
<tr>
<td>bemächtigen</td>
<td>'seize'</td>
</tr>
<tr>
<td>entäußern</td>
<td>'to relinquish'</td>
</tr>
</tbody>
</table>

The genitive complement of most verbs which govern the genitive is an impersonal object (Lederer, 531), but some of these can have a person as their genitive object (Lederer, 290).

Many verbs requiring the genitive are rarely used or are of an elevated, old, or literary style (Collins). Entsinnen alternately appears with the preposition an (+ accusative). In formal speech, other verbs may take the genitive instead of the accusative or a preposition (Erben, 89):

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>s. freuen (über)</td>
<td>'to be glad about'</td>
</tr>
<tr>
<td>genießen</td>
<td>'to enjoy/eat/drink'</td>
</tr>
<tr>
<td>begehren</td>
<td>'to desire'</td>
</tr>
<tr>
<td>vergessen</td>
<td>'to forget'</td>
</tr>
</tbody>
</table>

Interestingly, several reflexive verbs are persistent in the government of the genitive (Lederer, 289):

---

68Most verbs govern the accusative, and some govern the dative; the fewest verbs in Modern German govern the genitive.

92
s. annehmen 'look after'
   Er nimmt sich der Mutter an.
   'He looks after his mother.'

s. bedienen 'use'
   Sie bedient sich der Feder.
   'She uses the pen.'

s. befeießigen 'cultivate'
   Ich befeießige mich meines Geistes.
   'I cultivate my mind.'

s. bemächtigen 'seize'
   Der böse Prinz bemächtigt sich des Thrones.
   'The evil prince seizes the throne.'

s. enthalten 'abstain from'
   Sie enthält sich der Zigaretten.
   'She abstains from cigarettes.'

s. erbarmen 'pity'
   Der König erbarmt sich der armen Bauern.
   'The king pities the poor peasants.'

s. erfreuen 'enjoy'
   Das Kind erfreut sich der Süßigkeiten.
   'The child enjoys the candies.'

s. erinnern 'remember'
   Ich erinnere mich der Fakten.
   'I remember the facts.'

s. erwehren 'ward off; keep back'
   Er konnte sich kaum der Tränen erwehren.
   'He could hardly keep back his tears.'

s. rühmen 'boast about'
   Ich rühme mich meines Schreibens.
   'I boast about my writing.'

s. schämen 'be ashamed of'
   Ich schämme mich meiner Langatmigkeit.
   'I am ashamed of my long-windedness.'

s. vergewissern 'make sure of'
   Sie vergewissert sich der Auskunft.
   'She makes sure of the information.'

Many of the verbs which take the genitive case for their necessary complements still have such semantic qualities as enjoyment or thought. Genießen, s. erfreuen and s. erinnern are examples of verbs with such qualities in their meanings. The ability to make such semantic distinctions is quickly decreasing, but at one time the genitive allowed for more distinctions of meaning.
Some verbs have a different meaning when they have a genitive rather than an accusative object (Erben, 89). Some verb idioms, because they are fossilized expressions, have genitive complements (Lederer, 289):

- **sich eines Besseren besinnen**  
  'to think better of something'

- **seines Amtes walten**  
  'to carry out one's duties'

- **der Ruhe pflegen**  
  'to take a rest'

- **jeder Beschreibung spotten**  
  'to defy description'

- **jemanden keines Blickes würdigen**  
  'to not deign to look at'

Various legal terms still may take a genitive complement (Griesbach, 185), because they are part of a more formal, codified form of speech:

- **anklagen**  
  'accuse'

- **berauben**  
  'rob'

- **beschuldigen**  
  'accuse'

- **bezichtigen**  
  'accuse'

- **entbinden**  
  'release'

- **entheben**  
  'relieve'

- **entledigen**  
  'release'

- **entsetzen**  
  'relieve'

- **überführen**  
  'convict'

- **versichern**  
  'assure'

- **würdigen**  
  'deem worthy'

- **zeihen**  
  'accuse'

With such verbs, the genitive object is a concept (Lederer, 289):

> Er wurde des Diebstahls angeklagt.  
> 'He was accused of the theft.'

Such verbs are examples of verbs requiring two direct objects, one accusative and one genitive (Besch, 1546). The verb **beschuldigen** (+accusative +genitive) means to accuse (someone of something)
The genitive case, as one of two objects of a verb, is the most common way that the genitive still occurs as an objective case in German.

As the number of verbs governing the genitive has greatly lessened, so has the genitive generally ceased to be used as the complement of adjectives (Besch, 1546). Instead, genitive noun complements of adjectives have been replaced by prepositional phrases (Lockwood, 1968, 8) or accusative complements. Schiller wrote "des schönsten Anblicks wird mein Auge froh" ('because of the most beautiful view my eye became glad'), and today the adjective *froh* 'glad' requires, rather than the genitive, the preposition *über* 'about' (Lockwood, 1968, 8). Where a genitive noun went historically, the contemporary German puts an accusative noun in *du bist dein Geld wert* 'you are worth your money' (Lockwood, 1968, 5).

The following are other adjectives which govern the genitive. Some require prepositions in popular speech (Griesbach, 185):

- **bar** 'devoid of'
- **bedürftig** 'in need of'
- **bewußt/unbewußt** 'conscious/unconscious of'
- **eingedenk** 'mindful of'
- **fähig/unfähig (zu)** 'capable of'
- **gewahr** 'aware of'
- **gewärtig** 'prepared for'
- **gewiß** 'certain of'
- **kundig/unkundig** 'knowledgeable/unknowledgeable of'
- **mächtig** 'in control of'
- **müde (von)** 'tired of'
- **satt (von)** 'full of'
- **sicher** 'sure of'
- **teilhaftig (an)** 'blessed with'
- **überdrüssig** 'weary of'
- **verdächtig** 'suspected of'
- **verlustig** 'forfeiting'
- **voll (mit/von)** 'full of'
- **würdig/unwürdig** 'worthy/unworthy of'
Some of the same semantic characteristics found among verbs governing
the genitive, such as thought, desire, and emotion, are evident in the
meanings of these adjectives.

The genitive may be used as an adjectival complement when a
distinction of meaning is desired:

\[
\begin{align*}
\text{des Todes schuldig} & \quad \text{\textit{guilty of the death}} \\
\text{zehn Mark schuldig} & \quad \text{\textit{owing ten marks}}
\end{align*}
\]

The former example is qualitative; it describes the kind of guilt. The latter
example is quantitative; it tells how much is owed (Brinkmann, 137).

\textit{Schuldig} may also now occur with the preposition \textit{an} (Griesbach, 185).

Use of the genitive with adjectives or verbs in modern German often
sounds archaic (Behagel, 1902, 135):

\[
\text{du bist des Todes} \quad \text{\textit{you are a dead man, i.e of the death}}^{69}
\]

The genitive is still common in literature.

As in Old English, prepositions in German require objects in either
the accusative, dative, or genitive case. Often used prepositions that govern
the genitive are \textit{(an)statt} 'instead of,' \textit{trotz} 'despite,' \textit{während} 'during,'
and \textit{wegen} 'because of' (Asher, 34). Some other temporal prepositions, in
addition to \textit{während}, also govern the genitive: \textit{binnen} 'within',
\textit{gelegentlich} 'on the occasion of', and \textit{zeit} 'in' (Erben, 133). These three are
not especially common prepositions. Historically, more prepositions,
especially prepositions of time, governed the genitive (Behagel, 1928, II, 44).

In modern colloquial German, the use of the genitive case as an
object of a preposition, just as with other uses of the genitive, is declining.

A preposition followed by a noun in the genitive case is rare in the spoken

---

\(^{69}\)This is an example of the no longer productive predicative genitive. Another example is
from Luther: "selig sind, die reines Herzens sind" ('blessed are the pure of heart')
(Lockwood, 1968, 14).
language (Kufner, 47). The dative case is most commonly replacing the
genitive case after prepositions (Lederer, 288):

  wegen mir        'because of me'
trotz dem Regen   'in spite of the rain'
binnen kurzem     'shortly'

Use of the genitive in German has been decreasing through history,
but it is still definitely a case in the modern language, unlike English. Will
the genitive eventually die out in modern standard German, as in English?
Lockwood (1968, 21) says no, because of the strong tradition of literature in
German. In languages with a weak or no written tradition, optionality in
speech is often a precursor to loss; when the literary tradition is strong,
there is more resistance to change (Napoli, personal correspondence). Its
written tradition is one reason why modern English syntax tends towards
conservativism.
Conclusion

English made a shift from being the synthetic language of Old English to being the more analytic language that it is today. Other Low Germanic languages lean towards being analytic, but there are more vestiges of earlier genitive constructions in these languages. Modern High German remains synthetic, with a vital system of case, although its use of inflections has decreased somewhat.

The case system of English has decayed to the greatest degree among Western Germanic languages. Modern English nouns are never marked by case inflection, while its pronouns do have an objective case. English had the unique development of a syntactic particle from an inflectional morpheme.

The foremost evidence for the idea that 's is a syntactic particle, and no longer an inflectional morpheme, is that it attaches to noun phrases instead of nouns. This occurs whether the head noun is singular or plural. The particle 's apparently developed from the possessive dative with postulated possessive pronoun construction of earlier forms of English. This construction has been shared by all of the Western Germanic languages discussed in this paper.

Perhaps the English genitive inflectional morpheme did not simply drop out of the language, as the inflectional morphemes of all other cases did, but instead became reanalyzed, for another reason as well: the genitive's being a "special" case. It is the Indo-European case that typically acts as an adnominal attribute. When verbs and adjectives do govern the genitive in Germanic languages, such as historical English and modern German, they commonly share semantic features, such as the expression
of feelings or intellectual states, or syntactic features, such as the requirement of two objects.

The ability to make certain semantic distinctions by use of case has long been decreasing in Western Germanic languages, but predictably, other distinctions of meaning arise. In English, whether the possessor is a person or an impersonal object influences the expression of genitive relationships: 's for the former, of for the latter. In German, the preposition von is being chosen over the genitive case to express certain relationships. In Dutch, a syntactic distinction is sometimes being made: genitive with feminine and plural nouns, preposition with masculine and neuter nouns.

Languages constantly change. Case inflection in Indo-European languages has been decreasing through history. Usage of the genitive case in Western Germanic languages has changed. English no longer has any case inflection on its nouns, the extreme development among Western Germanic languages. Unfortunately, it is impossible to make predictions about future changes with perfect accuracy.
APPENDIX
### Old English Noun Inflection*

#### a-declension

(Masc. & Neuter)  
<table>
<thead>
<tr>
<th>Case</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominitive</td>
<td>-/-e</td>
<td>-as/-u+</td>
</tr>
<tr>
<td>Genitive</td>
<td>-es</td>
<td>-e</td>
</tr>
<tr>
<td>Dative</td>
<td>-e</td>
<td>-um</td>
</tr>
<tr>
<td>Accusative</td>
<td>-/-e</td>
<td>-as/-u</td>
</tr>
<tr>
<td>Instrumental</td>
<td>-e</td>
<td>-------</td>
</tr>
</tbody>
</table>

#### o-declension

(Feminine)  
<table>
<thead>
<tr>
<th>Case</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominitive</td>
<td>-a/-e</td>
<td>-------</td>
</tr>
<tr>
<td>Genitive</td>
<td>-a/-ena</td>
<td>-a/-ena</td>
</tr>
<tr>
<td>Dative</td>
<td>-e</td>
<td>-um</td>
</tr>
<tr>
<td>Accusative</td>
<td>-/-e</td>
<td>-a/-e</td>
</tr>
<tr>
<td>Instrumental</td>
<td>-------</td>
<td>-------</td>
</tr>
</tbody>
</table>

#### u-declension

(Masc. & Feminine)  
<table>
<thead>
<tr>
<th>Case</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominitive</td>
<td>-/-u</td>
<td>-a</td>
</tr>
<tr>
<td>Genitive</td>
<td>-e</td>
<td>-a/-ena</td>
</tr>
<tr>
<td>Dative</td>
<td>-e</td>
<td>-um</td>
</tr>
<tr>
<td>Accusative</td>
<td>-/-u/a</td>
<td>-/-e</td>
</tr>
<tr>
<td>Instrumental (masc.)</td>
<td>-a</td>
<td>-e</td>
</tr>
</tbody>
</table>

#### i-declension

(Masc. & Neuter & Feminine)  
<table>
<thead>
<tr>
<th>Case</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominitive</td>
<td>-a/-e</td>
<td>-a/-e</td>
</tr>
<tr>
<td>Genitive</td>
<td>-an/-an</td>
<td>-an/-ena</td>
</tr>
<tr>
<td>Dative</td>
<td>-an/-an</td>
<td>-an/-um</td>
</tr>
<tr>
<td>Accusative</td>
<td>-an/-an</td>
<td>-e/-an</td>
</tr>
<tr>
<td>Instrumental</td>
<td>-an</td>
<td>-an</td>
</tr>
</tbody>
</table>

#### weak declension

(Masc. & Feminine & Neuter)  
<table>
<thead>
<tr>
<th>Case</th>
<th>Singular</th>
<th>Feminine</th>
<th>Neuter</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominitive</td>
<td>-a</td>
<td>-e</td>
<td>-e</td>
<td>-an</td>
</tr>
<tr>
<td>Genitive</td>
<td>-an</td>
<td>-an</td>
<td>-an</td>
<td>-ena</td>
</tr>
<tr>
<td>Dative</td>
<td>-an</td>
<td>-an</td>
<td>-an</td>
<td>-um</td>
</tr>
<tr>
<td>Accusative</td>
<td>-an</td>
<td>-an</td>
<td>-e</td>
<td>-an</td>
</tr>
<tr>
<td>Instrumental</td>
<td>-an</td>
<td>-an</td>
<td>-------</td>
<td>-------</td>
</tr>
</tbody>
</table>

Some other declensions: nouns of familial relationship  
- little inflection; mostly syncope  
nouns with uninflected plurals

---

* Sources: Bourcier, pg. 88-89; March, pg. 37; Quirk (1957), pgs. 28-30.

+ -u with neuter
## Old English Adjective Inflection

<table>
<thead>
<tr>
<th></th>
<th>Definite (Weak)</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Singular</td>
<td>Fem. Neut.</td>
</tr>
<tr>
<td></td>
<td>Masc.</td>
<td>-e/-an</td>
</tr>
<tr>
<td>Nominitive</td>
<td>-a/-an</td>
<td>-an</td>
</tr>
<tr>
<td>Genitive</td>
<td>-an</td>
<td>-an/-an</td>
</tr>
<tr>
<td>Dative</td>
<td>-an</td>
<td>-an/-an</td>
</tr>
<tr>
<td>Accusative</td>
<td>-an/-an</td>
<td>-e/-an</td>
</tr>
<tr>
<td>Instrumental</td>
<td>-an</td>
<td>-an</td>
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<table>
<thead>
<tr>
<th></th>
<th>Indefinite (Strong)</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Masc.</td>
<td>-u/-o</td>
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<tr>
<td>Nominitive</td>
<td>-</td>
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</tr>
<tr>
<td>Genitive</td>
<td>-es</td>
<td>-ra/-es</td>
</tr>
<tr>
<td>Dative</td>
<td>-um/-an</td>
<td>-um/-an</td>
</tr>
<tr>
<td>Accusative</td>
<td>-ne</td>
<td>-um/-an</td>
</tr>
<tr>
<td>Instrumental</td>
<td>-e</td>
<td>-e</td>
</tr>
</tbody>
</table>

*Source: Quirk (1957), pgs. 31-33.*
Proto-Germanic

Proto-North Germanic  Proto-East Germanic  Proto-West Germanic

Proto-Low Germanic  Proto-High German

Proto-Anglo-Frisian  Old Saxon  Old High German

Old English  Old Frisian  Middle Dutch  Middle High German

Modern English  Modern Frisian  Modern High German  Yiddish

Sources: Bloomfield, pg. 121; notes taken in Introduction to Historical
Bibliography


