Swarthmore College

Works

Linguistics Faculty Works

Linguistics

1993

Syntax: Theory And Problems

Donna Jo Napoli

Swarthmore College, dnapoli1@swarthmore.edu

Follow this and additional works at: <https://works.swarthmore.edu/fac-linguistics>

Part of the [Linguistics Commons](#)

Let us know how access to these works benefits you

Recommended Citation

Donna Jo Napoli. (1993). "Syntax: Theory And Problems". *Syntax: Theory And Problems*.
<https://works.swarthmore.edu/fac-linguistics/59>

This work is brought to you for free by Swarthmore College Libraries' Works. It has been accepted for inclusion in Linguistics Faculty Works by an authorized administrator of Works. For more information, please contact myworks@swarthmore.edu.

1

Reflexives, Features of Nouns, Reference

Reflexives and Gender

Many sentences sound just fine. For example, no one would blink their eyes at:

- (1) Jack saved himself.

But not all sentences sound great. A native speaker of English might at first feel uncomfortable with

- (2) Jack saved herself.

The choice between *himself* and *herself* is the only difference between 1 and 2. And the only difference between these two *self* words is GENDER: *himself* is masculine; *herself* is feminine. So we are led to attribute the strangeness of 2 to the fact that *herself* is feminine (Tangent 1.1).

Why should gender matter here? To answer that we need to reconsider 2.

Notice that 2 need not be taken as a bad sentence. It only seems strange at first because it is out of context. If we assumed Jack were female, we could easily accept 2.

It appears, then, that the *self* word in 1 and 2 must be understood to have the same gender that Jack has. The typical term for these *self* words is REFLEXIVES. The other reflexives are *myself*, *ourselves*, *yourself*, *yourselves*, *itself*, *oneself*, and *themselves*.

We can say, then, that there is a compatibility requirement involving gender in 1 and 2. (And we will not state precisely at this point what this compatibility requirement is.)

Now the question is whether such a compatibility requirement is manifested in all sentences of English. But, surely, the answer is no. There are many sentences in

which the words for two elements that have real-world and/or linguistic gender appear in which no compatibility requirement is exhibited:

- (3) Jack found {my/our/your/her/his/its/their} lunch.

So something is triggering the compatibility requirement in 1 and 2. Is it *Jack* or the reflexive? We can quickly answer that this compatibility requirement is not a property of sentences about Jack, simply by pointing to 3, where no compatibility requirement is present. Furthermore, if we substitute *Ralph* for *Jack* in 1 and 2, we find the same possible readings:

- (4) Ralph saved himself.
Ralph saved herself.

Which reflexive we feel comfortable with in 4 depends on our understanding of the gender of the person named Ralph. Names like *Jack* and *Ralph* are typically men's. And our first reaction is to expect *himself*. We therefore expect that if we took a name that is typically a woman's, we would get the opposite first reactions. And we do.

- (5) Sue saved himself.
Sue saved herself.

Here our first reaction is to blink twice (or several times) at *himself*, but to accept *herself* without question. If someone utters the first sentence of 5, we are led to the conclusion that Sue is male.

Notice that *Jack*, *Ralph*, and *Sue*, being PROPER NOUNS (this term is explored in Star Problem 1.2), can conceivably bring to mind either males or females, since parents are free to name their children whatever they like (at least in those societies in which *Jack*, *Ralph*, and *Sue* are likely to be ordinary names). If the above account of the first reactions to the sentences in 1, 2, 4, and 5 is correct, then we predict that if, instead of *Jack*, *Ralph*, or *Sue*, we have a word or words that are not a proper name and if that word or those words have a gender LEXICALLY (that is, by the very meaning of the word as an item in our vocabulary) associated with it, then the compatibility requirement will make the wrong choice of reflexive yield a bad sentence. This prediction holds:

- (6) The boy saved himself.
*The boy saved herself.
(7) *The girl saved himself.
The girl saved herself.

(The ASTERISK before one of the sentences in both 6 and 7 indicates that these sentences are strange to a native speaker of English regardless of context.) The word *boy* has masculine gender lexically associated with it. And, as we predicted, *himself* is the only acceptable choice in 6. Likewise, the word *girl* forces the feminine gender, and *herself* is the only acceptable choice in 7. Examples 6 and 7 are important confirmation that a gender compatibility requirement exists and that it is triggered by the use of the reflexive.

Why should there be such a requirement on the gender of the reflexive in all the sentences above? To answer that question, we need to play with these examples a little more.

Reflexives and Number

Let us assume that Jack is male. Now compare 1 to 8:

- (8) *Jack saved themselves.

What can account for the failure of 8? If *themselves* were incompatible with *Jack* for gender here, we could see 8 as being in violation of the compatibility requirement that we have just been discussing above. But this is, in fact, not so: the reflexive *themselves* can easily be understood as masculine in other sentences, as in:

- (9) The boys saved themselves.

We know from 6 above that only a masculine reflexive can be associated with the word *boy*, and by extension we know that only a masculine reflexive can be associated with the word *boys*. So *themselves* in 9 is open to a masculine interpretation. Therefore, the failure of 8 is not due to gender incompatibility.

The relevant incompatibility in 8, as you may have recognized, is NUMBER: *themselves* is plural, but *Jack* is singular (Tangent 1.2). We might, then, jump immediately to the claim that there is a compatibility requirement on the number of the reflexive in all the sentences we have seen (parallel to the claim we made above that there is a compatibility requirement on the gender). In support of this claim, we can note that *themselves* is not acceptable in place of the reflexive in examples 1, 2, and 4–6:

- (10) *Ralph saved themselves.
 *Sue saved themselves.
 *The boy saved themselves.
 *The girl saved themselves.

And we predict that only *themselves* and not *himself* or *herself* will be acceptable in sentences parallel to those above with a plural word or words in place of *Jack*, *Ralph*, *Sue*, *the boy*, and *the girl*. This prediction holds:

- (11) *Jessie and Pete saved himself.
 Jessie and Pete saved themselves.
 *Sally and Maria saved herself.
 Sally and Maria saved themselves.
 *People will always save himself/herself.
 People will always save themselves.
 *All the children saved himself/herself.
 All the children saved themselves.

Why should there be such a requirement on the number of the reflexive in all the sentences above? Again, we need to delay trying to answer that question (just as we delayed trying to answer why the gender compatibility requirement should exist) until we look a little further.

Reflexives and Person

Let us take the following sentence spoken by a male:

(12) *I saved himself.

Contrast 12 to 1, repeated here for convenience:

(13) Jack saved himself.

Something is blocking 12, but it can be neither a compatibility requirement of gender nor one of number, since both *I* and *himself* are masculine and singular here. We find that we must talk about yet another feature in language: PERSON. (Please read Tangent 1.3 before continuing with the main text narrative.) In 12 *I* is first person, but *himself* is third person. So it looks like we have a compatibility requirement on person this time. And we want to ask why.

Features, Agreement, Sense, and Reference

But first let us consider what we know about FEATURES (this term is introduced in Tangent 1.1) at this point.

The three features of gender, number, and person are found in the PRONOMINAL system of English and, as you have learned or will learn by reading Tangents 1.1–1.3, they are determined by the relevant characteristics of the REFERENT (defined below) of the PRONOUN. For example, if the referent (the person spoken about) is a female, we will use *she*, *her*, or *hers*, and not *he* or *us* or *yours* or any other personal pronoun.

The PERSONAL PRONOUNS of English, then, have at least three features: person, number, and gender. In fact, one could argue that a pronoun such as *he* is a FEATURE BUNDLE containing at least three features (masculine, singular, third person). So what we have found out is that these three features of the feature bundle of the reflexive in the sentences we have looked at so far must be compatible with the feature bundle of some other item in the sentence.

Why? There are at least two possibilities. One is that this compatibility is the result of an obligatory linguistic process of matching or AGREEMENT. The other possibility is that this compatibility is due to something that the reflexive and the relevant other item in the sentence have in common.

The other relevant item in all the sentences above has been a NOUN PHRASE (hereafter NP). We categorize words grammatically according to whether they are NOUNS (hereafter N, such as *dog*), VERBS (hereafter V, such as *eat*), ADJECTIVES

(such as *true*), ADVERBS (such as *quickly*), or PREPOSITIONS (hereafter P, such as *into*). And we categorize STRINGS OF WORDS according to whether they are or are not PHRASAL LEVELS of any of these categories. (You will gain a working knowledge of categories and phrases by doing Problem Set 1.2, and a full discussion of these concepts is found in chapters 2 and 4.) For now let us say that an NP is a string of words made up of an N and all its paraphernalia. For example, *girl* is an N. But *the nice girl I met yesterday* is an NP. In Problem Set 1.1 you will find ways to distinguish between Ns and NPs SYNTACTICALLY and MORPHOLOGICALLY. The syntactic distinctions have to do with the distribution of Ns and NPs in larger phrases. The morphological distinctions have to do with word-formation processes (specifically, where certain prefixes, suffixes, and, in general, AFFIXES can attach; see Tangent 1.4). The SEMANTIC (or meaning) difference between Ns and NPs, however, is not as cleanly delineated, although it is certainly just as crucial for your understanding of linguistics. Consider the N *dog* in:

- (14) [A dog] came in.
 [Dogs] came in.
 [The dog] came in.
 [A dog] wouldn't ever come in.
 [No dog] would come in.
 [Those big dogs] came in.
 [Dogs] wouldn't ever come in.
 [Big dogs] came in.
 [No dogs] would come in.

All of these sentences have something in common. They are assigning the PROPERTY of coming in (or not coming in, or having already come in, etc.) to a set whose members are a certain kind of entity: that entity we call a dog. That is, the word *dog* carries a SENSE—animal, four-legged, hairy—and that sense is present in all sentences that make use of this word as an N. This is true even if in a particular sentence we negate part of the sense of the N:

- (15) That dog has only three legs.

The other words that belong to (or are paraphernalia of) the N, however, help us to pick out the particular set of entities with the sense of *dog* that we happen to be talking about in each sentence. When we hear *the dog*, we know that either a dog that is OLD INFORMATION to the discourse is being talked about or the class of all dogs (the GENERIC set) is being talked about. We see the old information use in 16 and the generic use in 17:

- (16) I saw a huge hound the other day. It was sniffing its way along the gutter. Suddenly *the dog* lunged. I ran, of course.
 (17) *The dog* is a four-legged mammal that has been around since prehistoric time.

We cannot use *the dog* to talk about a specific dog that is not old information to the discourse. That is, we cannot say something like:

(18) The dog smells yucky today.

unless we are assuming that the listener will know which dog we are talking about.

Similar remarks can be made about the other NPs above. For example, *no dog* in:

(19) No dog came in.

tells us that, of creatures with the sense of *dog*, we are saying none of them has the property of having come in.

The N, then, carries a sense, but it is the NP that has REFERENCE; it is the NP that picks out the entity being talked about. And the entity being talked about is called the REFERENT of the NP.

The notion of *reference* is not a simple one and there is much more that could be said about it. However, an in-depth study of semantic notions such as this one will not be found in this book, since our primary interest is syntax, and we are aiming to develop a theory of syntax in a reasonable number of pages.

Back to Agreement versus Reference as an Account of Our Compatibility Requirement

Returning to the fact that the features of person, number, and gender of a reflexive must be the same as those features of some other NP in the sentence, we can now restate the two possible explanations that we mentioned above for this fact.

First, there could be an agreement process between the relevant NP and the reflexive.

Second, the NP and the reflexive might be required to have the same referent. That is, a reflexive's features of person, number, and gender are determined by characteristics of its referent. Therefore, if these features of the reflexive are required to be the same as these features of some other NP, it is possible that this requirement reflects a more basic requirement: that the reflexive and the relevant other NP must have the same referent.

The first HYPOTHESIS amounts to saying that in a sentence like:

(20) Ralph likes himself.

an agreement process assures us that the features of gender, number, and person will be identical for *Ralph* and *himself*. This process could be one of COPYING these features from *Ralph* onto the feature bundle for the reflexive. Alternatively, the agreement process could be one of FILTERING out (that is, discarding) any reflexive with a feature bundle for person, number, and gender that does not match that of *Ralph*'s. And there are still other alternative ways this process might work.

The second hypothesis amounts to saying that in a sentence like 20, *Ralph* and *himself* are COREFERENTIAL (that is, they have the same referent): therefore they have the same features of person, number, and gender. To decide between these two possibilities, we need more information.

Case

There is one other feature found in the pronominal system of English: CASE. (Please read Tangent 1.5 before continuing with the main text narrative. You will not be able to follow the narrative without reading the tangent now.)

The form *he* can appear only in Subject position of TENSED CLAUSES. (You will study Subjects and clauses in Chapter 2 and you will look at tensed versus non-tensed clauses in chapter 3.) But the form *his* is used in other places, and *him* is used in still others:

- (21) He is nice. (cf. *Him is nice.)
 His father is nice. (cf. *Him father is nice.)
 I like him. (cf. *I like he.)

(Sentences like *His is nice* and *I like his* are good also. These are called ELLIPTICAL sentences; see Star Problem 1.5.) Unlike the other features of pronouns, however, the feature of Case is not determined by characteristics of the referent. Instead, Case is determined by syntactic factors that you will study in chapter 5.

Looking at sentences with reflexives, we find that the Case of the reflexive and the Case of the relevant other NP is not the same:

- (22) I like myself.

Here *I* is in the SUBJECTIVE or NOMINATIVE Case. But Subjective Case can occur only in the Subject position of tensed clauses, so *myself* is not in the Subjective Case in 22 since it is occurring in a position other than Subject of a tensed clause.

That the relevant NP and the reflexive in 22 do not have the same Case may not come as a surprise to you. You may have enough previous experience with grammar studies to expect that Subjects and Direct Objects of tensed clauses will not have the same Case. But, in fact, the simple fact that the relevant NP and the reflexive do not have the same Case is revealing and will help us to determine which of the hypotheses above is correct.

First, if the identity of the features of person, number, and gender between the reflexive and some other NP were the result of an agreement process, we might have expected the feature of Case to be identical also. In order to account for this lack of identity, we must put a stipulation on our agreement process excluding Case (either from the copying process or from the filtering process). This stipulation begs for a motivated explanation.

But if the identity of the features of person, number, and gender between the reflexive and some other NP is the result of coreference, we can have no expectation about the feature of Case. That is, the features of person, number, and gender are determined by characteristics of the referent, so coreferential items should have the same features of person, number, and gender. The feature of Case, on the other hand, is determined not by the referent but by syntactic factors pertinent to each particular NP in a particular sentence. Therefore we have no expectation that the Case of coreferential NPs should be the same. Their Case is totally independent of their reference.

Thus we will opt for the second hypothesis: the reflexive and the relevant other

NP have the same features of person, number, and gender because they are coreferential.

Notice that our conclusion has some welcome results. For one, we now have a truly explanatory account of the identity of these features, whereas with an agreement account we would be left with the question of why agreement should take place with reflexives but not with all pronominals.

Second, with our account we can see reflexives as having a referent and a bundle of features, some of which are dependent upon that referent. In this way, reflexives are similar to the personal pronouns, whose features of person, number, and gender are dependent upon their referent. For surely, it would be impossible to account for these features of personal pronouns by way of an agreement process. To see this, consider the situation in which you and I are looking out a window. We see a little girl on the curb of a busy street. You turn to me and say:

(23) She's going to get hit by a car.

Here there is no linguistic entity that the pronoun *she* might possibly be agreeing with: neither you nor I have said the word *girl*. Instead, the situation is such that you are sure I will be able to figure out who *she* refers to when you say it. The PRAGMATIC context (that is, the real-world situation in which the utterance takes place) is helping us here. But, let me repeat, there is no linguistic entity that the *she* could possibly be agreeing with. Thus agreement processes are not responsible for the features on NOMINALS (that is, noun-type things—you will learn more about them in Problem Set 1.1) in English, in general.

Anaphors and Binding

To this point we have learned that a reflexive must be coreferential with some other NP in the sentence, whereas pronouns need not be. This generalization predicts that reflexives cannot occur as the only nominal in a sentence, and, in fact, they usually cannot. (But we will look at some unusual uses of reflexives in Chapter 10.):

(24) *Himself left quickly.

We will call the required other NP the ANTECEDENT. And we will call items like reflexives, that require a LINGUISTIC ANTECEDENT (as opposed to a PRAGMATIC ANTECEDENT, as in the context for 24 above), ANAPHORS.

Actually, while we have just worked hard to establish that the notion of coreference is the key here, in fact coreference is only one of the various concrete examples (instantiations) of the relationship that must hold between an anaphor and its antecedent. Consider:

(25) Nobody truly hates himself.

The nominal *nobody* (like the NPs *no dog*, *nothing*, etc.) is not referential in any ordinary sense. Hence it may not make sense to speak of any forced coreference in 25.

Likewise, we find reflexive anaphors in examples like:

(26) Jack repeats himself.

Amoebae reproduce themselves continually.

Again, the semantic relationship between the reflexive and its antecedent is not one of coreference. In fact, it is difficult to state precisely what the semantic relationship is between the reflexive and its antecedent in the two examples in 26.

However, there is a generalization we can make for the anaphors in 25 and 26 and all other instances of anaphors above: their interpretation must be determined through association with a linguistic antecedent. We call this necessary dependence in interpretation a **BINDING** relationship, and we say that the antecedent **BINDS** the anaphor.

This is certainly not the whole story. We have recognized the existence of anaphors, a type of nominal that requires a linguistic antecedent. And we have recognized that this antecedent must be located somewhere in the same overall sentence that contains the anaphor. But we have not yet even approached the question of whether there are restrictions on where the anaphor and its antecedent may occur within the sentence with respect to each other. In fact, the data relevant to this question have been interpreted and analyzed in numerous ways, and the puzzle is still one of the more compelling issues in linguistic theory. This puzzle is the driving force behind this entire book, and piece by piece we will try to put the puzzle together.

Tangent 1.1: Gender

This tangent is best read after you have completed reading the main text narrative, since it uses terminology that is introduced in that narrative.

How do we know there is a gender difference between *himself* and *herself*? The difference between these words is in the first syllable, and this difference is paralleled by the fact that we have personal pronouns corresponding to these first syllables: *him* and *her*. *Him* is a **MASCULINE** pronoun; *her* is a **FEMININE** one. The question arises as to whether it would be sensible to internally analyze pronouns like *him* and *her* with respect to gender. That is, should we simply say that *him* is masculine, while *her* is feminine, or should we look inside these two words for some smaller part of each one that signals gender? (In technical terms, should we analyze them **MORPHOLOGICALLY**?)

Nouns can be classified as proper (that is, names, such as *Marion*, *Paul*, etc.) or **COMMON** (the run-of-the-mill noun which has a lexical sense, such as *cow*, *anger*, etc.). If we look at common nouns in English, we find that their morphological form does not usually distinguish them for gender. For example, there is no particular ending or beginning or middle to *mother* that tells us that this noun is feminine (compare to *father*, *brother*, *grocer*). However, there are a few handfuls of common nouns that are distinguished morphologically for gender. Included here are pairs like *steward/stewardess*, *lion/lioness*, and *duke/duchess*, which are witness to the fact that the suffix *-ess* carries feminine gender. (And pairs of this sort may well be

witness to a history of sexism in the English language and the societies in which it is spoken: consider who governs whom in the pair *governor/governess*, for example.)

In general, then, only third-person singular personal pronouns (number is discussed in Tangent 1.2 and person is discussed in Tangent 1.3) are lexically MARKED for gender. Other pronouns are not and most nouns are not.

Now the question is whether there is any motivation to analyze some subpart of *him* and *her* as carrying gender. For example, we might take the initial *h* to be a marker of something else and the final *-im* and *-er* to be markers of gender. The alternative would be to say that *him* is simply lexically marked as masculine, while *her* is lexically feminine. Which is the correct approach? The answer lies in how useful each analysis would be. Let us consider the other personal pronouns. In tables A–C the lexical items are arranged by number (singular versus plural; you will read about number in Tangent 1.2) and person (first, second, and third; you will read about person in Tangent 1.3).

A. (Partial) System of personal pronouns

	<i>Singular</i>	<i>Plural</i>
first person:	I, me	we, us
second person:	you	you (all)
third person:	he, she, it	they, them

There are other sets of pronominal elements, one of which is the POSSESSIVES. Some of these occur only with another nominal that they act as the genitive to

B. Possessives that occur with nominals

	<i>Singular</i>	<i>Plural</i>
first person:	my	our
second person:	your	our
third person:	his, her, its	their

Others occur without another nominal:

C. Isolated possessives

	<i>Singular</i>	<i>Plural</i>
first person:	mine	ours
second person:	yours	yours
third person:	his, hers, its	theirs

Here again, we see lexical gender marking, but only in *his*, *her*, *its*, and *hers*.

It is important to recognize that while the forms in Tables B and C are typically called possessives, they are not uniformly to be associated with a possessive sense. You will explore this question in part of Problem Set 1.1.

Now that we have seen these three sets of pronominals, we can return to the question of whether or not *-im* (in *him*) and *-er* (in *her*) are markers of gender. Nowhere else in this system do we find a final *-im* or *-er* acting as a gender marker. And nowhere else in this system do we find an initial *h* acting as a marker of something else. Thus the internal analysis of *him* and *her* does not productively carry over to the analysis of other personal pronouns. And, in fact, nowhere in the lexical system of English do we find such a correlation between these endings and gender.

Instead, if we were to claim that the *-im* of *him* was a masculine marker and the *-er* of *her* was a feminine marker, we would have a totally ad hoc analysis of these words. And this ad hoc analysis sheds no more light on the grammatical system as a whole than the analysis which takes the whole pronoun *him* to be masculine (without any specific internal part taken to carry the gender) and the whole pronoun *her* to be feminine.

We will analyze grammatical entities into smaller units only insofar as such analyses will prove perspicuous. That is, if an analysis offers insight into the grammatical system, it is worth considering. If two analyses are equally perspicuous (or not), we will choose the one that calls for less internal analysis. For this reason, we will not internally analyze *him* and *her* with respect to gender, but simply take *him* as a masculine pronoun and *her* as a feminine pronoun, where the entire word in each case tells us the gender.

The assumption that we just made is important. We said that if two analyses are equally perspicuous, we will choose the one that calls for less internal analysis. We will recognize subparts and classifications within groups only if there are data in the language whose analysis demands such recognition.

If we were looking at a language as it changes across time (in a DIACHRONIC study), we would consider a wider set of data than if we were looking at a language in a given time period (in a SYNCHRONIC study). This book uses a synchronic analysis of English syntax to teach linguistic methodology. For this reason, it is irrelevant to the present study whether or not *-im* signaled masculine and *-er* signaled feminine at some earlier stage of English. The relevant question for a synchronic study is whether *-im*, for example, carries such a message now. And, from our look at the rest of the pronominal system and at the LEXICON (the vocabulary) as a whole, we can say it does not.

Notice further that by requiring that there be linguistic data to justify every refinement of an analysis, we have taken a highly restrictive approach to the study of language. A philosopher might set up classifications of verbs, for example, based on any number of imaginable factors—such as whether the verbs deal with matters of theology or epistemology or any other field of study. But we could not do that unless verbs that deal with matters of theology, for example, exhibited some special linguistic behavior that justifies the classification. For instance, if all verbs that dealt with matters of theology were limited to appearing in the present tense, then there would be linguistic grounds upon which to set them up as a verb class. Or if all verbs that dealt with matters of theology had three syllables, we would have linguistic grounds upon which to set them up as a verb class. (So far as I know, of course, there are no linguistic grounds for setting up these verbs as a special class.)

Let us return to the matter of gender.

There is another gender represented on our list of the personal pronouns: NEUTER, as in *it*. But most of the pronouns are not lexically marked for gender: *I* can be understood as feminine or masculine, depending on the speaker; *you* can be understood as feminine or masculine, depending on the person spoken to; and so forth.

The fact that there is a correlation between gender and the object that the pronoun is referring to is evidence of the larger fact that in English gender is related to semantics in a rather straightforward way, which I will state below. Objects in the world are either male or female or neither. Language, however, does not necessarily use linguistic gender in a one-to-one correlation to real-world gender. In fact, I know of no language that has such a correlation. So, for example, in English the referent of *I* is definitely going to have a real-world gender, since (in normal situations) only people talk and people have gender. But *I* in English is not lexically marked for gender: it can be used to refer both to males and females. What we can see about English then is that if a given lexical item is marked for linguistic gender (such as the Ns *girl* and *stewardess* or the pronoun *it*), its gender will typically match real-world gender. (I say typically, because some speakers of English can use gender-marked pronouns to refer to entities that do not have a real-world gender, such as referring to a ship as *she*.) But linguistic gender in English need not be marked on every lexical item (such as the Ns *teacher* and *cook* or the pronoun *we*).

The only personal pronouns that are marked for gender are the third-person ones. That means that our personal-pronoun system is rather POOR (as opposed to RICH) in gender-marking.

The above comments are particular to English. There are other languages in which many words are lexically marked as having a given gender. For example, in Italian every N is either feminine or masculine. Often this gender corresponds to the real-world gender of the referent of the NP. Here are some examples using the masculine and feminine counterparts of the N meaning 'friend':

Carlo ha un amico. 'Carlo has a male friend.'

Carlo ha un'amica. 'Carlo has a female friend.'

But even objects that have no real-world gender are referred to by NPs that have a morphological gender:

Carlo ha il libro. 'Carlo has the book.'

Carlo ha la tavola. 'Carlo has the table.'

In these examples the NP *il libro* is morphologically marked as having masculine gender (by the *-o* ending) and the NP *la tavola* is morphologically marked (by the *-a* ending) as having feminine gender. And sometimes the morphological gender of an N will not necessarily match its real-world gender:

L'Italia ha la spia. 'Italy has the spy.'

Here the word *spia* is morphologically feminine whether we are using it to talk about a male or female spy.

Many languages linguistically mark their nouns and pronouns for gender, like Italian (and most of the languages of Europe). Some of them make use of just mas-

culine and feminine (like Italian), while some also use the neuter (like German, Latin, and Ancient Greek). Other languages either do not mark them or mark only a small subset of them, like English (and Japanese, Chinese, and many other languages). In the Bantu language family of southern Africa there may be as many as ten “genders”; nouns have different prefixes according to a variety of semantic and morphological factors, and the actual physiological gender of the referents of the animate NPs is often irrelevant.

If languages mark words in the lexicon for gender, the words most commonly marked are nominals (like nouns and pronouns). This fact, of course, suggests a fundamental relationship between linguistic gender and real-world gender, since it is nominals that have referents. However, as we have seen, no simple correlation between the two is apparent.

In sentences and phrases other words may be marked for gender, but typically this occurs by a process of agreement. For example, verbs can agree with other items. In some varieties of Arabic and other Semitic languages verbs in certain persons are distinguished for masculine versus feminine with regard to their Subject. In Nimboran (a language of New Guinea) a third-person verb is distinguished for masculine versus feminine with regard to the ACTOR. (Terms like *actor* and *agent* are discussed fully in chapter 3.) In Basque (spoken in the western Pyrenees of southern France and northern Spain) the verb is sometimes morphologically marked for the gender of the person addressed.

A much more common agreement process for gender is that between nominals and MODIFYING or PREDICATIVE adjectives. (We will be discussing modification and predication in chapter 3). For example, in Italian the word-root *alt-* means ‘tall,’ and it is not lexically marked for gender. But when it is used in a sentence or phrase it will have the morphological gender-marking appropriate for whatever nominal it modifies (that is, describes) or is predicated of (that is, assigns a property to):

Il mio amico è alto. ‘My male friend is tall.’
La mia amica è alta. ‘My female friend is tall.’

Even adjectives that in some sense have a real-world gender (such as *incinto* ‘pregnant’) undergo agreement processes:

Il sorcio è incinto. ‘The mouse is pregnant.’
La mia sorella è incinta. ‘My sister is pregnant.’

The N *sorcio* is masculine whether the mouse we’re talking about is male or female. And the adjective here agrees with the NP for gender.

While nominals are the typical types of words that bring to mind a real-world gender, we can see that some adjectives can do that, as well (as in the examples immediately above). Even some predicates do that (such as *partorire*—‘give birth to’), simply by virtue of their meaning and our knowledge of how the world works. (That is, only female creatures typically give birth.) Furthermore, there are languages in which some words or morphological forms bring to mind a given real-world gender not because of what they mean, but because of restrictions on or tendencies in their usage. Thus, for example, the use of the so-called beautification

honorific in Japanese, the *o*-prefix, suggests that the speaker is female simply by virtue of the fact that women use this prefix more often than men.

We say that gender is a feature that some words have. Features are gross (as opposed to refined or detailed) bits of information that are common to many words. For example, in the word *hag* we have the gross bit of information that the feature of feminine gender supplies us—that bit of information that is common to *girl* and *waitress* and *schoolmarm* and many other words. But we also have very detailed lexical information. That is, the word *hag* is used to describe an ugly female who is perhaps skinny with hanging skin and a long nose. A hag is worn out, maybe with discolored or missing teeth. A hag is not likely to burst into song.

Words can vary on how much information they give us. *Hag* is a HIGH-INFORMATION WORD. *Female* is a LOW-INFORMATION WORD. (In fact, it seems to contain no information other than the feature of gender.) And this range of information is common to words other than nominals, too. Thus *skip* is a high-information verb; *move* is a low-information verb.

When talking about features, then, we are talking about information that even our low-information Ns or NPs might carry.

Tangent 1.2: Number

Number is the term we use to talk about linguistic distinctions in quantity. Number in English is a distinction between one and more than one. We label one SINGULAR, and more than one PLURAL. Unlike gender, however, our number distinction is morphologically apparent on most pronominal elements. The chart below contains the personal pronouns and possessives (found in tables A–C of Tangent 1.1):

	<i>Singular</i>	<i>Plural</i>
first person:	I, me, my, mine	we, us, our, ours
second person:	you, your, yours	you, your, yours
third person:	he, him, his she, her, hers it, its	they, them, their, theirs

The only pronominals that are not lexically marked for number are *you*, *your*, and *yours*, the second person pronouns. (In Tangent 1.3 we discuss person.)

Actually, the situation is a bit more complex than that in ordinary usage today. Thus we find the pronouns *they*, *them*, *their*, and *theirs* used not just for plural, but for singular when their antecedent is an INDEFINITE:

Anybody who wants their paper back should tell me.

and in other situations in which the gender of the referent is unknown or varying and a speaker wants to avoid applying our rather uncomfortable prescriptivist rule of using *he*, *him*, and *his* for animate individuals:

If a person comes in and they want to see me, please tell them I've left for Panama.

It would be more accurate to say, then, that *they*, *them*, *their*, and *theirs* in ordinary speech are not marked for number. The choice of these pronouns in the instances described in this paragraph is undoubtedly related to the fact that they are also not marked for gender.

Like most pronouns, nouns are distinguished for number. An easily identifiable morphological ending is regularly employed:

I saw the boy.
versus: I saw the boys.

While the sounds /z/ (as in *boys*), /s/ (as in *cats*), and /əz/ (as in *glasses*) are the most common and the productive endings for plural nouns in English, we have small groups of nouns that exemplify patterns for plural formation that have been lost from English as PRODUCTIVE patterns:

foot : feet goose : geese

(A productive pattern is one that would be produced on newly coined words. In English if the new N *bloot* came into the language, we would make its plural be *bloots* not *bleet*. At an earlier stage of English, however, we might have chosen *bleet* as the plural.) We also have small groups of Ns that exhibit singular/plural pairs which have been borrowed in relative isolation from other languages:

cherub : cherubim phenomenon : phenomena

Cherub/cherubim is a Hebrew borrowing; *phenomenon/phenomena* is a Greek borrowing. Furthermore, we have some Ns that are lexically marked as having a given number. Thus *scissors* is always plural, whether we are referring to one pair or many. Again, as with gender, we find that there is no one-to-one correspondence between linguistic number and real-world number (although the correlation here is a lot cleaner in general than with gender).

Many languages mark number with some sort of morphological ending or set of endings, like English. Italian is one:

Ecco i miei amici.	'Here are my friends.'
Ecco il mio amico.	'Here is my male friend.'
Ecco le mie amiche.	'Here are my female friends.'
Ecco la mia amica.	'Here is my female friend.'

(In the plural if anyone in the group is a male, the masculine ending will be chosen.)

Number, like gender, is a feature—it is a gross bit of information. And, like gender, it can be realized on words other than nominals. Once more, however, this realization is typically due to agreement processes. For example, in Italian, adjectives are marked for number, but not lexically. So *american-* means 'American' and it can be used with a singular or plural nominal, where its ending will match that of the nominal:

Ecco il ragazzo americano.	'Here is the American boy.'
Ecco i ragazzi americani.	'Here are the American boys.'

Ecco la ragazza americana. 'Here is the American girl.'

Ecco le ragazze americane. 'Here are the American girls.'

Above we see that Italian adjectives can have two plural forms, differentiated by the feature of gender. (*Americani* is plural masculine; *americane* is plural feminine.)

Tensed verbs in Italian are also marked for number, in agreement with their Subject:

Il ragazzo parla lentamente.

'The boy speaks slowly.'

I ragazzi parlano lentamente.

'The boys speak slowly.'

In English we also have agreement between a tensed verb and its Subject (which we will explore in chapter 2), but it is phonetically distinct only in the simple present-tense third-person singular, regardless of aspect (and please wait until chapter 2 Tangent 2.1 for a discussion of tense and aspect):

The boy *leaves* his things all over the floor.

*The boy *leave* his things all over the floor.

The boys *leave* their things all over the floor.

*The boys *leaves* their things all over the floor.

The boy *has* left a mess.

*The boy *have* left a mess.

The boys *have* left a mess.

*The boys *has* left a mess.

Most languages use the singular-versus-plural distinction for their number feature on nominals. And many of these languages mark number morphologically on nominals, like Italian and English do. Most of the languages of Europe pattern this way.

Other languages use a different distinction. Ancient Greek and Sanskrit, for example, mark nominals (including pronouns) for the number distinctions of one, two, or more than two. The three classes are called singular, dual, and plural. While dual was used in the most ancient texts we have of Greek (including Homer), it is only rarely used in classical Greek, being limited for the most part to common pairs (such as yoked oxen or hands). Adjectives and verbs that agree with a dual nominal in these languages also have a dual form (although in Attic Greek we sometimes find plural adjectives agreeing with dual nominals). Furthermore, in some languages which distinguish only singular and plural in the nominal system, the three-way distinction of singular, dual, and plural shows up when a verb agrees with its Subject (as in Old English and residually in Russian). And there are even languages which have a four-way distinction in verbal agreement, adding in the trial (for precisely three) number (such as Kiwai, a language of New Guinea).

Tangent 1.3: Person

There are three persons in English. One is called *first person*, and it refers to the **SPEAKER**. It is seen in the pronominals here:

Singular: I, me, my, mine

Plural: we, us, our, ours

The next person is called *second*, and it refers to the person spoken to (often called the **HEARER**):

you, your, yours

In English the second person is not phonetically distinct for number. Some tables may represent the plural by having *you all* as the personal pronoun (as in table A of tangent 1.1). But there are two problems with this. One is that the possessives have no corresponding special forms for the plural. The other is that in some varieties of English *you all* can be used to refer to a singular hearer (as in those varieties of North Carolina speech that I am familiar with).

The last person is called *third*, and it refers to the person spoken about:

Singular: she, her, hers / he, him, his / it, its

Plural: they, them, their, theirs

The first row here is distinguished for both singular number and all three genders. In prescriptivist speech and in writing the second row is third-person plural with no gender distinction. But in much ordinary speech (see Tangent 1.2) the second row is third person with neither number nor gender distinction.

The full nouns of English, as contrasted to the pronominal system, are not morphologically distinguished for person (just as they are typically not morphologically distinguished for gender). Instead, every noun phrase that is not pronominal is treated by the grammar as being third person. For example, Subject-Verb Agreement (which we will discuss in chapter 2) with a full NP is always third person in English:

I love cotton candy.

*This woman love cotton candy.

This woman loves cotton candy.

The above fact points out that verbs, like pronominals, are marked for person in English. However, just as we saw (in Tangent 1.2) that number distinction on verbs is heard only in the third person of present tense verbs, we find that person distinction on verbs is heard only in the third person of present-tense verbs.

The number system of English is a simple one and is typical of many languages of the world. More elaborate systems are possible, however. For example, languages can morphologically distinguish a first person exclusive (where only the speaker or speakers are included) from a first-person inclusive (where both the speaker and the person spoken to are included).

Tangent 1.4: Affixes

The term *affix* may well be new to you, but the concept is not. Anyone who is reading this book has surely been told that the ending -s on:

cats

is the plural SUFFIX (as in Tangent 1.2, for example). And you are familiar with a wide range of other suffixes in English:

progressive -*ing*: walking

perfective -*ed*: walked

comparative -*er*: taller

superlative -*est*: tallest

diminutives: Annie, Jimmy, duckling, booklet

Suffixes are endings added onto a word. They are a type of MORPHEME, where morphemes are, generally speaking, the meaning-bearing building blocks of words. They are often classified as GRAMMATICAL or LEXICAL in nature. The grammatical affixes can be INFLECTIONAL or DERIVATIONAL. Inflectional affixes do not change the category of a word (an N stays an N; a V stays a V; etc.) but do make the form of the word appropriate to the context. Thus, if we have an NP with the quantifier *five*, the plural suffix will appear on the N:

I saw five cats.

Derivational affixes can change the category of a word. For example, there is a use of -*er* that can be added to a V to derive an N:

sleep, sleeper

walk, walker

Lexical affixes do not change the category of a word, nor do they make the form of the word appropriate to the context. Instead, they add some meaning to the word. Examples are the diminutives seen above. Another is -*ish*, meaning "sort of," as in:

blue, bluish

tall, tallish

Affixes added to the beginning of the word are called PREFIXES, as in:

kind, unkind

Many languages allow an affix internal to the ROOT of the word. These are called INFIXES. In English we do not have any widely productive infixes. However, in casual speech certain words (typically obscene) can be infixed into other words, as in:

fanfreakingtastic

(to use a milder variant of the more commonly found expression). Here *freaking* is infixed, rather than prefixed or suffixed, since it occurs internally to the root

fantastic. *Freaking* is not restricted to being only an infix; it can be a word all alone, or it can be prefixed to a root so long as another prefix precedes it:

That is absolutely freaking!
unfreakingbelievable

And some languages allow affixes that connect two words or other meaning-bearing units: INTERFIXES. Again in English it is difficult to find clear examples, although the *-o-* of words like the following may be one:

thermometer, speedometer, barometer

Suffixes, prefixes, infixes, and interfixes are lumped together into the group of morphemes called AFFIXES.

Words can consist of a single morpheme that is monosyllabic or polysyllabic:

dog
tomato

(If a word consists of a single morpheme, that morpheme cannot be an affix, by definition. It is a root.) Or words can be made of multiple morphemes, where at least one morpheme is considered a root:

unreasonableness
noncomplementary
son-in-law

The study of affixation is usually considered part of the study of word formation, which is also called MORPHOLOGY. Of course, there is more to morphology than just affixation. We can form words by adding roots together (as above in *son-in-law*, and in COMPOUND words like *teakettle*), as well as by adding affixes to roots. We can pile on multiple affixes and we can pile on multiple roots. And there are rules governing all the various combinations. One of the important points of debate in the literature concerns whether all word formation takes place in the lexicon or whether some is the result of syntactic processes. We will not enter into this debate in this book, however, since the reader needs to be familiar with both syntax and morphology in order to approach the debate intelligently.

Tangent 1.5: Case

English lexically marks its personal pronoun system for Case, where Case is associated with structural position. (We will follow modern convention and write *Case*, with a capital *C*, to distinguish it from other uses of the word *case* that do not pertain to linguistic terminology, as in: *In case he comes, please give him this note.*) Certain structural positions, called the GRAMMATICAL FUNCTIONS (GFs), have names. For now we can say in rough terms that Case correlates loosely to the Grammatical Function of the NP in the sentence. The GFs include SUBJECT, DIRECT OBJECT (DO), INDIRECT OBJECT (ID), and OBJECT OF A PREPOSITION (OP). In chapters 2 and 3 we will go into a discussion of GFs. For now, use whatever working

definition you have from your grade-school classes in English grammar. (The linguistic terms *Subject* and *Object*, like the linguistic term *Case*, will be capitalized in this book to distinguish them from their nonlinguistic-terminology counterparts—as in: *I enjoyed the subject of his lecture* and *The object of my affection is Jim.*) Here we will discuss Case in terms of the GFs. In chapter 5, however, you will learn a way to discuss Case matters without making reference to GFs.

We find that Subject position of tensed clauses is singled out and only the personal pronouns *I*, *we*, *you*, *she*, *he*, *it*, and *they* can occur here:

I'm leaving for Italy on the fifth.

*Me am leaving for Italy on the fifth.

The grammatical functions of DO, IO, and OP, however, if pronominal, are typically filled with the personal pronouns *me*, *us*, *you*, *her*, *him*, *it*, and *them*:

Ralph saw me.

*Ralph saw I.

Ralph gave a book to me./Ralph gave me a book.

*Ralph gave a book to I./*Ralph gave I a book.

Ralph went there with me.

*Ralph went there with I.

Because the grammatical functions split with regard to Case into Subject of tensed clauses versus all others (DO, IO, and OP), some people call the Case of the Subject **SUBJECTIVE** (hereafter *Subjective*, with a capital *S*, in contrast to the nontechnical term *subjective*) and the Case of all the others **OBJECTIVE** (hereafter *Objective*, with a capital *O*, in contrast to the nontechnical term *objective*).

Full NPs, as opposed to pronominals, are not distinguished for Subjective-versus-Objective Case in English. That is, we have no Ns or forms of any Ns that occur only in certain structural positions. Thus, regardless of the grammatical function of the NP *the dog*, for example, its morphological form does not change:

The dog barks.

I saw the dog.

I gave food to the dog./I gave the dog food.

I took a walk with the dog.

There is a third Case, however, that is morphologically distinguished for both pronominals and full NPs. That is called the **GENITIVE**. In Problem Set 1.1 below, you will consider certain properties of the genitive and you will learn there that no single semantic value can be assigned to the genitive, despite the fact that you have probably been told that the genitive expresses possession. For full NPs, it is regularly realized as 's, as in:

Sally's brother is nice.

I like Sally's brother.

This book is Sally's.

For pronominals, the form found in Table B of Tangent 1.1 occurs when it precedes other material within an NP:

{My/your/ her/his/ our/their} book isn't written yet.

And the form found in Table C of Tangent 1.1 occurs when the genitive pronominal stands in isolation:

That book is mine/yours/ hers/his/ ours/theirs.

Many languages are like English in having more audible Case distinctions on pronominals than on full NPs, including the Romance languages (that is, the languages descended from Latin, where full NPs exhibit no audible Case distinctions whatsoever, not even genitive). Other languages have an audibly rich Case system that extends over both pronominals and full NPs. For example, in Latin there are several audible Cases. Nominative is the Case for Subject. ACCUSATIVE is typically the Case for DO, although certain verbs may require a genitive or dative DO. DATIVE is typically the Case for IO. And OPs often have the ABLATIVE Case, although certain Ps may call for other Cases (such as accusative), sometimes with semantic distinctions attached to the Case choice. Furthermore, some Ns have a morphologically distinct Case for VOCATIVE uses (that is, direct address, as in the famous Latin line *Et tu, Brute*—'You, too, Brutus,' where *Brute* is the vocative form of *Brutus*). And Ns also have a genitive form. If you read that English has "nominative" Case, as well as "accusative" and "dative," you can be pretty sure that the labels here are simply borrowed from Latin and applied to mean the Case of the Subject, the Case of the DO, and the Case of the IO, respectively. But, in fact, there is no phonetic or morphological evidence that English distinguishes between the Cases of DO and IO (and OP, for that matter). Thus the Latin model is not a completely appropriate one for the English system. We will not adopt the Latin model in this book, but instead use only the terms *Subjective* (which is equivalent to *nominative*), *Objective* (which covers roughly *accusative*, *dative*, and *ablative*), and *genitive*.

While English, Latin, Greek, German, and many other languages give the Subject of tensed clauses one Case and assign another Case (or other Cases) to NPs in other positions, there are many languages that make a different split. They assign one Case to the Subjects of transitive verbs, and a different Case to the Subjects of intransitive verbs and the DOs of transitive verbs. Languages with this sort of Case system are called ERGATIVE and include Basque (spoken in the Pyrenees of Spain and southern France) and many native languages of Australia, New Zealand, and New Guinea, as well as North America.

Some languages have no audible Case system whatsoever, neither on the pronominals nor on the full NPs. Chinese is such a language. Some languages have no audible affixal Case system, but have a set of particles that in many ways give information similar to that supplied by Case endings in Indo-European languages (and some have argued that such particles are, in fact, Case-markers). Japanese is such a language.

We can now return to the text with some basic knowledge about Case systems.

***Problem Set 1.1: English Ns and NPs**

Later chapters assume that you will have done this problem set.

In the text we find the terms Noun (N) and Noun Phrase (NP), where an NP is an N (called the **HEAD** of the NP) and all its paraphernalia. (In chapter 4 we will look more closely at the various types of paraphernalia that can accompany an N within an NP. In this problem set and in Problem Set 1.2 you can gain a rudimentary knowledge of phrases in general.) An example of an N is:

dog

An example of an NP is:

a dog

or:

a large dog

where *dog* is the head of the NP *a dog* and of the NP *a large dog*.

Part 1

In the following sentences underline all the Ns once and all the NPs (the entire NPs) two times:

- (1) Colorless green ideas sleep furiously.
- (2) The people who left without helping have to be sick.
- (3) That boy's sister isn't telling the truth.

Part 2

Consider the morpheme (here the suffix) *s* in:

dogs (as in: I like dogs.)

some big dogs (as in: Some big dogs are friendly.)

scary dogs with big teeth (as in: I try to avoid scary dogs with big teeth.)

(a) Does this morpheme attach to the end of the head N or to the end of an NP? Justify your answer. (Be careful. If an NP ends in the head N and the *s* appears at the end, we cannot determine whether the *s* is attaching to the end of the head N or to the end of the entire NP. But, in fact, the *s* is attached to the end of only one of them. So make sure you look at examples where the end of the N and the end of the NP do not coincide.)

(b) Recall that the term "nominal" means a noun-type thing (either N or NP). I will use this term in this question so I will not give away the answer to (a) above.

What does this morpheme add to the semantics of a nominal? Give examples to support your answer. (This should be brief—a couple of sentences.)

(c) Do any categories other than nominal use this same morpheme (that is, the *s* of *cats*, for example) to mean the same thing as it does with a nominal? If so, which categories? (Consider only the categories of verb [such as *implicate*], adjective [such as *beautiful*], adverb [such as *contrapuntally*], and preposition [such as *under*], please.)

(d) Instead of *s* some nominals have an irregular form to get across the meaning that this morpheme *s* adds to the regular nominals we have seen above. For example, we find the pair:

goose geese

List at least five other nominals which have irregular forms (and list their irregular forms, too) where each of the nominals has a distinct way of getting across the meaning of this morpheme. (That is, give me five different types of irregularities—not five examples of the same type of irregularity. Do not be led astray. This question should take you only a few minutes to answer.)

Part 3

Consider the morpheme written as *'s* in:

the boy's book (as in: This is the boy's book.)

the boy who swam's book (as in: This is the boy who swam's book.)

(a) Does this morpheme attach at the end of an N or at the end of an NP? Justify your answer.

(b) What does this morpheme add to the semantics of a nominal? Consider nominals like:

Sally's brother

last night's party

the new kid's desk

Bill's lecture about health care

John's untimely death

Mary's photo of Bill that Jim owns

(Be careful. The answer to Part 2b above is short, but the answer to this question is much longer. Be sure to consider all these examples and any others that come to mind. Then, even if you have tons to say, limit your answer to Part 3b to one half of one page. Do not simply say that this morpheme always indicates possession. There is much more to it than that. In fact, possession often has nothing to do with the semantics here.)

Part 4

Given the answers to Parts 2 and 3 (if you did them the way I hoped), you now have a way to test whether the item you are looking at is an N or an NP. In the examples below underline the Ns with a wavy line and the NPs with two straight lines. (Be

careful: one of the issues you are being faced with here is whether or not something can be both an N and an NP at the same time.)

(4) Geese's beaks are powerful.

(5) Did Sally's little brothers ever show up?

(At this point you might want to go back and reconsider your answer to Part 1 above.)

Part 5

Can an NP ever consist of simply an N? (That is, can a single word be both an N and an NP at the same time?) If so, give an example of such an NP in a sentence. Then explain why you think this word is both an N and an NP at the same time. (Hint: Look back at what you did in Part 4.)

Part 6

Consider the CONJOINED phrase (where "conjoined" means connected by *and*):

big cats and dogs

This phrase is ambiguous. State the two readings. Then explain why these two readings emerge. (That is, what leads to the ambiguity? Please use what you learned from Parts 3–5 above to answer this.)

Part 7

Consider NPs that contain a head N. Is there anything which must precede such a head N in every single NP? If so, what? If not, give an example of an NP that begins with its head N and use that NP in a sentence.

Part 8

Consider NPs that contain a head N. Is there anything which must follow such a head N in every single NP? If not, give an example of an NP that ends with its head N and use that NP in a sentence.

Part 9

Is it possible for an NP not to contain a phonetically audible head N? That is, does the definition of NP really have to include a phonetically audible N? If you think it does, explain why you came to this conclusion. If you think it doesn't, give an example of such an NP and use it in a sentence. Explain why you think there is no N in your example NP. In answering this, be sure to consider these examples:

(6) The poor are always with us.

- (7) *The poors are always with us.
- (8) The poor's power is always marginal.

(Be careful here. If you claim that *poor* is a plural N in 6, you are claiming that it is irregular morphologically with regard to plural formation, since it does not use *s* (as in 7). But there are only a limited number of Ns in English that are irregular for their plural formation. (See your own answer to Part 2d above.) Ask yourself whether saying *poor* has an irregular plural is insightful or, in fact, misses a generalization. In thinking about this, you might consider examples like:

- (9) Here are all the books the new dean sent. Let's arrange them in her office by color, okay? The *blue* go on the top shelf. The *red* go on the bottom shelf. And let's put the *purple* on the in-between shelves.

If *poor* has an irregular plural, are you going to have to say that *blue* and *red* and *purple* do, too? Is that insightful?)

*Problem Set 1.2: English Clefts

The diagnostic developed in this problem set will be used repeatedly in later chapters of this book.

Sentences like:

- (1) It was Mary that my friend saw.
- (2) Who my friend saw was Mary.

are called CLEFT SENTENCES. The cleft in 1 is an *it*-cleft, and the cleft in 2 is a *wh*-cleft (because the one in 1 begins with *it* and the one in 2 begins with a question word: most question words in English begin with *wh*).

It is possible to invert the *wh*-cleft around the form of the verb *be*:

- (3) Mary was who my friend saw.

Let us take the liberty of calling the sentence in 3 a cleft sentence also. And let us call *Mary* the clefted item. This is the kind of cleft we will use in this exercise. So whenever I refer to cleft sentences below, I mean sentences with the form

- (4) item + form of the verb *be* + *wh*-word + clause

In the clause at the end of the cleft sentence, we have a "hole" that corresponds to the clefted item:

- (5) Mary is who my friend saw _____.

That is, we understand *saw* to have a Direct Object but the DO is missing. Furthermore, we understand the missing DO to be identical (in some sense that we have not defined yet) to *Mary*.

Do not make any assumptions about how we form cleft sentences, please. Just

note that all cleft sentences have a corresponding noncleft sentence. The noncleft sentence corresponding to (3) is:

- (6) My friend saw Mary.

Cleft sentences always contain a form of the COPULA (the verb *be*) with material both preceding and following (although not all sentences that contain a copula are cleft sentences). So examples like those in 7, which have fronted items and are called TOPICALIZATION sentences, are not cleft sentences:

- (7) Mary my friend saw.
Beans I like.
That guy Sue just swears you're going to like.

Please do not consider topicalization sentences as you do this problem set. Instead, stick to clefts of the type seen in 3.

There may be a number of restrictions on the various parts of cleft sentences. But the clefted item in examples like 3 at first looks as if it has no restrictions on it with regard to category, although many people are not perfectly comfortable with clefted verbal items:

- (8) Quickly is how she went.
Out is where Mary went.
Intelligent is what she is.
?Run is what Mary did.

Quickly is an adverb. *Out* is a preposition. *Intelligent* is an adjective. *Run* is a verb. And in 3 above we found *Mary*, which is an N.

Actually, there is an important restriction on the type of category that the clefted item can be. Consider the following examples, where the "hole" is underlined for your benefit:

- (9) The girl is who my friend saw _____.
(10) *Girl is who my friend saw the _____.
(11) Those exact dogs over there are what I'd like to buy _____.
(12) *Dogs are what I'd like to buy those exact _____ over there.

Part 1

If the clefted item is a nominal, is it an N or an NP? Support your answer with relevant data.

Part 2

In Problem Set 1.1, you learned that the genitive marker attaches to the end of an NP. Are the following sentences consistent with your answer to Part 1 of this problem set? Why or why not? (Do not worry about where the "hole" is in 13 and 14. That is not the point of this question.)

(13) Jack's is whose book I saw on the table.

(14) Your brother's is whose car needs washing.

(Not all speakers get 13 and 14 easily. If you do not, treat this question as though it were asking about a variety of English that you did not speak, and simply answer the question for the grammar of the variety in which 13 and 14 are good sentences.)

Part 3

Now consider prepositions and prepositional phrases. Ps are words like *in*, *out*, *after*, *with*, *to*, etc. PPs are made of a P plus its Object. Let us use the term PREPOSITIONAL ITEM as a cover term for both P and PP (just like "nominal" is a cover term for both N and NP). If the clefted item is a prepositional item, is it a P or a PP?

(15) Into the house is where she ran.

(16) *Into is where she ran the house.

Part 4

Are the following sentences consistent with your answer to Part 3? Why or why not?

(17) In is where she ran (not out).

(18) Up is where Dukakis hoped to be headed.

(Hint: Recall from Problem Set 1.1 that an NP can consist of simply an N sometimes, as in "*Dogs' ears can be floppy.*" This fact will, I hope, open your mind to the possibilities with prepositional items.)

Part 5

A word like *pretty* is an adjective. A string like *very pretty* is an adjective phrase (or AdjP).

A word like *quickly* is an adverb. A string like *too quickly* is an adverb phrase (or AdvP).

A word like *eat* is a verb. A string like *eat the pizza* is a VP.

Give a cleft sentence in which the clefted item is adjectival. Is it Adj or AdjP that we find here? Support your answer. (Hint: Look at the contrast in 9 versus 10, 11 versus 12, and 15 versus 16. Use that as a model.)

Do the same for adverbials that have the category Adv or AdvP.

Do the same for VERBALS (where the term "verbals" covers V and VP).

Part 6

What is the general restriction on the category of the clefted item of a cleft sentence? (Do not talk about specific categories, like N, V, etc. Just state what type of category this initial item must be. Try to think in terms of heads versus phrases.)

Part 7

Looking back at 8, what category does the clefted item in each sentence belong to? Be sure to make use of the answer you just gave in Part 6 and to consider whether the clefted items are heads or phrases.

Part 8

Is the string of words *up the ladder* a PP in 19?

- (19) She climbed up the ladder.

Give an argument using what you know about the clefted item of cleft-sentences to support your answer.

Part 9

Is the string of words *up the number* a PP in 20?

- (20) She looked up the number.

Give an argument to support your answer.

Part 10

Some languages have postpositions (like Japanese). Here is an example, just for interest's sake:

Toshio-ga [Hitomi-to] [kuruma-de] [Kobe-ni] itta.
 Toshio-SUBJ Hitomi with car by Kobe to went
 'Toshio went to Kobe by car with Hitomi.'

(The *ga* following *Toshio* tells us that *Toshio* is the Subject of this sentence.)

Some languages, including all the Romance languages, have only prepositions (and no postpositions). Here is an Italian example:

Daria andrà [con Tonino] [al negozio] [dopo cena].
 'Daria will go with Tonino to the store after dinner.'

And some have both. Included here are Dutch and German. The following examples are from Dutch.

Prepositional Phrase:

Joop heeft [aan haar] nog vaak gedacht.
 Joop has of her often thought
 'Joop often thought about her.'

Postpositional Phrase:

Kom mee, [het bos in].
 come with, the forest into
 'Come along, into the forest.'

Now the question for you is whether English has any postpositional phrases. A potential candidate is *the number up* in:

- (21) I can look the number up.

Is the string of words *the number up* a PP in 21 (where PP stands for postpositional phrase here)? Give an argument to support your answer.

Part 11

Compare 20 to 21. Please list three other combinations besides *look . . . up* that can have this same kind of varying word order. (This is not complicated. It should not take you more than a few minutes to find them.)

Part 12

Consider the word *right* with the sense of “directly,” as in:

- (22) Mary went right into the house.
Mary went right in.

We cannot say (with the sense of “directly”):

- (23) *Mary right sat down.
*Mary bought right a pizza.
*Mary is right smart.
*Mary ran right fast.

(Actually, some varieties of English can accept the final two sentences of 23. Please, if you can do this, answer the question for those varieties of English that mark all the sentences in 23 as ungrammatical. Then, as a separate exercise, you can discuss how your variety of English differs from the variety of English that rejects these sentences.)

Assume that *right* introduces only a phrasal level (that is, an XP, not just an X). (We have not justified this—that is why it is an assumption. At some later point in your syntactic studies you might try to prove this assumption.)

What (phrasal) category does *right* introduce?

Part 13

Is the single word *up* of 20 a PP? (Be careful to look at 20, not at 21!) Give two arguments to support your answer. (Please use what you learned in Parts 3 and 12 above. You use your clefting test and your *right*-test here.)

Part 14

What category do you think *up* is in 20? Why? Keep your discussion short. A couple of sentences should do. But the maximum limit is one half of one side of a page.

Problem Set 1.3: Italian Agreement

This problem set is on Italian and it is your first problem set on a language other than English, but it will not be your last. All the information you need to know in order to do this problem set is included. Relax and try it. None of the concepts presented are new to you.

Part 1

The color words in Italian typically show a morphological ending that indicates agreement with the item the color word modifies inside the noun phrase, as in:

(1)	la	macchina	nera	'the black car'
	the car	(fs)	black (fs)	
	le	macchine	nere	'the black cars'
	the car	(fp)	black (fp)	
	il	piatto	nero	'the black plate'
	the plate	(ms)	black (ms)	
	i	piatti	neri	'the black plates'
	the plate	(mp)	black (mp)	

(Note that fs = feminine singular, fp = feminine plural, ms = masculine singular, mp = masculine plural.) In this way, the color word in 1 behaves like an ordinary adjective of Italian.

On the basis of 1, for what features do the color words agree with the noun they modify in Italian? What are the four morphological endings seen in the color word above and what are the features associated with these endings?

Part 2

A few color words, however, are invariable. One type is exemplified in:

(2)	la	macchina	rosa	'the pink car'
	le	macchine	rosa	'the pink cars'
	il	piatto	rosa	'the pink plate'
	i	piatti	rosa	'the pink plates'

Rosa in Italian has more than one meaning. Just on the basis of your knowledge of English, suggest a second meaning for *rosa* beside 'pink.' Consider the semantic and pragmatic relationships between these two meanings for *rosa*. Why do you think *rosa* is invariable for agreement? Guess at another color word that might possibly be invariable, based solely on your knowledge of color words in English.

Part 3

A second type of color word that is invariable for agreement is exemplified in:

- (3) la macchina blù 'the blue car'
- le macchine blù 'the blue cars'
- il piatto blù 'the blue plate'
- i piatti blù 'the blue plates'

The accent marks in 3 indicate stress on the final vowel. Consider the four morphological endings you came up with in Part 1. Now consider the root for the word which means 'black' to which these endings were attached in 1. If the color word here were to make use of these endings in agreement processes, what morphological questions would arise? (Hint: Consider what the root for the word that means 'blue' might be. How does it differ from the root for 'black' in Part 1? Could this difference be the source of the impossibility of adding the agreement suffix in 3? You don't have much to go on here, so just make a stab at it.)

Part 4

Tensed verbs agree with their Subjects in Italian. Consider:

- (4) Io canto.
'I sing.'
- (5) Tu canti.
'You sing.'
- (6) Il ragazzo canta.
'The boy sings.'
- (7) La ragazza canta.
'The girl sings.'
- (8) Noi cantiamo.
'We sing.'
- (9) Voi cantate.
'You (plural) sing.'
- (10) I ragazzi cantano.
'The boys sing.'
- (11) Le ragazze cantano.
'The girls sing.'

Whether the speaker is male or female, whether the person spoken to is male or female, 4, 5, 8, and 9 are all grammatical. While 5 and 9 have the same translation in English, the difference in Italian is that 5 is understood to say that a single person sings, whereas 9 is understood to say that more than one person sings.

On the basis of 4–11, for what features do verbs agree with their Subjects in Italian?

(Note: While 4, 5, 8, and 9 are grammatical, pronominal subjects in Italian are quite often omitted entirely. Thus 4, 5, 8, and 9 would also be grammatical if they consisted of the verb alone. In fact, 6, 7, 10, and 11, would also be grammatical if they consisted of the verb alone. But in that case they would be interpreted the same way as sentences with an expressed pronominal Subject. You will look more closely at this aspect of Italian grammar in Problem Set 2.5 of chapter 2.)

Part 5

As I said above in Part 1, the agreement phenomenon exemplified in 1 is typical of adjectives in Italian. Compare, then, the features for which adjectives agree in Italian (which you discovered in Part 1) with the features for which verbs agree (which you discovered in Part 4). What feature is reflected in both agreement processes? What feature is reflected in only adjective agreement? What feature is reflected in only verb agreement?

If you are doing this problem set as part of a course, you might want to discuss in class the differences you find in these two agreement processes. If not, be sure to read the Tangent 2.3 on agreement in chapter 2 when you get to it.

Problem Set 1.4: Japanese Word Order and Particles

This problem set is on Japanese. It has only one conceptual point. If you see that point, you will be able to answer the question here in a sentence or two.

Please read the caveats concerning the Japanese problem sets found in the introduction to this book before starting.

Consider these English sentences:

- (1) Jack gave Pete Sally.
Jack gave Sally Pete.
Pete gave Jack Sally.
Pete gave Sally Jack.
Sally gave Pete Jack.
Sally gave Jack Pete.

In order to allow for a good context for these sentences, you may have to think of Sally, Pete, and Jack alternately as pets, perhaps. That is, in the first sentence Jack is giving Pete a pet named Sally; in the second sentence Jack is giving Sally a pet named Pete; and so on. These sentences do not mean the same thing.

Now consider the Japanese sentences:

- (2) Toshio-ga Hitomi-ni Hanako-o yatta.
Toshio-ga Hanako-o Hitomi-ni yatta.
Hitomi-ni Toshio-ga Hanako-o yatta.

Hitomi-ni Hanako-o Toshio-ga yatta.
 Hanako-o Toshio-ga Hitomi-ni yatta.
 Hanako-o Hitomi-ni Toshio-ga yatta.
 'Toshio gave Hanako to Hitomi.'

All of these sentences can be used to describe the situation in which Toshio gave Hanako to Hitomi, as the translation at the end of 2 shows (although some of them are more peculiar than others and call for certain restrictions on the contexts in which they can be appropriately used). Again, in order to have a pragmatically suitable situation, we might allow *Hanako* to be the name of a pet in 2.

The important point for us in this problem set is that 2 contrasts sharply with 1. In 1, all the sentences were sharply distinct in meaning. They described different situations and they would be true in different situations. But the sentences in 2 are very similar in meaning. They describe the same situation and they are true in the same situations. (The differences in meaning are of a subtle sort, having to do with issues such as what is old and new information in the sentence, where our sympathies lie, and other factors of the discourse.)

In both 1 and 2 the verbs remained in a fixed position, but the noun phrases were arranged differently from sentence to sentence. Rearranging the order of the NPs in English resulted in drastic changes for the semantics. But rearranging the order of the NPs in Japanese did not.

Why?

(Hint: Reread Tangent 1.5 on Case. Then guess at the function of the PARTICLES *ga*, *o*, and *ni* in Japanese.)

(Note: You are led to a particular answer here that not all scholars of Japanese would agree with. As you go through this book, you will do many problem sets on Japanese. After you have finished the book, you may want to return to this question and see if you can recognize why the answer you gave now is controversial.)

Star Problem 1.1

Consider the pronoun *one*, as in:

- (1) You have a mean brother and I have a nice one.

Does *one* belong to the category N or to the category NP? Justify your answer. (You will need to make up other sentences with *one* to make your point. Be sure that in the sentences you make up you are using the pronoun *one* and not the numeral *one* in front of an N (as in *one dog*).)

Once you have your answer, then consider examples like:

- (2) You have a mean older brother and I have a nice one.

If an N consists of simply a head N and an NP consists of the entire phrase (that is, the head N plus *all* its paraphernalia), what problem does 2 present for the analysis of the category of the word *one*? How might we try to resolve this problem? (We return to issues involving *one* in Tangent 8.1.)

Star Problem 1.2

We have contrasted words like *Sally*, which are proper nouns, with words like *chair*, which are common nouns. Basically, a proper noun is used as a name; it has a referent. But a common noun has a sense only, and is related to a referent only by way of being the head of an NP.

Give a sentence in which *Sally* appears as a head N for an NP that contains at least one other word, as well.

Is a so-called proper noun like *Sally* in a sentence like:

- (1) I invited Sally.

best analyzed as an N that happens to fill the NP, or best analyzed as an NP for which no internal analysis (that is, no breakdown into head N plus paraphernalia) makes sense? In thinking about this you may want to contrast examples like 2 to those like 3:

- (2) The Sally in your class likes peanut butter.
I've never met a Sally who liked her own name.
- (3) Poor Sally left town in a huff.
Have you met (my) darling Sally yet?

Star Problem 1.3

Given what you know about common and proper nouns from Star Problem 1.2, are the personal pronouns common or proper nouns in their ordinary uses? Give an example in which a personal pronoun is used in an extraordinary way. (Some people have claimed that the term "pronoun" is a misnomer. Now you know why.)

Star Problem 1.4

The morphological distinction between *my* and *mine* is not common to their counterparts in most languages. Discuss the distribution of *my* versus *mine*. Why do we call *my* an adjectival and *mine* a nominal?

Star Problem 1.5

In Part 9 of Problem Set 1.1 you were asked to consider NPs such as:

- (1) Thank you for carrying in all my toy animals. Please put *the breakable* over here and the *unbreakable* on the floor.

Discuss the contrast between the sense of *breakable* above and the sense of *breakables* in:

- (2) Do you have any breakables in this box?

The use of *breakable* in 1 is elliptical. In elliptical phrases we find that there is a syntactic "hole," so to speak: something is missing syntactically. In 1 the head N

for the NP *the breakable* is missing. There are various possibilities for the analysis of an elliptical NP. We might say that there is no head N in this NP, either as a syntactic reality or as a semantic reality. This is the most concrete analysis.

We might, alternatively, say that there is a head N here, but that it is phonetically empty (that is, it is inaudible). In this analysis, we have at least two options. We could claim that syntactically there is no head N in this NP, but in the semantics we have a phonetically empty head N, or we could say that in both the syntax and the semantics we have a phonetically empty head N. Both of these approaches are abstract in calling for a semantic and/or syntactic entity that has no phonetic counterpart.

The crucial issue for us, as students of syntax, is whether there is a head N in the syntax or not (where if there is a head N, it is, of course, phonetically empty). We will not here go into the question of whether or not there is a head N in the semantics.

Now compare the use of *mine* in:

- (3) That book is mine.
- (4) Oh, you finally brought in the books. Please put mine over here and Bill's over there.

Number 3 does not contain any elliptical phrases; there is no syntactic hole in 3. But 4 contains the elliptical phrases *mine* and *Bill's*. Look back at your discussion in Star Problem 1.4 of the distribution of *my* and *mine*. Notice that *mine* but not *my* appears in elliptical phrases, as we see in 4 contrasted to:

- (5) *Please put my over there.

How does the fact that only *mine* but not *my* occurs in elliptical NPs bear on the issue of whether or not there is in the syntax a phonetically empty head N in elliptical NPs?

Overview

In chapter 1 we learned that anaphors (such as reflexives in English) must be bound. This fact will eventually be incorporated into Condition A of the *binding theory* (BT).

We also learned that pronouns need not be bound. This fact will eventually be incorporated into Condition B of BT.

We have recognized that words fall into categories and that strings of words group together into phrases. These facts will help us build the X-Bar Theory of chapter 4.

We learned that English has a Case system for its nominals. We will piece together Case Theory in chapter 5.