

THIRTEENTH  
EDITION

# LANGUAGE FILES

# Materials for an Introduction to Language and Linguistics

Department of  
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THE OHIO STATE UNIVERSITY

**LANGUAGE FILES**

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**THIRTEENTH EDITION**

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# Language Files

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## Materials for an Introduction to Language and Linguistics

*Thirteenth Edition*

***Editors***

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**Department of Linguistics  
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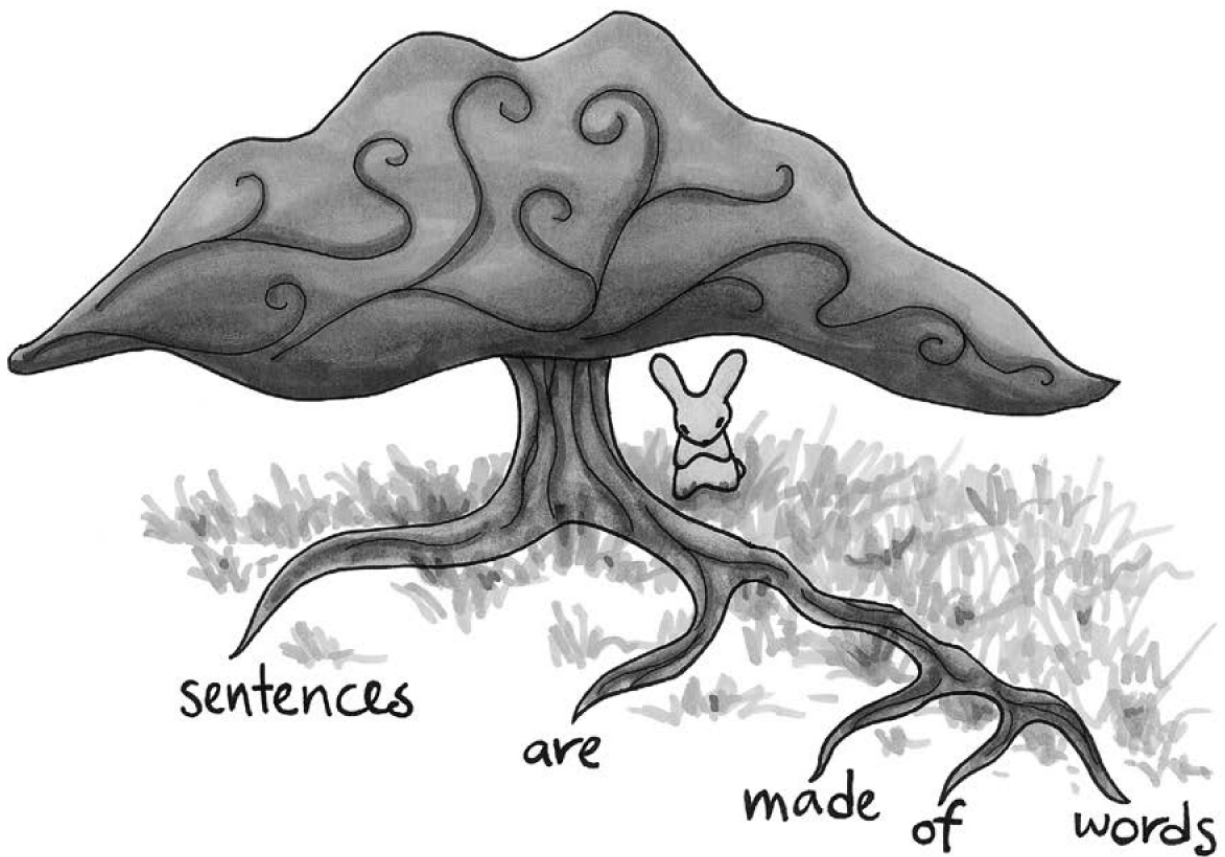
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# CHAPTER

## 5

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### Syntax





# FILE 5.0

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## What Is Syntax?

As a component of mental grammar, **syntax** has to do with how sentences and other phrases can be constructed out of smaller phrases and words. As a native speaker of some language, you know which strings of words correspond to sentences in your language, and which don't, because you know what the permissible syntactic combinations of words are in your language. Syntax is also a name for the subfield of linguistics that studies this component of grammar.

The construction of sentences is not a trivial matter. If you take a moment to consider it, you will realize that it isn't possible to take just any bunch of English words, jumble them together in random order, and get an actual sentence of English. Only certain combinations of words actually count as sentences of English—and the same is true of all natural languages.

But how do you know which combinations of words are sentences and which are not? What kinds of factors determine which combinations are possible? How are languages similar and how do they differ with respect to sentence construction? These are the kinds of questions that syntacticians try to answer and that you'll become familiar with in this file.

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### 5.1 Basic Ideas of Syntax

*Introduces the concept of linguistic expressions and grammaticality, as well as the idea that there are syntactic properties independent of meaning.*

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## 5.3 Syntactic Constituency

*Introduces the notion of syntactic constituents and presents several general constituency tests.*

## 5.4 Syntactic Categories

*Explains the concept of syntactic category and syntactic distribution and introduces several major syntactic categories in English.*

## 5.5 Constructing a Grammar

*Walks the reader through constructing a simple descriptive grammar of English.*

## 5.6 Practice

*Provides exercises, discussion questions, activities, and further readings related to syntax.*

# FILE 5.1

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## Basic Ideas of Syntax

### 5.1.1 (Un)Grammaticality

Syntax is the component of grammar that deals with how words and phrases are combined into larger phrases. Words (e.g., *Bob*, *cake*, *out*) and phrases (e.g., *out the window*, *my cake*, *Bob ate my cake*) are all **linguistic expressions**. A linguistic expression is just a piece of language—it has a certain form (e.g., what it sounds like), a certain meaning, and, most relevantly, some syntactic properties. These syntactic properties determine how the expression can combine with others. Thus, syntax is broadly concerned with how expressions combine with one another to form larger expressions. Some combinations are successful; others are not. For example, we can all agree that *Sally*, *Bob*, and *likes* are English expressions. Presumably, we can also agree that (1a) is a sentence of English while (1b) is not.

- (1) a. Sally likes Bob.
- b. \*Likes Bob Sally.

We can ask, then, why it is that arranging three English expressions in one way results in a sentence (see (1a)), while combining the same expressions in a different way does not (see (1b)). When a string of words really does form a sentence (or phrase) of some language, we say it is **grammatical** in that language. If some string of words does not form a sentence, we call it **ungrammatical** and mark it with the symbol \*, as in (1b) above (see also Section 1.2.3). When an expression is grammatical, we say that it is

syntactically well-formed. If it is ungrammatical, we refer to it as syntactically ill-formed.

The native speakers of a given language are uniquely qualified to decide whether a string of words truly forms a sentence of their native language, that is, to make a **grammaticality judgment**. A grammaticality judgment is a reflection of speakers' mental grammar, and not a test of their conscious knowledge of the prescriptive rules (see Files 1.2 and 1.3). So, although the sentence *I'm going to quickly grab a coffee before class* violates a prescriptive rule ("do not split infinitives!"), we nonetheless consider it grammatical. When making a grammaticality judgment about some string of words, ask yourself whether you could utter the string in question, whether you have ever heard it uttered, and whether you know or can imagine other native speakers of the language who would utter it. Do not worry about whether the string in question complies with prescriptive rules.

### 5.1.2 The Relationship between Syntax and Semantics

Along with distinguishing between the prescriptive and the descriptive concepts of grammaticality, we also need to distinguish between syntax and semantics, which is concerned with linguistic meaning. These two subject areas are not completely independent of one another. Assembling sentences and other phrases allows us to communicate more complex meanings than we could just using individual words. This is because the way expressions are syntactically combined with one another contributes to the meaning of the resulting sentence. Consider the following pair of English sentences:

- (2) a. Sally likes Bob.
- b. Bob likes Sally.

Sentence (2a) does not mean the same thing as (2b). However, these sentences contain exactly the same expressions (*Bob*, *Sally*, and *likes*), whose meanings are exactly the same in both. The crucial difference

between (2a) and (2b) lies in how these expressions are syntactically combined: different syntactic combinations produce the different meanings.

In English, we often call the expression that usually occurs immediately to the left of the verb its **subject**, and the one that occurs immediately to the right of the verb (if any) its **object**. One way to explain the syntactic differences between (2a) and (2b) is to say that in (2a), *Bob* is the object of *likes* and *Sally* is its subject, while in (2b), these relations are switched: *Sally* is the object of *likes*, while *Bob* is its subject. The different syntactic combinations of *likes*, *Sally*, and *Bob* in (2) account for the difference in meaning.

The fact that the meaning of a sentence depends on the meanings of the expressions it contains and on the way they are syntactically combined is called the **principle of compositionality** (see also File 6.4). This principle underlies the design feature of productivity (see File 1.4). When you know a language, you can produce and understand an infinite number of sentences because you know the meanings of the **lexical expressions** (i.e., words), and you know how different ways of syntactically combining them will affect the meaning of larger, multi-word **phrasal expressions**. As a result, even though all languages have a finite lexicon, they all allow for the construction of an infinite number of meaningful sentences. In this sense, syntax and semantics are intimately related.

In another sense, however, syntax and semantics are quite independent from one another. First, it is possible to have a grammatical, syntactically well-formed sentence with a bizarre meaning, and, conversely, it is possible to have a non-sentence whose meaning we can understand. Below is a famous sentence, due to Noam Chomsky:

(3) Colorless green ideas sleep furiously.

This sentence seems to mean something quite strange—colorless things cannot be green, ideas are not the kinds of things that sleep, and it's not clear that sleeping is the kind of activity that can be carried out in a furious manner. But syntactically speaking, (3) is a perfectly grammatical sentence

of English. If you're having trouble appreciating its syntactic well-formedness, compare it with (4).

(4) \*Green sleep colorless furiously ideas.

Sentence (3) may mean something strange, but (4) is just plain (syntactic) garbage!

On the other hand, sometimes a non-sentence can successfully convey a perfectly reasonable meaning. Suppose you have a friend who is not a native speaker of English and occasionally makes errors. One day your friend comes to you and excitedly exclaims:

(5) \*Me bought dog!

You would probably have no problem figuring out the meaning your friend was trying to express (the fact that they bought a dog), but, at the same time, you would most likely recognize immediately that (5) is not syntactically well-formed in English; you might even repair it to something like (6).

(6) I bought a dog.

Thus, it's possible both for actual sentences to express strange meanings as in (3) and for non-sentences to convey ordinary meanings as in (5).

There is another way in which syntax is independent of semantics: the syntactic properties of expressions cannot be predicted or explained on the basis of an expression's meaning. Consider the following pair of English verbs: *eat* and *devour*. They mean approximately the same thing in that they both refer to the activity of consuming food, but syntactically they behave very differently. Many native English speakers agree with the following pattern of grammaticality judgments:

- (7) a. Sally ate an apple.  
b. Sally devoured an apple.

- (8) a. Sally ate.  
b. \*Sally devoured.

While both *eat* and *devour* can occur with an object (*an apple* in (7a) and (7b)), *eat* does not require one since (8a) is grammatical in English. *Devour*, on the other hand, must occur with an object, since omitting the object results in ungrammaticality as in (8b). So although these two verbs are very similar in meaning, their syntactic properties are different.

Here is another example—both *my* and *mine* intuitively mean the same thing; that is, they describe the relation of possession between the speaker and something else. However, as example (9) shows, their syntactic behavior is different.

- (9) a. This dog is mine.                      \*This is mine dog.  
b. \*This dog is my.                        This is my dog.

These facts would be puzzling if we assumed that meanings determine the syntactic properties of words. If we acknowledge that words have syntactic properties that are distinct and independent from their meanings, the syntactic difference between *mine* and *my* is not surprising at all.

Further, if we assumed that meanings determine the syntactic properties of expressions, we would not expect to see any syntactic differences across languages. But if you have ever tried to learn a foreign language, it should be clear to you that this is not the case. While different languages have expressions that have the same meanings, these expressions can have vastly different syntactic properties. Let's examine one point of contrast between English and Serbo-Croatian that has nothing to do with word meanings and everything to do with syntactic properties.

- (10) a. Ana has a dog.  
b. Ana    ima    jednog    psa.  
    *Ana    has    a            dog*  
    'Ana has a dog.'

- (11) a. \*Ana has dog.  
b. Ana ima psa.  
*Ana has dog*  
'Ana has a dog.'

Sentence (10a) is grammatical in English, and so is its word-for-word translation into Serbo-Croatian in (10b). If we get rid of the English determiner *a*, we no longer have a grammatical sentence of English (see (11a)). However, getting rid of the equivalent determiner *jednog* 'a' from the Serbo-Croatian sentence does not result in ungrammaticality—(11b) is a well-formed sentence of Serbo-Croatian and means the same thing as (10b). What we learn from these examples is that words in different languages with equivalent meanings can have quite different syntactic behavior. So, while syntactic combination has consequences for the meanings that sentences express, meanings do not determine the syntactic properties of expressions, and syntactic well-formedness is largely independent of meaning. Since syntactic well-formedness and syntactic properties in general cannot be explained away in terms of other kinds of linguistic properties, we must study them in their own right.



# FILE 5.2

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## Syntactic Properties

### 5.2.1 What Are Syntactic Properties?

If syntax is the study of how expressions combine, but not all combinations of expressions are possible, it is natural to ask what kinds of restrictions exist on these combinations. That is, why are some combinations of expressions syntactically well-formed, but others are not? The short answer is that the **syntactic properties** of expressions determine their behavior.

In this file, we will see that there are essentially two kinds of syntactic properties. One set of syntactic properties has to do with **word order**—how are expressions allowed to be ordered with respect to one another? The other set of properties has to do with the **co-occurrence** of expressions—if some expression occurs in a sentence, what other types of expressions can or must co-occur with it in that sentence?

### 5.2.2 Word Order

Word order is perhaps the most obvious aspect of syntactic well-formedness. In an English sentence, for example, subjects typically precede verbs, while objects follow them, as shown in (1a) and (2a). Deviating from this word order pattern usually results in ungrammaticality, as shown in (1b) and (2b–d).

- (1) a. Sally walked.  
b. \*Walked Sally.

- (2) a. Sally ate an apple.  
b. \*Sally an apple ate.  
c. \*Ate Sally an apple.  
d. \*Ate an apple Sally.

This word order pattern, in which subjects precede verbs which in turn precede objects, is referred to as SVO (an abbreviation of Subject-Verb-Object). According to one recent study (Hammarström 2016), about 40% of the world's languages have this pattern. Even more common than SVO is the SOV pattern; about 43% of languages (e.g., Korean and Turkish) typically show SOV order. About 10% of languages, including Arabic and Irish, have VSO word order. The remaining patterns, VOS, OVS, and OSV, are quite rare. An example sentence from Malagasy, a VOS Austronesian language spoken in Madagascar, is shown in (3).

- (3) Manasa lamba amin'ny savony ny lehilahy.  
*washes clothes with the soap the man*  
'The man washes clothes with the soap.'

However, while it may be convenient to label a language as being VOS, SOV, etc., you should keep in mind that such labels can be misleading. For one thing, many languages exhibit different word order patterns in different contexts. In German, for example, main clauses such as (4a) typically have the SVO word order, while subordinate clauses (like the underlined group of expressions in (4b)) exhibit the SOV pattern.

- (4) a. Karl kocht die Suppe.  
*Karl cooks the soup*  
'Karl is cooking the soup.'
- b. Magda ist froh, daß Karl die Suppe kocht.  
*Magda is happy that Karl the soup cooks*  
'Magda is happy that Karl is cooking the soup.'

Even in English, which has a fairly rigid word order, VSO order can show up in yes/no questions (5a), and OSV order in sentences that show **topicalization** (5b).

- (5) a. Is Sally a student?  
b. Sally: I know you don't like apples, Polly, so I made you a pecan pie instead of an apple pie.  
Polly: Oh, apples, I like. It's pears that I can't stand.

In (5b), the underlined sentence *apples, I like* exhibits the OSV order. Although this sentence requires a special context to be uttered, it is still a possible sentence of English, so it would be misleading to say that English is an SVO language across the board.

Further, some languages have much more flexible word order, so it is not clear that it would be meaningful to say they have a “typical” word order pattern. For example, in some Slavic languages like Russian and Serbo-Croatian, as well as in Dyirbal, an Australian language, all six possible orders of verbs, subjects, and objects result in grammatical sentences.

But word order restrictions go far beyond the relative ordering of verbs, subjects, and objects. In English, for example, expressions such as the demonstrative *that* (part of a larger category called determiners) must precede the noun, as shown in (6), while in Malay, an Austronesian language, they follow the noun, as shown in (7).

- (6) a. Sally still hasn't read these books.  
b. \*Sally still hasn't read books these.

- (7) a. buku-buku    ini  
          books        these  
          'these books'  
b. \*ini buku-buku

Other kinds of expressions can be subject to ordering constraints as well. Prepositions such as *with* in English must come immediately to the left of the noun phrase, as shown in (8).

- (8) a. Sally finally met with that person.  
b. \*Sally finally met that person with.

In Japanese, however, the expression *to* ‘with’ must occur immediately to the right of the noun phrase, as shown in (9). For that reason, expressions like the Japanese *to* are called postpositions, and not prepositions.

- (9) a. kono kodomo to  
this child with  
‘with this child’  
b. \*to kono kodomo

Apart from imposing relative ordering constraints between certain kinds of expressions, languages can also have word order restrictions that mandate that a certain expression occur in a specific position in a sentence. For example, Warlpiri, another Australian language, generally allows free ordering of expressions in a sentence. The only word order restriction is that an auxiliary verb (e.g., *will* in English) must occur in the second position in a sentence. It doesn’t matter what kind of expression comes right before or right after the auxiliary, and it doesn’t matter how the expressions that follow the auxiliary are relatively ordered, so long as the auxiliary is second.

As we have seen, there are many different kinds of word order constraints that languages make use of. However, merely getting expressions in the right order in a sentence doesn’t guarantee syntactic well-formedness. There is much more to syntax than just word order.

### 5.2.3 Co-Occurrence

While the order of expressions is obviously important for syntactic well-formedness, there is another set of syntactic properties that is, in a way, more basic than word order, yet far less obvious. As soon as you decide on using a particular expression in a sentence, this initial choice can dictate other aspects of the sentence's structure. The expression you choose may allow or even require that certain other expressions co-occur with it. This section examines these co-occurrence relations between expressions, to which all languages are sensitive.

**a. Arguments.** Many expressions have co-occurrence requirements. That is, if they show up in a sentence, certain other expressions are required to occur in that sentence as well. Recall our earlier observation concerning *devoured*:

- (10) a. Sally devoured an apple.  
b. \*Sally devoured.

For many native English speakers, an object noun phrase (e.g., *an apple* in (10a)) is required to co-occur with *devoured*. Note that the subject noun phrase (e.g., *Sally* in (10a)) is also obligatory, as illustrated in (11), which is not a sentence.

- (11) \*Devoured an apple.

If the occurrence of some expression X in a sentence necessitates the occurrence of some other expression Y, then we say that Y is an **argument** of X. So, *devoured* requires two arguments: an object (*an apple*) and a subject (*Sally*). Alternatively, we say that in (10a), *Sally* and *an apple* are both arguments of *devoured*. Non-subject arguments are specifically called **complements**. Thus, we can also say that in (10a), *an apple* is a complement of *devoured*.

Even if a language has very flexible word order, it is still sensitive to the co-occurrence requirements of expressions. Consider the following examples from Serbo-Croatian:

- (12) a. Marija voli muziku.  
           *Marija likes music*  
           ‘Marija likes music.’  
       b. Marija muziku voli.  
       c. Voli muziku Marija.  
       d. Voli Marija muziku.  
       e. Muziku voli Marija.  
       f. Muziku Marija voli.

- (13) a. \*Marija voli.  
       b. \*Voli Marija.

These examples show that in Serbo-Croatian, if *voli* ‘likes’ occurs in a sentence, an object (in this case *muziku* ‘music’) has to occur in that sentence as well, since omitting it results in ungrammaticality, as shown in (13). But as long as an object occurs in the sentence, it doesn’t matter where it shows up or how it is ordered with respect to the verb and the subject—all six orders are grammatical, as shown in (12).

Arguments do not have to be noun phrases, like *an apple*. Different kinds of expressions require different kinds of arguments. When we consider complements, we can see that *an apple* is an acceptable complement for *devoured*, but not for *wondered*, since \**Sally wondered an apple* is not a sentence. Conversely, *about Bob* is a fine complement for *wondered*, but not for *devoured*: *Sally wondered about Bob* is a sentence of English, while \**Sally devoured about Bob* is not. If a complement is a noun phrase (e.g., *Bob*, *Sally*, *an apple*; see File 5.4), then we call it an object.

Expressions can require multiple complements. Some examples of different kinds of complements of English verbs are given in (14).

- (14) a. Sally told Polly she’s leaving.  
           [*Polly* and *she’s leaving* are both complements of *told*]  
       b. Sally put the book on the desk.  
           [*the book* and *on the desk* are both complements of *put*]

- c. Sally persuaded Bob to go on vacation.  
[*Bob* and *to go on vacation* are both complements of *persuaded*]

We noted that in English, subjects are also verbal arguments. However, there are languages that allow subjects to be omitted, for example, Italian.

- (15) a. *Ho comprato un libro.*  
*have-1sg bought a book*  
'I bought a book.'
- b. *Io ho comprato un libro.*  
*I have-1sg bought a book*  
'I bought a book.'

In this example, the auxiliary *ho* 'have' already contains crucial information about the subject, namely, that it has to be the first-person singular 'I.' The subject *io* 'I' can occur in the sentence, but it doesn't have to—(15a) is still a grammatical sentence of Italian.

It is important to keep in mind that verbs can be very picky about the form of the argument they require. For example, the only possible subject for *rained* in English seems to be *it*, as in the sentence, *It rained*. It is not easy to come up with other expressions that could replace *it* in this sentence (excluding poetic usage or other metaphorical extensions). Now consider a verb like *relied*. Its complement can only be some phrase of the form *on x* or *upon x*, for example, *Sally relied on Bob* or *Sally relied upon her charm*.

It's not just verbs that can require certain arguments. Other expressions can have their own arguments as well. For example:

- (16) a. Sally came to the party with Bob.  
b. \*Sally came to the party with.  
[*Bob* is an argument of *with*]

- (17) a. Sally is fond of parties.

b. \*Sally is fond.

[*of parties* is an argument of *fond*]

(18) a. Bob invited Polly and Sally to the party.

b. \*Bob invited Polly and to the party.

c. \*Bob invited and Sally to the party.

[*Polly* and *Sally* are both arguments (“conjuncts”) of *and*]

For a sentence to be well-formed, all the expressions it contains have to have all and **only** the arguments they need. We emphasize *only* because trying to give expressions more than their share of arguments is as bad as not giving them all the arguments they need. For example, *devoured* needs exactly one subject argument and exactly one complement—both \**Sally devoured* and \**Sally devoured an apple a pear* are ungrammatical. Similarly, neither \**devoured an apple* nor \**Sally Tom devoured an apple* is a sentence.

The restriction on the number of arguments that an expression can combine with can also be observed with nouns and determiners. Recall from Section 5.1.2 that, in English, a noun such as *dog* cannot occur by itself. Rather, it has to be preceded by a determiner such as *a*. However, it cannot be preceded by more than one determiner.

(19) a. Sally has {a/this/my} dog.<sup>1</sup>

b. \*Sally has dog.

c. \*Sally has this a dog.

d. \*Sally has this a my dog.

Finally, we note that languages can differ in terms of co-occurrence restrictions, just as they can differ in terms of word order. For example, in Serbo-Croatian it is possible for multiple determiners to co-occur, as shown in (20).

(20) Marija    sad    ima    tog    mog    psa.

*Marija    now    has    that    my    dog*



‘Marija now has that dog of mine.’

A key goal of this section has been to demonstrate the importance of the co-occurrence requirements of expressions. Many expressions require that certain other expressions—their arguments—occur with them in a sentence. Failing to give expressions the right number and kind of arguments will result in ungrammaticality.

**b. Adjuncts.** While there have to be exactly the right number and type of arguments for each expression in a sentence, there are certain kinds of expressions whose occurrence in a sentence is purely optional. These kinds of expressions are called **adjuncts**. Not only are they optional, but it is also possible to add as many of them as you like without winding up with a non-sentence. Let’s consider some examples from English.

- (21) a. Sally likes dogs.  
b. Sally likes small dogs.  
c. Sally likes small fluffy dogs.  
d. Sally likes small fluffy brown dogs.

The underlined expressions in (21)—attributive adjectives—don’t have to occur in the sentence since (21a) is grammatical. Furthermore, you can in principle add as many of them as you like and the sentence remains grammatical. In addition, they can be freely ordered with respect to one another—that is, *Sally likes fluffy brown dogs* and *Sally likes brown fluffy dogs* are both sentences.

We can make a couple of additional observations about these adjectives. First, while their occurrence is optional, we cannot add them to just any sentence, as (22) and (23) illustrate.

- (22) a. Sally likes Bob.  
b. \*Sally likes fluffy Bob.

- (23) a. Sally runs.  
b. \*Sally runs small.

In fact, the occurrence of these adjectives in a sentence is dependent on there being some expression like *dogs* in that sentence (i.e., a noun; see File 5.4). So, if you have an attributive adjective like *small* in a sentence, you also have to have a noun like *dogs*. This observation should remind you of the definition we gave for arguments: Y is an argument of X if the occurrence of X necessitates the occurrence of Y. We could then say that *dogs* is in a way an argument of *small*, although more commonly we say that *small* is an adjunct of *dogs*.

The point here is that being an argument and being an adjunct are not totally different kinds of co-occurrence relations—they're kind of like mirror images of one another. If X is an adjunct of Y, then Y is an argument of X because the presence of Y in a sentence is necessary for X to occur. However, it is not necessarily true that if Y is an argument of X, then X is Y's adjunct. For example, in *Sally runs*, *Sally* is an argument of *runs*, but we cannot consider *runs* an adjunct of *Sally*. If *runs* were an adjunct, we would expect it to be possible for multiple expressions like *runs* to occur in a sentence, since one of the defining properties of adjuncts is that we can add as many of them as we like. *\*Sally runs sleeps* is not a sentence, so *runs* is not an adjunct (and neither is *sleeps*, for that matter). Furthermore, adjuncts are optional, but we cannot get rid of *runs* and still have a sentence—since *Sally* is not a sentence all by itself, *runs* is not optional.

A second observation concerning attributive adjectives has to do with their semantic function (see also File 6.4). In *Sally likes small dogs*, *small* adds additional information about the meaning of *dogs*. This sentence tells us not that Sally likes dogs in general, but more specifically that she likes dogs that are small. The adjective *small* modifies the meaning of *dogs*. For this reason, adjuncts are sometimes called **modifiers**.

Attributive adjectives are not the only kinds of adjuncts. Other examples of adjunct phrases in English are underlined in the examples that follow. According to the criteria outlined above, they are adjuncts because their occurrence is optional, there can be multiple occurrences of them in a sentence, and they can be ordered freely with respect to one another.

- (24) a. Sally went to France.  
 b. Sally went to France last year.  
 c. Sally went to France last year in July.  
 d. Sally went to France last year in July with some friends.  
 e. Sally went to France last year in July with some friends to study French.

It is important to point out that the same expression can be an argument in one sentence, but an adjunct in another. This depends on how the expressions in the sentence are syntactically combined. For example, in (24b), *last year* is an adjunct because it can be omitted without loss of grammaticality. However, in the sentence *Last year was the best year of Sally's life*, *last year* is an argument since it is the subject of *was* and cannot be omitted. Here are some other examples of the same expression being used as an argument in one sentence, but as an adjunct in a different sentence.

- |  |                               |
|--|-------------------------------|
| (25) a. Sally urged Bob <u>to study French</u> .   | [argument of <i>urged</i> ]   |
| b. Sally went to France <u>to study French</u> .   | [adjunct]                     |
| (26) a. Sally put the book <u>on the desk</u> .    | [argument of <i>put</i> ]     |
| b. Sally's cat was sleeping <u>on the desk</u> .   | [adjunct]                     |
| (27) a. Sally's cat seemed <u>cute</u> .           | [argument of <i>seemed</i> ]  |
| b. Sally has a <u>cute</u> cat.                    | [adjunct]                     |
| (28) a. Sally behaved <u>very carelessly</u> .     | [argument of <i>behaved</i> ] |
| b. Sally did her homework <u>very carelessly</u> . | [adjunct]                     |

Therefore, it is misguided to ask whether an expression X is an argument or an adjunct independent of context; we always have to ask whether X is an argument or an adjunct in some particular sentence.

Table (29) summarizes the main differences between arguments and adjuncts in English and should help you distinguish them from one another.

Keep in mind, though, that whether an expression is an argument or an adjunct may not always be clear. In such cases, you should carefully assess the expression's syntactic behavior with respect to these criteria and see if you can gather more evidence for it being either an argument or an adjunct. Also, remember that different speakers can have different grammaticality judgments (see Section 10.2.5 on syntactic variation), so you and your classmates might arrive at different conclusions about the same expression, and this is perfectly normal.

(29) Distinguishing arguments and adjuncts

Arguments	Adjuncts
<b><i>Obligatory:</i></b>	<b><i>Optional:</i></b>
Sally seemed <u>happy</u> . *Sally seemed.	The cat was sleeping <u>on the table</u> . The cat was sleeping.
<u>Sally</u> seemed happy. *seemed happy.	The <u>fluffy</u> cat was sleeping. The cat was sleeping.
<b><i>Cannot have more than required:</i></b>	<b><i>Can have as many as you like:</i></b>
Sally seemed <u>cute</u> . *Sally seemed <u>cute</u> <u>happy</u> .	The cat was sleeping. The <u>gray</u> cat was sleeping. The <u>fluffy gray</u> cat was sleeping.
<u>Sally</u> seemed cute. * <u>Sally</u> <u>Bob</u> seemed cute.	Sally left. Sally left <u>yesterday</u> . Sally left <u>yesterday</u> <u>around 3 P.M.</u>
<b><i>Cannot be freely ordered with respect to one another:</i></b>	<b><i>Can be freely ordered with respect to one another:</i></b>
Sally put <u>the book</u> <u>on the table</u> .	The <u>fluffy gray</u> cat was sleeping.
*Sally put <u>on the table</u> <u>the book</u> .	The <u>gray fluffy</u> cat was sleeping.
Sally persuaded <u>Bob</u> <u>to study French</u> .	Sally left <u>yesterday</u> <u>around 3 P.M.</u>
*Sally persuaded <u>to study French</u> <u>Bob</u> .	Sally left <u>around 3 P.M.</u> <u>yesterday</u> .

## Long Description

**c. Agreement.** We mentioned above that there are often strict requirements regarding the kind of argument that an expression can have. For example, *about Bob* can be a complement of *wondered* but not a complement of *devoured*; the only expression that can be the subject of *rained* is *it*; etc. Another kind of requirement that expressions can have concerns the particular morphological form of their arguments. In this section we discuss how the inflectional morphological form (see Section 4.1.3) of an expression influences its co-occurrence requirements.

Let's begin by considering the examples in (30). Most English speakers would agree with the following judgments:

- (30) a. Sandy likes Bob.  
b. \*{I/you/we/they} likes Bob.<sup>2</sup>  
c. \*Sandy like Bob.  
d. {I/you/we/they} like Bob.

In (30), we see that *likes* can occur only with a third-person singular subject such as *Sandy*, while *like* occurs with all other kinds of subjects. The only difference between *likes* and *like* is the presence of the inflectional suffix *-s*, but it is precisely that suffix that is responsible for their different co-occurrence requirements.

The inflectional form of an expression can convey information about number, person, gender, and other so-called grammatical features, or some combination of them (e.g., the *-s* in *likes* simultaneously marks person (third) and number (singular)). Distinct expressions in a sentence may be required to have the same value for some grammatical feature, in which case we say that they agree with respect to that feature. Such features are called agreement features, and this phenomenon is called **agreement**. For example, we could say that *likes* agrees with *Sandy* in person and number: they are both third-person singular.

With respect to number in English, demonstratives also show agreement patterns: they have to agree with nouns in number, as shown in (31).

- (31) a. This girl came.  
b. \*This girls came.  
c. \*These girl came.  
d. These girls came.

In (31a), the demonstrative *this* and the noun *girl* are both singular, and in (31d), *these* and *girls* are both plural (the *-s* in *girls* being the plural inflection). Mixing and matching of expressions that are marked for a different number is not allowed, as indicated by the ungrammaticality of (31b) and (31c).

English distinguishes only singular and plural number for nouns, but other languages can have different kinds of grammatical number. Inuktitut, a language spoken in northern Canada, morphologically distinguishes between singular, plural, and dual, for groups of two things.

- (32) nuvuja     ‘cloud’  
      nuvujak   ‘two clouds’  
      nuvujait   ‘three or more clouds’

Some languages do not mark grammatical number on nouns at all, for example, Korean. The following Korean sentence could mean that there is either one car or multiple cars on the street, since *chaka* ‘car(s)’ is not marked for number and neither is the verb *dallinta* ‘run.’

- (33) kile            chaka            dallinta.  
      road           car                run  
      ‘There is one car running on the road.’  
      ‘There are (multiple) cars running on the road.’

It is important to note that even in languages that do mark number on nouns, grammatical number may not be predictable from the expression's meaning. For example, *scissors* in English is grammatically plural and shows plural agreement (e.g., *These scissors are the best!*), but semantically it refers to a single object. In Serbo-Croatian, *lišće* 'leaves' refers to a plurality of leaves, but syntactically it behaves like a singular noun and has to occur with singular determiners and singular verbs.

Other types of agreement are also observed in languages. For example, in Italian and some other languages, certain verbal forms have to agree with the subject in gender.

(34) a. Lei è andata a Palermo.  
*she be-3sg go-part.fem.sg to Palermo*  
 'She went to Palermo.'

b. Lui è andato a Palermo.  
*he be-3sg go-part.masc.sg to Palermo*  
 'He went to Palermo.'

c. \*Lei è andato a Palermo.

d. \*Lui è andata a Palermo.

In these examples, the form of the verb 'be,' *è*, agrees with the subject in person (third) and number (singular), while the participial form of the verb 'go' agrees with the subject in gender and number. The form *andata* requires a feminine singular subject, while the form *andato* requires a masculine singular subject. Mixing and matching is not allowed, as indicated by the ungrammaticality of (34c) and (34d).

It is worth mentioning that grammatical gender typically has nothing to do with natural gender. Although in the Italian example above we used *lei* 'she' and *lui* 'he,' which have the expected gender marking (feminine and masculine, respectively), this need not be the case. For example, in German the expression that means 'the girl,' *das Mädchen*, is not feminine

in terms of grammatical gender, but neuter. In Serbo-Croatian, if you want to talk about male giraffes, you have to use expressions that have feminine grammatical gender. In different languages that make use of grammatical gender, the expressions that refer to the same thing may be assigned to different gender classes. Thus, the word that means ‘book’ is masculine in French (*le livre*), neuter in German (*das Buch*), and feminine in Russian (*kniga*). Therefore, grammatical gender is an arbitrary system of classification. Similar classification systems in other languages are often referred to as noun classes.

In sum, the morphological form of an expression has consequences for its syntactic properties. For that reason, morphology and syntax are often seen as tightly related components of grammar and sometimes even considered and referred to jointly as **morphosyntax**.

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<sup>1</sup>“Sally has {a/this/my} dog” is an abbreviation of:

Sally has a dog.

Sally has this dog.

Sally has my dog.

The curly bracket notation, “{a/this/my},” indicates that with respect to the judgment given in the example, each expression within the curly brackets behaves the same. In this case, it would be grammatical for any one of them to occur in the specified position.

<sup>2</sup>“\*{I/you/we/they} likes Bob” is an abbreviation of:

\*I likes Bob.

\*You likes Bob.

\*We likes Bob.

\*They likes Bob.

So in (30b), all the expressions within the curly brackets are unacceptable in the specified position.