Linguictics

An Introduction

Faculty of Arts

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Introduction to Linguistics

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THIS COMPILED COURSE-BOOK IS PREPARED AND USED FOR TEACHING AND EDUCATIONAL PURPOSES ONLY

Introduction to Linguistics

(A COMPILED COURSE-BOOK FOR TEACHING AND EDUCATIONAL PURPOSES ONLY)

1st YEAR ARTS

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Introduction

Language enables humans to do many things, thus serving different functions in the society. Finch (1998) lists seven general (micro) functions:

Physiological function

Phatic function

Recording function

Identifying function

Reasoning function

Communicating function

Pleasure function

Physiological Function

Language can help get rid of nervous or physical energy. Our expression of fear and affection, our involuntary verbal reactions to beautiful things.

Phatic Function

Language can serve the function of creating or maintaining social relationship between speakers

Recording Function

Language allows us to record things we wish to remember.

Identifying Function

Language also allows us to identify an enormous array of objects and events and make sense of the world around us.

Reasoning Function

Language can help us think. Language is a tool of thought.

Communicating Function

Language is a means of communicating ideas and facts.

Pleasure Function

Language allows us to derive pleasure from it.

The Origin of Language

Many scholars have done a wide range of studies in the origin of language. Some have looked at the problem of whether primitive man had the physiological capacity to speak. Some hold that with the development of the human society, man learned to use tools by hand and tools promoted the development of speech, because learning involved language.

Various theories have been suggested with regards to the origin of language. The majority of these theories can be grouped under three broad categories.

Creation (or divine origin)

Evolutionary development

Invention

The divine origin theorists propose that in the beginning there was one language from one source, which later became corrupted into many languages

The evolutionary theory believes that language evolved as an adjunct to early communication (pointing, gesturing, grunting, imitation of animal sounds, etc.).

Invention theory sees the origin of language in the imitation of natural sounds. They pointed to onomatopoetic words and suggested that

these form the basis of language, or at least the core of the basic vocabulary. It was out of the natural cries that man constructed words.

Linguistics can be defined as the scientific or systematic study of language. It is a science in the sense that it scientifically studies the rules, systems and principles of human languages.

Longman Dictionary of Language Teaching & Applied Linguistics defines linguistics as the study of language as a system of human communication.

Chomsky defines linguistics as principally concerned with the universals of the human mind. He considers linguistics as a branch of cognitive psychology.

The study of language in the western world goes back many centuries to Greek and Roman antiquity and biblical times.

In the twentieth century, speech sounds (phonetics and phonology) grammar (morphology and syntax) ,meaning (semantics) ,the study of texts (discourse analysis).

Linguists have of course always been aware of the fact that in language all aspects are involved, namely, psychology, society, cognition…

What is a WORD ?

Ask anyone what a word is and . . . they'll look puzzled. In some sense, we all know what words are – we can list words of various sorts at the drop of a hat. But ask us to define explicitly what a word is, and we're flummoxed. Someone might say that a word is a stretch of letters that occurs between blank spaces. But someone else is bound to point out that words don't have to be written for us to know that they're words. And in spoken (or signed) language, there are no spaces or pauses to delineate words. Yet we know what they are. Still another person might at this point try an answer like this: "A word is something small that means something," to which a devil's advocate might respond, "But

what do you mean by ‘something small’?” This is the point at which it becomes necessary to define a few specialized linguistic terms. Linguists define a morpheme as the smallest unit of language that has its own meaning. Simple words like giraffe, wiggle, or yellow are morphemes, but so are prefixes like re- and pre- and suffixes like -ize and -er.2 There’s far more to be said about morphemes – as you’ll see in later chapters of this book – but for now we can use the term morpheme to help us come up with a more precise and coherent definition of word. Let us now define a word as one or more morphemes that can stand alone in a language. Words that consist of only one morpheme, like the words in (1), can be termed simple or simplex words. Words that are made up of more than one morpheme, like the ones in (2), are called complex:

(1) Simplex words giraffe fraud murmur oops just pistachio

(2) Complex words opposition intellectual crystallize prewash repressive blackboard

How many words occur in the following sentence?

My friend and I walk to class together, because our classes are in the same building and we dislike walking alone.

You might have thought of at least two ways of answering this question, and maybe more. On the one hand, you might have counted every item individually, in which case your answer would have been 21. On the other hand, you might have thought about whether you should count the two instances of and in the sentence as a single word and not as separate words. You might even have thought about whether to count walk and walking or class and classes as different words: after all, if you were not a native speaker of English and you needed to look up what they meant in the dictionary, you'd just find one entry for each pair of words. So when you count words, you may count them in a number of ways. Again, it's useful to have some special terms for how we count words. Let's say that if we are counting every instance in which a word occurs in a sentence, regardless of whether that word has

occurred before or not, we are counting word tokens. If we count word tokens in the sentence above, we count 21. If, however, we are counting a word once, no matter how many times it occurs in a sentence, we are counting word types. Counting this way, we count 20 types in the sentence above: the two tokens of the word and count as one type. A still different way of counting words would be to count what are called lexemes. Lexemes can be thought of as families of words that differ only in their grammatical endings or grammatical forms; singular and plural forms of a noun (class, classes), present, past, and participle forms of verbs (walk, walks, walked, walking), different forms of a pronoun (I, me, my, mine) each represent a single lexeme. One way of thinking about lexemes is that they are the basis of dictionary entries; dictionaries typically have a single entry for each lexeme. So if we are counting lexemes in the sentence above, we would count class and classes, walk and walking, I and my, and our and we as single lexemes; the sentence then has 16 lexemes.

Morphology

R.LIEBER

How many words? Psycholinguists estimate that the average English-speaking six-year-old knows 10,000 words, and the average high-school graduate around 60,000 words. Paul Bloom describes how this estimate can be made (2000: 5):

Words are taken from a large unabridged dictionary, including only those words whose meanings cannot be guessed using principles of morphology or analogy. . . . Since it would take too long to test people on hundreds of thousands of words, a random sample is taken. The proportion of the sample that people know is used to generate an estimate of their overall vocabulary size, under the assumption that the size of the dictionary is a reason- able estimate of the size of the language as a whole. For example, if you use a dictionary with 500,000 words, and test people on a 500-word sample, you would determine

the number of English words they know by taking the number that they got correct from this sample and multiplying by 1,000.

Children generally begin to produce their first words around the age of one. Bloom calculates that between the ages of one and 18 we would have to learn approximately ten words every day to have a vocabulary of 60,000 words. It's worth pointing out, I think, that this figure just takes into account the words that we have stored (fully or partially) in our mental lexicon, and not the words – perhaps an infinite number of them – that we can create by using rules of word formation. We will return shortly to our knowledge of word formation rules and its relation to our mental lexicon. First, however, we will look more closely at how we acquire our mental lexicon.

Most native speakers of English will recognize that words like unwipe, head bracelet or MacDonaldization are made up of several meaningful pieces, and will be able to split them into those pieces:

(1) un / wipe head / bracelet McDonald / ize / ation

As you learned in chapter 1, these pieces are called morphemes, the mini- mal meaningful units that are used to form words. Some of the morphemes in (1) can stand alone as words: wipe, head, bracelet, McDonald. These are called free morphemes. The morphemes that cannot stand alone are called bound morphemes. In the examples above, the bound morphemes are un-, -ize, and -ation. Bound morphemes come in different varieties. Those in (1) are pre- fixes and suffixes; the former are bound morphemes that come before the base of the word, and the latter bound morphemes that come after the base. Together, prefixes and suffixes can be grouped together as affixes.2 New lexemes that are formed with prefixes and suffixes on a base are often referred to as derived words, and the process by which they are formed as derivation. The base is the semantic core of the word to which the prefixes and suffixes attach. For example, wipe is the base of unwipe, and McDonald is the base of McDonaldization. Frequently, the base is a free morpheme, as it is in these two cases.

Morphologists therefore make a distinction between affixes and bound bases. Bound bases are morphemes that cannot stand alone as words, but are not prefixes or suffixes. Sometimes, as is the case with the morphemes path or derm, they can occur either before or after another bound base: path precedes the base ology, but follows the base psych(o); derm precedes another base in dermatitis but follows one in endoderm. This suggests that path and derm are not prefixes or suffixes: there is no such thing as an affix which sometimes precedes its base and sometimes follows it. But not all bound bases are as free in their placement as path; for example, psych(o) and ology seem to have more fixed positions, the former usually preceding another bound base, the latter following. Similarly, the base -itis always follows, and endo- always precedes another base. Why not call them respec- tively a prefix and a suffix, then? One reason is that all of these morphemes seem in an intuitive way to have far more substantial meanings than the average affix does. Whereas a prefix like un- (unhappy, unwise) simply means ‘not’ and a suffix -ish (red- dish, warmish) means ‘sort of’,

psych(o) means ‘having to do with the mind’, -ology means ‘the study of’, path means ‘sickness’, derm means ‘skin’ and -itis means ‘disease’. Semantically, bound bases can form the core of a word, just as free morphemes can. Figure 3.1 summarizes types of morphemes. We’ll look more carefully at the meanings of affixes in section 3.3.

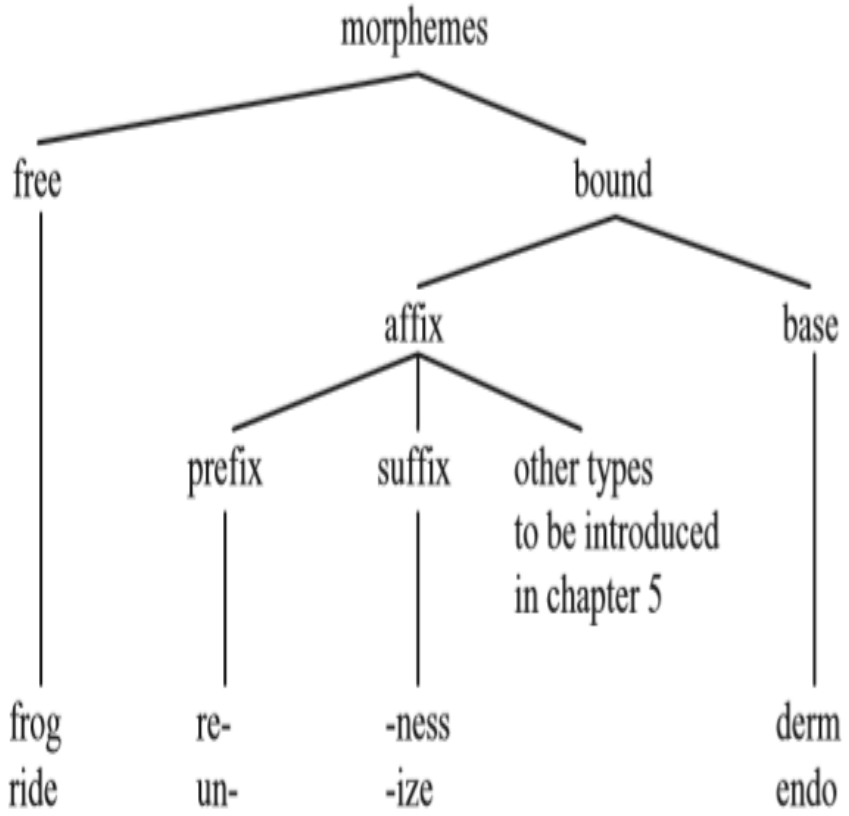


FIGURE 3.1
Types of morphemes

Word formation rules

Let's look more carefully at words derived by affixation. Prefixes and suffixes usually have special requirements for the sorts of bases they can attach to. Some of these requirements concern the phonology (sounds) of their bases, and others concern the semantics (meaning) of their bases – we will return to these shortly – but the most basic requirements are often the syntactic part of speech or category of their bases. For example, the suffix -ness attaches to nouns, as the examples in (3a) show, but not to verbs or adjectives (3b–c):3

(3) a. -ness on adjectives: redness, happiness, wholeness, commonness, niceness b. -ness on nouns: *chairness, *ideaness, *giraffeness c. -ness on verbs: *runness, *wiggleness, *yawnness

The prefix un- attaches to adjectives (where it means 'not') and to verbs (where it means 'reverse action'), but not to nouns:

(4) a. un- on adjectives: unhappy, uncommon, unkind, unserious b. un- on verbs: untie, untwist, undress, unsnap c. un- on nouns: *unchair, *unidea, *ungiraffe

We might begin to build some of the rules that native speakers of English use for making words with -ness or un- by stating their categorial requirements:

(5) Rule for -ness (first version): Attach -ness to an adjective. Rule for un- (first version): Attach un- to an adjective or to a verb.

Of course, if we want to be as precise as possible about what native speak- ers know about forming words with these affixes, we should also indicate what category of word results from using these affixes, and what the resulting word means. So a more complete version of our -ness and un- rules might look like (6):

(6) R ule for -ness (second version): -ness attaches to adjectives ‘X’ and produces nouns meaning ‘the quality of X’. Rule for un- (second version): un- attaches to adjectives meaning ‘X’ and produces

adjectives meaning ‘not X’; un- attaches to verbs meaning ‘X’ and produces verbs meaning ‘reverse the action X’.

(7) R ule for negative un- (final version): un- attaches to adjectives, preferably those with neutral or positive connotations, and creates negative adjectives. It has no phonological restrictions.

Now let’s look at two more affixes. In English we can form new verbs by using the suffixes -ize or -ify. Both of these suffixes attach to either nouns or adjectives, resulting in verbs:

(8) -ize on adjectives: civilize, idealize, finalize, romanticize, tranquillize -ize on nouns: unionize, crystallize, hospitalize, caramelize, animalize - ify on adjectives: purify, glorify, uglify, moistify, diversify - ify on nouns: mummify, speechify, classify, brutify, scarify, bourgeoisify

We might state the word formation rules for -ize and -ify as in (9):

(9) Rule for -ize (first version): -ize attaches to adjectives or nouns that mean 'X' and produces verbs that mean 'make/put into X'. Rule for -ify (first version): -ify attaches to adjectives or nouns that mean 'X' and produces verbs that mean 'make/put into X'.

But again, we can be a bit more precise about these rules. Although -ize and -ify have almost identical requirements for the category of base they attach to and produce words with roughly the same meaning, they have somewhat different requirements on the phonological form of the stem they attach to. As the examples in (8) show, -ize prefers words with two or more syllables where the final syllable doesn't bear primary stress (e.g., TRANquil, HOSpital). The suffix -ify, on the other hand, prefers monosyl- labic bases (pure, brute, scar), although it also attaches to bases that end in a -y (mummy, ugly) or bases whose final syllables are stressed (diVERSE, bour- GEOIS). Since we want to be as precise as possible about our word forma- tion rules for these suffixes,

we will state their phonological restrictions along with their categorial needs:

(10) Rule for -ize (final version): -ize attaches to adjectives or nouns of two or more syllables where the final syllable does not bear primary stress. For a base 'X' it produces verbs that mean 'make/ put into X'.

I leave it to you to come up with the final version of the word formation rule for -ify.

Word structure

When you divide up a complex word into its morphemes, as in (11), it's easy to get the impression that words are put together like the beads that make up a necklace – one after the other in a line:

(11) unhappiness □ un □ happy □ ness

But morphologists believe that words are more like onions than like neck- laces: onions are made up of layers from innermost to outermost. Consider a word like unhappiness. We can break this down into its component mor- phemes un □ happy □ ness, but given what we learned above about the properties of the prefix un- and the suffix -ness we know something more about the way in which this word is constructed beyond just its constituent parts. We know that un- must first go on the base happy. Happy is an adjec- tive, and un- attaches to adjectives but does not change their category. The suffix -ness attaches only to adjectives and makes them into nouns. So if un- attaches first to happy

and -ness attaches next, the requirements of both affixes are met. But if we were to do it the other way around, -ness would have first created a noun, and then un- would be unable to attach. We could represent the order of attachment as if words really were onions, with the base in the innermost layer, and each affix in its own succeeding layer: see figure 3.2.

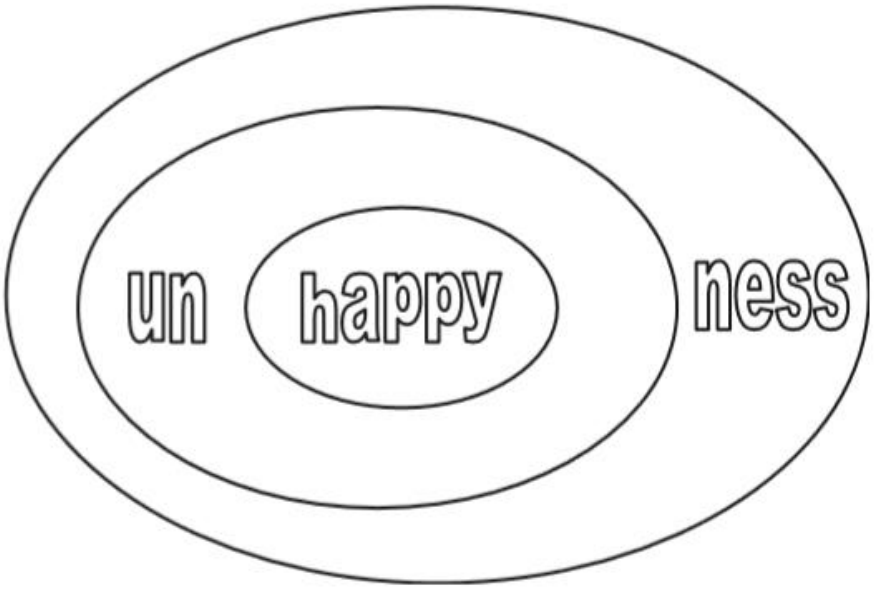


FIGURE 3.2
Words are like onions

AFFIXES

When we made the distinction between affixes and bound bases above, we did the basis of a rather vague notion of semantic robustness; bound bases in some sense had more meat to them than affixes did. Let us now attempt to make that idea a bit more precise by looking at typical mean- ings of affixes. In some cases, affixes seem to have not much meaning at all. Consider the suffixes in (14):

(14) a. -(a)tion examination, taxation, realization, construction - ment agreement, placement, advancement, postponement -al refusal, arousal, disposal

b. -ity purity, density, diversity, complexity -ness happiness, thickness, rudeness, sadness

Beyond turning verbs into nouns with meanings like ‘process of X-ing’ or ‘result of X-ing’, where X is the meaning of the verb, it’s not clear

that the suffixes -(a)tion, -ment, and -al add much of any meaning at all. Similarly with -ity and -ness, these don't carry much semantic weight of their own, aside from what comes with turning adjectives into nouns that mean something like 'the abstract quality of X', where X is the base adjective. Affixes like these are sometimes called transpositional affixes, meaning that their primary function is to change the category of their base with- out adding any extra meaning. Contrast these, however, with affixes like those in (15):

(15) a. -ee employee, recruitee, deportee, inductee b. -less shoeless, treeless, rainless, supperless c. re- reheat, reread, rewash

These affixes seem to have more semantic meat on their bones, so to speak: -ee on a verb indicates a person who undergoes an action; -less means something like 'without'; and re- means something like 'again'.

Free and bound morphemes Morphemes can be free or bound. If a morpheme is free, it can stand on its own; if it is bound, it must be

attached to a free morpheme. In the word walking, the morpheme walk is free because it can stand alone as a word. However, -ing is bound because it has to be attached to a lexical verb, in this case walk. In the examples below, the free morphemes are in italics and the bound morphemes in boldface:

force-ful dis-like miss-ed pre-judge un-like-li-est mis-inform-ation

As the above examples illustrate, a word will typically consist of a single free morpheme, sometimes referred to as the base. The base, as Plag (2003: 11) states, is "The part of a word which an affix is attached to." However, some words may contain more than one base, and some bases are (arguably) a bound rather than a free morpheme.

Compound words will always contain two bases. The word upon is composed of two prepositions: up and on. The word bookshelf contains two nouns: book and shelf. Many words of Latin origin have a base that is no longer a free morpheme. Consider the words perceive, receive, and conceive. Each of these words was borrowed whole into English from

Anglo-French. However, the words themselves contain the root -ceive, which has its ori- gins in Latin capere meaning ‘to take.’ Thus, perceive means literally per ‘thoroughly’ + capere ‘to take.’ Does this mean that perceive and the other words above should be analyzed as containing two bound morphemes? Certainly, per- is more recognizable as an independent morpheme in other English words such as perennial, which means ‘throughout the year.’ But for the average speaker of English, perceive, receive, and conceive are interpreted as containing a single free morpheme. Whatever mean- ing the individual parts of these words once had has been lost over time. Therefore, unless one is interested in analyzing the etymology of the indi- vidual parts of these words, they are best analyzed as containing one free morpheme. There is also the issue of whether words such as the or more can truly stand alone. Matthews (1991: 11–12) questions the status of words such as these as free morphemes, since they are never used alone: the article the, for instance, is always associated with nouns. Nevertheless, unless one is willing to create an intermediate category for words such as

these – a cat- egory on a continuum between free and bound morphemes – the words are best regarded as free morphemes.

Inflectional and derivational morphemes Bound morphemes are of two types: inflectional and derivational. Because English has so few inflections, they can simply be listed, as is done in Table 6.1. Inflections are one type of grammatical morpheme, a morpheme that indicates some kind of grammatical relationship. For

Table 6.1. Inflections in English

Inflections	Description	Examples
-s	3rd person present tense singular	*He/she likes movies*
	Possessive	*the child's toy*
	Plural	*girl/girls*
-ing	Progressive aspect	*He/she is leaving*
-ed	Past tense/perfective aspect	*He/she talked for an hour*
		He/she has talked for an hour
-er	Comparative form of adjective	*mild/milder*
-est	Superlative form of adjective	*mild/mildest*

instance, the -s morpheme on likes marks the tense as present and the subject as singular. The -s on the noun girls marks the noun as plural. Some free morphemes are also grammatical. While the -s on child's

indicates possession, so does the preposition of in the roof of the building or some friends of mine. The comparative and superlative inflections are typically used on adjectives that are one or two syllables long (e.g. happy, happier, happiest). However, lengthier adjectives require more and most (e.g. beauti- ful, more beautiful, most beautiful). Other free grammatical morphemes include the articles (a, an, the), auxiliary verbs (be, have), and coordinating conjunctions (and, or, but). While inflectional morphemes form a small class in English, deriva- tional morphemes are a much larger class. Merriam-Webster's A Dictionary of Prefixes, Suffixes, and Combining Forms, for instance, devotes nearly sixty pages to a description of the various derivational morphemes found on English words. Derivational morphemes exhibit other differ- ences from inflectional morphemes as well. Derivational morphemes can be either prefixes or suffixes, whereas inflectional morphemes can be only suffixes. Unlike inflectional morphemes, derivational morphemes can change the meaning of a word or its part of speech: adding dis- to the base like results in a word – dislike – with a

completely opposite meaning; adding -able to like changes like from a verb to an adjective: likeable. Adding -ed to a verb such as walk changes neither the meaning of walk nor its part of speech. A word can contain many derivational affixes, but only one inflectional affix; and if a word contains an inflectional suffix and one or more derivational suffixes, the derivational suffixes will always precede the inflectional suffixes. In the examples below, the inflectional affixes are in boldface and the derivational affixes in italics:

declassified: de □ class □ ify □ ed unlikeliest: un □ like □ ly □ est disempowering: dis □ em □ power □ing reformulations: re □ formula □ate □ ation □ s

As these words indicate, when affixes are combined in a word, the spelling of an individual affix will often differ from its spelling in the word in which it is included. As a later section will show, because English words can contain many different derivational affixes, affixation

– the process of adding derivational morphemes to a word – is a major source of new words in English.

Origins of derivational affixes.

Most derivational affixes were bor- rowed into English from either Greek or Latin. In Modern English, rela- tively few affixes of Germanic origin can be found. For instance, many negative prefixes, such as il-, im-, in-, and non-, were borrowed from Latin into English (the definitions and etymologies given in the lists below are based on those listed in Merriam-Webster's Third New International Dictionary):

illegal, illicit, improbable, immoral, incapable, incomplete, nonexistent, nonlethal

Many medical terms in English contain derivational morphemes of Greek origin:

ortho- 'straight' orthodontics, orthopedics epi- 'on' epidermis, epidural hyper- 'excessive' hypertension, hyperanxiety -sis 'disease' psychosis,

neurosis peri- ‘around’ periodontist, perimacular schizo- ‘split’ schizophrenia

Of course, not all of these affixes are restricted to medical terms: they can occur on words with less restricted uses, such as episode, perimeter, and hyperactive. Moreover, while the affixes in the words above are all of Greek origin, they are not restricted to occurring with bases of Greek origin. For instance, in hyperactive, the base, active, is of Latin origin (activus). Hybrid forms such as this occur in other English words as well, in many cases with bases of Germanic origin:

automobile: auto- (Greek ‘same’ or ‘self’) + mobile (Latin ‘moveable’) bioscience: bio- (Greek ‘life’) + science (Latin sciens ‘possessing knowledge’) dislike: dis- (Latin ‘opposite of’) + like (Old English lı –cian ‘have some affection for’) preown: pre- (Latin prae- ‘before’) + own (Old English a –gan ‘possess’)

Far fewer derivational affixes of Germanic origin can be found on current English words, largely because, as Hogg (2003: 107) notes, “By

quite early in the Middle English period many of the original Germanic affixes were lost ... and quickly replaced by new affixes from Latin and French." Some examples of derivational affixes of Germanic origin include -ard in words such as drunkard or laggard; -dom in words such as freedomor wisdom; and a- in words such as asleep or asunder.

The meanings of derivational affixes. In their discussion of affixes in English, Stockwell and Minkova (2001: 89–94) categorize affixes according to the meanings that they express. For instance, a number of affixes, they note, "in some way quantify the root" (p. 89). The prefix a- indicates that some- thing is "lacking" (e.g. amoral, atonal). The prefixes mono-, bi-, and tri- number the words to which they are affixed (e.g. monosyllable, bifocal, triangle). Many prefixes "say something about place or direction" (p. 90). The prefix en-points inward (e.g. encapsulate, enclose, encircle); intra- locates something within (e.g. intracity, introvert); and retro- points to the past (e.g. retrogression, retrograde). Unlike most prefixes, suffixes can also change the part of

speech of a word, and to varying degrees the meaning of the resultant word as well. As Stockwell and Minkova (2001: 89) observe, the amount of new meaning a suffix adds to a word will vary considerably: the suffix -ly, they claim, does little more than change an adjective into an adverb (e.g. hearty→ heartily). However, other suffixes create more significant changes in meaning.

Many suffixes, such as -ation, -ness, and -ment, convert verbs or adjectives into abstract nouns known as nominalizations:

verb to noun: creation, production, realization, establishment, resentment, development adjective to noun: goodness, happiness, likeliness, tastiness, fitness, heartiness

The suffixes -ant, -er, and -ist convert verbs or nouns into “agentive nouns” (p. 94): nouns with the meaning ‘someone who does something’:

Verb to noun: participant (one who ‘participates’), attendant, driver, rider, owner, fighter, singer Noun to noun: socialist (a practitioner of ‘socialism’), dentist, linguist, chemist, hypnotist

The suffix -ize converts nouns or adjectives into verbs:

noun to verb: fantasize (from the noun ‘fantasy’), idolize, demonize adjective to verb: finalize (from the adjective ‘final’), criticize, commercialize

Productivity.

A key difference between inflectional and derivational affixes is centered on the notion of productivity. An inflection such as -ing can occur on the base form of any verb, regardless of whether it is reg- ular or irregular: talking, hating, speaking, coming, going, liking. Therefore, inflections are highly productive because they can be regularly placed on any eligible base: verb inflections on verbs; -er and -est on adjectives and adverbs; and plural and possessive -s on nouns. Of course, -ed does not occur on irregular verbs (e.g. bought, went, sang) nor -s on nouns with irreg- ular plurals (e.g. geese, oxen, children). Polysyllabic adjectives and adverbs such as interesting and rapidly take more and most rather than -er and -est: more/most interesting (but not *interestinglieror *interestingliest),more/most rap- idly (*rapidlier or *rapidliest). Possessive -s is more likely to occur on animate rather than inanimate nouns: my friend's car, his sister's business but not *the

house's roof or *the desk's top. But if a noun or verb, for instance, is regular, it will in all cases be able to take a verb or noun inflection. Derivational affixes, on the other hand, are much less productive: they cannot uniformly be attached to a potentially eligible base, varying consid- erably in number of bases to which they can be affixed. Matthews (1991: 70) notes that the suffix -able, used to convert a verb into an adjective, is highly productive and can be affixed to just about any verb (e.g. catchable, walkable, hittable, touchable, sellable). In contrast, he continues, the suffix -th can be used on only a very small number of adjectives or verbs to create a noun: warmth, truth, or growth but not *coolth,*niceth, or *smallth. Other derivation- al affixes will fall between these two extremes in terms of their productivi- ty. A derivational prefix such as un- can be used as a marker of negation on many adjectives (unhappy, unwise, and unnecessary) but certainly not every adjective (*unfine,*uncareful, *unpretty). The same is true with the derivation- al suffix -ly, an affix that can convert an adjective to an adverb (e.g. happily, easily, nicely) but that has limitations on the

number of adjectives that can undergo this kind of conversion (*negotiably, *smally, *dirtily).

Compounding

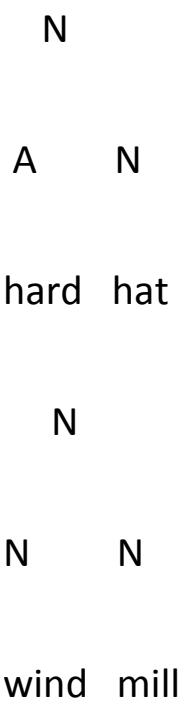
Derivation is not the only way of forming new words, of course. Many languages also form words by a process called compounding. Compounds are words that are composed of two (or more) bases, roots, or stems. In English we generally use free bases to compose compounds, as the exam- ples in (18) show:

(18) English compounds compounds of two nouns: windmill, dog bed, book store compounds of two adjectives: icy cold, blue-green, red hot c ompounds of an adjective and a noun: greenhouse, blackboard, hard hat compounds of a noun and an adjective: sky blue, cherry red, rock hard.

Compound structure

We can look at compounds as having internal structure in precisely the same way that derived words do, and we can represent that structure in the form of word trees. The compounds windmill and hard hat would have the structures in (19):

(19)



Compounds, of course, need not be limited to two bases. Compounding is what is called a recursive process, in the sense that a compound of

two bases can be compounded with another base, and this compounded with still another base, so that we can eventually obtain very complex com- pounds like paper towel dispenser factory building committee report.

Conversion

Although we often form new lexemes by affixation or compounding, in English it is also possible to form new lexemes merely by shifting the cat- egory or part of speech of an already existing lexeme without adding an affix. This means of word formation is often referred to as conversion or functional shift. In English, we often create new verbs from nouns, as the examples in (a) show, but we also do the reverse (b), and sometimes we can even create new verbs from adjectives (c):

a.

table to table

bread to bread

fish to fish

b.

to throw a throw

to kick a kick

to fix a (quick) fix

c.

cool to cool

yellow to yellow

When we create new verbs from nouns, the resulting verbs may have a wide range of meanings. For example, to bread is 'to put bread (crumbs) on something', but to fish is 'to take fish from a body of water'. And to clown is 'to act like a clown' rather than to put a clown somewhere or take a clown from somewhere! Going in the opposite

direction, the meaning of the new word is usually more predictable; that is, when we turn a verb into a noun, the result usually means something like ‘an instance of X-ing’, where X is the denotation of the verb. So for example, a throw is ‘an instance of throwing’.

Coinage

It is of course possible to make up entirely new words from whole cloth, a process called coinage. However, we rarely coin completely new words, choosing instead to recycle bases and affixes into new combinations. New products are sometimes given coined names like Kodak, Xerox, or Kleenex, and these in turn sometimes come to be used as common nouns: kodak was at one time used for cameras in general, and xerox and kleenex are still used respectively for copiers and facial tissue by some American English speakers. But it’s relatively rare to coin new words. In hundreds of new words archived on the Word Spy website (www.wordspy.com), I was able to find only the following four apparent coinages:

(34) blivet 'an intractable problem' mung 'to mess up, to change something so that it no longer works' grok ' to understand in a deep and exhaustive manner' (from Robert Heinlein's Stranger in a Strange Land) mongo 'objects retrieved from the garbage'

Why are there so few coinages? Perhaps because the words themselves give no clue to their meaning. Context often clarifies what a word is intended to mean, but without a context to suggest meaning, the words themselves are semantically opaque. It is no wonder that many of the pure coinages that creep into English come from original product names: the association of the coined word with the product makes its meaning clear, and occasionally the word will then be generalized to any instance of that product, even if manufactured by a different company.

Backformation

Generally, when we derive words we attach affixes to bases; in other words, the base comes before the word derived by affixation. For

example, we start with the verb write and form the agent noun writer. Sometimes, however, there are words that historically existed as monomorphemic bases, but which ended in a sequence of sounds identical to or reminis- cent of that of certain affixes. When native speakers come to perceive these words as being complex rather than simple, they create what is called a backformation. For example, historically the word burglar was monomorphemic. But because its last syllable was phonologically identi- cal to the agentive -er suffix, some English speakers have understood it to be based on a verb to burgle. Arguably for those speakers, then, burglar is no longer a simple word. Similarly, the verb surveil has been created from surveillance and the verb liaise from liaison. At least at first, some native speakers will find the backformations odd-sounding or objectionable. In January, 2007 I heard the governor of Iowa, Tom Vilsack, use the verb incent on National Public Radio; in context, it clearly was a backformation from the noun incentive, and it sounded quite odd at the time. But with time, that feeling of oddness will disappear. Indeed speakers are some-

times surprised to learn that the verb did not exist before the correspond- ing noun, so ordinary-sounding has the verb come to be. Such is the case for peddle and edit, both of which are historically backformations from peddler and editor, respectively.

Acronyms and initialisms

When the first letters of words that make up a name or a phrase are used to create a new word, the results are called acronyms or initialisms. In acronyms, the new word is pronounced as a word, rather than as a series of letters. For example, Acquired Immune Deficiency Syndrome gives us AIDS, pronounced [eidz]. And self-contained underwater breathing apparatus gives us scuba. Note in the case of scuba, the acronym has become so familiar to English speakers that many do not know that it's an acronym! My favorite current acronym is the DUMP, a term universally used in Durham, New Hampshire to refer to a local supermarket with the unwittingly unfortunate name 'the Durham Market Place'. Initialisms are similar to acronyms in that they

are composed from the first letters of a phrase, but unlike acronyms, they are pronounced as a series of letters. So most people in the US refer to the Federal Bureau of Investigation as the FBI pronounced [ɛf bi ai]. Other initialisms are PTA for Parent Teacher Association, PR for either 'public relations' or 'personal record', and NCAA for National College Athletic Association.

Clipping

Clipping is a means of creating new words by shortening already existing words. For example, we have info created from information, blog created from web log, or fridge from refrigerator. Universities are fertile grounds for the creation of clippings: students study psych, anthro, soc, and even ling with one prof or another, and if they're taking a science class, may spend long hours in the lab, which might or might not involve running some stats. Although clippings are often used in a colloquial rather than a for- mal register, some have attained more neutral status. The word lab, for example, is probably used far more

frequently in the US than its longer version laboratory. The word mob is a seventeenth-century clipping from the Latin term mobile vulgus 'the fickle common people'; the Latin phrase has long been forgotten, but the clipping persists as the normal word for an unruly throng of people.

Exercises.

Divide the following words into morphemes and label each morpheme as a prefix, suffix, free base, or bound base.

hypoallergenic non-morphological telephonic overcompensation reheatability monomaniacal

2. Now consider the words below and discuss what other sorts of restrictions we would have to add to our rules for -ize.

catechize, evangelize, antagonize, metabolize, epitomize

How many meanings can you come up with for the complex compound miniature poodle groomer manual? Try to draw the trees that correspond to each meaning you've come up with.

PRODUCTIVITY

Consider the examples in (1):

(1) a. warm warmth true truth

b. modern modernity pure purity

c. happy happiness dark darkness

In each case, we have adjectives and nouns that are derived from them (all cases of transposition, by the way). As a first pass, we might hypothesize the three rules of lexeme formation in (2):

(2) a. Rule for -th: -th attaches to adjectives, and creates nouns. For a base meaning ‘X’, the derived noun means ‘the state of being X’.

b. Rule for -ity: -ity attaches to adjectives, and creates nouns. For a base meaning ‘X’, the derived noun means ‘the state of being X’.

c. Rule for -ness: -ness attaches to adjectives, and creates nouns. For a base meaning ‘X’, the derived noun means ‘the state of being X’.

Now consider the list of adjectives in (3). If you had to make a noun from each of these, which of the three suffixes would you choose (note that you might be able to use more than one in some cases)?

(3) lovely cool crude evil googleable rustic musty inconsequential feline toxic bovine

Chances are that there are some of these words that you would choose to use -ity with (I choose crude, toxic, googleable, rustic, inconsequential, maybe feline), and others that you would use -ness with (for me, lovely, cool, evil, musty, probably bovine). Your choices might be slightly different from mine, but I'd be willing to predict that you didn't choose to use -th with any of these adjectives. What does this mean? In some cases, we can look at words, decide that they are complex, and isolate particular affixes. But when it comes to using those affixes to create new lexemes, we have the sense that they are no longer part of our active repertoire for forming new words.

Let's look further at the case of -ness and -ity, this time considering the additional examples in (4):

(4)

a. candid candidness

pink pinkness

hardy hardiness

common commonness

ticklish ticklishness

cunning cunningness

horrible horribleness

pure pureness

odd oddness

b. crude crudity

odd oddity

pure purity

dense density

rustic rusticity

timid timidity

grammatical grammaticality

local locality

available availability

senile senility

Types of inflection

Native speakers of English are often surprised at the kinds of inflection that can be found in languages – English is a language that has relatively little inflection, as languages go. So we'll start by surveying some of the types of inflection that can be found in the languages of the world.

Number

Perhaps the most familiar inflectional category for speakers of English is number. In English, nouns can be marked as singular or plural:

(1) Singular cat, mouse, ox, child Plural cats, mice, oxen, children

Although the vast majority of nouns pluralize in English by adding -s (or in terms of sounds, one of the variants [s], [z], or [əz]), some nouns form their plurals irregularly.

Person

Students of Indo-European languages like Latin or German, know that verbs in those languages are marked for the inflectional category of person: that is, verbs exhibit different endings depending on whether the subject of the sentence is the speaker (first person), the hearer (second person), or someone else (third person).

Gender and noun class

If you've studied French, Spanish, German, Latin, Russian, or another Indo-European language, you're probably familiar with the concept of gender. In languages that have grammatical gender nouns are divided into two or more classes with which other elements in a sentence – for example, articles and adjectives – must agree. We use French and German as our examples here:

(7) a. French Masculine Feminine homme 'man' femme 'woman' rat 'rat' souris 'mouse' bureau 'desk' table 'table'

Case

Case is another grammatical category that may affect nouns (or whole noun phrases). In languages that employ the inflectional category of case, nouns are distinguished on the basis of how they are deployed in sentences, for example, whether they function as subject, direct object, indirect object, as a location, time, or instrument, or as the object of a preposition. In Latin, for example, nouns must be inflected in one of

five cases, with singular and plural forms for each case The nominative case forms are used for the subject of the sentence. Accusative is generally used for the direct object and dative for the indirect object. Genitive is used for the possessor (for example, the boy's shirt). Ablative is used for the objects of prepositions (for example, cum 'with', d ē 'from'), although some prepositions take objects in the accusative case (ad 'to', post 'after').

Tense and aspect

Tense and aspect are inflectional categories that usually pertain to verbs. Both have to do with time, but in different ways. Tense refers to the point of time of an event in relation to another point – generally the point at which the speaker is speaking. In present tense the point in time of speaking and of the event spoken about are the same. In past tense the time of the event is before the time of speaking. And in future tense the event time is after the time of speaking. This can be rep-

resented schematically as in (13), where S stands for the time of speaking and E for the time of the event:

(13) Present S ? E Past E before S Future S before E

In English, we mark the past tense using the inflectional suffix -ed on verbs (walked, yawned), but there is no inflectional suffix for future tense. Instead, we use a separate auxiliary verb will to form the future tense (will walk, will scream).

Inflection in English

What we have As we've seen in passing in the sections above, English is a language that is quite poor in inflection. The distinction between singular and plural is marked on nouns:

Singular cat, mouse, ox, child Plural cats, mice, oxen, children

English has only a tiny bit of case marking on nouns: it uses the morpheme -s (orthographically -'s in the singular, -s' in the plural) to signal

possession, the remnant of the genitive case. Pronouns, however, still exhibit some case distinctions that are no longer marked in nouns:

Nouns singular non-possessive mother child singular possessive mother's child's plural non-possessive mothers children plural possessive mothers' childrens'

Pronouns singular subject I you he/she/it

singular object me you him/her/it

singular possessive my your his/her/its

plural subject we you they

plural object us you them

plural possessive our your their

In verbs, number is only marked in the third person present tense, where -s signals a singular subject. As we've seen, English verbs inflect for past tense, but not for future, and there are two participles (present with –ing

and past with -ed) that together with auxiliary verbs help to signal various aspectual distinctions:

Verbs

3rd person sg. present walks, runs all other present tense forms walk, run past tense walked, ran progressive (be) walking, running past participle (have) walked, run

Distinctions in aspect and voice are expressed in English through a combination of auxiliary choice and choice of participle. The progressive, which expresses, among other things, on-going actions, is formed with the auxiliary be plus the present participle:

Present progressive

I am mowing the lawn.

Past progressive

I was mowing the lawn.

Future progressive

I will be mowing the lawn.

The perfect (note that the perfect is not the same as the perfective, which we discussed above) expresses something that happened in the past but still has relevance to the present. This is signaled in English with the past participle and a form of the auxiliary have:

Perfect I have eaten the last piece of blueberry pie.

The passive voice in English is formed with the past participle as well, but the auxiliary be is used instead of have:

Passive I was followed by a voracious weasel.

It is, of course, possible to combine various auxiliaries and participial forms to express tense/aspect distinctions that are quite complex, as in, for example, the past perfect progressive passive sentence I had been being followed by a voracious weasel. As you can see, English has both regular and irregular inflections. All of our regular inflections are

suffixal, but irregular forms are often formed by internal stem change (ablaut and umlaut) or by a combination of internal stem change and suffixation. Examples of irregular forms : a. Irregular noun plurals foot feet mouse mice ox oxen child children alumnus alumni datum data

Semantics

Linguistic expressions can only occur in particular contexts; as a result, working out what role context plays in the determination of meaning is an important part of semantic analysis. This chapter considers one essential type of context: the external or real-world context to which linguistic expressions refer. We begin by discussing an important distinction: the distinction between what a word inherently means, and what it can be used to mean in a particular con- text, showing that this distinction is often not self-evident. We then distinguish the different types of task a hearer must perform to correctly understand a lin- guistic expression in its context (3.1). In 3.2 we begin the treatment of external context by considering the relation between sense and reference, discussing ◆ the origins of this distinction in Frege; ◆ its applications in linguistics; and the nature of deictic expressions, which

can be seen as a bridge between language and its surrounding external context.

Meaning and context

For the purposes of deciding what a piece of language means, no utterance can be considered as a self-standing whole: words only exist within particular contexts, and we will not be able to achieve an adequate description of meaning if we don't take these contexts into account. Indeed, one of the main questions which any theory of meaning has to answer concerns the scope of an expression's meaning: how much of the total effect of an expression is to be attributed to its meaning, and how much to the context in which it occurs? For example, consider the mean- ing of the English possessive morpheme (-s) in (1a) and (1b):

(1) a. Denise's teacher got burnt. b. Denise's brioche got burnt.

The possessive morpheme expresses two quite different relationships in each sentence: in (1a) it denotes a relationship like that of the verb teach to its object: (1a) means 'the person who teaches Denise got burnt'. In (1b), on the other hand, it denotes a relation of ownership or possession: Denise's brioche got burnt means 'the brioche belonging to Denise got burnt'. But does this difference result from a difference in the meaning of the possessive case, or is it a product of the context in which it is used? To many linguists, it would seem wrong to claim that the English posses- sive morpheme -s has two different meanings in (1a) and (1b). Instead, these linguists would claim, we should analyse its meaning in abstract terms, as denoting a quite general relation of dependence between two nouns, and leave the details of this relation in a given context to be sup- plied through the application of our real-world knowledge about the things being referred to. We know that people's relationships with teach- ers are different from their relationships with food. As a result, the pos- sessive case in the context of a word like teacher receives a quite different interpretation from the

one it has in the context of a word like brioche, even though the general, abstract meaning of the possessive – marking an (unspecified) dependence between the two nouns – is the same in each case. The fact that the exact details of this general, unspecified meaning may be vague, and in any case are open to various interpretations, does not detract from the intuition that it is the same meaning present in both cases. In this chapter, we will consider the external or real-world context to which linguistic expressions refer. Our understanding of expressions' meaning is often closely related to our knowledge of this context. The next chapter discusses the interpersonal context of linguistic action in which any utterance is placed. In order to interpret an expression correctly, it would seem that a hearer must perform a number of related tasks which involve these two different types of context. For example, consider someone interested in learning to play golf, who receives the advice All golfers need to find some good clubs. In order to understand what the speaker means, the hearer must:

1. Disambiguate the noun club, which can mean both ‘implement used to hit golf ball’ and ‘association in charge of a golf course’. Given the context, which interpretation is intended? 2. Assign referents to the noun phrases all golfers and good clubs: who does the speaker mean by golfers? What, for them, is a good club? 3. Determine the quantity referred to by some: roughly how many clubs does the speaker count as some, as opposed to lots? 4. Realize that the expression is intended as part of the context of advice, and is an instruction to find good clubs, not an assertion about a universal obligation falling on all golfers: this realization concerns the illocutionary force of the utterance. 5. As a result of (4), extract the implication that since all golfers need to find some good clubs, the hearer must also try to find some.

QUESTION Is there anything else which the hearer must realize in order to interpret the statement properly? How separate are the tasks in (1)–(5)?

In cases like this, the hearer makes the important interpretative decisions quite automatically. In fact, it is rather artifi cial even to differentiate the five different elements above: all that is required, you might think, is for the hearer to realize how, holistically, to take the instruction. Nevertheless, each item of the list expresses aspects of utterance interpretation which can be observed separately. The question of the interrelations between these different types of interpretative task will be important throughout this and the next chapter.

QUESTION Describe the decisions the hearer has to make about the interpretation of the following utterances in order to understand the speaker's likely meaning:

Customers are informed that the shop will be closing in fifteen minutes. Could you pass the chilli sauce? No one's going to the bar tonight. I'm sorry to bother you. What are you doing here? Will you ever grow up? I can't believe you called me that.

Semantics is not the only fi eld interested in phenomena like these: the subdiscipline of linguistics called pragmatics (Greek praxis, 'action'), which concerns the use of language in real contexts, also studies them. Semantics and pragmatics are closely related. Pragmatics cannot study language use without a prior conception of meaning: without knowing what words mean, one cannot decide how speakers modify and manipu- late these meanings in actual situations of language use. Similarly, semantics cannot arrive at any description of what words mean without looking at the ways they are used in different contexts. This interrelation between meaning and use means that pragmatics and semantics exist in a close symbiosis.

sense and reference

Perhaps the most basic type of context is the extralinguistic context of reference, which concerns the entities which an expression is about. (Following the Austrian philosopher Franz Brentano (1838–1917), the property, shared by thoughts and meanings, of being about things

other than themselves – objects in the world, possible states of affairs, etc. – is known as their intentionality.) As discussed in Chapter 1, reference is one of the fundamental con- cepts of the study of meaning. However, for a long time the distinction was not explicitly drawn between an expression's referent (the object to which it refers) and its sense (its general meaning, abstracted from its use to refer). It was the German logician and philosopher of mathematics Gottlob Frege (1848–1925) who first saw the significance of this distinction. Frege's primary concerns had little to do with language; for much of his career, his main goal was to clarify the logical bases of arithmetic. Between about 1891 and 1906, however, he became interested in ques- tions of meaning, and elaborated the distinction between sense (Sinn) and reference (Bedeutung) that subsequent philosophy and linguistics have inherited.

The Fregean distinction Frege had no single term for 'meaning', in the sense of the knowledge needed to understand a word (Dummett 2001:

12). Instead, he distin- guished three aspects of a word's total semantic effect:

• its 'force', which covered whether it was a statement or a question (he seems not to have considered other categories like commands);

• its 'tone' or 'colouring', which refers to differences of register and connotation (such as the difference between the verbs die, be deceased, and pass away: Dummett 2001); • and its sense.

The notions of force and tone are reasonably self-explanatory. But what is sense? In his famous 1892 essay 'On sense and reference' (sometimes translated 'sense and nominatum'), Frege introduced the distinction between sense and reference in order to explain a puzzle about statements of identity like those in the (a) and (b) pairs of (2)–(7) below:

(2) a. The morning star is the morning star. b. The morning star is the evening star.

(3) a. Abou Ammar is Abou Ammar. b. Abou Ammar is Yasser Arafat.

(4) a. Amber is amber. b. Amber is fossilized tree resin.

(5) a. The president of the World Chess Federation is the President of the World Chess Federation. b. The president of the World Chess Federation is the president of the Republic of Kalmykia.

(6) a. The founder of the FBI is the founder of the FBI. b. The founder of the FBI is the grandson of the King of Westphalia.

(7) a. The Feast of Saint Sylvester is The Feast of Saint Sylvester. b. The Feast of Saint Sylvester is New Year's Eve.

If all there is to meaning is simply reference, there should be no difference between each pair of sentences (we are ignoring tone and force, which are not relevant in these examples). This is because in each case both noun phrases have the same referent: the planet Venus in (2), the former president of the Palestinian Authority in (3), amber in (4), the Kalmykian president Kirsan Nikolayevich Ilyumzhinov in (5), Charles

Joseph Bonaparte in (6), and December 31 in (7). There is, however, a clear difference: while the (a) sentences are tautologies and uninformative – they don't give us any information – the (b) sentences clearly do tell us something. But if a term's reference is all there is to its meaning, how can this be explained? If meaning is no more than what a term refers to, the two pairs of sentences should not differ at all in their cognitive effect. Frege's solution to this puzzle was that an expression's reference is not, after all, the only part of its meaning: there is something else, which he called its sense. An expression's sense is the way in which we grasp or understand its referent. It is sense which gives an expression its cognitive value or signifi cance. One way of thinking of an expression's sense is as the mode of presentation of its referent: the way in which the referent is presented to our understanding. It is precisely because the noun phrases in the (b) sentences above have different ways of presenting their referents that the phrases are informative. The sense of 'morning star', which must be something like 'star visible in the morning', is clearly apparent from the

elements of the expression itself; this is a different mode of presentation of the term's referent, Venus, from the one we see in the 'evening star'. In other cases, the exact nature of an expression's sense – its mode of presentation to our understanding – may be less obvious: what, for exam- ple, is the sense of a proper name like Yasser Arafat or Abou Ammar? The nature of sense is one of the central topics of the philosophy of language. Philosophers like Frege and Bertrand Russell (1872–1970) thought that the sense of a proper name is some information which uniquely distinguishes the referent. The other main theory about the reference of proper names is a causal-historical one, according to which names are linked to their referents by a chain of actual naming events: in the fi rst instance, a refer- ent is given a name, and the name is passed down through the speech community: see Donnellan (1972) and Kripke (1980).

Componential analysis

While dictionaries use groupings of words to define single words (or col- locations), semanticists engaged in componential analysis (sometimes referred to as lexical decomposition) attempt to define words in terms of a set of abstract semantic primitives that break down a word into its essen- tial components. For instance, Leech (1981: 90) proposes the features below to define the words man, woman, boy, and girl:

man: □human, □adult, □male woman: □human, □adult, □male boy: □human, □adult, □male girl: □human, □adult, □male

Table 5.1. Componential analysis of English furniture terms.

	with back	with legs	for a single person	for sitting	with arms	rigid
chair	+	+	+	+	–	+
armchair	+	+	+	+	+	+
stool	–	+	+	+	–	+
sofa	+	+	–	+	+	+
beanbag	–	–	+	+	–	–

In interpreting semantic features, it is important to note that features such as □human or □adult bear no relation to the words human or adult. Instead, these features designate the abstract notions of "humanness" and "adultness." Therefore, the word boy, for instance, has an inherent mean- ing based on the notion of "humanness" but lacking the notion of "adult- ness." In addition, it is often difficult to determine precisely which features are necessary to define a given word. In the above list, Leech (1981) chooses to mark gender differences between the words with the features □/□male. He could just as easily have chosen the features □/□female, or □male and

□female. These latter two terms have the undesirable effect of adding one additional feature (□female) to the inventory of features need- ed to define the words. But the features □male and □female do more accurately define the words, since the feature –male defines "femaleness" in terms of the absence of "maleness," an unfortunate consequence to say the least. As will be demonstrated later in this section, the choice of fea- tures becomes even more problematic when abstract vocabulary (e.g. free- dom) is considered. Leech (1981: 90) notes that the words in the list above stand in binary opposition to one another: they differ in meaning in terms of the pres- ence or absence of certain features (e.g. □adult vs. –adult). However, with other groups of words, Leech argues, different types of features are neces- sary. The words mother and daughter, for instance, share the feature □female. However, the feature □/□adult is not relevant with daughter, since an individual can be someone's daughter at any age. Arguably, this feature is also not relevant with mother either, since someone could be a mother at a very young age before reaching adulthood. But there is a

dif- ferent relationship between the two words, what Leech (1981: 102–3) describes as a relation of opposition that "involves a contrast of direction": if I am your mother, you are my daughter; if you are my daughter, I am your mother. To express this kind of relationship, Leech (1981: 103) uses a left or right arrow with the feature 'parent':

mother: □ female →parent daughter: □ female ←parent

The right arrow means 'parent of'; the left arrow 'child of.' Other relationships involve what Leech (1981: 101) terms polar opposi- tions: words "best envisaged in terms of a scale running between two poles or extremes." Because the words hot/warm/cool/cold describe tempera- tures at varying points on a scale, Leech proposes that words such as these have features marked with up or down arrows of varying heights. The arrows below illustrate the varying degrees of temperature that the four words above express:

hot: temperature ↑ warm: temperature ↑ cool: temperature ↓ cold: temperature ↓

Of course, there are other kinds of relationships that exist between words, but once one looks beyond basic vocabulary, such as kinship terms, to the whole of the English lexicon, it becomes increasingly difficult to decide what semantic features are necessary to define words with less eas- ily identifiable meanings. While the words freedom and slavery stand in opposition to one another, it is not entirely clear exactly what features should be posited to distinguish the words. Abstract words in particular are not amenable to componential analysis. What features define liveli- hood, for instance, or fear, anger, and happiness? The inability of componential analysis to describe the meaning of words such as these has led many linguists to abandon this approach as a viable means of theorizing about the meanings of words. However, there are ways to simplify the number of semantic features needed to describe and distinguish words. For instance, Cruse (2004: 244) describes an approach in which semantic features are associated with a word through a series of “lexical contrasts.” In the group of

words below, he assigns features to the word chair by contrasting it with words that move progressively closer in meaning to chair:

chair vs. thought [concrete] vs. cat [inanimate] vs. trumpet [furniture] vs. table [for sitting] vs. sofa [for one] vs. stool [with back]

The words chair and thought have very little in common because while chair has the feature [concrete], thought does not. The word cat is slightly closer in meaning to chair: it does have the feature [concrete] but not the feature [inanimate]. Both sofaand stoolare quite close to chair, except that sofalacks the feature [forone] and stool the feature [withback]. The obvious advan- tage to this approach is that it does not attempt to assign every word a series of features that definitively define the word. Instead, words are assigned general features based on comparisons with other words. Another variation on componential analysis focuses not on the assignment of features to individual words in a language but rather on the development of features that specify what kinds of semantic features are universal to all languages.

Wierzbicka (1996 and 2006) has developed a series of what she terms semantic primes: abstract semantic features that, at least in theory, occur in all languages. The most current version of the theory contains "some sixty universal conceptual primes" (Wierzbicka 2006: 17), which are classified into sixteen general categories. For instance, within the category of "Descriptors" are the primes BIG and SMALL. Like the features used to conduct componential analysis, these primes do not refer to the words big and small but rather to the notion of size existing at two ends of a continuum. How these primes are realized within a given language will vary. For instance, the category "Determiners" includes the primes THIS, THE SAME, and OTHER/ELSE. English will realize notions of definiteness with determiners (or determinatives, as they have been termed in this book) such as the, this, or that. Languages lacking determiners (e.g. Russian and Japanese) will use other linguistic means to express the notion of definiteness.

Semantic relations

Although the goal of componential analysis is to develop semantic features that define an individual word, the features also serve to distinguish words from one another. For instance, as we saw above, Cruse (2004) pro- posed a system which compared words such as chair with a series of words that differed from chair by a single feature. More traditionally, semanticists have compared words in terms of a group of more general semantic relations that describe various degrees of similarities and differences that words exhibit. In her survey of the literature on semantic relations, Sparck Jones (1986: 42–7) identifies twelve different relations that have been pro- posed, including the three below:

Synonymy: words having the same meaning (e.g. help/assist, common/ ubiquitous, hard/difficult)

Antonymy: words having opposite meanings (e.g. light/dark, heavy/light, open/closed) Hyponymy: words whose meanings are

included in the meaning of a more general word (e.g. daisy, rose, tulip → flowers; desk, table, sofa → furniture; sparrow, robin, crow → birds)

Even though the above relations do not exhaust the number of relations that exist, they are very common and, additionally, play an important role in human cognition. We perceive the world in terms of similarities, differences, oppositions, and class inclusion – general perceptual categories that also apply to our views of the relationships existing between words in a language.

Synonymy.

Synonymy is a semantic relation that has been extensively studied. The true test of synonymy is substitutability: the ability of two words to be substituted for one another without a change in meaning. For instance, the example below contains the verb assist.

The research assistant was available to assist patients completing the survey.

If help is a synonym of assist, then it should be able to be substituted for assist in the above example without a change in meaning:

The research assistant was available to help patients completing the survey.

Because the two sentences are identical in meaning, help and assist can be considered, at least in the above contexts, as absolute synonyms. However, absolute synonymy is a controversial notion. Bolinger (1977: ix–x) proposed the non-synonymy principle because he believed that absolute synonymy does not exist. For him, every linguistic form has one (and only one) meaning. Therefore, even though two words may be close in meaning, they will never be identical in meaning. Edmonds and Hirst (2002: 107) argue that "Absolute synonymy, if it exists at all, is quite rare" because if words were truly synonymous they would need to "be able to be substituted one for the other in any context in which

their common sense is denoted with no change to truth value, communicative effect, or 'mean- ing' (however 'meaning' is defined)." It is easy to find examples illustrat- ing the difficulty of the notion of absolute synonymy. Most dictionaries will list hardas a synonym of difficult.In the two exam- ples below, both hard and difficult can be interchanged with little differ- ence in meaning:

He finds it difficult [hard] to describe his feelings

I do not deal with the equally hard [difficult] problem of the patient who is admitted unconscious to hospital after a suicide attempt .In the next two examples, substituting hard for difficult produces con- structions that are not entirely idiomatic:

Charles also found himself in a difficult [?hard] position.

Thus Frits Staal distinguishes between "the difficult [?hard] ways of con- templation" and "the easy way of drugs" by means of ... (CIC)

While stupid and unintelligent both mean 'lacking intelligence,' the substitution of one for the other produces very different results. The example below is taken from an academic book in which the author wishes to counter the common assumption that people who are illiterate lack intel- ligence. Because the word stupid has such negative connotations, using it in this context would negate the intended meaning of the author.

Freire believed that peasant adults, though often illiterate, are not unintelligent [stupid] and can reflect on their own experience, make connections, and cooperate to achieve agreed objectives.

In contrast, the short excerpt below was taken from a casual conversation in which the speaker wishes to directly convey that the person

being discussed is indeed not very smart. Using unintelligent would reduce the emphasis that the speaker wishes to achieve.

He's just so stupid [unintelligent].

Part of the force of stupid is that it has become, as the OED notes, "a term of disparagement or abuse." Thus, this more recent meaning of stupid may cloud other meanings just as describing someone as being gay is more likely to lead to the interpretation that the individual is homosexual rather than happy. Other differences are more subtle, as in the case of buy and purchase. There are certainly cases where the two words can be interchanged:

The family bought [purchased] a house in Park Street, London, and another converted Tudor farmhouse near Esher. (ICE-GB W2F-017 082)

Sangster recently purchased [bought] a 10-acre property in the South of France, apparently to concentrate on his golf.

However, forms of the two verbs occur in very different contexts. In the examples, bought and purchased have very different distributions across registers. In spontaneous conversations, bought occurs at a frequency of 348 occurrences per million words; purchased, in contrast, did not occur at all. Of all the registers, commerce had more instances

of purchased (67 occurrences per million words) than any other register. The reason for this distribution is that unlike bought, purchased is associated with some kind of formal commercial transaction. Thus, bought sounds somewhat awkward in the first example below, since what is being offered for sale is a commercial product in a formal business context:

The serving machines are available in a selection of sizes and can be leased or purchased [?bought].

Antonymy.

While synonyms have similar meanings, antonyms have opposite meanings. For Lyons (1977: 279) and Murphy (2003: 170), antonymy is a type of contrast; for Cruse (2004: 162), it is a type of oppositeness. But while these and other theorists acknowledge some kind of difference between word pairs that are antonyms, exactly which pairs are actually considered antonyms is subject to some disagreement. More narrowly focused definitions of antonymy restrict the class of

antonyms to adjectives that are gradable. According to this view, adjectives such as old and new would be antonyms because they depict two extremes on the scale of age: old new

There are various linguistic devices that can be used to mark points between these two extremes. First, both these adjectives have comparative and superlative forms: older/oldest and newer/newest. Thus, one can say that X is newer or older than Y, or that X is the oldest and Y is the newest. Second, both adjectives can be preceded by degree adverbs, such as very and somewhat, indicating differing points on the scale of oldness and newness: very old old somewhat old somewhat new new very new

With old and new, two distinct words are antonyms. But in English, it is also possible to create an antonym simply by adding a negative prefix, such as un-, to an adjective.

Examples of gradable antonyms

Separate words Prefixing with un-/in-/im-

young/old intelligent/unintelligent

hot/cold decent/indecent

beautiful/ugly attractive/unattractive

tall/short likable/unlikable

fat/thin comfortable/uncomfortable

heavy/light probable/improbable

high/low forgettable/unforgettable

wide/narrow civilized/uncivilized

happy/sad happy/unhappy

But while many words that contrast are gradable adjectives, others are not. For instance, dead and alive are words that are clearly opposite in meaning. However, they do not exist on a scale: something or someone is either dead or alive, and there is no point on a scale between these two extremes, as evidenced by the fact that it is impossible to describe

a per- son, for instance, as being very dead. It is possible to find intensification of such adjectives, as when Fidel Castro was described in 2006 as being “very alive and very alert” following surgery. But such expressions are more figurative than literal. Because dead and alive are binary opposites, Lyons (1977) does not characterize the relationship between them as antonymy but instead opposition. Others, however, take a more expansive view of antonymy. Jones (2002: 1), for instance, argues that because word pairs such as dead and alive are “intuitively recognized as ‘opposites’,” they should be included within the class of antonyms proper. And, indeed, empirical studies of antonymous word pairs provide many convincing examples of antonyms having a range of different forms. In their analysis of word pairs marked as antonyms in the Collins Cobuild Advanced Learner’s English Dictionary (4th edn.), Paradis and Willners (2006) found that while the majority of antonyms were adjectives (59%), other form classes were represented as well: nouns (19%), verbs (13%), and other (9%). In an empirical study of antonyms in a 280-million-word corpus of articles from The

Independent, Jones (2002: 31) chose to focus on 112 antonym pairs from four different word classes:

Adjectives:

active/passive, bad/good, illegal/legal, long/short, feminine/ masculine, rural/urban, gay/straight Nouns: advantage/disadvantage, boom/recession, guilt/innocence, optimism/ pessimism Verbs: agree/disagree, confirm/deny, disprove/prove, fail/succeed, lose/win Adverbs: directly/indirectly, explicitly/implicitly, officially/unofficially, quickly/slowly

Jones' decision to include the nouns optimism/pessimism, for instance, is quite justified because these nouns are very close in meaning to the gradable adjectives optimistic/pessimistic. It would thus be quite arbitrary to exclude optimism/pessimismfrom the class of antonyms simply because they are nouns. But despite the fact that nouns, verbs, and adverbs can be antonyms, antonymy is still, as Paradis and Willners' (2006) frequencies demonstrate, primarily a relation between

adjectives. In addition, of the five most fre- quent antonyms occurring in the corpus that Jones (2002: 33) examined, which totaled 25 percent of the pairs he discovered, four were adjectives: new/old, private/public, bad/good, hate/love, and poor/rich.

Hyponymy.

Hyponymy is a relation in which the meaning of a word is included in the meaning of a more general word: poodle is a hyponym of dog because the meaning of poodle is included within the more general meaning of dog. In the relation of hyponymy, the more specific word is known as a hyponym and the more general word a hypernym.

Words such as poodle, basset hound, and golden retriever are considered co-hyponyms because their meanings are all included within the meaning of dog, and each of these words is of equal specificity: they are all “types of” dogs. Because dog is more general than poodle or basset hound, it would be considered a hypernym of these words. While poodleis a hyponym of dog, it can potentially be a

hypernym as well if it is considered in relation to a more specific word, such as toy poodle, which would be a hyponym of poodle. Thus, whether a word is a hyponym or hypernym depends upon where it is positioned relative to other words to which it is related. In this sense, hyponymy is very much a hierarchical relationship: it "imposes a hierarchical structure upon the vocabulary and upon the fields within the vocabulary" (Lyons 1977: 295).

toy poodle

miniature poodle

standard poodle

large poodle

poodle

dog

domestic animal

animal

organism

living thing

whole, unit (an assemblage of parts that is regarded as a single entity)

object, physical object (a tangible and visible entity; an entity that can cast a shadow)

physical entity (an entity that has physical existence)

entity (that which is perceived or known or inferred to have its own distinct existence (living or nonliving))

FIGURE 6.4
Hyponym chain for *poodle* (adapted from http://wordnet.princeton.edu).

The information in this figure was taken from Wordnet (wordnet.princeton.edu), a large on-line lexical database (Fellbaum 1998). WordNet contains entries for content words – nouns, verbs, adjectives, and adverbs – that are grouped into synsets: a series of words that are synonymous. For each individual synset, it is possible to retrieve a chain of hyponyms and hypernyms. In Figure 6.4, hypernyms are displayed as one progresses vertically downward. Thus, animalis a hypernym of domestic animal but a hyponym of organism. At any point on the chain, various co-hyponyms could be added. For instance, a separate search of organism yielded numerous co-hyponyms in addition to animal, including person, plant, plankton, parasite, clone, and fungus. A search for co-hyponyms of per- son turned up so many matches that the search limit for WordNet was exceeded. Below are just some of the co-hyponyms that were listed:

self, adult, capitalist, captor, contestant, coward, creator, entertainer, individualist, intellectual, nonworker, traveler, unskilled person, worker, acquaintance, actor, adoptee, amateur, bullfighter

Although hyponymy is a relation “far more frequently found among nouns,” it is also possible to find examples with verbs and adjectives (Croft and Cruse 2004: 142). The verbs whisper, mumble, and yell are co-hyponyms of speak; the verbs jog, trot, and sprint are co-hyponyms of run. Cruse (1986: 89) includes the adjective scarlet as a hyponym of red. Comparable exam- ples with other colors are possible too, for instance navy blue as a hyponym of blue. But the concept of hyponymy is more problematic with adjectives, as evidenced by the fact that hyponyms in WordNet are restricted to the class of nouns and verbs. Among any group of co-hyponyms, certain words will be more proto- typical than others. The notion of prototype is very important in cognitively based theories of language and is based on the notion that:

Not all the members of a category have the same status within the category. People have intuitions that some category members are better examples of the category than others. Members that are judged to be best examples of the category can be considered to be the most central in the category. (Croft and Cruse 2004: 77)

With co-hyponyms, this notion is especially salient. In each of the word groups below, the hypernym is given first and is followed by a group of co- hyponyms. The least prototypical hyponyms are in boldface:

drinking vessel: glass, cup, mug, goblet, stein

furniture: desk, chair, couch, table, waterbed, ottoman

book: textbook, workbook, novel, cookbook, catechism, popup book

food: leftovers, produce, turkey, polenta, partridge

Although goblet is not prototypical for most speakers of English, some of the other words will vary by speaker and by cultural context. If an

individual has young children, then a popup book might be highly prototypical, since such books are quite popular with young children.

Other word formation processes. There are many other word formation processes beyond those already discussed. Some of these processes are very common; others are quite rare and have not over time contributed many new words to the English language.

Compounding

Compounding, according to Plag (2003: 132), is "the most productive type of word-formation process in English." Historically, it has a long tradition in English: two-thirds of the words in the Old English poem Beowulf, for instance, are compounds. Compounding involves combining two base morphemes to create a word with a new meaning that is not necessarily a sum of the meanings of the individual words. For instance, hot and house have individual meanings, and a hothouse is certainly a building kept at a high temperature. But it is not simply

any kind of “overheated” building but one in which plants requiring very high temperatures are grown. Orthographically, compounds can be spelled as a single word (e.g. police- man), as a hyphenated word (e.g. word-formation), or as two separate words (e.g. police officer). But practice will vary. In this section, word formation is spelled as two words, whereas in the quote above, it is spelled with a hyphen. On the one hand, these differences may simply reflect a greater preference for hyphenation of compounds in British English than American English (Quirk et al. 1985: 1569). On the other hand, the differences indicate how semantically integrated the two units are: policeman has been in the language much longer than police officer, which is much newer. Over time, it is quite possible that police officer will be spelled as a single word. In speech, compound words have a specific pattern of stress. One sylla- ble in the first element will receive primary stress, and one syllable in the second element secondary stress. Consider the examples below:

whíte hóuse (‘a house colored white’) Whítehòuse (‘the house in Washington, DC where the president of the United States lives’)

In the first pair of words, the adjective white merely modifies house. Thus, both words would receive relatively equal stress. In the second pair of words, however, the first element, White, would receive much greater stress than house. This is the typical pattern of stress found in compounds. Compounds are formed through various combinations of parts of speech:

noun noun: letter carrier, birthmark, life raft, clergyman, talk radio, fire fighter, streetlight, salesperson, deathwatch, human shield, spacewalk, sandcastle, senior moment, podcast

adjective noun: close call, small talk, blacklist, blackberry, heavyweight, bigwig

preposition preposition: upon, within, unto, into, onto

verb noun: chokehold, playroom, treadmill, call box, punch card, hitman verb preposition: breakdown, walkup, teach-in, playoff, takeout, startup, walkthrough, drawdown

These categories do not exhaust the types of compounds that are possible in English, but do demonstrate that it is a highly productive type of word formation process.

Borrowing

is a process by which a language receives a word directly from another language, usually as a result of contact with the language. Although English has borrowed heavily from Latin, Greek, and French, other languages have contributed vocabulary as well:

Old Norse (many words beginning with the sounds /sk/): skirt, sky, skin, scrape German: blitz, kindergarten, hamburger, strudel, dachshund

Arabic: coffee, alcohol, jar, jihad, albatross, giraffe, hashish Yiddish: bagel, schlep, schmooze, schmaltz, chutzpah Chinese: chow mein, chopstick, ginseng, tycoon, tai chi, kung fu Spanish: avocado, barrio, taco, mosquito, mesa, adobe

Many languages resist borrowing vocabulary from other languages. However, English has historically been very receptive to borrowing. The remaining word formation processes have contributed relatively few words to English. Functional shift involves changing the part of speech of a word rather than its form. Thus, bottle in the sentence The woman bottles her own beerresults from changing bottlefrom a noun to a verb. Other exam- ples of nouns being converted to verbs include man and impact:

The sessions are being manned by a team

The article was a review of process developments over the years and the way changing technology has impacted on fuel design. The search engine Google has seen its name converted into a verb so that now one

sees examples such as I googled myself on the Internet. The search engine name Google is based on the word googol, a word with a very interesting history. In its entry for this word, Webster's Third New International Dictionary, Unabridged notes that googol was "coined by Milton Sirotta, nine-year-old nephew of Dr. Edward Kasner" and designates 10100 (unabridged.merriam-webster.com, accessed April 13, 2008). Because googol is an invented word – one with no prior linguistic history – it is known as a root creation. Root creations can be "echoic," as McArthur (1992: 876) notes, and include words such as cuckoo, zap, and splash. They can also be trade names with generic uses. While Kleenex can be used to describe any kind of soft paper tissue, the word itself is the name of a specific brand of tissues. Other trade names that have developed generic meanings include Dacron and nylon (types of fabric), Tylenol (a brand name for the painkiller aceta- minophen), coke, Xerox, and band-aid. Trade names still associated with com- panies will be capitalized, and companies wanting to prevent their products from being used generically have sometimes resorted to

lawsuits to protect the distinctiveness of the names of their products. Two processes involve either the shortening of single words or the fusion of two words into one. Clippings are words that have been shortened: flu is a clipped form of influenza; phone is a shortened form of tele- phone. Additional examples include doc(tor), sec(ond), taxi(meter) cab(riole), (omni)bus, auto(mobile), gas(oline), and (inter)net.

Blends result from parts of two words being combined to create a single word. The word brunch is a combination of breakfast□lunch. Other examples include:

stagflation (stagnation □ inflation) chortle (chuckle □ snort) smog (smoke □ fog) infomercial (information □ commercial) snizzle (snow □ drizzle) blog (web □ log) Docudrama (documentary □ drama) Podcast (ipod □ broadcast)

Acronyms and abbreviations are formed using the first letters of two or more words to form a single word. The difference between the two processes is that while acronyms can be pronounced as a single word,

abbreviations have to be spelled out. Thus, AIDS is an acronym because it can be pronounced as a single word, while CIA is an abbreviation because the individual letters have to be pronounced. Acronyms and abbreviations are very common in English. Examples abound:

Abbreviations

LSD (lysergic acid diethylamide) DVD (digital video disc) CPA (certified public accountant) IED (improvised explosive device) ID (identification) lol (laughing out loud) WMD (weapons of mass destruction) MP (member of parliament, or military police)

Acronyms

yuppie (young urban professional) MADD (mothers against drunk drivers) NATO (North Atlantic Treaty Organization) RAM(random access memory) NIMBY (not in my backyard) radar (radio detection and

ranging) sonar (sound navigation and ranging) laser (light amplification by the stimulated emission of radiation)

This is a brief introduction to syntax, the study of the structure of sentences. It introduces some basic concepts, aiming to give readers an idea of syntactic phenomena and argumentation. The text adopts a theoretical perspective called 'Government and Binding Theory' or 'Principles and Parameters Theory', familiarity with which is generally presupposed in original syntactic research, although many of the ideas are found in most other theories. To simplify the exposition, the text sometimes adopts some fairly old- fashioned analyses of certain phenomena. Linguistics, like all other sciences, is constantly making new discoveries and many issues in linguistics are subject to debate. Doing justice to all the important recent discoveries and to all the approaches which have been suggested for the phenomena we discuss is impossible here.

Semantic features

While semantic roles describe 'who does what' in a relatively basic way (someone affects someone else, someone benefits from an action) semantic features represent the specific properties something needs to have to be semantically acceptable in a certain construction. Here's the example from above once more: John likes basketball ''The table likes basketball The dog ran across the field ''The refrigerator ran across the field What's wrong with the second and the fourth sentence? The answer is that the experience and the action described (like, run) can't be made and performed by non-living things such as tables and refrigerators.

	John	the table	the dog	the refrigerator
Animate	+	-	+	-

The term animacy is used to describe whether or not something is what we conventionally call 'alive'. It is apparently a requirement for the

subject X to have the feature +animate in order for a sentence like X ran across the field to be semantically well-formed.

While 'animate' and 'human' are broader (and more useful) features than 'canine' and 'liquid', all of them are distinctive in certain contexts. Humans are generally the subject of verbs such as like, adore, hate and consider, some kind of dog is generally the subject of the verb bark and some form of liquid generally the direct object of the verb drink. ''Dana's mother has no children ''The empty bucket is full ''The meeting will take place three years ago We can generally explain semantic anomaly via some kind of feature mismatch. In the examples above, the mismatch occurs in different places: +mother and +no children do not match, +empty and +full are not compatible and +future event +past event do not work together. Note that these are not commonly used features, but reading the examples like this makes it simple to spot the semantic problem right away.

Semantic properties:

relation between hypernym and hyponym

• human [+human] • > adult [+human, +adult]

• > man [+human, +adult, +male]

• > husband [+human, +adult, +male, +married]

• > house husband [+human, +adult, +male, +married, -employed]

Hyponyms & Hypernyms • Note that a hyponym entails a hypernym, but not the opposite.

(1) A Texan tried to assassinate the President. (2) A Texan tried to murder the President. (3) A Texan tried to kill the President. (4) # A Texan tried to assassinate my brother. (5) A Texan tried to murder my brother. (6) A Texan tried to kill my brother. (7) #A Texan tied to assassinate my hamster. (8) #? A Texan tried to murder my hamster. (9) A Texan tried to kill my hamster.

• assassinate entails murder, murder entails kill • kill does not entail murder, murder does not entail assassinate

Lexical Semantics: [-male] or [+female]? • In instances of binary opposition, one term tends to be less 'marked' than another (i.e. the default). This is language specific. How old are you? vs. How young are you? How long is the river? vs. How short is the river? How fast is the car? vs. How slow is the car?

• Use of the marked form makes a presupposition. How shallow is it? How young is he? #How young is your grandpa?

Synonyms

Synonyms: words that seem to have the same meaning • 'couch' vs. 'sofa'

Unlikely that there are perfect synonyms • couch potato, *sofa potato • deep vs. profound • deep thoughts, profound thoughts • deep holes,

*profound holes • mother vs. mom, father vs. dad • different levels of formality

Antonyms: words that seem to have opposite meanings

Three types of antonyms:

• Complementary single - married, dead - alive

• mutually exclusive • Gradable cold - cool - warm - hot, wet - dry • can modify with ‘very’, ‘a little’, etc.

• Converse above / below, give / receive, buy - sell • reciprocal relationship between words • relationship x entails existence of relationship y

Reference

Words also refer to (concrete or abstract) things • reference to specific entity (a referent) • Bill, the White House, Paris • reference to set of entities • person, house, city • cf. definite, indefinite articles • a person,

the person • Not all words contain a referent in the real world • unicorn.

Homophones

Homophones are terms that have a similar sound pattern, but are otherwise unrelated. Examples for this are see - sea, buy - bye, might - mite, night - knight. When two terms are spelled similarly but the sound patterns differ, we speak of homographs. An example for a pair of homographs is wind, as in we wind up in the same club every weekend vs. the wind is very cold in December. When both pronunciation and writing are identical, linguists conventionally speak of homonyms (see below).

Homonyms

Homonyms are terms that are superficially identical (in speech and writing) but etymologically unrelated: match = thing that you light a cigarette with match = thing that a soccer team loses

date = a sweet kind of fruit (ger: Dattel) date = an appointment Note that homonyms are characterized by the fact that they look the same superficially, but are actually unrelated. Usually the etymology of a word is key in determining whether it is a homonym.

Polysemy

In contrast to homonymity, which describes separate words with different meanings that only happen to look similar, polysemy describes individual word with multiple and distinct senses (polysemes). The term bank, for example, can denote either the institution or the building in which the institution resides. Both meanings are associated with the same word, making bank polysemous. By contrast, a river bank is not a different meaning of the same term, but a different word entirely.

SYNTAX

A. McIntyre

Syntactic categories

It is assumed that you have some familiarity with what in traditional grammar were called the parts of speech, i.e. notions like those in (1). Such notions are now covered by the term categories or syntactic categories.

(1) Category Abbreviation Example

a. noun N John, London, computer, city, stupidity, event

b. verb V hear, think, kill, shorten, eavesdrop, exist

c. adjective A good, obscene, demented, lovely, schoolmasterly

d. preposition P by, in, with, from, to, at, inside, despite

e. adverb Adv slowly, often, now, mostly

f. determiner D (or Det) a, the, this, those

It is worthwhile learning the abbreviations for the categories, as they are used in other works. Let us briefly examine some of the criteria which are used in determining the category a word belongs to. We will not try to give a full list of completely failsafe criteria here; we will simply indicate the types of criteria which are considered more reliable by syntacticians. One less reliable type of criterion for categories which you may already have encountered is semantic, i.e. based on meaning. Thus, you may have been told in school that a noun denotes a person, place or thing, that a verb denotes an activity or state and that an adjective denotes a property. Unfortunately, such semantic generalisations are tendencies, not absolute rules. Thus, there are nouns which denote activities (the hammering), events (recital), states (drunkenness) and properties (silliness). More reliable evidence for determining the category of a word come from morphological and distributional criteria. Examples of morphological criteria would be that

nouns, but no other category, can take a plural affix (tables, intervals, oxen) and that most verbs change their morphological form according to the requirements of tense and agreement (I sing, she sings, I sang; I talk, she talks, I talked). If you can add -ly to a word to form an adverb, you know that word is an adjective (slow>slowly).

Examples of distributional criteria for various categories are given below. In each case, assume that the gap in the sentence is to be filled by a single word.

a. They have no []N b. the []A []N c. She did so []Adv d. very []A/Adv e. They can []V

Constituent structure

Identifying the syntactic category of each word in a sentence is only the beginning of syntactic analysis. Consider the simple sentence below:

(3) That man likes that woman In analysing sentence (3), we might propose the following rule:

(4) S → D+N+V+D+N (Translation: A sentence can consist of the sequence determiner + noun + verb + determiner + noun.) It is easy to show that a rule like (4) is worse than useless. Suppose we want to give more information about the man spoken of in (3) and/or to say that he likes someone or something other than that woman. We could then replace that man and that women with different, more complex expressions. A small selection of the infinite number of possible replacements is given in (5) and (6). (5) a. that old man b. that old man with the bottle of beer c. that extremely old and decrepit man with a nearly empty bottle of cheap beer d. that man over there near the window e. that extremely old and decrepit man over there with a nearly empty bottle of cheap beer (6) a. heavy metal music from the Seventies b. people with a flair for the unusual c. paintings by certain fairly weird and decadent artists d. the lady over there beside the

fireplace e. his collection of photographs of Victorian guesthouses in Tasmania The possibility of replacing that man in (3) with any expression in (5) and that woman in (3) with any expression in (6) gives us twenty-five sentences. If we wish to be able to describe what happens using rules like that in (4), we would require twenty-five different rules. Once we start adding further material to the sentence (say, very much just before likes and/or obviously at the beginning of the sentence), the number of rules of the type in (4) begins to multiply. We would rapidly see that the number of rules of the type in (4) required to describe possible English sentences would be infinite. There is no way a child could learn such rules. Also, such rules are purely descriptive, by which is meant that they just state observed empirical facts without giving any explanation for them. A way out of this impasse emerges when we realise that what has hitherto been lacking in our analysis of sentences has been the idea that words can combine with other words to form larger groups of words which belong together. In technical parlance, such groups of words are called

constituents. Constituents combine with other constituents to form yet larger constituents, until we eventually have the largest type of constituent studied in syntax, the sentence. The expressions listed in (5) and (6) were examples of constituents called 'noun phrases' (NPs), expressions which include a noun and some additional material giving additional information about it. NPs can typically be replaced by pronouns: each NP in (5) and (6) can be replaced by he, her, it, them etc. as appropriate. We will give a better definition of NPs and other types of constituents later. Our purpose now is merely to show how establishing constituent structure greatly helps us in analysing sentences. Consider (7), which will be rejected later and should not be memorised, but is far better than (4): (7) S → NP V NP (Translation: A sentence can consist of the sequence NP+V+NP.) Even if we are only interested in describing the twenty-five possible sentences consisting of a NP from (5), a verb and a NP from (6), the benefits of recognising constituent structure should now be apparent. If we use rules of the type in (4), we would require twenty-five rules to describe these

sentences, whereas (7) describes all twenty-five sentences with just one rule. It should be emphasised again that the rule in (7) is being used only as a way of showing the need for constituent structure. We will later show how this rule can be improved upon. As another, more interesting argument for the need for constituent structure, consider the following sentences containing the possessive s morpheme: (8) a. [That lady]'s husband left. b. [That lady over there]'s husband left. (=the husband of that lady over there...) c. [That lady near the door]'s husband left. (=the husband of that lady near the door...) d. [That lady you talked to]'s husband left. (=the husband of that lady you talked to...) e. [That lady you saw]'s husband left. (=the husband of that lady you saw...) Notice that we cannot describe the behaviour of the possessive 's in terms of the category of the words it attaches to: 's can appear immediately to the right of a word of any category. Notice also that 's does not necessarily say that the word it appears to the right of is the possessor. (For instance, the door in (8)(c) probably does not have a husband.) Rather, the correct generalisation is that possessive 's

attaches to a particular type of constituent (marked by square brackets in (8)), namely a NP. Without knowing what a NP is, there is simply no way to describe the behaviour of possessive 's. Thus, we cannot describe sentence structure without recourse to constituents.

Tests for constituents

In all sciences, linguistics included, one should be able to assess the truth or falsehood of a claim by means of objective tests. We now introduce some tests for establishing whether a string (i.e. group of words) is a constituent or not.

a) Proform test.

Proforms are expressions like she, them, somewhere, do so, there which have the function of representing a constituent which has already been mentioned, so that one need not go to the effort of pronouncing/writing the constituent twice. The best-known type of proform is a so-called pronoun, which replaces a NP, e.g. she/him/they. If you can replace a string with a proform, the string is a constituent. (9)

illustrates the use of the proform test in finding constituents in (9)(a).

(9) a. The lady running the group handed in her resignation on Friday at noon. b. She handed in her resignation on Friday at noon. [Thus, The lady running the group is a constituent] c. The lady running it handed in her resignation on Friday at noon. [Thus, the group is a constituent] d. The lady running the group did so on Friday at noon. [Thus, handed in her resignation is a constituent] e. The lady running the group handed in her resignation then. [Thus, on Friday at noon is a constituent]

b) Question test.

If you can convert a sentence into a question using a wh-expression (e.g. where/how/when/why/what/who(m), and phrases like with whom?, at what time?, in whose house?), the string that the wh-expression replaces is a constituent. (Wh-expressions are proforms.)

The answer to the question is also a constituent. (10) illustrates this with reference to (9)(a). In each case, A and B refer to different speakers. B's answer is a constituent. (10) a. A: What did the lady

running the group hand in on Friday at noon? B: Her resignation. b. A: Who handed in her resignation on Friday at noon? B: The lady running the group c. A: When did the lady running the group hand in her resignation? B: On Friday at noon

c) Movement test.

If a string can be moved to some other position in the sentence, you know it is very likely to be a constituent. The following examples apply this test to identify constituents in the respective (a) sentences. (11) a. Egbert was reading a thick book about formal logic on the balcony on Sunday. b. On Sunday, Egbert was reading a thick book about formal logic on the balcony. c. On the balcony, Egbert was reading a thick book about formal logic on Sunday. d. Egbert was reading on the balcony on Sunday a thick book about formal logic. (12) a. Rover ran out of the house. b. Out of the house Rover ran. (13) a. Ann is not a fan of mindless techno music. b. A fan of mindless techno music, Ann is not. (14) a. Gertrude wasn't interested in art. b. Interested in art, Gertrude

wasn't. (15) a. Hortense didn't win the race. b. Win the race, Hortense didn't.

d) Coordination test.

Coordination is the operation of joining two words or phrases together using conjunctions, e.g. and and or. Strings joined by conjunctions must each be a constituent. (They must be constituents of the same type, a fact which will be important to us later.) Suppose you are trying to test whether the underlined strings in (16)(a) and (17)(a) are constituents. Try to find another expression which you can coordinate with the underlined string. You can be confident that the string is a constituent if you can place the other expression with which it is coordinated either before or after it without any difference in meaning, as in (16)(b,c) and (17)(b,c). (16) a. I went to the post office to post a letter. b. I went to the post office to post a letter and did the shopping. c. I did the shopping and went to the post office to post a letter. (17) a. She spoke to a small number of the students interested in the subject. b. She

spoke to a small number of the students interested in the subject and the staff. c. She spoke to the staff and a small number of the students interested in the subject. e) Cleft test. (18)(a) can be changed into the sentences in (b-d). These are instances of cleft sentences (Spaltsätze). (Cleft comes from an old verb cleave meaning 'divide'; the idea is that cleft sentences are divided in two.) The general form of cleft sentences is (18)(e). The purpose of cleft sentences is to focus the material between be and that, underlined in (18)(b- d), presenting it as the new information. This material is always a constituent. (18) a. The guests from overseas visited the best parts of the city on Monday. b. It was on Monday that the guests from overseas visited the best parts of the city. c. It was the best parts of the city that the guests from overseas visited on Monday. d. It was the guests from overseas that visited the best parts of the city on Monday. e. It {was/is} X that ... [where X is some constituent] f) Pseudocleft test. Sentence (18)(a) can also be changed into sentences like those in (19) and (20). These are 'pseudocleft sentences', which we can describe roughly as a reformulation of a

sentence such that a form of be divides the sentence into two parts, of which one is a focussed constituent from the original sentence (underlined in the examples below) and the other begins with what. The order of the two parts of the sentence is often flexible. The important point about pseudoclefts for our purposes is that the string appearing in the part of the sentence not containing what, i.e. the underlined string in the examples below, must always be a constituent. (19) a. What the guests from overseas visited on Monday was the best parts of the city. b. The best parts of the city were what the guests from overseas visited on Monday. (20) a. What the guests from overseas did on Monday was visit the best parts of the city. b. Visit the best parts of the city was what the guests from overseas did on Monday. (21) a. I don't need losers like him who couldn't think their way out of a paper bag. b. What I don't need are losers like him who couldn't think their way out of a paper bag. c. Losers like him who couldn't think their way out of a paper bag are what I don't need. (22) a. She seemed to be totally fed up with the inefficiency of the system. b. What she seemed

to be was totally fed up with the inefficiency of the system. c. Totally fed up with the inefficiency of the system was what she seemed to be. g) Though test. In (23) we see that it is sometimes possible to transform sentences beginning with although into structures where a focussed part of the sentence precedes though, followed by the rest of the sentence. This fact can be used as another constituent test because whatever stands in front of though must be a constituent. (23) a. Although she is a defender of free will... = A defender of free will though she is... b. Although they are annoyed at their son... = Annoyed at their son though they are... c. Though he crossed the road with care... = Cross the road with care though he did... There are other constituent tests, but the ones given above will suffice for our purposes. A couple of warnings are appropriate. Firstly, to be completely certain that the results are correct, it is wise to use more than one test when trying to work out whether a string is a constituent. Secondly, the above descriptions of the tests were all formulated in terms similar to 'If you can do such-and-such with a string, then it is a

constituent', rather than 'If you cannot do such-and-such with a string, then it is not a constituent'. This was because constituent tests will sometimes yield unacceptable results not because the string being tested is not a constituent, but because of some other factor. Consider the underlined string in she played the piece very quickly and very skillfully. We know it is a constituent because it is coordinated with very skillfully. However, we cannot form a question from this sentence: *How did she play the piece and very skillfully? 3 The unacceptability of this sentence does not show that very quickly is not a constituent, but is explained by a constraint (not discussed here) which says that one cannot ask a question of a coordinated element.

A. Apply two of the above tests to show that the underlined phrases are constituents. a. A lady in a blue dress sang the national anthem in the stadium some time after noon. b. Someone saw a suspicious-looking man with a briefcase walking around in the foyer on Monday half an hour before the building blew up.

1.4. Phrasal categories and the notion of 'head' Just like words, constituents larger than words have a category. We distinguish word-level categories (categories of words, i.e. N, V, A, P, etc.) and phrasal categories or simply phrases (constituents larger than a word). Examples of the latter which were already mentioned are NP and S. There are a number of other types of phrases. The first thing to note is that each word-level category has a corresponding phrasal category, which contains the word-level category itself and any material which -in a manner to be made more precise shortly- adds additional information to it or is dependent on it.

In (24)-(28) are examples of the phrasal categories we will be concentrating on in this text. Do not worry if you do not yet understand why the expressions in (24)-(28) are seen as instances of the respective categories. This set of problems is taken up in the next section.

(24) Noun Phrase (NP) a. the woman; a (big) tree; (this) coffee, (our) existence b. a (renowned) expert (on indigenous Australian music)

(from Brisbane) c. the (classical) dancer (of exceptional talent) (who got run over by a bus) d. the (most important) representatives (of workers' ./

W(about Spain) (25) Verb Phrase (VP) a. (suddenly) die (of cancer) (at a young age) b. (blindly) rely on the advice of a counsellor c. (often) called him a maladjusted sociopath d. give Basil the book e. read (a book) (26) Adjective Phrase (AP) a. (very) angry (at the rest of the human race) b. (completely and utterly) disappointed (at the ineptitude of her secretary) c. interested (in the history of Postmodernist theatre) (to some extent) d. dull (to the extreme) e. (soul-destroyingly) boring f. devoid of content (27) Prepositional Phrase (PP) a. (right) near the fireplace b. towards the entrance to the building c. (wholly) inside (the enclosure) d. out (of the house) e. despite the failed attempt of the paramilitary at blowing up the Institute of Syntax (28) Adverb Phrase (AdvP) a. (very) slowly b. (extremely) well c. (completely) independently of the approval of his superiors The underlined elements in the phrases above are the elements around which the respective

phrases are built. They are said to be the heads of the respective phrases. (Alternative ways of saying this are, taking NP as an example, that N heads or projects NP, or that NP is a projection of N or is headed by N.) The head of a phrase is the element which determines the properties of the whole phrase. All elements in a phrase other than the head are dependent on the head, in that they either give additional information about the head, or are included in the phrase because the head requires or allows this. The head is obligatory, in the sense that if you leave out the head of a phrase, the rest of the phrase must be left out too. You can confirm this by forming a sentence containing any of the phrases in (24)-(28), but omitting the head of that phrase. The resulting sentence will almost certainly be unacceptable. Note that the notion of 'head' also applies to word structure. Inside words, the head is the element which determines the properties of the whole word. For instance, we say that eat is the head of overeat because the whole word has the same category as eat (i.e. it is a verb) and is inflected in the same way as eat (cf. ate/eaten and overate/overeaten). A

difference between morphological and syntactic heads is that, in English, the head of a word is usually the right-hand element, while the head of a phrase is often not the right-hand element.

1.5. The main problems in identifying and motivating the phrasal categories Readers may be asking why some of the expressions in (24)-(28) were seen as being headed by the underlined elements. In some cases there may be doubt about whether the expressions are even constituents. We address the most challenging cases now, applying the constituent tests introduced in section 1.3 and making some additional observations.

NP

NPs are among the easiest phrase-level categories to understand. The following points hold of each example in (24), and of all other NPs: a. The whole phrase refers to the entity/concept named by the noun. b. All the material in the phrase gives information about the noun. c. The whole phrase can be replaced by a pronoun

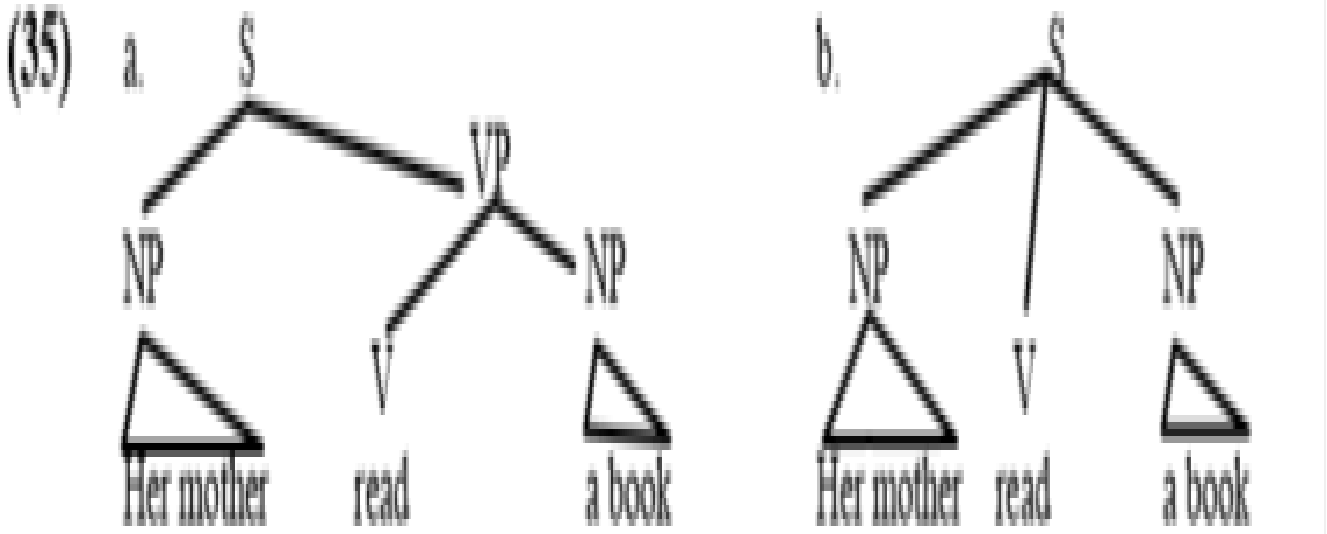
(she/her/he/him/it/they/them). Points a and b are two arguments for the claim that the noun determines the nature of the whole phrase, and is thus its head.4 Point c gives an important grammatical characteristic of NPs in general, which helps us to identify them. It is important to realise that pronouns stand for full NPs, not just nouns. If pronouns stood for nouns, then replacing the big tree with a pronoun would yield the unacceptable expression *the big it. It is easy to identify simple expressions like (24)(a) as NPs. Cases which may confuse beginners are structures like (24)(b-d) where the NP includes material after the noun. As an example of this, consider (24)(e), repeated in (29) as part of a full sentence. We can establish that the underlined string in (29) is a constituent by applying the cleft test in (30), the movement test in (31) and the proform test in (32). Since the proform is a pronoun, we can assume, as per point c above, that the underlined constituent in (29) is a NP. It should also be clear that the constituent conforms to points a and b above. (29) I saw a documentary by a French journalist about Spain last night. (30) a. It was a documentary

by a French journalist about Spain that I saw last night. b. *It was a documentary that I saw by a French journalist about Spain last night. (31) a. I saw last night a documentary by a French journalist about Spain. b. *I saw by a French journalist about Spain last night a documentary (32) a. I saw it last night. b. *I saw it by a French journalist about Spain last night Students may have trouble with these sentences because the string a documentary can be a complete NP in some contexts. It is important to note that, while it is a NP in a sentence like e.g. I saw a documentary last night, the tests above show that a documentary is not a complete NP in the context of (29).

1.5.2 VP Consider now the strings of words in (25), referred to as VPs. These strings all contain a verb and that, if one adds an appropriate NP (called a subject5) in front of the string, a full sentence is formed. Thus, adding the NP her mother to (25)(e) gives us the sentence (33). Readers may wonder why the strings in (25) are regarded as constituents. To make the question more concrete, consider (33). Why is it better to

assume that (33) has the structure indicated in (34)(a) or (35)(a) rather than that seen in (34)(b) or (35)(b).6 If the VP constituent exists at all, why does it not include the subject? Why is her mother read not a VP?

(33) Her mother read a book. (34) a. [S[NPHer mother] [VP [V read] [NP a book]] b. [S [NP Her mother] [V read] [NP a book]]



(34)(b)/(35)(b) suggests that the string read a book is not a constituent, but two independent constituents. On the other hand, (34)(a)/(35)(a) suggests that this string is a constituent. If we apply the constituent tests introduced in section 1.3, we find clear evidence for the existence

of the constituent presupposed by (34)(a)/(35)(a). (36) a. Her mother READ A BOOK. She did so last year. [Proform test] b. A: What did her mother do? B: READ A BOOK. [Question test] c. Her mother [READ A BOOK] and [did a crossword puzzle] [Coordination] Her mother [did a crossword puzzle] and [READ A BOOK] d. READ A BOOK was what her mother did. [Pseudocleft test] e. READ A BOOK though she did, she was still bored. [though test] To show that the behaviour of read a book is no fluke, we give below some evidence indicating that each of the other constructions in (25) are constituents. (37) [VP Suddenly die of cancer at a young age] though she did, she is still remembered. (38) What he did was [VP blindly rely on the advice of a counsellor] (39) They [VP often called him a maladjusted sociopath] and [VP laughed at him] They [VP laughed at him] and [VP often called him a maladjusted sociopath] (40) A: What did she do? B: [VP give Basil the book] Thus, it is clear that the structures in (25) are possible constituents in a sentence. That the constituents in (25) are seen as headed by the verbs rather than some other element seems fairly self-evident. Readers will

be able to verify for themselves that all the material in the phrase is giving us information about the situation expressed by the verb.

1.5.3 PP Beginners sometimes assume that PPs (e.g. (27)) are a type of NP. This assumption seems to result from the intuition that the preposition is in some sense 'less important' than the noun in the NP after the preposition, which is taken to show that the noun ought to be the head of the whole construction. This reasoning is misses the mark. Taking the PP into the shop as an example, we note that the preposition is not telling us anything about the shop, contrary to what we would expect if it were part of the NP headed by shop. Secondly, note that PPs never denote entities, unlike NPs. In most cases, PPs denote locations or directions. Finally, pronouns that can replace NPs (it/them/she etc) can never replace PPs. There is thus clear evidence that PPs are not a type of NP.

1.5.4 AP It seems to be relatively unproblematic to identify APs in predicative position (i.e. if the AP is in a sentence-final position and the

NP it describes is nowhere near it, as is the case if one of the APs in (26) appears in a sentence beginning with They are, e.g. They are very angry at the rest of the human race. What sometimes causes confusion among beginners are cases of prenominal APs, i.e. APs which are directly in front of the noun they describe, as in the very

big tree. Here the AP is very big, not very big tree. A reason for assuming this is that the noun is the head of the whole construction, not the adjective, since the adjective is describing the noun and not vice-versa. Additionally, if you compare prenominal APs with predicative APs, you will notice that a uniform characterisation of the AP is possible only by assuming that the AP never contains the noun it describes.

1.6. More on Coordination We can now complete the treatment of coordination begun in section 1.3. The basic principles are: • Coordination is generally possible only with constituents of the same

category. • Coordination forms a phrase of the same category as that of the coordinated constituents.

Identify the categories coordinated by the italicised conjunctions in the sentences below. a. A cleaner and a professor of physics recently got married. b. She will sing and play a Beatles tune. c. He went to the restaurant for a pie and chips but only had a glass of wine there. d. There was an interesting talk on the last day of the conference, but everyone fell asleep. C. Find the heads of the phrases below. Is the phrase a NP, AP, VP, AdvP or PP? a. that big and ugly building b. in the house over there c. extremely proud of his children d. smokes very weird cigarettes e. sometimes sings out of tune f. outside the house over there g. seldom knew all the answers h. completely unbeknownst to us D. Identify the NP and VP which combine to form the following sentences. a. The lady over there and her friend know George. b. Fred obviously believes the story about the Martian invasion. c. A big

problem with the theory still gives the researchers cause for concern. d. He usually read or watched television.

1.7. Complements, Arguments and Modifiers Consider the following phrases, where the heads are underlined and optional constituents are enclosed in parentheses. (42) VP: a. (constantly) relied ON HER (throughout the crisis) b. (secretly) devoured THE LEFTOVERS (in the kitchen) (before leaving) c. (often) claimed THAT HE WAS GOD'S PERSONAL MESSENGER (despite somewhat sceptical reactions) (43) AP: a. reliant ON HER PARENTS (during the crisis) b. fond OF HIS WIFE (in every way) c. proud (OF HER CHILDREN) (above all justification) d. unable (TO KEEP THE APPOINTMENT) (because of the accident)

(completely) bereft/devoid OF INSPIRATION (=lacking it) (44) NP a. his fondness/liking FOR STRONG DRINK (during the Winter months) b. my (misguided) reliance ON MICROSOFT SOFTWARE (in writing these notes) c. the expert (ON PHYSICS) (on the committee) (in an orange waistcoat) d. her (profound) faith (IN DIVINE BEINGS) (during the crisis)

e. the (generous) friends (OF THE ACCIDENT VICTIMS) f. the (better known) kings (OF ENGLAND) (before the fifteenth century) (45) PP: a. towards THE FENCE b. (right) inside (THE HOUSE) c. despite STATE INTERVENTION In these phrases, the constituents in capitals are said to be complements of the heads. The expressions in italics are modifiers of the heads. The differences are as follows. A. It is impossible to define the head of the phrase without referring to its complement. Take the verbs in (42). Any definition of rely would mention a person or thing relied upon, a definition of devour would mention something that is eaten and a definition of claim would mention some claim that is made. However, the definitions of the verbs in (42) need not mention the sorts of information expressed by the constituents in italics. (Consider how redundant the PPs sound in the following definition of devour: 'enthusiastically eat something at a particular time and at a particular place'.) A definition of expert (see (44)(c)) would mention that the individual in question possesses knowledge of a particular subject (which can appear as the complement of expert), but not whether the

expert belongs to a committee or what they wear. A definition of proud (see (43)(c)) must mention that a proud person is proud of something or someone. B. Modifiers are always optional, while complements are often obligatory. Notice that the claim is not that complements are always obligatory. The capitalised expression in (46) is a complement for the same reasons as that in (42)(b) is: one cannot define the verb without mentioning an eaten entity. However, it is possible to say she ate as well as she ate the leftovers, so we must assume that the complement is optional. Even if the complement is not expressed, it is still present in the meaning of the VP, for one cannot eat without any food being consumed. Similar remarks apply to proud and expert (cf. (43)(c) and (44)(c)). If we hear John is proud, we know that he is proud of someone or something. The sentence John is an expert is understood such that he is an expert on something. (46) ate (THE LEFTOVERS) (before she went to the pub) C. Complements appear closer to the head than modifiers do, as the examples above show. D. (This principle subsumes A.) The complements of a word are those elements which

occur within the phrase headed by the word which are mentioned in the lexical entry of a word. A word's lexical entry is the information associated with the word in the (mental) lexicon, the part of the native speaker's linguistic knowledge which contains idiosyncratic information, i.e. information which must be memorised because it is not describable in terms of rules. The mental lexicon is thus a mental 'dictionary'. The lexical entry for a word must include, among other things, information about the syntactic category, the pronunciation and the meaning of a word. It will also indicate how and whether certain parts of the meaning of a word are to be expressed in the sentence. Consider the verbs eat, devour and dine, all of which basically mean 'consume food'. The lexical entries for these verbs will be quite similar, but (apart from differences in pronunciation and subtle semantic differences) will differ in their specification of whether and how the food can be expressed in the sentence. The entry for devour specifies that the food must appear as a NP (we devoured the chicken), the entry for eat says that it may or may not do so, since both we ate and we ate the chicken are

acceptable. The entry for dine specifies that the food may either not appear in the sentence (we dined), or may appear as a PP headed by on (we dined on the chicken), but not as a NP

(*we dined the chicken). From contrasts of this type we can see that the types of complements a word can take are to some extent idiosyncratic, i.e. not able to be predicted wholly and solely on the basis of the meaning of that word. This is why information about the complements a word can take must appear in that word's lexical entry. On the other hand, the types of expressions which can modify an expression can always be predicted on the basis of knowledge of the meanings of that expression and of those of the modifiers. E. There is no syntactically determined limit to the number of modifiers a word can have within its phrase, cf. (47). Because complements of a head can appear only if the lexical entry for the head mentions them, the number and type of complements of a head is much more limited. Verbs have at most two complements, and other categories can mostly

only have one. (47) a. [sometimes] walked THE DOG [slowly] [in the park] [on Fridays] [after work] [for two hours] [to clear his mind] b. [big], [black], [fluffy] , [slobbery], [dangerous] dogs [without collars] [in the park]

The term 'argument': In other texts you may encounter the term argument. It means that same as complement, except argument is exempt from condition C above: an argument of a head need not appear within that head's projection. Thus, the subjects in John [VP ate the food] and Ann [VP gave me the book] are arguments of eat/give, but do not appear in the VP.

E. Are the phrases listed in brackets below each sentence below complements or modifiers, and what are they are complements or modifiers of? More than one answer may be right. a. People started loudly applauding the performance of the band in the next room. [the phrases headed by loudly, in, of, and performance] b. She gave Mary a book on French art from the last century at the party. [the phrases

headed by at, from, on, Mary, book] c. The minister resigned because of the parliamentary decision on Friday [the phrases headed by on, because of] d. They unanimously rejected the application for funding for a second trip to America in August. [the phrases headed by in, for (both occurrences) , unanimously] .

English Idioms

Ants

have ants in your pants

humorous tonotbeabletokeepstillbecauseyouare very excitedor worried about something • She's got ants in herpants becauseshe's going toaparty tonight.

anybody

anybody who is anybody

humorous if anybody who is anybody is doing something, all the most famous and important people are doing that thing • Anybody who is anybody will be at the Queen'sbirthday celebrations.

Ape

go ape

informal go apeshit

taboo to become very angry » Yicky'll go ape whensheseesthis mess.

apology be an apology for sth humorous to be a very bad example of something • That old thing isan apologyfor acar.

Appearances

keep up appearances

to hide your personal or financial problems from other people by continuing toliveandbehavein the same way that you did in the past • Simply keeping up appearances was stretching their resourcestothelimit.

Appetite

whet sb's appetite

if an experience whets someone's appetite for something, it makes them want more of it. That first flying lesson whettedher appetite.• (often+ for) Idid a short courselast year,and it's whetted my appetitefor study.

apple

An apple a day keeps the doctor away.

old-fashioned something that you say which means eating an apple every day will keep you healthy • If 'an apple a day keeps the doctor away,' then why have I got this terriblecold?

apres-ski

apres-ski the social activities

that take place in the evening at hotels and restaurants in towns where people go to ski • If it's apres-ski you're after, this town with its

hundred or so bars is the resortfor you. • Bars and dancing are among the apres- ski actioitiesfor theadults.

a priori) (a priori formal accepted without being thought about or questioned •

The existence of God is a priori for most people with a religious faith. • In a court of law, a priori assumptions about guilt and innocence can bedangerous. argy-bargy argy-bargy British, informal loud arguments • Did you hear all that argy-bargy outside the Kingston Arms last night?

ark

The ark is a large wooden ship in a story from the Bible.It is used in the following phrases connected with things that are oldor old-fashioned.

be out of the ark

British &Australian to be very old-fashioned. My granny's hat was straight out of the ark. went/had gone out with the ark British

&Australian, humorous if an objector method went out with the ark, it is not used any more • These old manual printing presses went out with the ark - everything's computerized these days.

arm

chance your arm

British &Australian, informal to take a risk in order to get something that you want. Aren't you chancing your arm a bit giving up a secure job to start a business? cost(sb) an arm and a leg informal to be very expensive' These opera tickets cost us an arm and a leg

(as) wise as an owl very wise.

 Grand- father is as wise as an owl. My goal is to be wise as an owl. (as) wise as Solomon very wise. (Refers to a character in the Bible.) If you are in trouble, get Chris to advise you.

He’s as wise as Solomon. This is a difficult proplem. You’d need to be as wise as Solomon to be able to solve it.

aside from

someone or something not includ- ing someone or something.

Aside from

a small bank account, I have no money at all. Aside from Mary, I have no friends. ask for something to do something that will cause trouble. (Also literal.) Don't talk to me that way! You're really asking for it. Anyone who acts like that is just asking for a good talking to.

ask for the moon

to ask for too much; to make great demands. When you're trying to get a job, it's unwise to ask for the moon. Please lend me the money. I'm not asking for the moon!

ask for trouble

and look for trouble to seem to be trying to get into trouble; to do something that would cause trouble; to do or say something that will cause trouble. Stop talking to me that way, John. You're just asking

for trouble. The guard asked me to leave unless I was looking for trouble. Anybody who threatens a police officer is just asking for trouble. You're looking for trouble if you ask the boss for a raise.

ask someone out

to ask a person for a date. Mary hopes that John will ask her out. T John doesn't want to ask out his best friend's girl.

asleep at the switch

not attending to one's job; failing to do one's duty at the proper time. (Also literal.) The guard was asleep at the switch when the robber broke in. If I hadn't been asleep at the switch, I'd haveseen the stolen car. assault and batterya violent attack [upon someone] followed by a beating. (A crim- inal charge.) Max was charged with two counts of

assault and battery.

Dave does not go out at night because he does not want to be a victim of assault and battery

at a set time

at a particular time; at an as- signed time. Each person has to show up at a set time. Do I have to be there at a set time, or can I come whenever I want?

at a snail's pace

very slowly. When you watch a clock, time seems to move at a snail's pace. You always eat at a snail's paceI'm tired of waiting for you.

at bay

at a distance. I have to keep the bill collectors at bay until I get my check. The wolves will not remain at bay for very long.

at every turn

everywhere; everywhere one looks. There is a new problem at every turn. Life holds new adventures at every turn.

(at) full blast

using full power; as loudly as possible. The neighbors had their televisions on at full blast. The car radio was on full blast. We couldn't hear what the driver was saying.