

October 5, 2004

## CLASS 5: WORDS: CLASSES AND BUILD-UP

### WHAT ARE “CATEGORIES”?

We can basically distinguish **two types of categorial information**:

- ① person, number, gender, case, definiteness, tense, aspect, mood, voice etc.
- ② noun, verb, adjective, adverb, preposition, determiner, complementizer etc.

- (1) A *grammatical category* is a class of expressions which share a common set of grammatical properties. (Radford 1997: 29)

The **inventory of grammatical categories** for English follows straightforwardly for the most part from traditional grammars (“school English”). But let’s go through the **major types** now and establish some evidence for them (supplemented by Haegeman & Guéron 2000: 53-63).

### Nouns

- (2) linguist, friend, lawyer, gallery, lunch, star, computer, book, friendship, calendar...

These nouns, as different in *semantic meaning*, share properties of **nominal morphology**:

- the words in (2) are all *singular*
    - singular nouns can follow an *indefinite determiner* (which marks singular): (3a)
  - these nouns can be put into *plural* (‘be pluralized’) by adding the ending *-(e)s*: (3b)
    - plural-marked nouns can follow, for instance, *numeral adjectives* (‘numerals’): (3c)
  - nouns in general can be associated with the *genitive morpheme* (or ‘possessive’) *’s*: (3d)
- (3) a. a linguist — a friend — a lawyer — a gallery — a lunch  
b. linguist-s — friend-s — lawyer-s — gallery-es — lunch-es  
c. two linguists — three friends — four lawyers — five galleries — six lunches  
d. the linguist’s joy — the friend’s name — the lawyer’s guilt — the gallery’s fate

Words belonging to the same category (“word class”) also have a similar **distribution**: they appear in similar positions in the sentence. Nouns can, for example, be preceded the definite article or by a demonstrative, as in (4a), as well as by possessive pronouns, as in (4b).

- (4) a. **the** linguist — **this** friend — **the** lawyer — **that** gallery — **the** lunch  
b. **my** linguist — **your** friend — **his** lawyer — **her** gallery — **our** lunch

Other words that belong to the **lexical category** of nouns are given in (5a-c).

- (5) a. mother, daughter, teacher, girl, door, window, writer, soldier, bomb...  
b. love, hatred, justice, friendship, faith, hope, charity, horror, thought...  
c. information, water, food, milk, flour, sugar, cream, mud, blood, gas...

But these groups of nouns differ **semantically**. One class of nouns expresses *concrete entities, objects or persons*, (5a); others *abstract entities*, such as *concepts or feelings*, (5b).

Nouns from both classes can be *pluralized*, (6a); these are **count nouns**. That term derives from their property of being *countable*, (6b); they usually can’t stand alone in a sentence, (6).

- (6) a. mothers — daughters — teachers — girls — doors — windows — writers  
b. a/one mother — a/one daughter — a/one teacher — a/one girl — a/one door  
c. \* Mother / Daughter / Teacher goes shopping / grows up / sucks.

Some nouns from the abstract-class need to be *specified* further if they occur with a *determiner* (see below), such as (7a-b), or appear in their **bare form**, as illustrated in (7c).

- (7) a. \* The love / hatred / justice is wonderful / a pity / only for some.  
b. The love I feel for Joy is wonderful.  
c. Love makes the world go round.

Yet another class of nouns doesn’t usually have plural forms; these *non-countable words*, we call non-count or **mass nouns**, (5c), shown in (8a-b), though they can be qualified, (8c).

- (8) a. \*informations — \*waters — \*foods — \*milks — \*flours — \*sugars — \*creams  
b. \*an/one information — \*a/one water — \*a/one food — \*a/one milk  
c. good information, fresh water, hot food, sour milk, fine flour, brown sugar

### Verbs

Verbs come in different flavours too. For starters, we identify verbs in terms of their *inflectional morphology*. English verbs come (and more often than not show up) in *base* or **root form**. One of the few examples of **agreement morphology** is the *third person singular present tense*, where the marker *-s* attaches to the root. Other types of **verbal morphology** are (regular) *past tense*, the *present participle gerund*, and the *past participle*.

- (9) a. work, wait, show, meet, go...  
b. he/she/it work-s — wait-s — show-s — meet-s — goe-s  
c. work-ed — wait-ed — show-ed — \*meet-ed ⇒ *met* — \*go-ed ⇒ *went*  
d. work-ing — wait-ing — show-ing — meet-ing — go-ing  
e. work-ed — wait-ed — show-ed — \*meet-ed ⇒ *met* — \*go-ed ⇒ *gone*

And then there are, of course, the much loved *irregular forms* (past tense, past participles):

- (10) a. buy ⇒ **bought** — bring ⇒ **brought** — speak ⇒ **spoke** — come ⇒ **came**  
b. buy ⇒ **bought** — bring ⇒ **brought** — speak ⇒ **spoken** — come ⇒ **come**

Apart from showing up in their specific morphology, verbs can be distinguished **distributively** from other grammatical categories by being able to be preceded by elements like *will*, *can* or *must* (**modal auxiliaries**), or by *to*, which signals the infinitival form.

- (11) a. Joy **will** / **can** / **must** comb Miss Emma tonight.  
b. It is important for Joy **to** comb Miss Emma tonight.

### Adjectives

Adjectives, like those in (12), also have a number of unique properties.

(12) young, kind, attractive, important, studious, red, local, interesting, smart, tall, tiny...

With respect to **adjectival morphology**, adjectives can be associated with the **affixes -er and -est** to express the notion of **degree** (*comparative* and *superlative*, respectively): (13a-b).

- (13) a. young-**er** — kind-**er** — redd-**er** — smart-**er** — tall-**er** — tini-**er**  
b. young-**est** — kind-**est** — redd-**est** — smart-**est** — tall-**est** — tini-**est**

Degree for adjectives that are *polysyllabic* can be expressed by a preceding *more/most*, as shown in (14a-b), and, as so often in language, there are exceptions, like those in (14c).

- (14) a. **more** attractive — **more** important — **more** studious — **more** local  
b. **most** attractive — **most** important — **most** studious — **most** local  
c. good ⇨ **better** ⇨ **best** — bad ⇨ **worse** ⇨ **worst**

**Distributively**, we can observe that adjectives can co-occur with other *degree words*:

- (15) a. **so** young — **so** kind — **so** attractive — **so** important  
b. **too** young — **too** kind — **too** attractive — **too** important  
c. **that** young — **that** kind — **that** attractive — **that** important  
d. **very** young — **very** kind — **very** attractive — **very** important  
e. **quite** young — **quite** kind — **quite** attractive — **quite** important  
f. **rather** young — **rather** kind — **rather** attractive — **rather** important  
g. **how** young — **how** kind — **how** attractive — **how** important [‘interrogative *how*’]

The **position** of adjectives in an English sentence is directly preceding the noun:

- (16) a. a / the / this / that / those /those \_\_\_\_ *noun(s)*  
b. my / your / his / her/ our / your / their \_\_\_\_ *noun(s)*
- (17) a. a **young** cat  
b. the **kind** teacher  
c. this **attractive** theory  
d. my **important** wife
- (17') a. **young** cats  
b. the **kind** teachers  
c. these **attractive** theories  
d. our **important** wives

### Adverbs

Adverbs, like those in (18a), are formed in three ways. **Adverbial morphology** consists of adding the *adverbial marker -ly* to adjectives, (18b). But not all adverbs are *morphologically related* to adjectives. Some are *formally identical* to adjectives, others *exceptional*: (18c).

- (18) a. carefully, eagerly, strongly, badly, happily, lazily, long, well  
b. careful-**ly** — eager-**ly** — strong-**ly** — bad-**ly** — happi-**ly** — lazi-**ly**  
c. long ⇨ **long** — good ⇨ **well**

In terms of **distribution**, adverbs can, just like adjectives, be *modified by degree words*:

- (19) a. Miss Emma balanced on the edge **very carefully**.  
b. The students study for syntax **more eagerly** than for postmodernism.  
c. The teacher press the chalk **so strongly** on the blackboard that it breaks.  
d. I fix things **too badly** so they don't work.  
e. Joy lets me cook **quite happily**.  
f. Cats lie on beds **rather lazily**.  
g. Some classes don't have to be **that long**.  
h. **How well** do you draw syntactic trees?  
i. I will prepare that class **well enough**.

Still, adverbs cannot be inserted into exactly the same **positions** as adjectives: (20a-b).

- (20) a. Her (very) **careful** answer surprised him.  
b. \* Her (very) **carefully** answer surprised him.

### Prepositions

**Morphologically**, prepositions are invariant, i.e. there is no prepositional morphology. “Classical” prepositions are *monosyllabic*, as (21a), while others are *polysyllabic*, as (21b).

- (21) a. in, on, of, at, by, for, with (...)  
b. about, against, above, beyond, underneath, after, before (...)

But their **distribution** is pretty clear: prepositions are usually followed by a nominal expression (some phrase containing a noun, a *noun phrase*; see next class), as in (22a-j).

- (22) a. **in** class  
b. **on** top **of** the world  
c. **at** a nice restaurant  
d. **by** the author  
e. **with** this book
- f. **about** syntax  
g. **against** postmodernism  
h. **above** my head  
i. **beyond** the horizon  
j. **underneath** the surface

Some prepositions can also be followed by a *sentence*, illustrated in (23a-b). (We will distinguish prepositions from **particles**, and also **complementizers**, in subsequent classes.)

- (23) a. **after** [they left]  
b. **before** [I talk to you again]

What all prepositions do have in common is that they can be **modified**: (24a-d).

- (24) a. **right in** here  
b. **straight by** the book  
c. **right about** now  
d. **straight against** the tide

### LEXICAL VS. FUNCTIONAL WORDS

We distinguish the above **lexical words** from another class of grammatical categories, **functional words**. Before wondering why, let's look at a representative of the latter group.

### Determiners

These are the little guys that pop up in front of the noun (and any *nominal modifiers*, such as adjectives). The cover term we use in the generative framework is **determiners**. Strictly speaking, however, these are all distinct words, and a number of items fall into this category: *definite* and *indefinite articles*, (25a), **numerals**, (25b), **quantifiers**, (25c), **possessive pronouns**, (25d), **demonstrative pronouns**, (25e), and possibly more.

- (25) a. the, a(n)  
 b. one, two, three...  
 c. some, many, most, no, all (...)  
 d. my, your, his, her, its, our, their  
 e. this, that, these, those

In general, these items precede the noun (plus modifying material; see above). We can observe that some of these are in **complementary distribution**, while others can co-occur.

- (26) a. \***this the** student [demonstrative pronoun + definite article]  
 b. \***that a** student [demonstrative pronoun + indefinite article]  
 c. \***a her** book [indefinite article + possessive pronoun]  
 d. \***the his** book [definite article + possessive pronoun]  
 e. \***this their** teacher [demonstrative pronoun + possessive pronoun]  
 f. \***that our** course [demonstrative pronoun + possessive pronoun]
- (27) a. **the two** students [definite article + numeral]  
 b. **my two thousand** books [possessive pronoun + numeral]

*Quantifiers* are a bit tricky and lead to a messy partition. (28) offers just a brief glimpse.

- (28) a. \***these some** students [demonstrative pronoun + quantifier = *indefinite* article]  
 b. **those many** students [demonstrative pronoun + quantifier]  
 c. **all those** students [quantifier + demonstrative pronoun]  
 d. **some of these** students [quantifier + demonstrative pronoun with *of*-insertion]

*Demonstratives* and *articles* on the other hand can be shown to differ quite clearly: (29).

- (29) a. **This** is a nice house. / I don't like **that**.  
 b. \* **The** is a nice house. / I don't like **the**.

- the **distributive** evidence in (26) suggests that *articles*, *demonstratives* and *possessives* occupy the same position inside the *nominal expression* (the stuff around the noun)
- we can also see in (27) that *numerals* follow this class of determiners (cf. \**two the students*)
- *quantifiers* seem to have a more complicated behaviour, which we won't be concerned with

So, how are determiners different from the other grammatical elements (nouns, verbs, adjectives, adverbs, prepositions)? In particular, why do we call the first class **lexical categories** and the second **functional categories**?

One traditional argument is that lexical words have **lexical/descriptive content**, while functional words carry an essentially **grammatical function**, they act as **functors** (hence the terminology!).

This distinction can be carried on and rationalized in that *lexical categories* are words from an **open class** word list, while *functional categories* are **closed class** items.

This means that, by and large, *open class* items can be constantly added to the **vocabulary** of a language. We can always make up new nouns, turn these into verbs, adjectivize them and finally create an adverb out of them (for example; the rules governing such creation and derivation are part of **morphology**). Our inventory of open class items is in principle **infinite**.

*Closed class* items, on the other hand, are limited. In general, no new items of this class can be added to the vocabulary. *Prepositions* may be a marginal group, as our inventory of prepositions seems to be quite **finite** — hence the “(...)” after these (and some other items) above — but given the criterion we just developed, they certainly carry *descriptive content*.

- (30) a. The student **met** the teacher. (30') a. **A** student met the teacher.  
 b. The student **hit** the teacher. b. **This** student met the teacher.
- (31) a. The **butcher / dean / rector / child** met the **father / athlete / salesman / author**.  
 b. Our teacher writes **on / above / underneath / behind / inside / at** the blackboard.  
 c. Miss Emma like **fluffy / soft / big / pretty / high / illegitimate / woolen** materials.  
 d. All students study **hard / thoroughly / little / well / badly / easily** for syntax.

### Pronouns

A second type of *functional category* is made up by **pronouns**. English pronominals are the last true remnants of **morphological case-marking**, as shown in *Table 1*. We distinguish *nominative* from *objective* (neutral whether it's *accusative* or *dative*) cases, a pronoun's **Case-property**. We further distinguish the so-called **phi-φ-features** (which we'll return to).

As for their **categorial status**, some linguists have argued that pronouns are another sub-class of *determiners*, on the basis of data. But this use is rather restricted and such a classification not without problems (better perhaps: **pronominal** vs. **pronominal** determiners).

PHI-FEATURES			CASE-PROPERTIES	
Person	Number	Gender	Nominative	Objective
1	singular	—	<i>I</i>	<i>me</i>
1	plural	—	<i>we</i>	<i>us</i>
2	—	—	<i>you</i>	<i>you</i>
3	singular	masculine	<i>he</i>	<i>him</i>
3	singular	feminine	<i>she</i>	<i>her</i>
3	singular	neuter	<i>it</i>	<i>it</i>
3	plural	—	<i>they</i>	<i>them</i>

Table 1: The English pronominal system

- (32) a. **You** (*lousy*) *postmodernists* don't have much to say to **us** (*clever*) *generativists*.  
 b. **You** don't have much to say to **us**.
- (33) a. \***he** *postmodernist*  
 b. \***her** *generativist*  
 c. \***it** *issue*  
 d. #**they** *linguists*

### Auxiliaries

Another class of *closed class* items consists of **auxiliary elements**. We classically distinguish **modal auxiliaries**, from **perfective**, **imperfective/progressive** & **dummy auxiliaries** — in some (semantic) senses similar, English also has a bunch of **inflectional morphemes**.

(34) will, would, may, might, can, could, shall, should, must

(35) have, be, do

(36) *-ing, -s, -ed, -en*

Auxiliaries have the *semantic function* of **marking grammatical properties** of the verb that follows them: *tense* (e.g. present vs. past), *aspect* (such as progressive, habitual), *voice* (active vs. passive), *mood* (indicative, subjunctive etc.) or *modality* (possibility, necessity...).

- (37) a. The students **will** learn syntax.  
b. The students **have** learned syntax.  
c. The students **are / were** learning syntax.  
d. Syntax **will be / has been / is being** learned by the students.
- (38) a. They **ll** learn syntax.  
b. They **'ve** learned syntax.  
c. They **'re** learning syntax.
- (39) a. The students learn-**ed** syntax.  
b. The linguist teach-**es** syntax.  
c. The students learn-**Ø** syntax.
- (40) a. The students **would / may / can / shall / must** learn syntax.  
b. The students **would / may / can / shall / must be** learn-*ing* syntax.  
c. The students **would / may / can / shall / must have** learn-*ed* syntax.  
d. Syntax **would / may / can / shall / must be** learn-*ed* by the students.  
e. Syntax **would / may / can / shall / must have been** learn-*ed* by the students.

In their **distribution**, auxiliaries differ from verbs in being able to undergo **inversion**:

- (41) a. **You can pass** the exam.  
b. **They studied** hard.
- (41') a. *Can you pass* the exam?  
b. *Did they study* hard?
- (42) a. \* *Solved you* the homework?  
b. \* *Come you* home tonight?
- (42') a. *Did you solve* the homework?  
b. *Do/Will you come* home tonight?

Another difference is that auxiliaries can directly be **negated** by *not*, without **do-support**:

- (43) a. Miss Emma **can not / can't** go outside.  
b. Joy **has not / hasn't** finished work yet.
- (44) a. \* They **like not / liken't** the food.  
b. \* I **played not / playn't** the piano.
- (44') a. They **do not / don't** like the food.  
b. I **do not / don't** play the piano.

Auxiliaries, in contrast to verbs, can also be used as **tags** (in so-called *tag questions*):

- (45) a. You don't like this, **do you?**  
b. We will learn this, **won't we?**
- (45') a. \* You don't like this, **like you?**  
b. \* We will learn this, **learn('t) we?**

### Infinitive particle

The fifth type of *functional category* in English is the **infinitive particle** *to*. The only type of element it allows (and requires!) to follow it is an *infinitival clause*, as illustrated in (46).

- (46) a. I wonder whether **to skip** this section.  
b. You probably want **to go** home now.  
c. But I don't intend **to let** you go now!

This is its identifying property, basically in terms of **distribution** again. As such it can be clearly contrasted with the homophonous preposition *to* (see Radford 1997: 46ff.). What is of more interest for us is **what category** infinitival *to* belongs to.

Note that *distributionally*, infinitival *to* behaves very much like the **finite auxiliaries**.

- (47) a. It is important [ that the students **should** learn syntax ].  
b. It is important [ for the students **to** learn syntax ].
- (48) a. Everybody **should / would / could / must / will** love / \*loves / \*loving syntax.  
b. Everybody is supposed **to** love / \*loves / \*loving syntax.
- (49) a. Joy doesn't want to eat Pounce, but I know Miss Emma **would eat Pounce**.  
b. Joy wouldn't eat Pounce, but I know Miss Emma **wants to eat Pounce**.  
c. \* Joy wouldn't eat Pounce, but I know Miss Emma **wants eat Pounce**.

Establishing such a connection between finite auxiliaries and infinitival *to*, we can view *to* as the **non-finite** counterpart of the (type of) **syntactic category** that these elements belong to. Given that these auxiliaries are finite, they express *tense* and they show *agreement* (with the subject) — and that is something we see infinitives do in other languages (e.g. Italian): *canta+re* 'to sing'. (Note as a brief aside that Portuguese, among select other languages, even has *inflected infinitives* that show some agreement marking as well.)

### Complementizers

The sixth group of *closed class* items we look at are **complementizers**. These elements introduce entire sentences, i.e. *subordinate* or **embedded clauses**: (50) — and as these clauses function as the *complement* of the complementizer, we call them also **complement clauses** (as opposed to **adjunct clauses**, those that are not related thematically to the **matrix**).

- (50) a. By now you all must think [ **that** syntax *is* the greatest thing ].  
b. Please tell me [ **if** you *don't* understand something (or anything?) ].  
c. I would love [ **for** you all *to* pass this class and continue with syntax ].  
d. Everybody wants to know [ **whether** this class *will* be as good as it looks ].

We can distinguish **two types of complementizers**: those, that *require their complement clause* to be *finite* and those, that require it to be *non-finite* (basically, *infinitival*).

- (51) a. \* By now you all must think [ **that** syntax *to* be the greatest thing ].  
b. \* Please tell me [ **if** you *to* understand something (or anything?) ].  
c. \* I would love [ **for** you all *will / should* pass this class and continue with syntax ].  
d. \* Everybody wants to know [ **whether** this class *to* be as good as it looks ].

Another big difference between *that/for* and *if/whether* is that the first two introduce declarative sentences and the other two interrogative sentences.

- (52) a. I know **that** Macs are better than PCs. ⇒ Macs are better than PCs.  
 b. I wish **for** everybody to own a Mac. ⇒ Everybody (should) own(s) a Mac.  
 c. I don't know **if** you care. ⇒ Do you care?  
 d. I wonder **whether** PCs are any good. ⇒ Are PCs any good?

Complementizers serve three **grammatical functions**.

- they mark the fact that the clause they introduce is the **complement of some predicate**
- they serve to indicate whether the clause they introduce is **finite or non-finite** (*infinitival*)
- they mark the **illocutionary force** (*semantic/pragmatic function*) of the clause they introduce

The question arises again (cf. *to...*) whether complementizers need to be assigned their **own, separate grammatical category** (i.e. *complementizer*) or whether we can subsume them under *already established categories*. By looking at the words themselves, an obvious choice would be to call *for* a preposition (just like the preposition *for*), *that* a determiner (demonstrative), and *if* and *whether* maybe as adverbs. Would that work? ⇒ No...

- (53) a. He headed (*straight*) **for** the pub.  
 b. She hoped (*\*straight*) **for** him to head for the pub.  
 c. **For** *her to go there* would be impossible.  
 d. \* **For** *her* would be impossible.
- (54) a. She refuses to believe **that** *rumour*.  
 b. She refuses to believe **that** *he went to the pub*.  
 c. She refuses to believe /ðæt/ / /ðæt/ *rumour*.  
 d. She refuses to believe /ðæt/ / \*ðæt/ *he went to the pub*.  
 e. She refuses to believe **this** / **the** *rumour*.  
 f. \* She refuses to believe **this** / **the** *he went to the pub*.

The same types of arguments can be made for the other complementizers. **Distributionally** complementizers behave like a class of their own, and so they do **functionally** as well.

### Conjunctions

The final group of *closed class* items are (**coordinating**) **conjunctions**. These elements basically connect expressions, both words (55) or phrases (56) and entire sentences (57).

- (55) a. my [ black **and** white ] camera  
 b. [ one **or** two ] minutes  
 c. the [ pretty **but** boring ] woman
- (56) a. [ a young girl ] **and** [ an old father ]  
 b. [ this cat ] **or** [ that dog ]  
 c. He has [ left earth ] **but** [ not gone to heaven ].
- (57) a. [ John makes coffee ] **and** [ Mary takes a shower ].  
 b. [ We might all go to Pissouri ] **or** [ I just go alone ].  
 c. [ I talked to him about it ] **but** [ he didn't listen ].

CATEGORIAL LABELS:	
(58) a.	N, V, A
b.	P, Adv
c.	I: T, Aux, Mod
d.	C: C <sub>Q</sub> , C <sub>-Q</sub> , C <sub>+fin</sub>
(59) a.	D: Art, Dem
b.	D: Num, Q, Poss
c.	D: Pron
(60) a.	PERS, NUM, GEN...
b.	NOM, ACC, GEN...
c.	PAST, PRES...

### SOME TERMINOLOGY: MORPH & CO.

A **morpheme** is the *smallest string of sounds carrying information about meaning/function*.

- **free morphemes** can stand on their own, i.e. be words
- **bound morphemes** need to attach to something

- (58) a. house  
 b. house-s

- morphemes that are not words (i.e. those that are bound) are called **affixes**
- depending on their position, we have a **prefix, suffix, infix, circumfix** (?)
- affixes can be **category-sensitive**

- (59) a. polite (adjective) – politeness (noun)  
 b. drive (verb) – driver (noun)

We can say that affixes attach to **stems** and that the most embedded stem in a complex word is called the **root** (i.e. it is a simple stem). Note that while **all affixes are bound** (bound morphemes), **not all roots are free** morphemes, some can be bound as well.

- (60) a. leg-ible, aud-ience, magn-ify (associated with **Romance roots**)  
 b. cran-berry, huckle-berry, gorm-less (**cranberry morphemes**)

*What is a word?* We might now have a better answer than last class: A word is the **smallest free form** found in language. And yes, we can still distinguish **simple** from **complex** words.

- **roots belong to lexical categories** (i.e. nouns, verbs, adjectives, prepositions)

- (61) a. care (verb, root) – careful (adjective)  
 b. careful (adjective, stem) – carefulness (noun)

### MORE TERMINOLOGY: THE ALLOMORPH

Morphemes may come in **more than one form**:

- (62) a. hand-s, dog-s, nun-s [z]  
 b. cat-s, dock-s, trap-s [s]

The **plural morpheme** –s is pronounced differently in (62a) and (62b). Is it the **same or two different morphemes**? It is **one morpheme with two different realizations** depending on the phonological environment. It is [-s] after [t], [k], [p] and [-z] after [d], [g], [n] — What is it that makes these two sets different? **The first is [-voice], the second [+voice].**

- (63) a. [Z] → [s] / [-voice] \_\_\_\_  
 b. [Z] → [z] / [+voice] \_\_\_\_

**Vowels** can be said to be inherently voiced, so they take the [z]-realization as well: *day-s*.

**One further possibility** of realizing the plural morpheme is **after sounds like [-s], [-z]:**

- (64) bus-es, box-es, maze-s [ɪz] (or [ɛz])

(66) c. [Z] → [ɪz] / [coronal, fricative] \_\_\_\_

The rule in (63c) should actually **apply before** those in (63a,b). Why? Because if in the case of *bus* for example, where *-s* is [-voice], we apply the rule in (63a) that would give us the plural morpheme *-s* only, so we have no way of accounting for the presence of [ɪz]. In other words, we'll get the wrong result. (**Some sibilants are a subset of all voiceless consonants.**)

(65) *Allomorphic English plural rule*  
[Z] → [ɪz] / [coronal, fricative] \_\_\_\_  
          [s] / [-voice] \_\_\_\_  
          [z] / [+voice] \_\_\_\_

The three different realizations of the plural morpheme [Z] are called **allomorphs**. In cases **allomorphs are predicted by the phonological environment** (this is relevant for the relation between morphology and phonology, which we will not consider in this course).

Something very similar can be said for the **past tense morpheme** *-ed*: [ɪd/ɛd], [d], [t].

But not only phonology determines allomorphy: the **lexicon** and **grammar** do as well.

(66) a. laugh, cliff — laughs, cliffs [s]  
      b. wife, loaf — \*wives, \*loafs \* [s]  
      c. — wives, loaves [z]

(67) *my wife's job* ⇔ 's: [s]

It looks like the “word” *wife* comes in two allomorphs as well: **free wife** and **bound wife**.

Lastly, it must be pointed out that although intuitive, **correlating morphemes with meaning** is not (always) accurate. (cf. “Morphemes are the smallest unit pairing sound and meaning.”) Recall that we defined morphemes in terms of meaning **or** function — for a good reason.

(68) a. return, restore... [rɪ], [rɛ]  
      b. re-turn, re-store... [rɪ], \*[rɛ]

(69) a. involve, revolve  
      b. #involution / involvement, revolution / \*revolvment

## WORDS AND GRAMMAR

Some suffixes are **dependent on the grammatical context**, others are not:

(70) a. endure-**s**, endure-**ed**, endure-**ing** [inflection: trade in function]  
      b. endure-**ance**, endure-**able**, endure-**er** [derivation: trade in meaning]

The forms in (70a) are all inflections of the verb *endure*. We capture their relation by calling the underlying form a **lexeme**, in this case *ENDURE* (which intuitively is the most basic form).

(71) a. The banks in Cyprus have funny opening hours. [noun<sub>1</sub> BANK]  
      b. We all sit on the banks and wait. [noun<sub>2</sub> BANK]  
      c. Everyone banks on something. [verb BANK]

## REGULAR AND IRREGULAR INFLECTION

(72) a. walk – walk-ed / lip – lips  
      b. go – went / tooth – teeth

**Regular inflection** comes in different allomorphs of the same underlying inflectional morpheme. **Irregular inflection**, on the other hand, is often an instance of **suppletion**: *distinct roots that stand in suppletive relationship as representatives of one lexeme*.

(73) pianist-**s**, ox-**en**, formul-**ae**, cact-**i**

As we're not dealing with **roots**, it's easier to use the notion 'suffix' rather than 'morpheme'.

## FORMS OF LEXICAL CATEGORIES

**Nominal** inflection in English is pretty much restricted to **number**. The suffix *-s* is a **plural morpheme** (for **count nouns**) alongside which we can postulate a **zero plural** or **zero suffix** *-Ø* (for some domesticated or hunted animals). Others are formed with a **periphrastic form**.

**Determiners** and **pronouns** don't fit into the **open class**, but there is something interesting in this connection we can say: e.g. *THAT* surfaces as *that* or *those*, or *SHE* as *she/her* and so on. **Case** is marked only on pronouns in English and again the notion of lexeme comes in handy.

**Verbal inflection** marks **person**, **number**, **tense**. In English, we really only get third person singular *-s* (past *-ed*, participial *-ing / -en*), but the lexeme *BE* has a fuller paradigm. If two or more forms of some lexeme are systematically used elsewhere, we speak of **syncretism**.

**Adjectives** in English only mark the dimension of **comparison** (for some, periphrastically).

## PREAMBLE: MORE DEFINITIONS

Negative definition of “**derivational**”: *Suffixes that are not inflectional must be derivational*.

The **base** is a *partially complete word form to which a suffix attaches*.

- one result is an **inflected word form**, the other a **new lexeme** (derivational)
- the base for an affixation process is what remains when an affix is **removed**

## DERIVATIONS: THE BASICS

Derivational morphology deals with **word formation** (often resulting in a **new word class**):

(74) a. happy, unhappy, happiness, unhappiness  
      b. care, careless, carelessness, \*carelessness  
      c. educate, education; generate, generation  
      d. custom, customize, customization

Affixes attach to roots or stems and form new words; better to say: they **attach to bases**. Sometimes we may not see an overt morpheme (*zero-derivation*). This is called **conversion**:

(75) cut (N) – cut (V); fish (N) – fish (V)

Morphemes seem to come in a **fixed order**, so for example we have *prefixes*, *suffixes* etc. However, they also seem to **care what they attach to**:

- (76) a. quick – quickly; soft – softly; care – \*carely      *-ly*: Adj ⇒ Adv  
 b. quick – quickness; soft – softness; care – \*careness      *-ness*: Adj ⇒ N  
 c. care – careless – carelessness (\*quickless, \*softless)      *-less*: N ⇒ Adj  
 d. joy – enjoy; danger – endanger      *-en-*: N ⇒ V

So *-ly* attaches to adjectives and forms adverbs, *-ness* attaches to adjectives and forms nouns, *-en-* attaches to nouns and gives us verbs. In all the above examples the meaning of the whole is determined by the meaning of the parts, **compositionality** (but this is not always the case).

- (77) a. amuse – amusement, enjoy – enjoyment  
 b. cure – curable – incurable

- **N ⇒ N**: ‘small X’, ‘female X’, inhabitant of X’, ‘state of being an X’, ‘devotee of/expert on X’
- **X ⇒ N**: *-ity, -ness, -ism* — *-ance/ence, -ment, -ing, -ion/tion/ation, -al, -er* — stress, final C, V
- **A ⇒ A**: *un- + -able, -ful* (English/Germanic) — *in- + -ible, -al* (Latin/Romance)
- **X ⇒ A**: passive/participle *-ed, -en, -ing* (test: *very*) — *-able, -ent/ant, -ive* — *-ful, -less, -al, -ish*
- **V ⇒ V**: *re-, un-, de-, dis-* (all through prefixation!) — V-change: transitivity (causativity)
- **X ⇒ V**: *de-, -ise/ize, -fy/ify* — final voicing/V-change — *en-/em-* (plus others, e.g. *-en*)

## COMPOUNDING

A **compound** is a word that contains more than one root.

- (78) a. high school, black board, green house, white house, toy factory      [NP phrases]  
 b. highschool, blackboard, green house, White House, toy factory      [compounds]

- compound **verbs**: VV, NV, AV, PV (these are all **right-headed**)
- compound **adjectives**: NA, AA, PA (?\*VA: *fail-safe, \*sing-happy*)
- compound **nouns**: VN, NN, AN, PN (main **stress** on left, right-headed)

**Headless** compounds are also known as **exocentric** (“center outside”).

- *faintheart* (not about a heart or a faint), *pickpocket, killjoy, cutpurse*
- VP-N: *take-off, sell-out, wrap-in, sit-in*; PN-A: *overland, in-house, offshore, downmarket*

**Right-headed** (most English) & **left-headed** (*attorney general*) compounds are **endocentric**.

Compounding is **recursive**.

- (79) a. film society  
 b. student film society  
 c. student film society committee

Compounds have a **constituent structure** (allowing disambiguation).

- (80) a. student [film society]  
 b. [student film] society

Elements of compounds are **related** to each other: head-modifier, predicate-argument, apposition.

- (81) a. film society, hand-wash, footpath ...  
 b. truck driver, language teacher ...  
 c. learner-driver, mother-child ...

Compounds can be **endocentric** or **exocentric**:

- (82) a. film society, truck driver ...  
 b. pickpocket, push up ...

**Lack of referential properties** of the non-head:

- (83) a. film society (no reference to specific film)  
 b. truck driver (no reference to a specific truck)

Compounds show **morphological integrity**: they cannot be split up by other elements.

## PRIMARY (ROOT) VS. SECONDARY (VERBAL, SYNTHETIC) COMPOUNDS

**Primary compounds** are formed with simple words, e.g. *greenhouse, postal order*.

**Secondary compounds** have a complex word as their head, e.g. *truck driver, truck driving*.

**What counts** as a synthetic compound?

- The non-head is an **argument**: *truck driver, slum clearance...*
- Perhaps passive **participles**: *hand-made, moth-eaten...*
- Perhaps compounds based on **adjectives**: *machine readable...*

**Properties** of synthetic compounds:

1. The verb’s **internal argument** is satisfied by the non-head: drive a truck – truck driver
2. The **subject** can never be the non-head: \*child driver (a child who drives)
3. The non-head could be an **adjunct**: act fast – fast acting, eaten by moths – moth eaten
4. The heads of synthetic compounds inherit the **argument structure** of the verb

## RELATED ISSUES: BLENDS, ACRONYMS, PHRASALS

**Did you know...** *lord* = loaf ‘bread’ + warden ‘guardian’, *woman* = wife ‘female’ + mon ‘person’

**Blends**: *smoke* + *fog* = *smog*

**Acronyms**: UCY = University of Cyprus, Skinheads against Racial Prejudice = SHARP

- distinction: *initialisms* vs. *reverse acronyms*

**Eponyms**: *guy, spartan, kleenex, atlas*

- based on *personal/geographical/commercial* names, literature, folklore, or mythology

**Shortening**: *influenza* ⇒ *flu*

**Combining forms**: *anthrop(o) + (o)logy*

**Phrasal words**: *jack-in-the-box* (\**jacks-in-the-box, \*people-in-the-street* — devoted to syntax)

- only (?) occurrence of left-headed word forms in English? (*attorney general* and so on)

## THE STRUCTURE OF WORDS

Based on **structural properties**, we can talk better about possibilities and generalizations.

**compounds**: [ [ non-head ] head ]

**derivations**: [ <sub>3</sub>prefix- [ [ [ ROOT ] -suffix<sub>1</sub> ] -suffix<sub>2</sub> ] ]  
 [ BASE<sub>1</sub> ]  
 [ BASE<sub>2</sub> ]  
 [ BASE<sub>3</sub> ]

**inflections**: [ [ [ [ ROOT ] -suffix<sub>D</sub> ] -suffix<sub>D</sub> ] -suffix<sub>1</sub> ] \*-suffix<sub>D</sub> ]

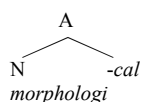
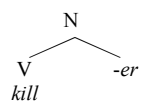
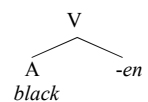
We see structure everywhere, and given that word formation is the result of organized processes, it shouldn't come as a surprise to see **structure on the word level**. Just as phrase structure rules tell us which elements combine to form phrases on the sentence level, here too we have **rules**: the morphological rules that create word forms (roots, bases, affixes).

The **simplest structure** is that of a **simple word** giving its word class or category:

- (84) a. N            b. V            c. A            d. P  
       |            |            |            |  
       morphology    kill            black            on

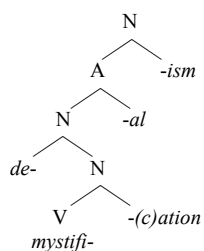
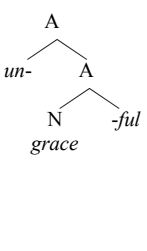
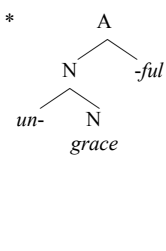
- (85) a. [ morphology ]<sub>N</sub>    b. [ kill ]<sub>V</sub>    c. [ black ]<sub>A</sub>    d. [ on ]<sub>P</sub>

How do we then **derive new word forms**? By assuming that affixes have a category too, in other words: **all morphemes are heads** (cf. discussion on the **lexical entry** for roots/affixes).

- (86) a.     b.     c. 

- (87) a. [ [ morphologi ]<sub>N</sub> -cal ]<sub>A</sub>    b. [ [ kill ]<sub>V</sub> -er ]<sub>N</sub>    c. [ black ]<sub>A</sub> -en ]<sub>V</sub>

The same goes for **more complex derivations**, very similar to phrase structure rules:

- (88) a.     b.     c. \* 

- (89) a. [ [ [ de- [ [ mystifi- ]<sub>V</sub> -(c)ation ]<sub>N</sub> ]<sub>N</sub> -al ]<sub>A</sub> -ism ]<sub>N</sub>  
 b. [ un- [ [ grace ]<sub>N</sub> -ful ]<sub>A</sub> ]<sub>A</sub>  
 c. \*[ un- [ grace ]<sub>N</sub> ]<sub>N</sub> -ful ]<sub>A</sub>

- **compounds**, too, can be represented this way — and **ambiguities** can be dissolved
- **bracketing paradox**: a derivational suffix attaches to a phrase, not to a word or root.

*Always bear in mind **rules & regularities** (which kind of affix goes with which word class).*

#### CITED LITERATURE:

Haegeman, L. & J. Guéron (2000) *English Grammar: A Generative Perspective*. Oxford: Blackwell.  
 Radford, A. (1997) *Syntax: A Minimalist Introduction*. Cambridge: Cambridge University Press.

## EXERCISES

### I Fill in the relevant forms of the following (Modern) Greek inflectional specifications:

- (A) a. NOM.SG.MASC 'fisherman'  
b. GEN.PL.MASC 'fisherman'  
c. NOM.SG.NEUT 'horse'  
d. GEN.SG.NEUT 'horse'  
e. NOM.SG.FEM 'woman'  
f. GEN.PL.FEM 'woman'  
g. ACC.PL.FEM 'woman'
- (B) a. NOM.SG.NEUT 'presence'  
b. GEN.SG.NEUT 'presence'  
c. NOM.PL.NEUT 'letter'  
d. GEN.SG.NEUT 'letter'  
e. ACC.SG.NEUT 'mistake'  
f. ACC.SG.FEM 'exit'  
g. NOM.PL.MASC 'cab-driver'
- (C) a. GEN.PL.MASC 'nice'  
b. ACC.PL.FEM 'nice'  
c. GEN.SG.MASC 'interesting'  
d. NOM.SG.FEM 'interesting'  
e. NOM.PL.NEUT 'interesting'  
f. ACC.SG.NEUT 'international'  
g. NOM.PL.FEM 'international'
- (D) a. 2.SG.PRES.ACT.PERF 'play'  
b. 3.PL.AOR.ACT 'play'  
c. 1.PL.AOR.ACT 'drink'  
d. PAST-PART.PL 'drink'  
e. 1.SG.PRES.ACT.PERF 'sleep' [=ipotaktiki aoristos]  
f. 1.SG.PRES.ACT.IMPERF 'sleep' [=ipotaktiki enestotas]  
g. 2.PL.PAST.ACT.IMPERF 'sleep'
- (E) a. 2.SG.PAST.PASS.IMPERF 'drive'  
b. 1.SG.AOR.ACT 'explode'  
c. 3.SG.AOR.ACT 'explode'  
d. 2.PL.PRES.ACT.PERF 'come'  
e. 1.PL.AOR.ACT 'come'  
f. 2.SG.FUT.ACT.PERF 'come'  
g. 2.SG.PAST.ACT.IMPERF 'come'

## II ENGLISH WORD DIVISION

### 1. Analyze the following words into morphs using the model given below:

Example:	Prefix(es)	Root	Suffix(es)
<i>inequality</i>	in-	equal	-ity
(a) hospitalization		(k) disfunctional	
(b) invisibly		(l) inconsiderate	
(c) uninteresting		(m) postcolonial	
(d) undercooked		(n) unlikelyhood	
(e) transcontinental		(o) relationship	
(f) ungrammatical		(p) asymmetrical	
(g) reinforcement		(q) hypersensitivity	
(h) prototypical		(r) unfriendliness	
(i) unforgettable		(s) interdependence	
(j) impropriety		(t) monotheism	

### 2. Is -ly an inflectional or a derivational affix?

Like an inflectional affix, it seems to attach to many (though not all) the members of the class of adjective, as in *quickly, helpfully, sadly, regretably, softly, sharply, foolishly*. If -ly is an inflectional suffix marking the grammatical category adverb, then it should meet the following criteria for inflectional suffixes:

- never change the part of speech of a root,
- follow, not precede, any derivational suffixes,
- affix to virtually any member of the category adjective.

Does -ly meet these criteria? Try to think of examples which violate these principles.

## III WRITING MORPHEMIC RULES

### 1. Examine the following past tense forms in English:

<i>hated</i>	<i>pulled</i>	<i>roared</i>	<i>walked</i>
<i>raided</i>	<i>opened</i>	<i>hugged</i>	<i>pushed</i>
<i>faded</i>	<i>groomed</i>	<i>robbed</i>	<i>missed</i>
<i>fitted</i>	<i>mowed</i>	<i>bruised</i>	<i>hoped</i>
<i>mated</i>	<i>cried</i>	<i>loved</i>	<i>fetched</i>
<i>loaded</i>	<i>paid</i>	<i>judged</i>	<i>laughed</i>

- Determine the allomorphs of this inflectional suffix.
- Determine the conditioning environments for each of the allomorphs.
- Decide on the underlying (or “elsewhere”) form of this morpheme from which the other allomorphs are derived. For what reasons did you choose this particular form as base?
- Write a morphemic rule.
- Consider the following past tense forms. How are they conditioned? How are they realized?

<i>sang</i>	<i>bought</i>	<i>cut</i>	<i>went</i>
<i>rang</i>	<i>fought</i>	<i>put</i>	<i>were</i>

### 2. Consider the following words:

<i>illegal</i>	<i>ineligible</i>	<i>inactive</i>	<i>imbibe</i>
<i>irrelevant</i>	<i>intolerant</i>	<i>indeterminate</i>	<i>immature</i>
<i>impossible</i>	<i>insecure</i>	<i>illogical</i>	<i>irregular</i>
<i>immoral</i>	<i>infamous</i>	<i>imbalance</i>	<i>injudicious</i>
<i>impatient</i>	<i>injury</i>	<i>ingrate</i>	<i>incongruous</i>

- Determine the allomorphs of this derivational prefix.
- Determine the conditioning factors for each of the allomorphs.
- Decide on the underlying (or “elsewhere”) form of this morpheme from which the other allomorphs are derived. Justify the base form.
- Write a morphemic rule.
- State the meaning of the morpheme.
- Why are the forms *ignoble* and *ignominious*, which presumably contain the same prefix, a problem? Try to account for this problem. (Hint: Look up the etymologies of the words.)

### 3. Consider the following words:

<i>collect</i>	<i>cohabit</i>	<i>collide</i>
<i>correct</i>	<i>coalesce</i>	<i>corrode</i>
<i>connect</i>	<i>collate</i>	<i>confess</i>
<i>commute</i>	<i>commend</i>	<i>cohere</i>
<i>combat</i>	<i>contend</i>	<i>coexist</i>
<i>compute</i>	<i>consent</i>	<i>coincide</i>
<i>compare</i>	<i>condemn</i>	

- Determine the allomorphs of this derivational prefix.
- Write a morphemic rule specifying underlying form, allomorphs, and environments.
- State the meaning of the morpheme, if possible.

### 4. Consider the following pairs of words:

<i>sign</i>	<i>signature</i>
<i>design</i>	<i>designation</i>
<i>resign</i>	<i>resignation</i>

- What is the root allomorphy exhibited by all of the forms?
- Write a morphemic rule for the first set of words.

## IV DERIVATIONAL PREFIXES AND SUFFIXES

### 1. Sort the suffixes in the words below according to their class-changing function.

The categories include the following: [There are two examples of each suffix.]

- |             |               |
|-------------|---------------|
| (a) N > N   | (e) N > A     |
| (b) V > N   | (f) V > A     |
| (c) A > N   | (g) N/A > Adv |
| (d) N/A > V |               |

<i>broaden</i>	<i>syntactic</i>	<i>width</i>	<i>socialist</i>
<i>absorbent</i>	<i>falsehood</i>	<i>closure</i>	<i>straighten</i>
<i>rhetorician</i>	<i>clockwise</i>	<i>refusal</i>	<i>vaccinate</i>
<i>gangster</i>	<i>stardom</i>	<i>warmth</i>	<i>hopeless</i>
<i>twofold</i>	<i>trial</i>	<i>accidental</i>	<i>selfish</i>
<i>advisory</i>	<i>likelihood</i>	<i>friendless</i>	<i>politician</i>
<i>idealist</i>	<i>mobster</i>	<i>kingdom</i>	<i>facilitate</i>
<i>flippant</i>	<i>contradictory</i>	<i>boyish</i>	<i>seizure</i>
<i>manifold</i>	<i>stepwise</i>	<i>thankless</i>	<i>global</i>
<i>historic</i>	<i>penniless</i>		

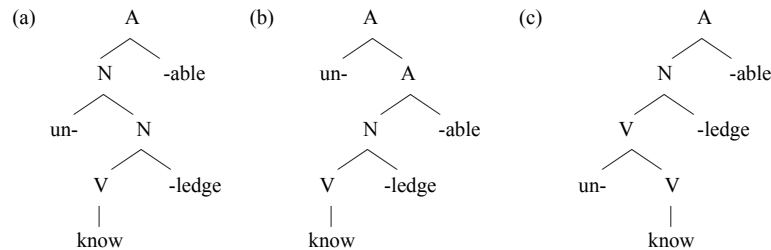
**2. Can you think of a reason why -en may attach to some adjectives, but not to others?**

<i>blacken</i>	<i>broaden</i>	<i>stiffen</i>	<i>ripen</i>
<i>deafen</i>	<i>tighten</i>	<i>soften</i>	<i>loosen</i>
<i>*thin</i>	<i>*longen</i>	<i>*slimen</i>	
<i>*nearen</i>	<i>*slowen</i>	<i>*narrowen</i>	
<i>*highen</i>	<i>*holyen</i>	<i>*noblen</i>	

**3. Can you think of a reason why -ed may attach to some nouns, but not to others?**

<i>brown-haired</i>	<i>kind-hearted</i>	<i>low-spirited</i>
<i>left-handed</i>	<i>narrow-minded</i>	<i>strong-headed</i>
<i>*brown-coated</i>	<i>*heavy-pursed</i>	<i>*long-skirted</i>
<i>*one-childed</i>	<i>*two-catted</i>	<i>*silly-hatted</i>

**4. Which is the proper derivation of *unknowledgeable*? Explain.**



**V PREFIXATION**

**1. Consider the following words:**

<i>disbelief</i>	<i>dishonorable</i>	<i>dislike</i>
<i>discomfort</i>	<i>dispassionate</i>	<i>disconnect</i>
<i>disharmony</i>	<i>dismissive</i>	<i>disclose</i>
<i>disorder</i>	<i>disgraceful</i>	<i>disinfect</i>
<i>displeasure</i>	<i>disorderly</i>	<i>disown</i>
<i>dishonest</i>	<i>dissimilar</i>	<i>discontinuous</i>
<i>discharge</i>	<i>disobey</i>	<i>distrust</i>

- What kinds of bases does the prefix *dis-* attach to? Give an example of each.
- What kinds of roots does the prefix *dis-* attach to? Explain.
- Is it a class-maintaining or class-changing prefix?
- What are the two meanings of the prefix? Name and give an example from the list above of each of the two meanings.
- In addition to derivation, what process of word formation is involved in the formation of the following words?

<i>disarm</i>	<i>distrust</i>	<i>dismember</i>	<i>disfigure</i>
<i>disband</i>	<i>discolor</i>	<i>discourage</i>	<i>disbar</i>

- What problem do the following words pose for morphological analysis? Explain.

<i>discern</i>	<i>disgust</i>	<i>dissipate</i>	<i>disburse</i>
<i>disparage</i>	<i>dismantle</i>	<i>dispel</i>	<i>discreet</i>

- Would you say that the following words contain the *dis-* prefix or a different one? Explain.

<i>denude</i>	<i>deforest</i>	<i>demerit</i>	<i>declassify</i>
<i>deform</i>	<i>degrade</i>	<i>denounce</i>	<i>decode</i>
<i>detract</i>	<i>deflower</i>	<i>deflect</i>	<i>defrost</i>

- Analyze the following words into morphs and label each morph as R (=root), DP (=derivational prefix), DS (=derivational suffix), and IS (=inflectional suffix). Specify the grammatical function of the affixes and the part of speech of the root.

Ex.: DISCOURAGEMENT *dis-* (DP) + *courage* (R – noun) + *-ment* (DS – nominalizer)

*disheartening*    *disproportionately*    *disqualification*    *disenchantments*    *disinterested*

- Draw a tree diagram showing the derivation of the word *disreputable*.

**2. Consider the follow words:**

<i>antisocial</i>	<i>antibacterial</i>	<i>antihistamine</i>
<i>antibody</i>	<i>antinuclear</i>	<i>antihygienic</i>
<i>anticlimax</i>	<i>antihero</i>	<i>antiseptic</i>

- What bases does the prefix *anti-* attach to? Give an example of each.
- What kinds of roots does the prefix *anti-* attach to? Explain.
- Is the prefix class-changing or class-maintaining?
- Give the meaning of the prefix.
- What problem do the following words pose for morphological analysis? Explain.

<i>antipathy</i>	<i>antidote</i>	<i>antithetic</i>	<i>antibiotic</i>
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- In addition to derivation what process is involved in the formation of the following words?

<i>antiwar</i>	<i>antifreeze</i>	<i>antislip</i>
<i>antitrust</i>	<i>antiknock</i>	<i>antiwrinkle</i>

- What problem do the following words pose for morphemic analysis? Explain.

<i>antacid</i>	<i>Antarctic</i>	<i>antepileptic</i>
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- Analyze the following words as in (1h) above:

<i>antibacterial</i>	<i>antiperspirant</i>	<i>antirevolutionary</i>
<i>anticommercialization</i>		<i>antidisestablishmentarianism</i>

- Give a tree diagram showing the derivation of the word *antidepressant*.

## VI COMPOUNDING

1. Identify the syntactic pattern in each of the following compounds & express it in a rule.

Example: 'gravedigger' — N + V + -er > N

- |                  |                   |                     |
|------------------|-------------------|---------------------|
| (a) hovercraft   | (m) dugout        | (y) lukewarm        |
| (b) dairyman     | (n) hardhearted   | (z) law-abiding     |
| (c) bath-towel   | (o) homesick      | (aa) far-reaching   |
| (d) goldfish     | (p) proofread     | (bb) homemade       |
| (e) inroads      | (q) overqualified | (cc) clean-cut      |
| (f) bystander    | (r) overachieve   | (dd) fighter-bomber |
| (g) setback      | (s) badmouth      | (ee) earthenware    |
| (h) meltdown     | (t) redhead       | (ff) driver's seat  |
| (i) blackout     | (u) birth control | (gg) baking powder  |
| (j) stand-in     | (v) breakfast     | (hh) drip-coffee    |
| (k) turnout      | (w) thoroughgoing | (ii) wisecrack      |
| (l) money-hungry | (x) quick-change  | (jj) snowplow       |

2. The following words are compounds which also include derivational affixes. Analyze the words, identifying the roots and their parts of speech, as well as the affixes and their function as nominalizer, verbalizer, adjectivalizer, or adverbializer.

Example: 'housekeeper' — *house* (root – noun) + *keep* (root – verb) + -er (nominalizer)

- (a) flightworthiness
- (b) chatterbox
- (c) owner-occupied
- (d) freedom-loving
- (e) handicraft
- (f) broken-hearted
- (g) safety-tested
- (h) worldly-wise
- (i) anti-aircraft
- (j) machine-readable
- (k) chartered accountant

## VII MINOR PROCESSES OF WORD FORMATION

1. Identify the process of word formation responsible for each of the following words.

- |                   |                     |                   |
|-------------------|---------------------|-------------------|
| (a) curio         | (j) serendipity     | (s) guesstimate   |
| (b) (to) laze     | (k) diesel          | (t) canary        |
| (c) (to) network  | (l) (a) ha-ha       | (u) brain-gain    |
| (d) (to) cohere   | (m) (to) make up    | (v) boojum        |
| (e) (a) sitcom    | (n) (to) total      | (w) gaffe-slack   |
| (f) (the) muppets | (o) (the) hereafter | (x) psycho        |
| (g) (a) what-not  | (p) amphetamine     | (y) walkie-talkie |
| (h) margarine     | (q) (a) construct   | (z) bonfire       |
| (i) dystopia      | (r) (the) chunnel   |                   |

2. The words in column A have been created from the corresponding words in B. Indicate the word formation process responsible for the creation of each word in column A.

- | <u>Column A</u> | <u>Column B</u>                               |
|-----------------|-----------------------------------------------|
| (a) sprig       | spray + twig                                  |
| (b) nostril     | nosu + thyr1 'hole' [in Old English]          |
| (c) bookie      | bookmaker                                     |
| (d) van         | caravan                                       |
| (e) Amerindian  | American Indian                               |
| (f) CD          | compact disc                                  |
| (g) RAM         | random access memory                          |
| (h) televise    | television                                    |
| (i) xerox       | xerography                                    |
| (j) telathon    | television + marathon                         |
| (k) sci-fi      | science fiction                               |
| (l) elect       | election                                      |
| (m) deli        | delicatessen                                  |
| (n) scuba       | self-contained underwater breathing apparatus |
| (o) scavenge    | scavenger                                     |
| (p) jell        | jelly                                         |