



FACHRICHTUNG 4.3 – ANGLISTIK, AMERIKANISTIK  
UND ANGLOPHONE KULTUREN  
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## Morphology – lecture script

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### 1. Introduction

1.1 General info: website: bibliography, lecture script

1.2 Conventions:

underline cited forms: fly  
prefixes end with a hyphen: pre-  
suffixes begin with a hyphen: -less

- Where necessary, write lexical base form in CAPS:

the 3<sup>rd</sup> person singular of the verb FLY is flies, the present participle flying,  
and the past tense (or preterite) form is flew

- Mark primary stress with ´ on vowel and secondary stress with ` on vowel,

place meanings/explanations in 'single quotes'

Thus: bláck bírd = 'bird which is black'  
bláckbird = 'species of bird'

- Mark unacceptable forms with an asterisk: \*bluity

### 1.3 Why morphology?

Morphology is at the crossroads between phonology, syntax, semantics, lexicon and context; even spelling frequently plays a role in word-formation:

phonological: sane - sanity      allude – allusion

syntactic:      cook trans verb, intrans verb, noun

semantic:      watchdog = 'dog that keeps watch'

lapdog = 'dog that sits on your lap'

bulldog = 'breed of dog, looks like bull'

hotdog = 'sausage'

lexical:      Is software a word? Is hard drive? Is RAM?

contextual:      by rule or systematic regularity, we know  
unplayable = 'can't be played', but only context clarifies

compare:      unplayable CD, unplayable chess game, unplayable sax,  
unplayable sax solo

spelling:      besides RAM (Acronymy) and CD (Initialism), we find  
deejay from DJ from Disk Jockey

We pronounce zoo based on spelling, rather than as it  
sounds in it's source word zoological garden.

Due to word-formation, morphology more obviously displays individual creativity than phonology, syntax, semantics.

In word-formation and borrowing, morphology has a more accessible diachronic dimension than other branches.

Word-formation is more obviously indeterminate in meaning without the concrete context, e.g.

crop dusters apply (insecticide) dust to crops  
furniture dusters remove dust from furniture

Rules determine the semantic relation of the noun duster to the verb dust, but context determines which verb meaning fits.

Dutch shoe-makers =      1. people from Holland who make shoes

2. makers of Dutch-style shoes

AI bought a Dutch shoe-maker = 1. device for making Dutch-style shoes

2. shoe-making device from Holland

Special focus in this lecture will be on morphological processes and context.

#### 1.4 A historical perspective on morphology

Morphology as "Formenlehre" is often reduced to patterns of inflection in traditional linguistics; even where the paradigms were irregular, they were at least fixed and describable.

Typical inflectional patterns or paradigms, e.g. personal pronouns and possessive adjectives in English:

I	me	my/mine
you	you	your/yours
he, she, it	him, her, it	his/his, her/hers, its/its

But word-formation combines elements of phonology, syntax, semantics, lexicon, spelling and context.

This makes it impossible to deal with in a uniform manner.

The acceptability of words is not rule-governed in the same way as pronunciations or sentences are, e.g.

trumpet and fiddle yield verbs to trumpet and to fiddle, but

oboe and violin do not: no \*to oboe or \*to violin

19<sup>th</sup> century language scholars wanted to see linguistics as science.

--law-like relationships between languages

--formal correspondences between Sanskrit, Latin, German, English

--comparable paradigms like personal pronouns

But, morphological processes seem contrary to general laws

--idiosyncratic, creative word-formation patterns

--word borrowing confuses regular patterns, e.g. Zeitgeist, apartheid

Morphology marginalized by 20<sup>th</sup> century linguists

--diachronic dimension cannot be conveniently ignored

Recall Saussure's distinction of synchronic and diachronic:

--"nonce formations" represent potential new words and may enter regular vocabulary, e.g. e-mail leads to initially jocular form snail mail

Acceptance or rejection of new words depends on non-linguistic factors.

Saussure's dichotomy *synchronic-diachronic* important in late 19<sup>th</sup> Century, but it has had consequences detrimental to linguistics since.

--word-formation happens in real language performance (*parole*)

--acceptance of new words takes place over time (*diachronic*)

--creative morphology as anomaly in structural description of language

### 1.5 Discourse morphology

How are new words introduced into specific discourse contexts?

Rules and regular types of word-formation versus acceptability

Consider nonce word-formation bottle-orderer

Automatically the guest who ordered a bottle of liquor a few minutes after arrival aroused the credit manager's suspicion. Most new arrivals who wanted a drink quickly--after a journey or a tiring day--ordered a mixed drink from the bar. The immediate **bottle-orderer** was often starting on a drunk, and might not intend to pay, or couldn't. (A. Hailey, Hotel, Pan Books)

Opposed tendency: creation of words **not** to be understood by everyone

Within groups, certain forms serve to signal common interests and rapport, e.g.

Hey Judy!

**Watsup?** not **2** much here. **thanx 4** writing back, i love hearing from u!

**Newayz**, guess what!!! i met chris today, he's such a sweetie!!! **omygosh**, i don't know if he likes me though. he might or might not.

i can still dream and wonder what it would be like to go out with him. **LOLAL** (laugh out loud a lot).

Well not much to say, i'll **right** back later. o that's cool about bill and the summer **vacay** stuff. where **r u** going???

**I'llbc-ingu, luv ya lots!!!**

Note parenthetical explanation for LOLAL

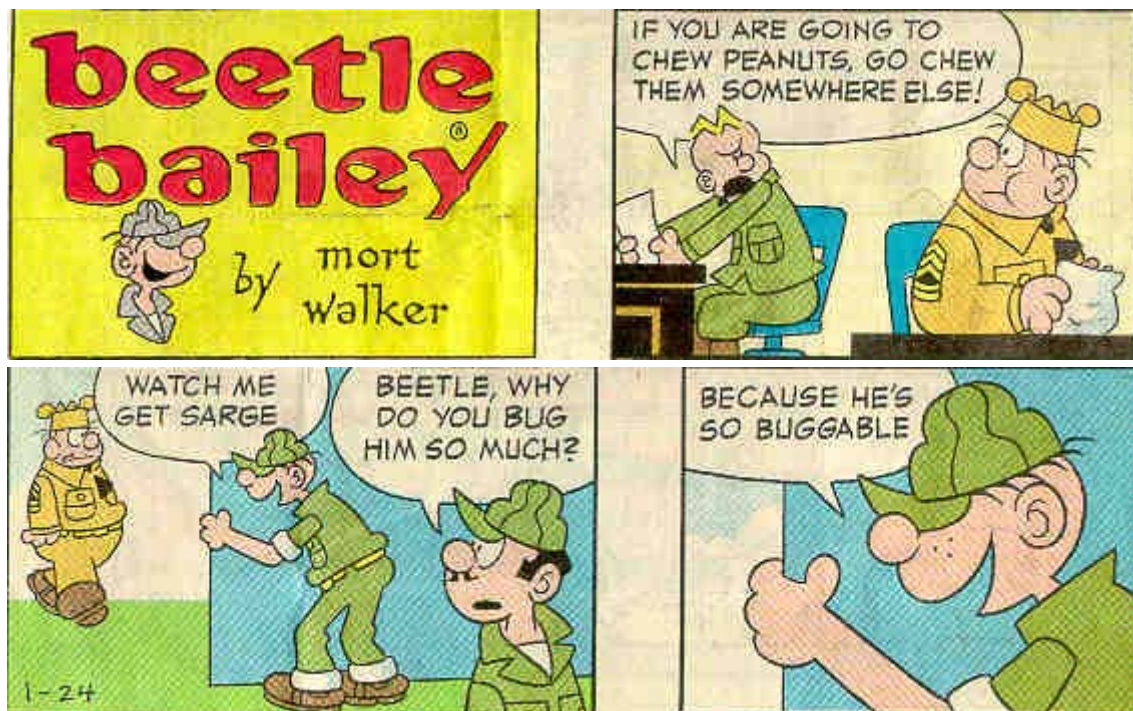
Note interrelation between spelling and word-formation

Note potential of word-formation processes for play.

Morphologically-based word-play is common in the press, advertising, literature, as well as in everyday talk.

Playful word-formation is often the basis for humor.

Also note comic-book language





Author sets the stage for the far-fetched word-formation whappable with the somewhat more acceptable compound buggable.

Three factors:

- facilitative explanation,
- conspiratorial encryption
- humorous orientation

## 1.6 Morphology in linguistics

Structuralist linguistic systems usually begin with phonetics and work up:

--phonological processes, e.g. delete initial /h/ in unstressed words like her and him

--phonotactic regularities in syllable structure, e.g.: no initial nasal + stop consonants in English, hence no \*mtoto

--morphology: responsible for inflectional paradigms, so-called stems and derivational affixes on the way to syntax

OR morphology as bridge from syntax to phonotactics and phonological processes in a structuralist system.

syntax: abstract noun related to the verb prósper,

morphology: adds affix -ity to form the abstract noun prosperity **and** appropriate stress-shift.

Either way:

--prósper (verb) and prosperity (abstract noun) with stress-shift due to the suffix -ity

--bláckbird is a species of bird and bláck bírd is a noun phrase with a head noun and an adjective modifier

Description of multi-morpheme words and relations between their parts is the province of morphology.

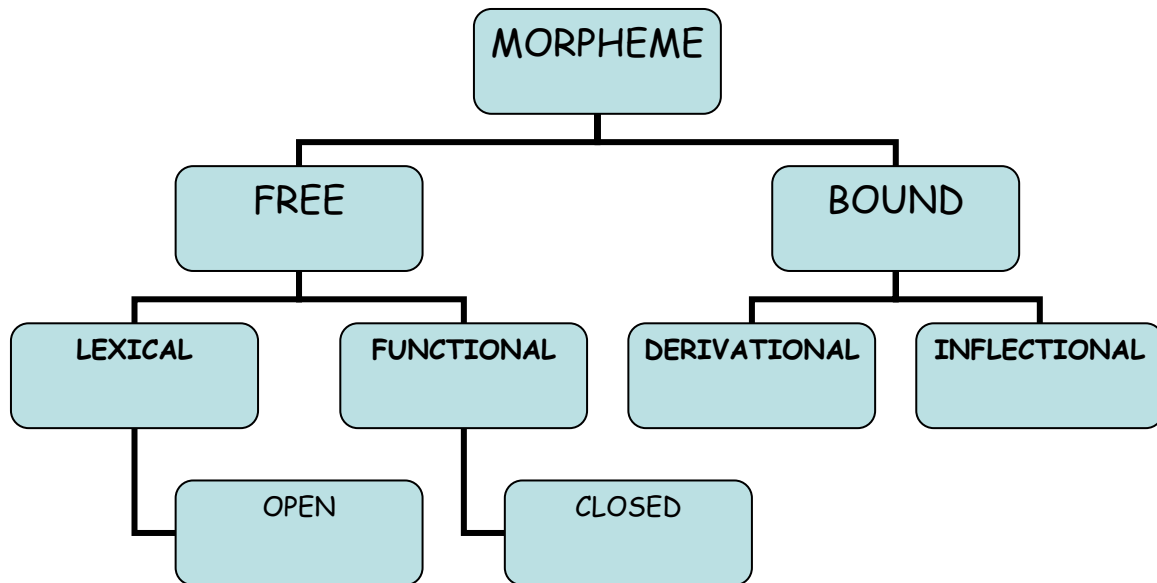
Traditional views of semantics place the word at the center of linguistic theorizing.

The word functions as a sign, as described by Saussure, because it combines form and meaning.

The combination of form and meaning characterizes the *morpheme*, and the morpheme stands at the center of morphology.

## 1.7 Morphemes

*Morpheme* = smallest unit of form-meaning or form-function



A word may consist of single morpheme, e.g.: tree, run, new, for, who, etc. or a word may contain multiple morphemes, e.g.: prosperity, blackbird.

Morphemes are *lexical*: nouns, verbs, adjectives, adverbs (open classes) or *functional*: prepositions, conjunctions, pronouns etc. (closed classes).

*Stems* are usually free, as in lexical and functional words but stems may also be bound, as in:

caval which appears only in a few words like cavalry, cavalier, cavalcade

or even of unique occurrence like cran- in cranberry

hence the term: "cranberry morpheme":

cf. raspberry, spareribs, cobweb, werewolf etc.

Affixes are either inflectional or derivational:

*Inflectional affixes* (always suffixes in English) indicate relationships between words in clauses.

*Derivational affixes* (both prefixes and suffixes) change meaning, grammatical category or phonological form.

English has only a few inflectional morphemes:

On nouns: plural -s and possessive -s

On verbs: 3rd person singular -s

Past Tense -ed

Present Participle -ing

Past Participle -en/-ed

On adjectives and adverbs: comparative -er, superlative -est

with alternates: more, most

English follows the Germanic pattern with suffixes -er and -est:

on one-syllable words: bigger, faster, darkest, highest

on two-syllable words ending in vowels: sillier, mellower, tiniest,  
narrowest

on two-syllable words ending in syllabic -l, -n, -r: simpler, oftener,  
cleverer, simplest, noblest

and the Romance pattern with preposed more and most on longer words.

But, inevitably, both may apply sometimes, e.g.

politer - more polite

commonest - most common

Also a few *inflectional paradigms* like the personal pronouns listed above,

the demonstratives: this - that, these - those

and the wh-words: who, whom, whose

Two kinds of variation for the inflectional suffixes:

First: morphologically irregular noun and verb suffixes

--nouns: few old irregular plurals like: sheep (zero-plural), oxen, children

knife - knives, house - houses, bath - bathes (voicing; only f-v shift in spelling)

also: men, feet, mice, geese (with vowel mutation or "umlaut")

and foreign plurals like: funghi, schemata, indices, curricula, stimuli etc.

--verbs: some irregular past tense and past participles like:

ride, rode, ridden sing, sang, sung come, came, come (*gradation* or *ablaut*)

say, said, said sleep, slept, slept

hit, hit, hit set, set, set bid, bid, bid (*defective* pattern) (note final dental -t/-d)

a few common verbs have "suppletive" paradigms, e.g.

be: Pres Sg am, are, is Pl are

Past Sg was Pl were

go: go, went, gone

Second: phonologically conditioned variants of the regular suffixes

--plural and possessive -s

/lʒ/ after sibilants, as in: watches, busses, bushes

/s/ after voiceless consonants

/z/ elsewhere (voiced consonants and vowels)

--Past Tense -ed

/ld/ after /t, d/, as in: spotted, loaded

/t/ after voiceless consonants

/d/ elsewhere (voiced consonants and vowels)

Variant forms of a morpheme are called *allomorphs*.

Thus, for the plural morpheme:

both irregular, morphologically conditioned allomorphs like -en,

and regular phonologically conditioned allomorphs /lʒ, s, z/

Lots of morphemes have two or more allomorphs, e.g.

-- the indefinite article has the allomorphs a and an

-- wo in won't is an allomorph of will

-- abil in ability is an allomorph of able

-- ed in edible is an allomorph of eat

-- child has a sg allomorph with /aI/ and pl allomorph with short /I/

The alternate forms of the comparative morpheme, the suffix -er and more, can also be considered allomorphs

## 2. The word

The word as natural language element by contrast with morpheme, syllable, sentence etc. Hence the difficulty in providing any single, exact definition.

### 2.1 Spelling

The word is what we write between spaces (though illiterate cultures and kids recognize words, and spelling conventions vary by national unit and publishing house).

compare:            can not, cannot, can't  
                         she'll've, she'll have, she will have  
                         socalled, so-called, so called  
                         i'llbc-ingu, WYSIWYG

### 2.2 Phonology

Word is pronounced with a single intonation contour though function words often have no discrete value or at least can be under *contrastive stress*.

This eliminates i'llbc-ing u and, perhaps, WYSIWYG, but offers no help with so-called and she'll've, no matter how they're written.

Phonotactic constraints eliminate obvious discrepancies like \*mtoto and \*ngoo, but again it's no help with so-called and she'll've etc.

## 2.3 Syntax

Words are units belonging to certain parts of speech:

--they can be listed in a *lexicon* or dictionary,

--they can be subjected to grammatical tests, e.g.

adjectives must fit in the slot: a \_\_\_ noun,  
adjectives must take the comparative ending -er  
or follow more in the slot above

But syntax can't deal with contractions like she'll and she'll've or with new words, esp. those based on spelling like i'llbc-ing u and WYSIWYG .

According to Bloomfield (1933) the word is the minimal free form, but we still find jocular expansions like:

absobloodylutely and Califrigginifornia

In conversation, we even interrupt compounds, e.g.

Jason: The Russians have the busiest **space like port** in the world, don't they?

They launch something like every- every couple of weeks.

Jason inserts like to express doubt about the form (or as a *hedge*).

## 2.4 Words and phrases

Boundary between words and phrases problematic,

--*variable spelling* like so-called/ so called;

--*phrasal verbs* like to get up and to put up with;

--*semi-compounds* like to give rise to and to take advantage of;

--*binomials* like up and coming and by and large and so on

Compare: spoonfuls - spoonsful - spoons full,  
daughters in law - daughter-in-laws  
passers by, passer bys  
still lifes - still lives

Conversational example of alternation

Teddy: See what kind of a deal you can make. But I'm only giving you that-  
twenty thousand dollars {laughing}. Well, Henry **wheeled and dealt**.  
**Wheeled and dealed?**

Jim: {laughs}.

Teddy: And he did get it for twenty thousand.

Teddy questions formation of the past tense for binomial to wheel and deal.

--historical past tense of deal as a free form is dealt,

--if to wheel and deal is word-like unit, then regular past tense: dealed.

## 2.5 Homophony

When two items sound alike (are *homophones*) are they one word or two?

A word expresses a single unitary meaning

--though function words like the and at express no obvious meaning

--words like myth and culture express no single unitary meaning

So how do we differentiate:

--separate words with the same sound

--one word with multiple related meanings?

Compare also:

right N: The rights of all citizens are equal.  
V: They righted the car after its tumble.  
adj: The right solution may be elusive.

adv: She ran right out the door.

alongside the verb write

well as N, Aj, Av, interjection and pause-filler etc.

The problem of homophony recurs in morphology, e.g. in *affixes*:

-er: comparative in faster, bigger  
for agent in climber, singer  
for resident in New Yorker, Londoner  
for family member in brother, mother  
part of un-analyzable stem in water, butter

### 3. Word classes (parts of speech)

Define the word by defining parts of speech

#### 3.1 Traditional, notional definitions

Noun as name of a person, place, thing or concept

Verb as expression of action, state or relation

Adjectives express properties

Adverbs express relations of place, time, manner etc.

Prepositions express spatial, temporal etc. relations

Unhelpful as definition or as a guide to identification

#### 3.2 Slots

Noun as word that can function as subject or object

Verb as word that can function as main element of predicator

Adjective as word that can modify a noun

Adverb as word that can modify a verb, adjective, adverb and clause

Provides test frames based on a grammar:

"determiner __ predicator"	for noun
"determiner __ noun"	for adjective
"modal __ noun"	for transitive verb etc

Problem of *conversion* (also called *zero-derivation*): one part of speech in slot normally occupied by another, e.g.

adjective (with adjective inflection) in noun slot:

The poor hate the rich

The poorer hate the richer

The poorest hate the richest

noun (proper noun) in verb slot:

"J. W. Marriot Sr. and J. W. Jr. **Pan Am'd** out of here Saturday for Peking." (Herb Caen in newspaper column)

"I know it's across from a quarry. That's the only way I can **landmark** it."  
(conversational directions to beach)

### 3.3 Paradigms

Paradigm = a set of inflected words belonging to a single stem or a set of elements which can be substituted for each other.

Recall personal pronouns:

Sg

I    me    my/mine

you   you   your/yours

he,   him,   his/his,

she,   her,   her/hers,

it    it    its/its

Pl

<u>we</u>	<u>us</u>	<u>our/ours</u>
<u>you</u>	<u>you</u>	<u>your/yours</u>
<u>they</u>	<u>them</u>	<u>their/theirs</u>

cf. reflexive pronouns:

Sg. myself, yourself, himself, herself, itself

Pl. ourselves, yourselves, themselves

and interrogative/relative pronouns:

Nom	<u>who</u>
Obj	<u>whom</u>
poss	<u>whose</u>

compare nouns:

nominative

Sg	<u>cat</u>	<u>ox</u>	<u>man</u>	<u>sheep</u>	<u>alumnus</u>
Pl	<u>cats</u>	<u>oxen</u>	<u>men</u>	<u>sheep</u>	<u>alumni</u>

possessive

Sg	<u>cat's</u>	<u>ox's</u>	<u>man's</u>	<u>sheep's</u>	<u>alumnus's</u>
Pl	<u>cats'</u>	<u>oxen's</u>	<u>men's</u>	<u>sheep's</u>	<u>alumni's</u>

Word like ox and sheep with irregular or zero plurals belong in the same class as regular nouns like cat because they function in the same slots.

verbs: person

Sg	1 <sup>st</sup>	<u>am</u>	<u>go</u>
	2 <sup>nd</sup>	<u>are</u>	<u>go</u>
	3 <sup>rd</sup>	<u>is</u>	<u>goes</u>

infinitive:	be	go	eat	kick	hit
3 <sup>rd</sup> Sg pres:	is	goes	eats	kicks	hits
past tense:	was	went	ate	kicked	hit
pres part:	being	going	eating	kicking	hitting
past part:	been	gone	eaten	kicked	hit

Note *suppletive* and *irregular* and *defective* forms.

Also modal verbs: present tense and past tense

<u>can</u>	<u>could</u>
<u>may</u>	<u>might</u>
<u>shall</u>	<u>should</u>
<u>will</u>	<u>would</u>

by *back shift* (*sequence of tenses*): I think I can, I thought I could

demonstratives: near - distant

Sg this - that

Pl these - those

adjective and adverb:

comparative -er and superlative -est

(or occur with more and most in: "Article more \_\_\_ Noun")

Thus: blue, bluer, bluest

big, bigger, biggest

important, more important, most important

Note irregular adj comparison: good – better – best

bad – worse – worst

Many parts of speech don't inflect at all, e.g.

articles: a, an; the

prepositions: at, between, by, for, in, on, under etc

conjunctions: and, but, or

subordinators: because, since, though etc

### 3.4 Endings: inflectional, derivational

Besides taking inflections plural -s and possessive -s, nouns fall into classes with a range of derivational suffixes, e.g.

-er lover, baker, jogger, manufacturer

-ity prosperity, sanity, reality, solemnity

-ion motion, revolution, suspicion, succession

-ness kindness, silliness, willingness, truthfulness

-ism racism, truism, Marxism, liberalism etc

Verbs also have characteristic derivational suffixes, besides displaying the appropriate inflectional forms, namely:

infinitive, 3<sup>rd</sup> pers sg pres, past tense, pres and past participles,

-en redden, fatten, sweeten, enlighten

-ify beautify, pacify, magnify, ratify

-ate motivate, liberate, inundate, tolerate

-ize harmonize, realize, recognize, rationalize

Adjectives have characteristic derivational suffixes, besides inflectional forms for the comparative and superlative.

- ous anxious, prosperous, mountainous, advantageous
- ful awful, beautiful, peaceful, powerful
- able viable, admirable, comfortable, irritable
- ly lovely, friendly, womanly, brotherly
- some awesome, wholesome, lonesome, handsome
- y icy, hilly, funny, handy, shaky

Adverbs take characteristic derivational suffixes, besides same comparative and superlative as adjectives.

- ly hardly, awfully, anxiously, admirably
- wise edgewise, clockwise, contrariwise, moneywise
- ward inward, backward, northward, homeward
- s always, sideways, weekdays, evenings

Note homophony again:

adj + -ly yields adv quickly

N + -ly yields adj friendly

adj + -en yields V deaden

N + -en yields adj leaden

Sometimes even within single word class:

N + -y yields adj dirty

N + -y yields N dolly

Even inflectional suffixes have derivational homophones:

past participle -en vs -en in deaden & leaden

3<sup>rd</sup> pers Sg Pres -s vs -s̄ in sideways

pres participle -ing vs -ing in wedding

adj comparative -er vs -er in runner

#### 4. Word-Formation

The study of Word-Formation includes:

--analysis of existing words

--creative production of new words

As an exercise, consider the types of word-formation in the poem below: e. e. cummings

in Just-  
spring when the world is **mud-**  
**luscious** the little  
lame **balloonman**

whistles far and wee

and **eddieandbill** come  
running from marbles and  
piracies and it's  
spring

when the world is **puddle-wonderful**

the queer  
old balloonman whistles  
far and wee  
and **bettyandisbel** come dancing

from **hop-scotch** and **jump-rope** and

it's  
spring  
and  
the  
**goat-footed**

balloonman whistles  
far  
and  
wee

#### 4.1 Inflection, derivation, compounding

*Inflection*, summarized from previous sections,

regular noun inflections: plural -s and possessive -s,

regular verb inflections: 3<sup>rd</sup> pers Sg. Pres -s,

past tense -ed

pres participle -ing

past participle -en (-ed)

regular adj/adv inflections: comparative -er (more)  
superlative -est (most)

Except for forms in paradigms above, all other suffixes are *derivational*.

*Derivation* builds words by means of affixes, both suffixes and prefixes, e.g.

able + -ity yields ability

in- + ability yields inability

*Compounding* builds words by combining already existing words, as in:

steam + ship yields steamship

sky + blue yields skyblue

#### 4.2 Word-formation as an anomaly in grammar

*Acceptability* of derived or compound words is not rule-governed

--we readily derive the verb to bike from the noun bike, but the verb to car from the noun car is oddly unacceptable.

--we form housedoor from house and door, and doorknob from door and knob but compound houseknob is oddly unacceptable.

*Meanings* of derived or compound words are not predictable

<u>Marxism</u>	= philosophy of Marx
<u>racism</u>	= intolerance of other races
<u>truism</u>	= a self-evident statement
<u>dragonfly</u>	= a fly that looks like a dragon
<u>horse fly</u>	= a fly that hangs around horses
<u>firefly</u>	= a beetle with a light-producing organ
<u>butterfly</u>	= a lepidopteran

*Word-formation* processes collapse syntactic differences and create ambiguity.

#### Japanese paper folders

- people from Japan who fold paper, either professionally or as a hobby,
- devices for folding paper the Japanese way or for folding Japanese paper
- binders (from Japan) either made of (Japanese) paper or for holding Japanese) paper etc.

Clear relations between Japan, fold and paper in sentences

- are blurred in forming the Adj Japanese,
- and the Noun folder from the verb fold + -er,
- and further in the compound paper-folder

This effect is heightened through homophony in the system as a whole.

Abbreviation processes create truly opaque words:

clipping	<u>flu</u> <u>pram</u> <u>mike</u>
hypocorism	<u>hanky</u> <u>movie</u> <u>telly</u>
acronymy	<u>AIDS</u> <u>TESOL</u>
initialism	<u>HIV</u> <u>AAA</u>

Note also tendency to simplify compounds:

public house becomes pub

floppy disk becomes floppy

What advantages does word-formation bring with it to make up for all this ambiguity?

## 5. Derivation: Affixation

*Derivation* builds words by means of *affixation*. *Affixation* involves addition of prefixes and suffixes.

### 5.1 Derivation vs. Compounding

Derivation involves *bound forms*: prefixes and suffixes

pre- de- in-                      -al -ous -ity

Compounding involves *free forms*: lexical or grammatical words: fly, door, many, into, up, through

Historically affixes often derive from free forms, and they may look identical, sound identical, and even have similar meanings, e.g.

in in-, full -ful(l), less -less, able -able/-ible. (recall how spoonful can turn into spoons full in the plural)

Compare: -dom in wisdom freedom kingdom  
from OE dom 'judgment' seen in doom, doomsday

*Particle Compounds* include elements similar to both affixes and free grammatical forms, e.g.

ínset<sub>N</sub> from to set ín    dríve-in<sub>N</sub> from to drive ín

úpsét<sub>N</sub> from to upsét    sétup<sub>N</sub> from to set úp

Many Latin-based forms recur in compounds, but not as free forms, e.g. micro- and -ology:

microphone, micrometer, microchip, microprocessor

zoology, biology, anthropology, morphology

These so-called *neo-classical* or *neo-Latin compounds* are usually analyzed as consisting of *bound stems*.

Like the particles mentioned above, some Latin-based elements have a status somewhere between affixes and bound stems, e.g. ex-, sub-, super-, ultra-, besides occurring in neo-classical compounds like:

exhibition subcutaneous supernumerary ultrasonic

These elements routinely combine with native English stems: ex-wife, sub-floor, super-clean, ultra-bright

In fact, sub occurs as a free form meaning 'submarine', and ex now occurs as a free form meaning 'ex-partner'.

Neo-classical elements may become free forms, usually through *clipping*, e.g.

phone from telephone, zoo from zoological garden, bio from biography, pro from professional

Even: pros and cons from generalized meanings of the prefixes

## 5.2. Prefixing

Prefixes may change the part of speech of the stem they combine with e.g.

noun band + dis- becomes verb disband

But they may leave it as it is, e.g. verb tie + un- remains verb untie

A single prefix may have both effects, depending on the stem it attaches to, e.g.

noun war + pre- becomes adjective pre-war

noun school + pre- remains noun preschool

Verb heat + pre- remains Verb pre-heat

Noun throne + de- becomes Verb dethrone

verb centralize + de- remains verb decentralize

Prefixes often combine with several types of stems. Semantically, most prefixes fall into a few classes:

NEGATIVE:     un-   unfair unequal unreal

non- non-binding non-existent non-fat  
in- inhuman insane intractable

variants: im- impatient imbalanced immaculate  
il- illogical illegitimate  
ir- irregular irreversible

REVERSIVE un- untie unlock unfold  
dis- disband dismount disqualify  
de- dethrone decentralize desegregate

PRIVATIVE a- asymmetry asocial amorphous  
mal- malformed maladjusted malcontent  
mis- mistake mislead misfortune  
semi- semi-fluid semi-annual semi-attached

NUMBER bi- bicarbonate bi-weekly bilingual  
multi- multilateral multi-colored  
poly- polyglot polyvalent polysemy

TIME ante- ante-bellum antediluvian ante-room  
pre- pre-war pre-heat pre-natal  
post- post-war post-meridian post-date

SIZE mega- megalopolis mega-ton mega-hit  
micro- microscope micro-biology microwave  
mini- miniature minigolf minivan

SPACE            ex-    exhale exhibit extend  
                      mid-    midday midair mid-Atlantic  
                      en-    entomb entrap encircle  
                              variant: em- embark embrace emplane

en- can have a causal sense in *denominal* verbs (derived from Nouns) and *de-adjectival* verbs (derived from Adjectives): enslave empower ennoble

Variant: prefix en- AND suffix -en, e.g. enliven enlighten embolden

be- also sometimes has a causal sense in *de-adjectival* and *denominal* verbs:

becalm benumb belittle bedew beshrew beknight

Note: be- was historically not a prefix at all, instead, be- derives from prep by with no obvious uniform sense: before, become, befall, bestir, bemoan

Similarly, a- derives from OE on:

ablaze, ajar, atop, adrift, aloft, awash

Linate prefix re- 'again': repeat, replay, re-examine

'reversal': regain, recoil, reclaim

### 5.3 Suffixing

Suffixes may change the part of speech of the stem they combine with e.g. verb view + -er becomes noun viewer, and they may leave it as is, while altering its sense, e.g.

noun duck + -ling remains noun duckling (diminutive -ling)

noun friend + -ly becomes adjective friendly

noun friend + -ship remains noun friendship (concrete noun becomes abstract noun)

A single suffix (or homophonous suffixes) may have both effects, depending on the stem it attaches to, e.g.

noun hand + -y becomes Adjective handy

noun pup + -y remains Noun puppy (diminutive -y)

noun child + -ish becomes Adjective childish

adjective yellow + -ish remains Adjective yellowish

Note use of -ish to mean 'kind of', e.g.

In the 1960s he moved from Hollywood to England and bought a **statelish** house near, but not too near, London.

(The Economist Mar. 13, 1999)

One even hears: They're getting oldish.

Can you be there around sixish?

Suffixes may combine with several types of stems, with or without altering the parts of speech, e.g.

-ish with nouns, adjectives and other types of words,

-y with different kinds of nouns

-- diminutive -y in nouns like mommy

-- -y in de-nominal adjectives like leafy.

### 5.3.1 Productivity, stress

*Productivity* is the measure of how generally applicable an affix is.

An affix which applies to all or most words in a particular syntactic group to form new words is maximally productive, e.g.

-able/-ible to derive adjectives from transitive verbs

-ly to derive adverbs from adjectives:

Examples:

drinkable, readable, measurable, combinable

corruptible, reversible, convertible, note edible

(cf. visible, feasible, credible, risible)

extremely, vastly, actually, jauntily but \*bigly \*fastly

Hence notion of derivational rule or formula:

$V_{\text{trans}} + \text{-able} \rightarrow \text{adjective}$

Where the adj denotes the property of being able to undergo the process identified by the verb

fix + -able  $\rightarrow$  fixable

Sue can fix the car.

The car can be fixed by Sue.

The car is able to be fixed (by Sue).

The car is fixable (by Sue).

Consider the very productive:  $V + \text{-er} \rightarrow \text{noun}$

where the Noun denotes a person who habitually or professionally performs the act identified by the verb

$V_{\text{intrans}} \text{ sing} \rightarrow \text{singer}$

$V_{\text{trans}} \text{ bake} \rightarrow \text{baker}$

But there are exceptions:

Sue worries me doesn't mean Sue's a worrier

Sue concerns me but no \*concerner

The baby spits up but no \*spitter up \*up-spitter \*spit upper

Sue puts up with people but no \*putter up with \*put up wither

But: A house that needs fixing up is a fixer-upper !

An affix which applies to few words in a particular syntactic group to form new words is minimally productive, e.g.

-ling as a diminutive suffix on nouns: darling, sapling, stripling, yearling,  
fingerling

but \*dogling \*carling

Affixes once productive may have become unproductive over time: they're no longer used as or felt to be suffixes at all, e.g. the historical noun-forming suffix -th in:

width, depth, length, health, wealth, strength

but \*narrowth \*tallth \*cleverth

All native suffixes and many suffixes derived from foreign words can be added to words with no phonological change modifying the derivative, e.g.

boyish, withdrawal, urbanite, fixable, baker

Though historically we find regular phonological alterations from voiceless to voiced consonants before vowels, e.g.

belief<sub>N</sub> believe<sub>V</sub> believer<sub>N</sub> grief<sub>N</sub> grieve<sub>V</sub> grievous<sub>A</sub>

loss<sub>N</sub> - lose<sub>V</sub> worth<sub>N</sub> - worthy<sub>A</sub> house<sub>N</sub> house<sub>V</sub> housing<sub>N</sub>

Latin-coined suffixes cause various sorts of phonological changes, e.g.

addition of consonant: autumn - autumnal column - columnar

consonant shift: office - official decide - decision

electric - electricity pollute - pollution

confuse-confusion

vowel shift: severe - severity sane - sanity

stress shift: mánage - mánager - managérial ártist - artístic

prósper - prospérity perspíre - persirátion

phótograph - photógraphy - photográphic

Note: tórment<sub>N</sub> - tormént<sub>V</sub> régress<sub>N</sub> - regréss<sub>V</sub>

rébel<sub>N</sub> - rebél<sub>V</sub> cónvert<sub>N</sub> - convért<sub>V</sub>

ábsent<sub>A</sub> - absént<sub>V</sub> pérfect<sub>A</sub> - perféct<sub>V</sub>

Native English stress is on the stem so it tends to be initial or near the beginning of a word.

Latin stress tends to fall on the *penultimate* or *ante-penultimate* syllable.

Consequently there may be inconsistency and uncertainty, esp. between BE and AE varieties, e.g.

extraórdinary vs extraordinary (just 5 syllables)

omnípotent vs omnipótent

AE láboratory vs BE labóraty (both 4 syllables, but different syllables)

AE rénaissance vs BE renáissance

AE staláctite vs BE stálactite

### 5.3.2 Word classes: forms and meanings

Some derived adjectives are transforms of predicate adjectives, e.g.

my childish sister from My sister is childish.

my careless sister from My sister is careless.

Parallel to: my young sister from My sister is young.

These adjectives provide descriptive information about the noun they modify.

Other adjectives require a predication with an adverbial, e.g.

a polar bear not from \*the bear is polar

but from the bear lives near the pole

a financial expert not from \*the expert is financial

but from the expert deals in finance

These adjectives determine the type or class of the noun they modify.

Derived words must often be built up and taken apart in a fixed order:

unadventurousness --> unadventurous + -ness

Then: un- + adventurous but not \*unadventure + -ous

extraterritorial --> extra- + territorial but not: \*extraterritory + -al

Thus derived words have a particular *constituent structure*.

Consider:

able + -ity --> ability and ability + in- --> inability

but: in- + able --> \*inable

instead: un- + able --> unable and: unable + -ity --> \*unability

As a group, de-adjectival and de-nominal verbs tend to have a simple causal relation with the underlying adjective or noun:

beautify 'cause to be beautiful'

redden 'cause to be red'

alienate 'cause to be alien'

hospitalize 'cause to be in hospital'

Compare de-verbal nouns with a range of relations to underlying verb:

employer 'one who employs'

employee 'one who is employed'

employment 'state of being employed'

But we do find regular semantic patterns from adj to verb to noun(s):

pure<sub>A</sub> purify<sub>V</sub> purifier<sub>N</sub> purification<sub>N</sub>

facile<sub>A</sub> facilitate<sub>V</sub> facilitator<sub>N</sub> facilitation<sub>N</sub>

fertile<sub>A</sub> fertilize<sub>V</sub> fertilizer<sub>N</sub> fertilization<sub>N</sub>

With Latin-based words, the apparent underlying adjective is often missing, e.g.

--- edify<sub>V</sub> edifier<sub>N</sub> edification<sub>N</sub>

--- dedicate<sub>V</sub> dedicator<sub>N</sub> dedication<sub>N</sub>

--- tantalize<sub>V</sub> tantalizer<sub>N</sub> tantalization<sub>N</sub>

Similarly, we find regular semantic patterns from noun to verb to noun(s) like:

pollen<sub>N</sub> pollenate<sub>V</sub> pollenator<sub>N</sub> pollenation<sub>N</sub>

----<sub>N</sub> innovate<sub>V</sub> innovator<sub>N</sub> innovation<sub>N</sub>

----<sub>N</sub> rotate<sub>V</sub> rotator<sub>N</sub> rotation<sub>N</sub>

Many suffixes with many meanings and/or functions, no generally established method of grouping them

Consider a few select examples of special interest due to homophony, variant forms, meanings etc.

-able with its variant -ible, from OF,

with native stems in ME: believable and with un- unknowable

de-verbal acceptable 'can be accepted'

de-nominal reasonable 'accordant to reason'

also: comfortable, charitable 'offering comfort/charity'

-al forms de-verbal nouns: arrival refusal trial

and de-nominal adjectives: bridal accidental herbal global

cf. focal local (from focus and locus ?)

also as -ial in pictorial editorial dictatorial

esp. in essential (vs. essence) circumstantial (vs. circumstance)

even -ical as in conical periodical puritanical

and -ual as in spiritual actual textual

-ate: de-nominal noun suffix meaning 'office, institution' as in

consulate electorate syndicate

de-nominal adjective suffix in proportionate passionate affectionate

verbal suffix originally used to anglicize Latin verbs ending in -are

as in create translate isolate

then to derive new verbs like mutate facilitate dehydrate

With natural extension to -ation: mutation facilitation dehydration

-ation even appears as an independent suffix in exportation

with verbs in -ize like organization formalization

and more generally as in: relaxation temptation starvation

Cf. -cation with verbs in -ify like purification justification beautification

-ed forms adjectives meaning 'possessed of, provided with'

as in feathered, crested, well-mannered, five-fingered and in palefaced,  
lemon-flavored, heart-shaped with a strong tendency to lose the suffix before  
nouns: lemon-flavor cake, heart-shape leaves

Pronounced as an independent syllable after alveolars t/d as in: white-spotted or  
heavy headed

but also in OE and ME words such as: crooked dogged jagged wicked

-ess feminine suffix borrowed with French words like:

baroness countess hostess patroness traitress (Note r)

later applied to native words such as: shepherdess, priestess, stewardess,  
seamstress (Note r)

even lioness and tigress

Cf. -ette originally diminutive in novelette, collarette

esp. 20th C. AE after suffragette used as a feminine suffix, e.g. majolette  
usherette censorette

due to asymmetry of pairs like governor-governess and major-majolette, both  
suffixes are often objectionable, esp. on names of professions: poetess,  
waitress, stewardess

Words with feminine suffixes count as *marked* by comparison with masculine or  
neutral terms without suffixes. Historically, they tend to undergo pejoration, e.g.  
master – mistress, steward - stewardess

-ic originally adjectival suffix:

in scientific terms: chloric ferric formic

also -tic in learned words: operatic lunatic dramatic

with ethnic names: Celtic Gallic Germanic

and proper names: Platonic Miltonic Byronic

also sometimes -ical, e.g. in: geographical rhetorical classical

-icity further derives nouns: elastic - elasticity, public - publicity

anthropomorphic - anthropomorhicity

cf. noun-forming -ician: musician physician tactician politician statistician

-ie, -y originally hypocoristic suffix on proper names like: Charlie, Georgie, Annie, Jenny, Davy, Bessy

then on common nouns like: baby, granny, brownie, cookie

also to derive de-nominal adjectives with the meaning 'full of' as in:

bloody, guilty, cloudy, risky, newsy

and deverbal adjectives like: sleepy, creepy, squeaky, crumbly

even de-adjectival adjectives like: crispy, lanky

Note by-form -sy, perhaps originally from plurals like: tricksy, sudsy

but also playful in folksy, tipsy, bitsy (esp. in itsy-bitsy)

-ness very productive since OE, attaches primarily to adjectives to form nouns:

bitterness, idleness, redness

also on derived adjectives: carelessness, willfulness, righteousness

and participles: drunkenness, unexpectedness

even composite participles: level-headedness, kind-heartedness,

left-handedness, far-sightedness

non-adjectives: oneness, nothingness

and phrases: matter-of-factness, used-upness

sometimes in competition with other suffixes: accurateness - accuracy

oddness - oddity corruptness - corruption

Note: business is today a *moneme* vs the derivative busyness and wilderness  
differs from wildness

-ize very productive verb-forming suffix with a range of meanings:

'cause or make' as in legalize, familiarize

'put into form of' as in itemize, satirize

'subject to treatment of' as in terrorize, propagandize

'treat with special process' as in galvanize, simonize

'treat or combine with' as in oxidize, ionize

Note the connection of meaning with certain special technical fields

-ize expands to -ization to form nouns designating process:

legalization, itemization, galvanization, oxidization

Hence series like: legal<sub>A</sub> legalize<sub>V</sub> legalizer<sub>N</sub> legalization<sub>N</sub>

And again missing adjectives: ----<sub>A</sub> galvanize<sub>V</sub> galvanizer<sub>N</sub> galvanization<sub>N</sub>

### 5.3.3 Back-formation

*Back-formation* from apparent derivational series with missing initial term

Recall missing nouns, as in:

----<sub>N</sub> rotate<sub>V</sub> rotator<sub>N</sub> rotation<sub>N</sub> which suggests creation of a noun rotor

Historically, such verbs as edit, sculpt and scavenge are back-formations

----<sub>V</sub> editor<sub>N</sub> edition<sub>N</sub> suggests: edit<sub>V</sub>

----<sub>V</sub> sculptor<sub>N</sub> sculpture<sub>N</sub> suggests: sculpt<sub>V</sub>

We also find isolated examples like:

to laze from the adjective lazy

to jell from the noun jelly

to reminisce from the noun reminiscence

Newer back-formations are televise, babysit, aggress (against) and, of course, for linguists: back-form<sub>v</sub>

Historically, we can check dates to see if a word was **back-formed**, e.g.

noun pedlar recorded 1377 long before verb to peddle (1532)

noun editor recorded 1712 before verb to edit (1791)

But also semantically back-formations often depend on their source:

edit means 'perform the duties of an editor'

televise means 'broadcast on television'

aggress (against) means 'perform an act of aggression (against)'

to laze means 'act lazy'

Similarly, sculpt means 'to produce a sculpture' not 'to perform sculpting' and babysit means 'to act as a babysitter' rather than 'to sit like a baby' or 'to sit on a baby' etc.

Back-formations may become semantically free of their source nouns:

resurrect 'to revive', back-formed from resurrection

preempt 'replace', from preemption;

Also to jell 'congeal' is used figuratively so often that it no longer depends on the noun jelly for its meaning, e.g. in:

"My ideas are beginning to jell"

Nouns back-formed from adjectives may violate constraints on prefixing, e.g.

unsurprise and illogic with negative prefixes usually reserved for adjectives

in: "our utter **unsurprise**" (Listener 28, 1968)

"scientists . . . often are accused of **illogic**" (Listener 11, 1968)

Hence the oddity and sometimes humor of back-formations, e.g.

to carpent from the noun carpenter

to auth from the noun author

"Coroners began **coroning** in the 12th century" (New Statesman 10, 1967)

"If it's feasible, let's **fease** it" (Hockett 1960)

Back-formation can also lead to *polysemy*, as in:

"Felix is in the study **computing**"

compute means 'to work at a computer' back-formed from the noun compute, like earlier formation to typewrite,

#### 5.3.4 Zero-Derivation

*Zero-derivation* (also call *conversion*) is the use of a word to represent a different part of speech with no affix expressed but still understood to be present in content, thanks to an association with derivatives where the item of content finds expression in an affix.

The lexical adjective clean is used as a verb meaning 'make clean' in:

This filter cleans the water.

Just as purify means 'make pure' in: This filter purifies the water.

and freshen means 'make fresh' in: This filter freshens the water.

Jespersen called zero-derivation a "specifically English" process.

English possesses very few affixes for deriving verbs from nouns, namely the prefixes be-, en- and the suffixes -ify, -ate, -ize

There are even fewer affixes for deriving nouns from adjectives. Only -ness is highly productive, as e.g. in:

bigness, truthfulness, silliness versus -ship and -ment in hardship and merriment

English has the very productive suffixes -er in freezer or experiencer, and -ation in summation and marginalization.

Yet English freely forms nouns from verbs by zero-derivation as well, e.g.

someone who smiles produces a smile<sub>N</sub>

someone who rides takes a ride<sub>N</sub>

someone who cheats others is a cheat<sub>N</sub>

something which surprises someone is a surprise<sub>N</sub>

someplace we dump things is a dump<sub>N</sub>

someone who hurries is in a hurry<sub>N</sub>

something that gets caught is a catch<sub>N</sub> etc

The commonest group of zero-derived words is de-nominal verbs:

intransitives like: fish 'to attempt to catch fish'

bloom 'to produce a bloom'

journey 'to go on a journey'

drum 'to play a drum'

pity 'to experience pity for someone'

transitives like: copy 'to make a copy'

wreck 'to make a wreck of something'

pilot 'to perform the function of a pilot'

ape 'to act like an ape'

hammer 'to perform an action using hammer'

vacation 'to spend the period of a vacation'

bag 'to put into a bag'

skin 'to remove the skin from something'

sugar 'to prepare or treat with sugar'

	<u>baby</u>	'to treat like a baby'
	<u>gesture</u>	'to perform a gesture'
even:	<u>boo</u>	'to say the word <u>boo</u> '

Zero-derived de-adjectival verbs are:

<u>mellow</u>	'to become mellow'
<u>warm</u>	'to make something warm'

Many verbs are in both groups: cool 'to become cool' and 'to make something cool'

Note: on the usual definition of derivation with a zero-affix, zero-derivation might seem to include cases where vowel shift or stress shift mark derivation, e.g.

vowel shift:	<u>loss</u> <sub>N</sub> - <u>lose</u> <sub>V</sub>
consonant shift:	<u>loose</u> <sub>adj</sub> - <u>lose</u> <sub>V</sub>
stress shift:	<u>rébel</u> <sub>N</sub> - <u>rebél</u> <sub>V</sub> <u>cónvert</u> <sub>N</sub> - <u>convért</u> <sub>V</sub>

but these examples are generally treated separately.

Strictly, zero-derivation is only derivation with a zero-affix *and no other changes*.

#### 5.4 Analyzing derived words: isolating the stem

Two strategies for analyzing derived words:

1. Identify the stem by finding the same form in other words, then split off the affixes.
2. Identify and remove affixes till only the stem remains.

Recall that in *neo-classical compounds* analysis may yield *bound stems* or with a status somewhere between affixes and bound stems.

e.g. <u>growth</u>	<u>grow</u> - <u>th</u>
<u>ugly</u>	<u>ug</u> - <u>ly</u>
<u>happiness</u>	<u>happy</u> - <u>ness</u> <u>hap</u> - <u>y</u> cf. <u>happen</u> <u>hap</u> <u>haply</u>
<u>manufacturing</u>	<u>manufactur</u> - <u>ing</u> <u>manufact</u> - <u>ure</u> cf. (manu)factory <u>manu</u> <u>fact</u> cf. <u>manu</u> <u>script</u> <u>manu</u> - <u>al</u>
<u>posterity</u>	<u>poster</u> - <u>ity</u> cf. <u>poster</u> - <u>ior</u>
<u>familiarization</u>	<u>familiar</u> - <u>ize</u> - <u>ation</u> <u>famili</u> - <u>ar</u> cf. <u>familial</u> <u>family</u>
<u>irresponsibility</u>	<u>irresponsibil</u> - <u>ity</u> <u>ir-</u> <u>response</u> - <u>ible</u>
<u>re- sponse</u>	cf. <u>respond</u> <u>sponsor</u>
<u>comprehensive</u>	<u>comprehens</u> - <u>ive</u> cf. <u>comprehend</u> <u>apprehend</u> <u>com-</u> <u>prehens</u> cf. <u>prehension</u> <u>prehensile</u>
<u>contradictorily</u>	<u>contradictory</u> - <u>ly</u> <u>contradict</u> - <u>ory</u> <u>contra-</u> <u>dict</u> cf. <u>diction</u> <u>predict</u>
<u>indecisive</u>	<u>in-</u> <u>decis</u> - <u>ive</u> cf. <u>decide</u> <u>de-</u> <u>cis</u> cf. <u>incisive</u> <u>incisor</u> <u>scissors</u>

## 6. Compounding

*Compounding* forms new words by combining two or more independent words (or free or stems),

By contrast *derivation* forms new words by adding affixes (which are bound, not free) to words.

### 6.1 Compounding and syntax

Compounding is more like syntax than derivation.

recall: There's a bláck<sub>A</sub> bírd<sub>N</sub> vs. There's a bláckbird<sub>N</sub>

Note: There's a véry bláck<sub>A</sub> bírd<sub>N</sub> vs. \*There's a véry bláckbird<sub>N</sub>

cf. The sky is blue vs. the blue sky vs. the skyblue flowers

Usually second word of two-word compound is base, and first word is modifier:

houseboat 'boat used as a house'

boathouse 'house (building) used for sheltering boats'

Hence the second word determines the part of speech of the compound:

skyblue is an adjective because blue is an adjective

bluebird is a noun because bird is a noun

Consider so-called *synthetic compounds* like watchmaker and chimney sweep

In watchmaker 'one who makes watches', watch determines the process named by the verb make, and maker can't stand alone.

Cf. deerhunter 'hunter of deer' where deer modifies independent noun hunter

In chimney sweep 'one who sweeps chimneys' sweep should be sweeper, and so is even more dependent on chimney.

keep can serve as half of the compound barkeep 'one who tends bar' only because bar determines its meaning

sunset (also sunrise) relies on set as a stem, though set can't function in this way independently: cf. setting of the sun

pickpocket 'one who picks pockets' reverses the usual order of elements. Even for a synthetic compound, it should be pocket-picker. And pocket-picker is semantically odd, cf. cherry-picker, cotton-picker.

Compare *pseudo-compounds* (also called *bahuvrihi compounds*) like loudmouth, birdbrain and blackcap:

loudmouth means 'talkative person', i.e. one with a loud mouth

birdbrain means 'dull-witted person', i.e. one with a brain like a bird

blackcap denotes a bird with a black cap (*Sylvia atricapilla*), not the cap itself

The apparent stem of such pseudo-compounds doesn't function as the stem for structural/semantic purposes at all.

Some theorists distinguish "endocentric" (= head-internal) from "exocentric" (=head external) compounds.

Then loudmouth, birdbrain and blackcap are all exocentric, because referents are not mouths, brains, caps, but people and birds.

cherry-picker and cotton-picker are both endocentric, because the head picker refers to the agent of the action described.

pickpocket is exocentric, because pocket does not denote the agent of the action.

## 6.2 Noun compounds

In terms of underlying relations, noun compounds focus on the subject (or agent) of an activity, on its object (or goal), on the predicate (or activity itself) or on an adverbial complement (place, time, instrument).

subject focus:	<u>crybaby</u>	'baby cries'
	<u>pickpocket</u>	'person picks pockets'
object focus:	<u>drawbridge</u>	'bridge meant to be drawn'
	<u>mincemeat</u>	'meat was minced'
predicate focus:	<u>sunrise</u>	'sun is rising'
	<u>bloodshed</u>	'blood is being shed'
adverbial focus:	<u>writing table</u>	'table for (the purpose of) writing'
	<u>bus stop</u>	'place where the bus stops'
	<u>washday</u>	'day when we wash (clothes)'

Structurally, noun compounds can be analyzed as follows.

N + N    steamboat 'steam drives boat'            bedtime 'time for bed'  
            girlfriend 'friend is a girl'                oaktree 'tree is an oak'

N-s + N    craftsman 'man practices a craft'  
              driver's seat 'driver has a seat'

V-ing + N    writing table 'table for writing on'

V + N        whetstone 'stone for whetting blades'

N + V-ing    housekeeping    sight-seeing

N + zero-derived de-verbal N    earthquake    bloodshed

N + V-er    watchmaker    shoplifter    cf.    self-starter

Some theorists also distinguish semantic compound types, according to which, e.g. houseboat counts as "appositive" because both house and boat denote the object.

Semantically similar examples are: girlfriend and twenty-three

By contrast, syntactically parallel compounds may belong to different semantic classes, e.g.

housedoor and barstool both instantiate the type "whole-part"

stonewall and cheesecake both instantiate the type "material-object"

wine-maker and playwright both instantiate the type "goal-agent"

and so on for other semantic types

### 6.3 Adjective compounds

Some adjective compound types parallel noun types from above.

Same form may serve as either an adjective or a noun, e.g.

an evergreen bush vs. an evergreen

a deafmute boss vs. the boss is a deafmute

N + A                    colorblind 'blind as to color'

cf. self-sufficient

skyblue 'blue as the sky'   world-wide 'wide as the world'

A + A                    blue-green   deafmute;   Anglo-French   socio-economic

N + V-ing              ocean-going   heart-breaking   cf. all-knowing

A + V-ing              good-looking   sweet-smelling

N + V-ed/-en          home-made   crestfallen   god-forsaken

bug-eyed   cf. self-made

A + V-ed/-en          deep-fried   free-born   broad-leaved

Adv + A                evergreen   lukewarm

Adv + V-ing            hard-hitting   plain-speaking

Adv + V-ed/-en     well-dressed   quick-frozen

#### 6.4 Verb compounds

According to Marchand (1969), "Verbal composition does not exist in Present-day English." Instead we find *pseudo-compounds* due to:

zero-derivation, e.g. spotlight, blacklist, sidetrack, pinpoint

back-formation, e.g. stage-manage (from stage-manager)

globetrot (from globetrotter)

playact (from playacting)

And *verbal combinations* with an initial locative particle (out over under), e.g.

OUT de-verbal:            outrun   outlive   outgrow

de-nominal:            outnumber   outdistance   outwit

de-adjectival:        outsmart

OVER            only de-verbal 'cover, control':   overrun   overcome   oversee

'do to excess':        overdo   overeat   overexert

UNDER            only de-verbal 'beneath':   underline   undermine   underlay

'do too little':        underestimate   underrate

some verbs appear as participles only:   underfed   undernourished

Note: don and doff from do on and do off

But there are apparent verbal compounds not fitting the patterns mentioned:

figurative compounds: browbeat   eavesdrop and hitchhike

literal action verbs: double-park   breastfeed   taperecord

technical terms: hog-tie   kiln-dry   pan-fry   spot-weld   mass-produce

dance & locomotion terms: cake-walk   slow-dance   high-step

Consider:

"She spent the day exploring various old churches . . . she had been **cathedral-looking** at Avignon." (Koestler Scum of the Earth)

"Ivan Pope, aged nine, **consumer-tested** one of the newest boy's toys for us." (Evening Standard 19 Nov 1971)

And washing instructions on clothing: hand wash tumble dry warm iron etc

## 6.5 Phrasal compounds

Compounds may derive from complete phrases, e.g.

X and X            bread and butter   cut and dried

noun phrase      man-in-the-street   mother-of-pearl

N, N            queen mother   player-coach   cf. actor-turned-director

E.g. "The **reporter-turned-hostess-turned-novelist** is Sally Quinn." (Time 11 Aug 1986)

verb phrase    has-been   wannabe   also-ran

know-how   know-it-all   hand-me-down

happy-go-lucky   merry-go-round

Consider another example from the press (Evening Standard 30 July 1968); note the intervening suffix -able:

"Nobody could ever meet anyone remotely **fallable-in-love-with** on the Irish Mail."

adjective/adverb phrase    inside-out   upside-down

complete clause:   forget-me-not   devil-may-care   cf. IOU

proper noun + noun:   tomcat   billygoat   jackass

proper noun + phrase:   jack-in-the-box   jack-o'-lantern

Johnny-come-lately

In an 869 word editorial in U.S. News (7 June 99):

Talk about a **right-brain, left-brain** problem

candidates were **Johnny-on-the-spot** with instant analysis

both parties reverted to the predictable **scalp 'em-scenario**

their temptation to move into **all-China-all-the-time** politics

Calling for Clinton's scalp is a **been-there-done-that** kind of thing by now

Finally, from the US television series **Friends**:

RACHEL: . . . John and David boots on sale, fifty percent off!

CHANDLER: Oh, how well you know me.

RACHEL: They're **my new "I don't need a job, I don't need my parents, I've got great boots" boots!**

## 7. New words for old

Why do we keep inventing new words?

Some words enter language along with the things they name, e.g. coffee, automobile, Communism, psychotherapy.

Abbreviations of various kinds may be preferred, e.g. ICBM for intercontinental ballistic missile and lab for laboratory.

Abbreviations may involve *conspiritorial encryption*, i.e. introducing new words as a test of membership, commonly in slang and technical language.

Writers and advertisers invent new words to display creativity and to make their texts--and hence their products--memorable.

We get tired of old words and replace them with new ones, just as we replace old clothes and accessories.

Like clothes and accessories, new words are especially attractive if they come from exotic places: hence the appeal of foreign words.

## 7.1 Borrowing

Language communities import words from each other along with goods and ideas.

A language may serve as a source for whole areas of vocabulary, e.g. Latin for terminology of Christianity, French for war and law following the Norman Conquest, Latin as *lingua franca* in Middle Ages.

### 7.1.1 Periods of borrowing

From Latin: before 450 on the continent: street cheese pipe mint (L. moneta)

450-600 initial period in England: port mountain -wich/-wick (L. vicus) Greenwich

600- Roman missionaries: altar angel candle priest temple

From Scandinavian 850-1050: Sky skin skill get give take call they-them-their

From French 1066- : government state royal court

religion baptism faith mercy

fashion dress robe gown

food dinner supper feast beef pork sausage

art music color beauty

general able clear calm save wait push

Latin again in ME: adjacent gesture history legal summary

Latin again in Renaissance: education describe acceptance analogy

### 7.1.2 Loan translation

*Loan translation* is the process whereby a native translation is modeled on a foreign compound, as in:

superman is a loan-translation from German Übermensch

loan-word itself is a loan- translation from German Lehnwort

in the other direction, German loan-translated skyscraper as Wolkenkratzer

*Folk etymology* occurs when a foreign word is misunderstood and re-modeled on native principles, e.g.

female from OF femelle by association with male

coleslaw from Dutch koolsla 'cabbage salad' cf. cold slaw

buckaroo from Spanish vaquero 'cowboy' due to buck (of horses)

cockroach from Spanish cucaracha by association with cock and perhaps roach 'fish'

## 7.2 Onomatopoeia and Phonesthemes

Saussure made *arbitrariness* the basic feature of language as a system of signs,

But we find *motivation* or *iconicity* at many points in the language, e.g.

*Onomatopoeia* (also called Echoism), as in:

hiss (of humans, snakes, steam),

murmur (of voices and brooks),

wheeze (of humans and machinery),

cockadoodle (of cocks/roosters)

quack (of ducks).

The imitative word may also act as the name of the animal itself, as in: cuckoo, bobwhite, chickadee.

Verbs like boo, pooh-pooh, shush are formed from coded sounds people make.

*Phonesthemes* = sounds or clusters of sounds (not morphemes) associated with a certain recurrent meaning in some language (also called *sound symbolism*).

--initial fl- associated with flying and flowing, e.g. fly, flow, fleet, flutter, fluid, float, flotsam, flush, etc.

--initial sp- associated with squirting water, e.g. spit, spout, spurt, spew, sputter

Also when l follows, as in splash, splatter, splosh

--suffix -er associated with recurrent motion, e.g. glitter, flutter, scatter, sputter, chatter, twitter

--syllable-initial cluster tw associated with the number 2: two, twice, twelve, twenty, twain, between, betwixt, twin, twine, twig, twilight (cf. zw in German)

Unfortunately, there are plenty of exceptions to all these regularities, e.g.

fl- in flat, floor, flower

sp- spider, spur, spooky

-tter in matter, potter, gutter

tw in twang, twirl, twitch

so sounds or clusters don't carry a specific meaning,

though they do recur in certain semantically related words

### 7.3 Reduplication

*Reduplication* can also be seen as a sort of iconic process in word-formation, since rime and *Ablaut* (or *vowel gradation*, as in sing-sang-sung) relate the elements of a pair based on a similarity of sound.

RIME nitwit, lovey-dovey, super-duper, handy-dandy, boogie-woogie

cf. chock-a-block ding-a-ling

limiting case: verbatim repetition, as in: pooh-pooh, so-so, bye-bye

cf. so-and-so, through-and-through

nursery words: mama, dada, pee-pee, boo-boo

Note hifi from high fidelity with vowel shift to create rime

ABLAUT sing-song, criss-cross, chit-chat, wishy-washy, doo-dad

cf. spic-n-span bric-a-brac even tic-tac-toe

Onomatopoeia along with verbatim repetition, rime or ablaut, e.g. Choo-choo, murmur, ga-ga

bow-wow, hubbub

tick-tock, ding-dong, ping-pong, flip-flop, pitter-patter

The independent base word is usually the second word: chit-chat, nitwit

But it may be the first word: super-duper, tick-tock

Both words may be attested: sing-song, handy-dandy

Or perhaps neither, esp. when the combination enjoys onomatopoeic motivation, as in: ga-ga, boogie-woogie

Many rime and ablaut combinations retain a non-serious character even after centuries of use, e.g.

handy-dandy recorded in 1362, pitter-patter in 1425, riffraff in 1470

#### 7.4 Blending

In *blending* two words are fused into one, usually the first part of one word and the last part of the other, as in:

brunch from breakfast and lunch

simulcast from simultaneous and broadcast

The resultant blend partakes of both original meanings.

Blends are also called *portmanteau words* due to Humpty-Dumpty in Carroll's Alice in Wonderland, who says:

"You see it's like a portmanteau--there are two meanings packed up into one word."

Increasingly, blending is a creative, jocular process:

alcoholidays from alcohol and holidays

balloonatic from balloon and lunatic

guesstimate (or guestimate) from guess and estimate

californication apparently via spelling from California and fornication

#### 7.5 Clipping and Hypercorism

In *clipping* sections of words (not necessarily morphemes or even full syllables) are removed to yield a new shorter form, i.e. with no meaning change.

*back-clipping* lab from lab(oratory) gas from gas(oline)

*fore-clipping* plane from (air)plane bus from (omni)bus

Both *back-* and *fore-clipping*

flu from (in)flu(enza)

fridge from (re)fridge(rator)

still from (de)still(ery)

*clipping compounds*

Amerindian from Amer(ican) Indian

navicert from navi(gation) cert(ification)

In compounds, clipping may leave just initial syllables:

tacsatcom from tactical satellite communications

alnico from aluminum-nickle-cobalt

cf. Frisco from (San) Fr(anc)isco

Clipped form may be respelled:

mike bike from microphone bicycle

fax from facsimile

Clipped pronunciation may change spelling:

pram from perambulator

divvy up from divide up

Clipped spelling may change pronunciation:

préfab from prefábricated mob from L. mobile vulgus

BE vs AE differences: BE advert subs vs AE ad burbs

In *hypocorism* a final -y or -ie is added to a back-clipped word, as in:

movie from moving picture    telly from television

Note: AE uses *initialism* TV instead of *hypocorism* telly

The source word may be further simplified, as in: hanky for handkerchief

For one-syllable words, *hypocorism* yields the same result as simply adding the diminutive suffix -y or -ie, as in: mommy, daddy, doggy, ducky, dolly

*Hypocorism* probably originated as baby-talk with names of grandparents, aunts and uncles, siblings etc, as in: granny, aunty, Eddie, Susie, Johnny

*Hypocorisms* often retain some of the intimacy and playfulness of nursery language.

brekkie for breakfast

Chrissy pressies for Christmas presents

Note: Aussies use barbie for barbeque

## 7.6 Antonomasia (Commonization)

*Antonomasia* (*commonization*) occurs when a proper name enters the language as a common noun, e.g.

--proper noun Vandal for member of a destructive, war-like tribe becomes generally used as a common noun for any person who wantonly destroys property,

--name of Earl of Sandwich, who liked eating meat between slices of bread, becomes generally used as a common noun for the bread-meat-bread treat.

Compare, e.g. romeo einstein

gin from Genever

denim from serge de Nimes

plimsoll from Plimsoll mark from Samuel Plimsoll (AE sneakers ! )

tuxedo from Tuxedo Park, NY (BE dinner jacket ! )

wellies by hypocorism from Wellingtons from Duke of Wellington  
(AE rubber boots)

In the 20<sup>th</sup> century, antonomasia has increasingly taken the form of trade names entering general vocabulary as common nouns, e.g. aspirin, zipper, nylon, teflon, xerox.

Since the dominant firms differed from one place to another, the commonized names tend to differ as well, e.g.

AE	<u>scotch tape</u>	BE	<u>sello tape</u>
	<u>Kleenex</u>		<u>tissue</u>
	<u>pen</u>		<u>biro</u>

7.7 Acronymy: Spelling, initials, syllables etc

*Acronymy* = formation of new words based on the initial letters of words

*Initialism* (or *Alphabetism*) pronounces the initials separately, as in:

CD VCR USA UFO PC CPU

alphabet itself is initialism from alpha beta with final vowel clipped

Acronymy proper where the letters are pronounced together:

Nato from North Atlantic Treaty Organization

Aids from acquired immune deficiency syndrome

Ram from random access memory

Some linguists include *syllable words* here (same as *clipping compounds* above):

sial from silicon and aluminum

aldehyde from alcohol dehydrogenatum

There are also various forms mixing initials and syllables, like:

radar from radio distancing and ranging

binac from binary automatic computer

Jeep originally GP from General Purpose Vehicle

cf. Veep from VP from Vice President

The acronym may be perceived as a separate word and respelled as such:

deejay for DJ from disk jockey

emcee for MC from master of ceremonies

Some acronyms just happen, but others are planned:

CARE packages from Cooperative for American Remittances to Europe

MAGIC from machine for automatic graphics interface to a computer

MADD from Women Against Drunk Drivers

Combinations of processes, e.g.

laser by acronymy from light amplification by simulated emission of radiation

yielded to lase by back-formation

delicatessen borrowed from German, then clipped to deli

hanky by hypocormism from handkerchief yielded hanky-panky by riming reduplication

## 8. Discourse morphology

### 8.1 Group-Formation

--Recall discussion of -ess and -ette,

-ess spread in its function of marking the feminine member of pairs, e.g. governor-governess,

This leads to pejoration in the whole group of words. -ette became associated with feminine meaning in suffragette, and spread to forms like majorette, again with negative connotations compared with unmarked "masculine" group.

--Recall formation of groups through reduplication based on rime and ablaut, e.g. namby-pamby and sing-song.

Words in both groups have a non-serious quality, associated with baby-talk.

Hypocorisms as a group also have a non-serious quality, e.g. Chrissy Pressies

The suffix -nik entered English in 1957 with the Russian word sputnik.

Failure of American satellite spawned: Yanknik, flopnik, goofnik, sputternik.

Associated with counter-culture types: beatnik peacenik protestnik folknik

Introduced suffixes led to formation of word-groups as early as 1516 when More's book title Utopia spawned eutopia a year later.

Modern words modeled on utopia are: dystopia 'bad place, negative utopia', subtopia 'place of suburbs'

Churchill's sarcastic queuetopia 'place where people queue'

Pornotopia originally a 'place for studying pornography'

Many current examples of group-formation in computer jargon, below.

## 8.2 Word-formation in technical language

Computer jargon especially interesting because it's grown so fast

acronyms PC CPI CD-ROM RAM WYSIWYG

abbreviation, clipping and blending:

e-zine from electronic and magazine modeled on e-mail

know-bot from know and robot reanalyzing ro- -bot

net-izen from (inter)net and (cit)izen

blog from web + log retains final consonant of first word

also blogger and blogging

Spamming maybe from spill and cram  
but perhaps instead metaphorically from Spam

Group formation, e.g. the morpheme ware

originally ware meant 'articles of merchandise or manufacture'

software was modeled on hardware in computer parlance

then came freeware 'free software' shareware quiltware nagware

Also: cybernetics invented 1948 by N. Wiener

then: cybertech(nology) cybergenetics cyberspace

cyberpunk cybersearch cybersex

cyborg blending of cybernetics and organism

And: hypertext hyperlink hypermedia hypermarket

hypertext markup language (html)

Metaphor: mouse zip (hence zip drive zip or zipped files etc)

cookie virus window surfing

snail mail modeled on e-mail with rime-based reduplication

### 8.3 Word-formation in literature

#### Shakespeare's Word-formation

invention: assassination obscene dwindle

derivation: countless premeditated courtship

blending: glaze from glare and gaze  
triumpherate from triumph and triumverate

compounding: fancy-free lack-lustre uncle-father giant-dwarf  
fortunate-unhappy devilish-holy

zero-derivation: out-herod Herod outvillain'd villany

"I am **proverbed** with a grandsire phrase"

Double zero-derivation? (from "Romeo and Juliet" III v 151-54)

"Proud," and "I thank you," and "I thank you not," And yet "not proud." Mistress minion, you, **Thank me no thankings, nor proud me no prouds**, But fettle your fine joints 'gainst Thursday next.

Word-formation in Dylan Thomas: "A Child's Christmas in Wales"

One Christmas was so much like another, in those years around the sea-town corner now and out of all sound except the distant speaking of the voices I sometimes hear a moment before sleep, that I can never remember whether it snowed for six days and six nights when I was twelve or whether it snowed for twelve days and twelve nights when I was six. All the Christmases roll down toward the **two-tongued** sea, like a cold and headlong moon bundling down the sky that was our street; and they stop at the rim of the **ice-edged fish-freezing** waves, and I plunge my hands in the snow and bring out whatever I can find. In goes my hand into that **wool-white bell-tongued** ball of holidays resting at the rim of the **carol-singing** sea, and out come Mrs. Prothero and the firemen.

Further examples of nonce word-formation in "Child's Christmas"

**horrible-whiskered** cats

**harp-shaped** hills

**duchess-faced** horse

snow **minutely-ivied** the walls

**wind-cherried** noses

the **bat-black, snow-white** belfries

down the **tea-tray-slithered** run of the chilly glinting hill

a substance that could be **tug-o'-warred** down to the galoshes

the **rainbow-billed** and **pea-green** birds.

#### 8.4 Morphology and punning

Conversational word-play thrives on creative re-analysis of words.

Tom: so what about Bob?

Fred: well right now he's working as a freelance photographer.

Norm: yeah, and nobody's lance is freer than Bob's.

{General laughter}

Lydia: we had such a nice day today,  
so you hurry and get rested.  
because you're going to have a big nice[day tomorrow.]

Brandond: [hurry and] get rested.

Ned: {laughs}

Brandon: that's oxymoronic.

Ned: {laughing} yeah, can you imagine the ox?

Brandon: no, but I've spotted the moron.

Ned: I see {laughing}.  
you'd think as dumb as oxes are.

to call one a moron would be tautological.

{Laughter}