

ELTE PhD Programme in English Linguistics

Morphology

(mainly: derivational morphology and compounding)

Instructor: László Varga

Prescribed texts: Aronoff, M. 1976. *Word formation in generative grammar*. Cambridge, Mass.: MIT Press

Spencer, A. 2001. Morphology. In: Aronoff, M. & J. Rees-Miller (eds.) 2001. *The Handbook of Linguistics*. Oxford: Blackwell Publishers, pp. 213-237

(Katamba, F. 1993. *Morphology*. London: Macmillan, pp. 291-327).

Exam: written paper based on Prescribed texts and lectures, with problem solving.

Schedule:

1. Basics. A brief history of morphology until the mid 1970's. Word and word structure. Inflection and derivation.
2. Problems with morphemes. Redefinition.
3. Word-based morphology. Possible and actual words.
4. The notion of productivity. A comparison of *#ness* and *+ity*. The lexicon.
5. Word formation rules. Syntactic and semantic aspects. Morphological aspects.
6. Word formation rules. Phonological aspects (i).
7. Word formation rules. Phonological aspects (ii).
8. Truncation rules.
9. Allomorphy rules.
10. Distributional arguments, *-able*.
- (11. Compounds)

Select bibliography

General morphology:

Anderson, S.R. 1988. "Morphological theory." In: Newmeyer (ed.) *Linguistics: the Cambridge survey, Vol 1: Linguistic theory: foundations*. Cambridge: CUP.

Aronoff, M. 1976. *Word formation in generative grammar*. Cambridge, Mass.: MIT Press.

Bauer, L. 1983. *Introducing linguistic morphology*. Edinburgh: UP.

Dressler, W. 1985. *Morphology*. Ann Arbor: Karoma.

Jensen, J. 1990. *Morphology*. Amsterdam: Benjamins.

Katamba, F. 1993. *Morphology*. London: Macmillan.

Matthews, P.H. 1991. *Morphology*. 2nd ed. Cambridge: CUP.

Nida, E. 1949. *Morphology: the descriptive analysis of words*. 2nd ed. Ann Arbor: University of Michigan.

Scalise, S. 1984. *Generative morphology*. Dordrecht: Foris.

Selkirk, E.O. 1982. *The syntax of words*. Cambridge, Mass.: MIT Press.

Spencer, A. 1991. *Morphological theory*. Oxford UK & Cambridge USA: Blackwell

English morphology:

Adams, Valerie 1973. *An introduction to modern English word-formation*. London: Longmans.

Bauer, L. 1983. *English word-formation*. Cambridge: CUP.

Hogg, R. & C. McCully 1987. *Metrical phonology: a coursebook*. Cambridge: CUP. (Relevant parts.)

Marchand, H. 1969. *The categories and types of present-day English word-formation*. 2nd ed. Munich: Beck.

Siegel, D. 1979. *Topics in English morphology*. New York: Garland.

Course handouts

Basics (Revision of things known, and Katamba Chs 2-3)

Lexeme, grammatical word, word form. Inflection, derivation. Paradigm.

Morpheme, morph, allomorph.

Conditioning (phonological, grammatical, lexical). Suppletion.

Free morphemes, bound morphemes.

Affixes (prefixes, suffixes, infixes). Empty formatives.

Stem, root, base. Warning: // In general usage (e.g. Bauer, Crystal, Katamba, Spencer) a *stem* is that part of a word which remains if the last-added inflectional affix is removed, a *base* is that part of a word which remains if the last-added (inflectional or derivational) affix is removed, and a *root* is that part of a word which remains if all affixes are removed. // In Aronoff's usage, a *stem* is that part of a word which remains if we remove the last-added isolable affix (e.g. *regul* is the stem for *regulable*), and a *base* is a word from which another word is derived, e.g. *regulate* is the base for *regulable*).

Agglutinating, isolating (analytic), inflectional (fusional, synthetic), incorporating (polysynthetic), infixing languages.

1) TAKE: *take, takes, taking, took, taken*. 2) portmanteau morphs, e.g. It. *bell-o*.

3) *-cub-*: *incubate, incubus, concubine, succubus; incumbent, succumb, decumbent*

4) *inept, unkempt, cranberry; permit, commit, submit, admit, remit*

5) empty formatives (stem extenders): *sensual, children, tradesman*

6)a. *pénz+telen+ség+em+ből*

b. *kangaroo, table, boy*

c. *took, mice*

d. *iilu- mi- niip- puq* ('he is in his house')

house his be-in 3sg.indic

e. *ktb* 'write'; *kitab* 'book'; *katab* 'he wrote'; *katib* 'writer'

More on words, inflection and derivation (Aronoff Ch1, Bauer pp22-33)

1) a. a pound of tea b. He took a pound of tea and put two spoonfuls of it into a teapot.

2) a. teapot b. *He took the teapot and poured it into the cup.

3) a. The analysis of existing composite words b. The formation of new composite words

Problems with the identification of inflectional and derivational morphemes:

-“morphemes whose form is specified by rules of concord and government are inflectional” (?) *novij učenik, novaja učenica, ja čitaju, ti čitaješ; v škole, bez školi, na školu, látam Pétert, találkoztam Péterrel, hiszek Péternek.* But then what about tense, genitive suffix, comparative?

-“if a form including affixes can be replaced in some of its occurrences by a simple root form, then that form shows derivation rather than inflection” (?) *The writer/boy received a prize. But then kissed in They always kissed their mother.* should be regarded as a derivative, because it can be replaced by *kiss*.

-“if an affix causes a stem to change its wordclass membership, then the affix is derivational” *en+joy*

- Inflectional morphemes are normally external to derivational ones:

compart+ment+al#ize#d **compart+ment+al#d#ize*

- Closed system (small number) of inflectional affixes vs. open class (large number) of derivational ones; *drug-oholic, work-oholic*

11) [communal]_A → [communal#ize]_V ‘make communal’ → [communalize+Ation]_N ‘the act of making communal’

111) A string σ has to be bracketed

- a. if its surface reflex shows up elsewhere as an independent word, AND
- b. if the meaning of the matrix string, of which σ is a substring, is a function of the meaning of σ and the meaning of the rest of the matrix string.

*(fil)(ter)

12) a. Prohibition [pròəbɪʃən] [pro=hibit+ion]_N b. prohibition [pròhɪbɪʃən] [[pro=hibit]_V +ion]_N

13) “to self-destruct”, “to cohere”

a. destroy / destruction construct / construction

b. Vs+ion (confuse/confusion) }
 Vd+ion (delude/delusion) } → Vs+ion
 Vr+ion (cohere/cohesion) }

14) <i>Xion</i>	<i>Xive/ory</i>	<i>Xor</i>	*X
incision	incisive	incisor	*incise
locomotion	locomotive	locomotor	*locomote
valediction	valedictory		*valedict
illusion	illusory		*illude
revulsion	revulsive		*revulse

15) commune_N+al_A#ize_V+Ation_N

16) a. bake_V#er_N b. butch#er_N c. poss+abl_A d. prob+abl_A e. cran#berry_N f. girh+es_A

Productivity

1) a. perceptive # ness c. servile + ity b ? perceptive + ity

2) a. fabulousness ?fabulosity b. acrimonious *acrimoniosity famous *famosity

3) The semantics of *Xousness*

- a. ‘the fact that Y is Xous’: *His callousness surprised me.*
- b. ‘the extent to which Y is Xous’: *His callousness surprised me.*
- c. ‘the quality or state of being Xous’: *Callousness is not a virtue.*

4) The semantics of *Xosity* is less coherent:

- curiosity: Like (3a, b): *His curiosity surprised me.*
- Like (3c): *Curiosity can be dangerous.*
- Other: *They admired my dress, but only as a curiosity.*

5) lúminous luminósity; fábulous fábulousness fabulósity

6) *RI*: -ous truncation: os → 0 / ____ + ity

7) various variety *variosity; curious *curiety curiosity

8) The application of (6) is not lexically governed in +ity derivatives of words of the class *XV*cious

a. <i>X</i> acious	<i>X</i> acity	* <i>X</i> aciousity	} <i>XV</i> cious
mendacious	mendacity	(*mendaciousity)	
b. <i>X</i> ocious	<i>X</i> ocity	* <i>X</i> ociousity	
precocious	precocity	(*precociousity)	
c. <i>X</i> ecious	* <i>X</i> ecity	<i>X</i> eciousity	
specious	(*specity)	speciousity	

9) The application of (6) is lexically governed in +ity derivatives of words of the class *X*ulous

<i>nebulous</i>	*nebulity	nebulosity	} <i>X</i> ulous
<i>credulous</i>	credulity	*credulosity	

We expect +ity to be more productive with (8) than with (9).

10) = (5 on p41): Majority (21 out) of the 29 adjectives of the form *X*acious have corresponding nominals of the form *X*acity < NOT lexically governed > productive

bibacious	*
efficacious	*
perspicacious	perspicacity
mendacious	mendacity

11) = (6 on p42): Only minority (8 out) of the 52 adjectives of the form *X*ulous have corresponding nominals of the form *X*ulosity or *X*ulity < lexically governed > not productive

bibulous	*	
miraculous	*	
fabulous	fabulosity	[-R1]
nebulous	nebulosity	[-R1]
credulous	credulity	[+R1]

12) glorious	glory	*gloriosity	gloriousness
gracious	grace	*gracity	graciousness
furious	fury	*furiousity	furiousness
spacious	space	*specity	spaciousness

Constraints on productivity (Katamba 4.2)

13) Phonological: a) -en added to monosyllabic stems ending in an obstruent, which may optionally be preceded by a sonorant: *blacken, dampen, lengthen*, but **dryen, *laxen, *dimmen, *greenen*
 b) -ly not added to adjectives ending in *ly*: **sillily, *friendlily, *sisterlily*

14) Morphological: -hood was originally attached only to native stems, not to Latinate roots: *boyhood, sisterhood, kingdom, *judgehood, *governorhood, *prisonerhood*. Later this changed: *parenthood, statehood, nationhood*.

15) Semantic: a) Adj+past participle compounds permitted only where the root to which -ed is added is inalienably possessed by the head N which it modifies: *blue-eyed, red-haired, short-sleeved, three-legged, *two-carred family, *big-Alsatianed woman*
 b) **unsad, *unpessimistic, *unill*

Word Formation Rules (i): Syntactic, semantic aspects, and morphological restrictions

1)a. John punched Bill	b. * John repunched Bill.
c. John punched the holes in the paper.	d. John repunched the holes in the paper.

- 2) $N\#able_1$ $V\#able_2$
 fashion#able accept#able
 fashion#able#ness accept#able#ness
 *fashion#abil+ity accept#abil+ity
 ‘characterized by X’ ‘capable of being Xed’

3) $[[X]_{V+ee}]_N$

4) $[[X]_{V\#er}]_N$ ‘one who Vs habitually, professionally’; e.g. *baker, programmer, teacher, writer, diver*

5)a. John washed the dishes, b. John rewashed the dishes. = John washed the dishes again.

6)a. I hit John. b. * I rehit John. I hit John again.

7) Velar Softening

electri[k]	electri[s]ity	analo[g]ue	analo[dʒ]y
criti[k]	criti[s]ism	re[g]al	re[dʒ]icide
mysti[k]	mysti[s]ism	ri[g]our	ri[dʒ]id

- 8) a. advise#abil+ity read#abil+ity
 b. forgive # able *forgive # able = *for[dʒ]ivable
 $\begin{array}{|c|c|} \hline -Lat & +Lat \\ \hline \end{array}$ $\begin{array}{|c|} \hline +Lat \\ \hline \end{array}$

9) Xable +ity; Xic/Xal/Xid/Xile +ity

- 10)a. $[en+Y]_V$ $[be+X]_V$
 en+croach#ment be+wilder#ment
 em+bezzle#ment be+dazzle#ment
 b. un#flag+ing un#buri+ed un#bear#able

- 11) X+ate/ X+ant/ X+ent *#ness
 profligate aberrant decent
 *profligateness *aberrantness *decentness
 profligacy aberrancy decency
 Exc: accurateness, accuracy

- 12) ornament_N *orna_V ornamental
 excrement_N *excre_V excremental
 regiment_N *regi_V regimental
 fragment_N *frag_V fragmental
 employment_N employ_V *employmental
 discernment_N discern_V *discernmental
 containment_N contain_V *containmental
 Exc.:
 government_N govern_V governmental
 development_N develop_V developmental

- 13)a. $[[employ]_{V\#ment}]_N$ *+al
 b. $[orna\#ment]_N$ +al c. Obstruent Deletion: obs → 0 / ___#ment
 d. $[experiment]_N$ +al e. $[[experiment]_N]_V$

15) $X]_{N+al}]_A$

Condition: $X \neq [Y]_V \#ment$

16)humanity	humanness;	proposal	proposition
recital	recitation;	consolement	consolation
assignment	assignation;	committal	commitment

17) constitution+al#ism, physic+al#ism, anim+al#ism

18) *fatal ism al, *dogmat ism al

N.B. In *dismal*, *rheumatismal*, *catechismal*, the *ism* is not a morpheme.

19)A: +al rule: $[[X]_{N+al}]_A$ B: #ism rule: $[[X]_A\#ism]_N$

Problem:

20)a. +Ation precedes +al: organiz+Ation+al

b. +al precedes #ize: industri+al#ize

c. #ize precedes +Ation: organiz+Ation;

+Ation may both precede and follow #ize

21) i. A: +al/+ence, etc. (Nominal affixes other than *Ation* or *ment*); *committal*, *occurrence* ...

ii. { B: +Ation *explanation*, *starvation*, *sensation*, *consolation*

N.B.: verbs in *eN+* and *be+* are exceptions

C: #ment; *embezzlement*, *bewilderment*

22) *fatal#ism+al ~ fatalistic, * modern#ism+al ~ modernistic

23) Rule of negative *un#*

a. The main part of the WFR:

$[X]_A \rightarrow [un\# [X]_A]_A$

Semantics: $un\#X = \text{'not X'}$

b. Morphological conditions on the base:

1. $[Y_V \#ed_{\text{participial}}]_A$ (buried)

2. $[Y_V \#ing]_A$ (flagging)

3. $[Y_V \#able]_A$ (bearable)

4. $[Y+y]_A$ (worthy)

5. $[Y+ly]_A$ (seemly)

6. $[Y \#ful]_A$ (mindful)

7. $[Y+al]_A$ (conditional)

8. $[Y \#like]_A$ (warlike)

Word Formation Rules (ii): (Phonological aspects)

24) Klamath	Noncausative	Causative
	pe:wa 'bathes'	hespe:wa
	no:ga 'is cooked'	hosno:ga
	ma:s [?] a 'is sick'	hasma:s [?] a

25) Kisseberth's assumption: $hV^* s+$

26) Klamath Causative WFR (a copying rule)

$v[C_0V X]$
 $1 \ 2 \ 3 \rightarrow v_{\text{caus}}[h \begin{array}{|c|} \hline 2 \\ \hline \text{long} \\ \hline \end{array} s \ v[123]]$

27) 3 2 1 3 2 1

Mononga-fuckin-hela; fan-fuckin-tastic

28) Siegel's "fuckin" rule

$$\begin{array}{ccc} 3 & & 1 \\ [XVC_0 (V C_0)_0 & & [\text{infix}]V Y] \\ -\text{str} & & \end{array}$$

29) Aronoff's "fuckin" rule

$$\begin{array}{ccc} 3 & 1 & \\ [X V Q V Y] & & 3 \\ 1 2 3 4 5 & \rightarrow & 1 2 3 [\text{infix}] 4 5; \text{ where } Q \text{ contains no } V \end{array}$$

30) a. N V b. $v_{[N[X] 0]}$ c. $N[X] \rightarrow v[X]$
 father father
 referee referee
 skate skate
 hammer hammer

31) + prephonological (cyclic); # postcyclic (word-level); ## postphonological

33) a. trial, denial, refusal, rehearsal, arrival b. *constructal, *organizal, *resistal

34) 3 1 1 3 2 1
 Kalamazoo fuckin Kalamafuckinzoo

35)a. abridgement, impeachment b. *abridgeation, *impeachment
 c. sheepish, piggish d. *fishish, *drudgish

36)a. analyze#able b. (analyze#abil)+ity c. (un#grammatical)+ity
 standard#ize (standard#ize)+ation
 govern#ment (govern#ment)+al

37) /standard#i:z/

Adjustment Rules (i): Truncation Rules

1) Truncation

$$\begin{array}{ccc} [[\text{root} + A]_X + B]_Y \\ 1 \quad 2 \quad 3 \quad \rightarrow \quad 1 \quad 0 \quad 3 \end{array}$$

where X and Y are major lexical categories

2) Siegel's +ee Attachment: preliminary

$$\begin{array}{ccc} [[]_V +ee]_N & & \text{e.g. } [[\text{employ}]_V +ee]_N \\ +\text{trans} & & \\ +\text{anim. obj.} & & \end{array}$$

3) nominate nominee, evacuate evacuee

4) Aronoff's +ee Attachment (One WFR+Truncation)

$$\begin{array}{ccc} [[\text{nomin}+ate]_V +ee]_N & & \text{nomin} +ee \\ 1 \quad 2 \quad 3 \quad \rightarrow \quad 1 \quad 0 \quad 3 \end{array}$$

5) Siegel's *+ee* Attachment: revised (Two WFRs!) Restriction: (5a) does not operate where (5b) does.

a. as (2).....e.g. [[employ]_{Vee}]_N

b. [[]_{X ee}]_Ne.g. [[nomin]_{Xee}]_N

where there exists Y_Ve.g. nominate_V

+trans

+anim. obj.

such that $[Y]_V = [[]_X]_V$ e.g. [nominate]_V = [[nomin]_X ate]_V

Restriction: (5a) does not operate where (5b) does.

6) Words in *+ant* fall into two classes

(i) Those which have a morphologically related V:

A. officiate → officiant

negotiate → negotiant

(deodorize → deodorant)

B. descend → descendant

complain → complainant

(ii) Those whose roots are not free words:

C. merchant, pedant, penchant

7) Aronoff's *+ant* Attachment (One Truncation rule)

[[negoti+ate]_{V+ant}]_N negoti +ant

1 2 3 → 1 0 3

8) *+ant* Attachment à la Siegel (Two WFRs!)

a. [[]_{V +ant}]_Ne.g. [[descend]_{Vant}]_N

b. [[]_{X ant}]_Ne.g. [[negoti]_{Xant}]_N

where there exists Y_Ve.g. negotiate_V

such that $[Y]_V = [[]_X]_V$e.g. [negotiate]_V = [[negoti]_X ate]_V

9) inflate *inflant inflatant; dilate *dilant dilatant

10) in=fl+ate di=l+ate

11) in=flate di=late

12) relegate – relegable, penetrate – penetrable, consecrate – consecrable (memorize – memorable)

13) inflate – *inflable – inflatable; dilate – *dilable – dilatible

14)a. big–bigger, small–smaller b. interesting – more interesting

15) *Adj* *moreAdj* *Adj-er*

a. big *more big bigger

fast *more fast faster

happy ?more happy happier

b. silly more silly sillier

lovely more lovely lovelier

comely more comely comelier

c. flagrant more flagrant *flagranter

pompous more pompous *pompouser

16) *Adv* *moreAdv* *Adv-er*

(He did it) { fast *more fast faster

slow (US) *more slow slower

skilfully more skilfully *skilfullier

- 17) a. I am *strongly* (**strong*) inclined to believe it.
 b. I am *more strongly* inclined to believe it.
 c. I am *stronger* (**stronglier*) inclined to believe it.
- 18) a. He ran *quickly* (**quick*). 19) a. He spoke *softly* (**soft*).
 b. He ran *more quickly*. b. He spoke *more softly*.
 c. He ran *quicker* (**quicklier*). c. He spoke *softer* (**softlier*).

20) Adverb +*er* TruncationC₀VC₀+ly+er_{Adv}

1 2 3 → 1 0 3

21) *Isačenko's Russian Truncation rules*N. B.: the # in (21) to (32) is the symbol of an abstract vowel called *yer*

$$\{\text{ov}\}_1 + \{\text{ov}\}_2 \rightarrow \{\text{ov}\}_2: \begin{cases} \{(\text{su}v\text{or}+\text{ov}_1)+(\text{ov}_2+\#\text{c}\#)\} \rightarrow \text{su}v\acute{o}r\text{e}v\text{e}c \\ \{(\text{roz}+\text{ov}_1)+(\text{ov}_2+\text{at})\} \rightarrow \text{rozov}\acute{a}t\text{y}j \end{cases}$$

Structurally similar to:

22) X+ate_V+At+ion_N

1 2 3 4 → 1 0 3 4 e.g. cre+ate+At+ion → cre+At+ion

23) leningrad leningrádskij

tomsk *tómsskij / tómskij

bask baskskij / *baskij

24) oburžuazit' 'make bourgeois'; buržuaznyj 'bourgeois'

N.B.: ' shows palatalization of preceding consonant, when the palatalization is not caused by a following vowel!

25) buržuazn(yj) → buržuaznit' → buržuazit'_V26) sekret_N sekretnyj_A zasekretit'_V27) cyngá_N 'scurvy' → cyngótnyj_A → cyngótet'_V

28) o+bez+N+verbalizer e.g. obezúmet' 'make mindless'

bez_N: 'without N' V: 'make Nless'29) bez_N bez+N+#_{n_A} o+bez+N+verbalizer_V

'without N' 'Nless' 'make Nless'

a. bez umá bezúmnyj obezúmet'

b. bez lóšadi bezlošádnyj obezlošádet'

c. bez vredá bezvrédnyj obezvrédit'

d. bez vodý bezvódnij obezvódit'

e. bez zemlí bezzemél'nyj obezzemélit'

f. bez nadéždy beznad'óžnyj obeznad'óžit'

30) /bez+zem#l'+#n+yj/ → bezzemél'nyj 31) zem#l'+a → zeml'á

32) Input 1: bez+zem#l'+#n_A

vocalization: e

stress: é

deletion: 0

Output 1: bezzemél'+n_AWFR: o+bezzemél'+n_A+it'_VTruncation: o+bezzemél'it'_VOutput 2: obezzemélit'_V

33) 0. gestórben, gebúnden

a. mißfällen *gemißfällen, mißbráucht *gemißbráucht, mißbílligt *gemißbílligt

b. mißverstanden, why not *gemißverstanden? (and also mißgestáltet, mißinterpretiert, etc.)

34) gemißverstanden → mißverstanden → míßverstanden

Adjustment Rules (ii): Allomorphy Rules

35) dandelion, accordion, ganglion; onion, companion, million

36) SPE: (+At)+iVn

37) 1. +Ation *realization* (unrestricted)

2. +tion *resumption* (if restricted root ends in non-coronal)

3. +ion *communion* (if restricted root ends in coronal)

4. +ition *repetition* (like 3 = restricted root ends in coronal)

5. +ution *resolution* (like 2 = restricted root ends in non-coronal)

38) <u>Labial</u>	<u>Coronal</u>	<u>Velar</u>	
<i>perturbation</i>	<i>cessation</i>	<i>deportation</i>	<i>evocation</i>
<i>formation</i>	<i>degradation</i>	<i>manifestation</i>	<i>purgation</i>
<i>exhumation</i>	<i>elicitation</i>	<i>consultation</i>	<i>prolongation</i>
<i>usurpation</i>	<i>accusation</i>	<i>affectation</i>	<i>amplification</i>
	<i>revelation</i>	<i>commendation</i>	<i>implication</i>
	<i>declaration</i>	<i>sensation</i>	
	<i>examination</i>	<i>indorsation</i>	
	<i>representation</i>		

39) vary *variation*; continue *continuation*; renounce *renunciation*

40) amplify *amplification*; imply *implication* 41) SPE: k → 0 / +C₁ ī ___##

42) equivocate *equivocation* *equivocatation

43) nominate *nominee*; dominate *dominant*; penetrate *penetrable*

44) Marked roots ending in non-coronals take +tion

a. sume

subsume *subsumption* *subsumation

consume *consumption* *consumation

assume *assumption* *assumation

presume *presumption* *presumation

b. duce

deduce *deduction*

reduce *reduction*

seduce *seduction*

produce *production*

introduce *introduction*

ceive

conceive *conception*

receive *reception*

deceive *deception*

perceive *perception*

scribe

prescribe *prescription*

conscribe *conscription*

deem

redeem *redemption*

sorb

absorb *absorption*

stroy

destroy *destruction*

N.B. On p102, Aronoff says the root of *destruction* is *struc*, whereas on p28 he says the root is *struct*!

Marked roots ending in coronals take +ion.

45) rebel rebellion commune communion

46) decīde decīision revīse revīision

47) V → V / ___ C₁¹ $\begin{bmatrix} \text{-low} \\ \text{-back} \\ \text{-cons} \\ \text{-str} \end{bmatrix}$ V abrāde, abrāision → abrāision
 -high +tns
 -high

48) Exceptional: convene convention

49) add addition 50) revolve revolution
 vend vendition resolve resolution
 define definition dissolve dissolution
 X+pose X+position solve solution
 compete competition
 repeat repetition
 imbibe imbibition

49)a. addit-ion, imbibit-ion

b. add $\begin{bmatrix} \text{restr.} \\ \text{+ition} \end{bmatrix}$ → addition, imbibe $\begin{bmatrix} \text{restr.} \\ \text{+ition} \end{bmatrix}$ → imbibition

prescribe $\begin{bmatrix} \text{restr.} \\ \text{+tion} \end{bmatrix}$ → prescription

50)a. resolve → resoltion → resolution; solve → solvtion → solution
 v → u / ___ t

51) Allomorphy of *ion*

+A_{tion} → $\left. \begin{matrix} \text{+ion} \\ \text{+tion} \end{matrix} \right\} / X \left. \begin{matrix} \text{+cor} \\ \text{-cor} \end{matrix} \right\} \text{-----}$

Condition: X α cor is one of a set of specified latinate roots shown in (44)-(46), (49)-(50).

52) invert inversion /rž/ insert insertion /rš/

53) Preliminary:

vert → verd / ___ +ion

54) **Marked coronal alternations**

<i>Sample verbs</i>	<i>Verb-</i>	<i>/+ion</i>	<i>/+ive (and often +able)</i>
1. excrete, X+sert	t	š	t
2. X+mit	t	š	s
3. X+vert	t	ž	s
4. digest	st	sč	st
5. connect	kt	kš	kt
6. decide, explode	d	ž	s
7. X+cede	d	š	s
8. apprehend	nd	nš	ns
9. commune	n	n	
10. scan	n	nš	
11. convene, retain	n	nš	nt
12. prevent	nt	nš	nt
13. recense	ns	nš	
14. coerce	rs	rš	rs
15. disperse	rs	rž / rš	rs
16. submerge, asperge	rdž	rž	rs
17. adhere	r	ž	s
18. recur	r	rž	rs
19. rebel	l	l	
20. X+pel	l	lš	ls
21. convulse	ls	lš	ls
22. revise	z	ž	
23. percuss	s	š	s
24. admonish	š	š	t

55) C → -voice / ___ +ive

56) Vs, Vz, st, kt, nt, nd, ns, ls

N.B.: I think *rs* could also be added to the list.

57) z/ž t/š s/š st/sč

58) Palatalization (i): t → č/s ___ yV

59) Palatalization (ii):

$$\begin{bmatrix} +\text{cons} \\ -\text{voc} \end{bmatrix} \rightarrow \begin{bmatrix} -\text{ant} \\ +\text{strid} \end{bmatrix} / _ _ _ yV$$

N.B.: +ant, +cor seem to be missing from initial C in Aronoff.

60) Xnd# Xns+... (Xnšən# Xnsrv# Xnsəbl#)

hend: apprehend, comprehend *fend*: defend *tend*: pretend, contend, extend

pand: expand *scend*: ascend, descend, condescend

61) $d \rightarrow s / n _ \left\{ \begin{array}{l} +ive \\ +ion \\ +abl \end{array} \right\}$, where d is part of marked Xnd roots

62) commend, emend, amend, recommend
commend+Ation
commend+able

63) abolish abolition
admonish admonition admonitive
punish ?punitio punitive

64) Xish#_v Xit+...

65) Xvert#_v Xverz+... rather than (53)
convert, converžən, convers iv

66) Xmit#_v Xmis+...
submit, submišən, submis iv

67) Xerge#_v Xerz+...
emerge emersion /rž/
submerge submersion submersible
deterge detersion detersive
asperge aspersion

68) $g \rightarrow z / _ \left\{ \begin{array}{l} +ive \\ +ion \\ +abl \end{array} \right\}$, where g is part of Xerge

69) *asperse* backformed from *aspersion*; *disperse* from *dispersion*; *immerse* from *immersion*

70)a. Xhi:r#_v Xhi:z+... *adhere, adhesive* b. Xkər#_v Xkərz+... *recur, recursive*

71)a. Xvi:n#_v Xvent+... *convene, convention* b. Xtein#_v Xtent+... *retain, retention*

72) d-final roots (except for *cede*) show the forms *d / ž / s*: *decide, decision, decisive*
XVz+..., where V is long

73) $d \rightarrow z / _ \left\{ \begin{array}{l} +ive \\ +ion \end{array} \right\}$

74) Xcede#_v Xcess+... *concede, concession*

Marked non-coronals:

75) *stroy* destroy *struc* destruction *ceive* deceive *cep* deception

76)a.(= 41) $k \rightarrow 0 / +C_1 \bar{i} _ \#\#$ b. $0 \rightarrow k / +C_1 \bar{i} _ +Ation$

77) $+f \bar{i} k \rightarrow +fak / \left\{ \begin{array}{l} satis \\ putre \\ lique \end{array} \right\} _ +Ation$

78) (i) professor professorial (ii) habit habitual (iii) orient oriental
manager managerial tempest tempestuous excrement excremental
president presidential
exponent exponential (iv) periphery peripheral
Arab Arabian calamity calamitous
industry industrious,
industrial

79) *departmential, *excremential; parental, torrential; continental, exponential

80)a. professor: pro=fess+Or+i / habit: habit+u b. presidency: president+i+y
c. y → i / C ___boundary

81) professor → professori / ___ +al
periphery → peripher / ___ +al
habit → habitu / ___ +al

Distributional arguments

1) A → B
a_{i1}..... b_{i1}
a_{i2}..... b_{i2}
a_{i3}..... b_{i3}
a_{i4}..... b_{i4}
a_{i5}
a_{i6}
a_{i7}

2) <i>Xment_V</i>	<i>Xment_N</i>	<i>Xment_V</i>	<i>Xment_N</i>
ornament	ornament	tormént	tórment
implement	implement	frágmént	frágment
complement	complement	segmént	ségment
tenement	tenement	augmént	aúgment
sediment	sediment	fermént	férment
regiment	regiment		
compliment	compliment		
experiment	experiment		
/...ment/	/...mənt/	/...mént/	/. ' .mənt/

3) element figment monument garment

4) If *Xist_N* is the source of *Xistic_A*, then there should be a word *x_iist_N* for (almost) every *x_iistic_A*.
But no *Xist_N* for the adjectives in (5):

5)a	b				
characteristic	patristic	solecistic	formulistic	shamanistic	totemistic
logistic	heuristic	sufistic	euphemistic	eudemonistic	hetaeristic
mediumistic	eristic	sylogistic	euphuistic	synchronistic	poristic
phlogistic	ballistic	neologistic	animistic	anachronistic	humoralistic
harmonistic		catabolistic	melanistic	hylozoistic	

6) haggadistic	casuistic	(6) + (5a) do not have a corresponding $Xism_N$	
talmudistic	oculistic		
elohistic	stylistic	7) Total $Xistic_A$	145
eulogistic	eucharistic		
yahwistic	diaristic	$Xistic_A, Xist_N, Xism_N$	100
annualistic	folkloristic	$Xistic_A, *Xist_N, *Xism_N$	9 (=5a)
novelistic	juristic	$Xistic_A, *Xist_N, Xism_N$	19 (=5b)
artistic	linguistic	$Xistic_A, Xist_N, *Xism_N$	17 (=6)
coloristic			

8) For a given word x_iist there cannot exist a corresponding word x_iistic unless there also exists a corresponding word x_ism .

9) archaeologist	*archeologism	*archaeologic
meteorologist	*meteorologism	*meteorologic
alchemist	*alchemism	*alchemistic
botanist	*botanism	*botanistic
dentist	*dentism	*dentistic
symphonist	*symphonism	*symphonistic
economist	*economism	*economistic
etc.		

10) m → t/s ____ +ic

11) phantasm / fantastic, iconoclasm / iconoclastic, sarcasm / sarcastic

-Able revisited

12) refrángible c6rrigible

13)a. +abl	b. +abVI	14) #abl	
in6xplicable	inexplicable	g6vern#abl	b6llast#abl d6scipline#abl
h6spitable	hospitable		
6xplicable	explicable		
d6spicable	desplicable	15)a. +able	b. #able
f6rmidable	formidable	c6mparable	comp6rable
		r6parable	rep6rable
		r6futable	ref6table
		pr6ferable	pr6ferable
		d6sputable	disp6table

perceive: perception, perceptive, perceptor, perceptory, { perceptible
perceivable

16)	+abl	#abl	17)	+abl
circumscribe	circumscriptible	circumscribable	tolerate	tolerable
extend	extensible	extendable	negotiate	negotiable
defend	defensible	defendable	vindicate	vindicable
perceive	perceptible	perceivable	demonstrate	demonstrable
divide	divisible	dividable	exculpate	exculpable
deride	derisible	deridable		
18)	debate	debatable		*debable
	abate	abatable		*abable
	dilate	dilatable		*dilable
	state	statable		*stable (in this
	relate	relatable		*reliable
	inflate	inflatable		*inflable
	translate	translatable		*translatable
19)	+abl	#abl	20)a.	possible refrangible vulnerable horrible
cultivate	cúltivable	cúltivatable	b.	divide / divisible
educate	éducable	éducatable		extend / estensible
irrigate	írrigable	írrigatable		communicate / communicable
navigate	návigable	návigatable		delineate / delineable
regulate	régulable	régulatable		
frustrate	frústrable	frustrátable		
filtrate	fíltrable	fíltratable		
demonstrate	démonstrable	démonstratable		
operate	óperable	óperatable		
narrate	nárrable	narrátable		
implicate	ímplicable	ímplicatable		
separate	séparable	séparatable		
allocate	álocable	álocatable		
investigate	invéstigable	invéstigatable		
anticipate	antícipable	antícipatable		

21) <i>Type</i>	<i>in+</i>	<i>un#-</i>
Nonlexical stem (+abl)	im+poss+ible im+palp+able	*un#poss+ible *un#palp+able
<i>At</i> truncation, + <i>abl</i>	irregulable inviolable	*unregulable *unviolable
<i>At</i> not truncated, # <i>abl</i>	*irregulatable *inviolatable	unregulatable unviolatable
Allomorphic root, + <i>abl</i>	imperceptible indivisible	*unperceptible *undivisible
Non-allomorphic root, # <i>abl</i>	*imperceivable *individable	unperceivable undividable
Stem stress changed, + <i>abl</i>	irr�parable irr�vocable	*unr�parable *unr�vocable
Stem stress unchanged, # <i>abl</i>	*irrep�irable *irrev�kable	unrep�irable unrev�kable

22) #abl → +abl (optional, obligatory with nonlexical stems)

23) He has just explained the in plicable.

24) *regulable* base: *regulate*, stem: *regul*
regulatable base = stem: *regulate*

25) I am am nable to a change in plans. It's v sible to the naked eye.
He is  ligible for appointment. That's comp tible with our findings.

26) divisible by three, divisible into three parts
?dividable by three, ?dividable into three parts

27) comp rable (X#abl): 'capable of being compared'

a. The two models are simply not comp rable.

c mparable (X+abl): 'capable of being compared'

b. The two models are simply not c mparable.
'equivalent'

c. This is the c mparable model in our line.

d. *This is the comp rable model in our line.

28) t leratable (X#abl): 'capable of being tolerated'

t lerable (X+abl): 'moderately good'

a. We ate a t lerable lunch.

b. * We ate a t leratable lunch.

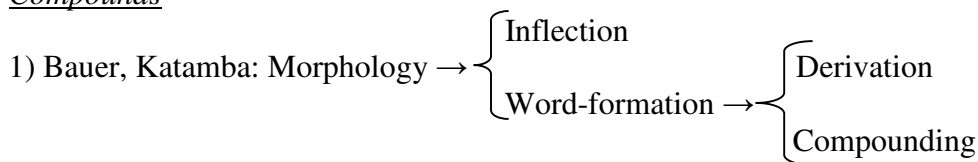
29) perc ivable (X#abl): 'capable of being perceived' (regardless of it size)

perc ptible (X+abl): 'significant' (large enough to matter)

a. There is a flaw in the grain, but it's imperc ptible.

b. *There is a flaw in the grain, but it's unperc ivable.

30) Aronoff does not deny that X#abl words may also diverge from compositionality: e.g. *advisable*, *excitable*, *sensible*. But when we have pairs, then the word of the form X+abl is always the one that diverges from compositionality.

Compounds

2) Aronoff: Morphology → Word-formation → Derivation

3)a. gréenhouse ~ green hóuse b. fíre extinguisher ~ extinguish the fire

4) word formation, word-formation, wordformation

5) gréenhouse, fíre extinguisher, Chrístmas tree

6) apple píe, prime mínister, yellow féver, lawn ténnis, Christmas púdding, man máde, easy góing

7) *mediatrix*

a. morphological properties b. semantic properties

c. phonological properties d. syntactic properties

8) *pass the salt*

9) *kick the bucket, kick humble pie, be in the red*

a. Subclause: *when the chips are down*

b. VP: *kick the bucket*

c. NP: *the man in the street*

d. PP: *round the clock*

10)a. take (___NP) in hand, push (___NP) too far, keep tabs on (___NP)

b. The teacher is keeping tabs on the new students.

c. Tabs are being kept on the new students by the teacher.

11) The lexicalist hypothesis:

Syntactic rules apply to words regardless of their internal structure.

12)a. [She saw the greengrocer.]

Which greengrocer did she see?

b. *Which green grocer did she see?

13)a. a pound of tea

b. He took a pound of tea and put two spoonfuls of it into the teapot.

14)a. teapot

b. He took the teapot and poured it into the cup.

15) Di Sciullo & Williams:

<u>morphemes</u> >	<u>words</u> >	<u>compounds</u> >	<u>phrases</u> >	<u>sentences</u>
all listed	most listed	many of them	some listed	most of them
	(But not if	less liable	(the idioms)	unlisted
	their meanings	to be listed		
	are composi-			
	tional.)			

16) Classification of compounds

(i) Whether they have a head

(ii) If they have a head (= are endocentric)

a. the word-class of the head

b. whether the head appears at the left or at the right of the compound

17) a. schoolboy, bedroom, teapot b. pincushion, fleabite, seaweed

18) NN AN PN VN
water-lily *hothouse* *undergraduate* *paymaster*
bookcase *greenfly* *near-sightedness* *think tank*
motor-car *high court* *outskirts* *call girl*
skyline *wet-suit* *underdog* *copycat*
India-rubber *bluebell* *oversight* *punch-line*

19)
$$N \rightarrow \left\{ \begin{array}{c} N \\ V \\ A \\ P \end{array} \right\} N$$

20)
$$\begin{array}{c} N \\ / \quad \backslash \\ N \quad N \\ / \quad \backslash \quad / \quad \backslash \\ N \quad N \quad N \quad N \\ | \quad | \quad | \quad | \\ \text{railway station attendant} \end{array}$$

21) NA AA PA
world-wide *short-lived* *overwhelming*
user-friendly *hard-hearted* *under-mentioned*
seaworthy *good-natured* *outspoken*
foolproof *long-winded* *near-sighted*
 (2nd A= bound
 adjectival base)

22)
$$A \rightarrow \left\{ \begin{array}{c} N \\ A \\ P \end{array} \right\} A$$

23) Deverbal compounds:

a. [N Ver] _N	b. [N Ven] _A	c. [N Ving] _N	d. [N Ving] _A
<i>moneylender</i>	<i>hand-written</i>	<i>bear-baiting</i>	<i>God-fearing</i>
<i>gamekeeper</i>	<i>computer-matched</i>	<i>hay-making</i>	<i>awe-inspiring</i>
<i>shoemaker</i>	<i>hand-sewn</i>	<i>brick-laying</i>	<i>self-seeking</i>
<i>bookseller</i>	<i>time-worn</i>	<i>sheep-shearing</i>	<i>eye-catching</i>
<i>anteater</i>	<i>guilt-ridden</i>		

24) NOT deverbal compounds:

a. [N Ver] _N	b. [N Ven] _A	c. [N Ving] _N	d. [A Ving] _A
<i>chainsmoker</i>	<i>capacity filled</i>	<i>Sunday closing</i>	<i>low-flying</i>
<i>party drinker</i>	<i>guilt-laden</i>	<i>church-going</i>	<i>hard-working</i>
<i>daydreamer</i>	<i>alcohol related</i>	<i>spring-cleaning</i>	<i>hard-hitting</i>

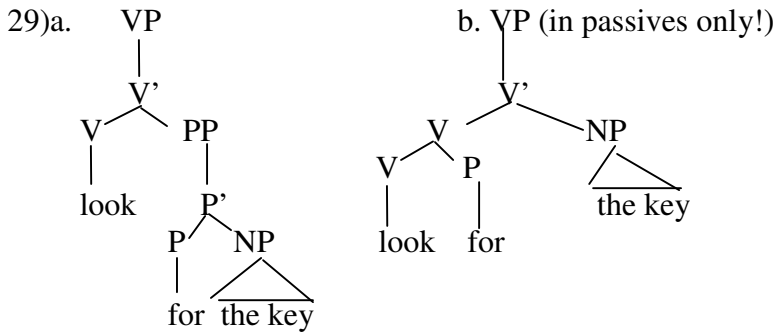
25) N → V N *think tank*, *call girl*, *copycat*, *playboy*, *punch-line*, *showman*

26) codex copying - copycat

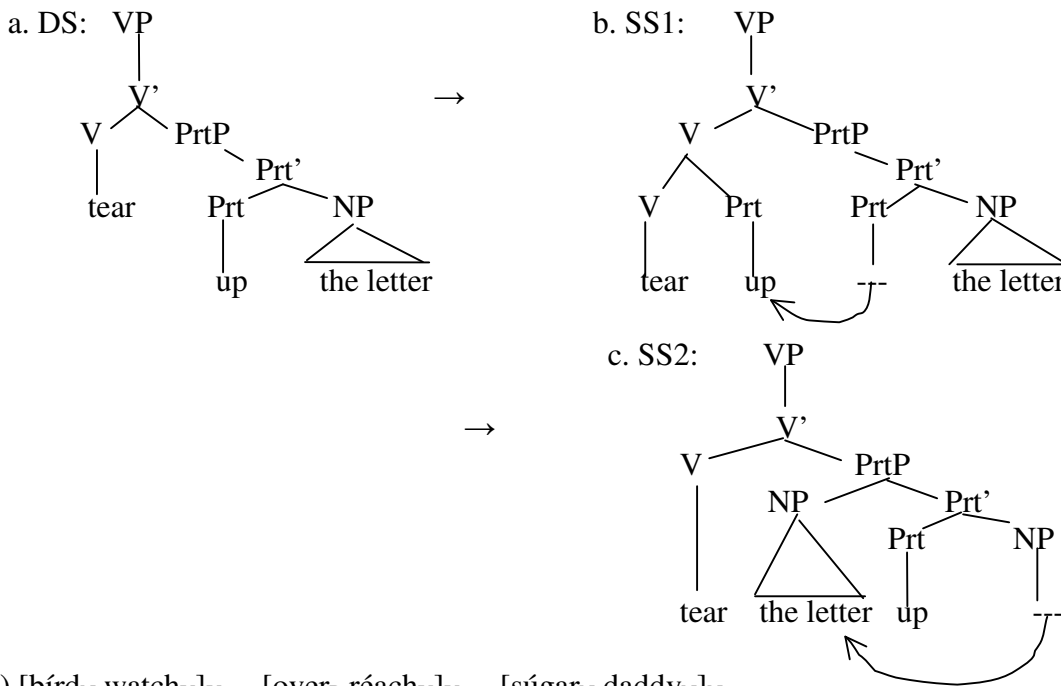
27) V → P V (preposition + verb) *undersell*, *overrate*, *upstage*, *outstay*, *offload*, *upset*

28) For Katamba Verb+Preposition V-compounds also exist. Problems!

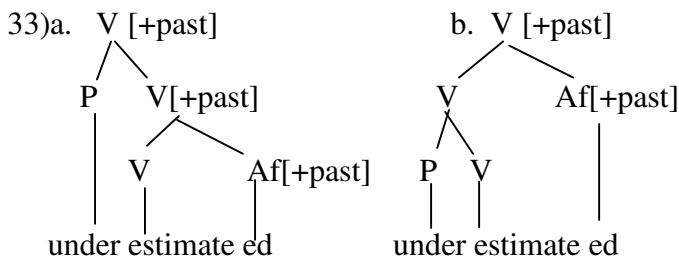
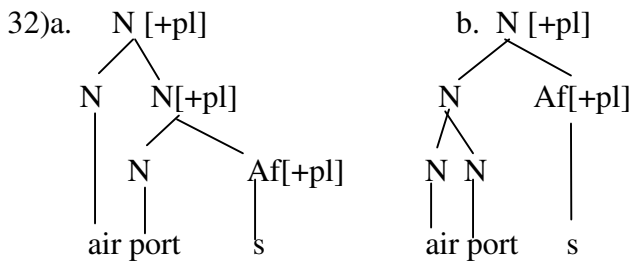
- “prepositional verbs”: look into X, look through X, look for X
- “phrasal verbs”: show off, go off, look out, take X in, look X up



30) Prt = Particle (not the same as P= preposition; cf. Haegeman & Guéron 1999: *English Grammar (A Generative Perspective)*. Oxford, Blackwell, pp. 252-264)



31) [bírd_N watch_V]_V [over_P réach_V]_V [súgar_N daddy_N]_N
 [blúe_A book_N]_N [blue_A bláck_A]_A [wínd_N screen_N]_N



99) firemen oversaw

34) A. scissors *scissor trousers *trouser binoculars *binocular
 B. scissor-handles trouser-legs binocular-cases

35) passer-by passers by
 notary public notaries public
 grant-in-aid grants-in-aid
 coat of mail coats of mail
 mother-in-law mothers-in-law

36) attorney general attorneys general/attorney generals
 spoonful spoonsful/spoonfuls

37) overseas investor sales receipt
 parks commissioner parts distributor
 arms merchant arms race
 buildings inspector weapons analysis

38) phone in, drive out, look out, lay off, melt down

39)

40) see-through (curtains), live-in (nanny)

41)

Semantically *exocentric* (*bahuvrihi*) compounds:

42) greenhouse lazy-bones blue-nose

43) spoil-sport dare-devil

44) butterfingers blockhead turncoat

Semantically *copulative* (*dvanda*) compounds:

45) boyfriend north-west

Urbana-Champaign player-manager

Harper-Collins worker-priest

Marginal (atypical) compounds:*(i) Rhyming compounds*

- 46)a. Black-Jack claptrap night-light
 b. goody-goody pretty-pretty preachy-preachy
- 47) nitvit titbit helter-skelter hobnob namby-pamby
 (cf. Hung. icipici, icurka-picurka, egyedem-begyedem, etc.)

(ii) Ablaut compounds

- 48) zigzag tittle-tattle dilly-dally tick-tock sing-song wishy-washy
 (cf. Hung. giz-gaz, dirib-darab, cikk-cakk, piff-puff, etc.)

N.B. Perhaps twin-words would be a better term for Rhyming and Ablaut compounds.

(iii) Cranberry words

- 49)a. cranberry b. blueberry
 huckleberry blackberry
 strawberry
 gooseberry
 elderberry

(iv) Neoclassical compounds

- 50) hydro- theo-
 hydrology theology
 hydrometer theocracy
 hydrolysis apotheosis
 hydrogeology theosophy
- 51) Affix Base Affix/Base? Base
 a. colonial pre- colonial neo- colonial
 b. active in- active hyper- active

- 52) *acro amphi ana anti apo archi auto bio brachy cardio cata chrono deca demo dia ecto
 electro endo epi ethno exo geo hemi hetero hexa hippo homo hyper hypo ideo iso kilo
 macro mega meta micro mono neo neuro ophthalmo ortho osteo paleo para penta peri
 philo phono poly proto pseudo psycho stereo syn techno tele theo thermo xeno xylo zoo*

- 53) postman (cf. footballer)

- 54)a. basketful, spoonful b. painful, beautiful