### Lexical Phonology and Morphology

#### February 4, 2016

▲□▶ ▲□▶ ▲三▶ ▲三▶ 三三 のへで

## Paul Kiparsky: early 1980s

- Developing work by Dorothy Siegel, Steven Strauss, Mark Aronoff, David Pesetsky.
- **2** A theory of many things...
- **3** A theory (largely) of *derivational* morphology (though it is not described that way).
- A theory of the relationship between phonotactics and what once was called automatic morphophonology. (But automatic morphophonology grew into all of what phonology was.)
- **5** A theory of levels or layers in morphology.
- 6 A constraint on neutralizations rules' application in nonderived environments. What is a neutralization rule?
- **7** A theory of underspecification, or of markedness.

#### Dynamic view

- Lexical phonology is extremely derivational: things happen, some things happen before other things happen, and if something happens before X appears on the scene, then too bad for X. If Y isn't "in the lexicon," then a lexical rule can't "see" it (whatever that might mean!).
- 2 The most remarkable claim of lexical phonology is that the generalizations describing markedness principles of a language are the same as the rules governing the changes of sounds under conditions of word-formation.
- **3** Lexical/postlexical components
  - This is the most important distinction, one going back a long way, but dropped for a while in generative phonology.
  - Lexical rules have exceptions, do not create novel segments or sequences = morphophonemic rules.
  - Postlexical: flapping; word-final devoicing in German, Dutch, Russian; Lexical rule? Think trisyllabic shortening.

## Lexical v. Post-lexical

Lexicon

- Structure-preserving (output is possible UR)
- Not necessarily phonetically natural
- never applies across words
- Apply only in derived environments
- Trisyllabic shortening

Post-lexical

- No lexical exceptions
- Not necessarily structure-preserving
- May apply across words
- May not refer to internal morphological information

うして ふゆう ふほう ふほう ふしつ

Flap formation

# Derived environments?

An environment is "derived" if it applies across a morpheme boundary.

▲□▶ ▲□▶ ▲三▶ ▲三▶ 三三 のへで

The case from Finnish

halut-a	to want
halus-i	wanted
Non-derived environments:	
tila	room
aiti	$\operatorname{mother}$

## English stress, oversimplified

antepenult	penult	penult	heavy ultima
America cinema asparagus metropolis	aroma balalaika hiatus horizon	veranda agenda consensus synopsis	Naverone magazine antidote
javelin	corona	utensil	

▲□▶ ▲□▶ ▲三▶ ▲三▶ 三三 のへで

# Trisyllabic shortening

#### (aka Trisyllabic Laxing)

1::	-1:::		
divine	divinity		
serene	serenity		
profane	profanity		
vile	vilify		
clear	clarity		
rite	ritual		
grade	gradual		
tyrant	tyranny	tyranize	tyrannous
penal	penalize	-	-
*	1		
fable	fabulous		

・ロト ・日 ・ モ ・ モ ・ モ ・ シック

## Trisyllabic shortening: exceptions

nightingale, stevedore, ivory, Amory, bravery, mightily, pirating, obesity.

So: Trisyllabic Shortening has (lexical) exceptions, it doesn't look across word-boundaries, and it seems to be a *markedness* statement for nonderived forms; it creates a segment type that exists underlyingly.

Rule: a vowel is short, when followed by (at least) two syllables, the first of which is unstressed.

うして ふゆう ふほう ふほう ふしつ

## Two classes of suffixes in English

Which suffixes trigger Trisyllabic shortening?: *ity*, *ify*, *ual*, *??ize* (*no*), others?

- Group 1: stress affecting: -ic, -al, -ity, -ion, -y (nominalizing), -al, -ate, -ous, -ive, -ation
- Group 2 stress neutral -hood, -ful, -ly, -ize, -ness, -less, -y (adj.) fictionalize

ション ふゆ く は マ く ほ マ く む マ

■ Both? -able -ism

## Basis for stratal distinction

Proposal: Lexical phonology is built of multiple layers (or strata).

- Group 1 easily attaches to non-word roots (e.g., paternal), while Group 2 almost always attaches to existing words.
- Group 1, when it attaches to words, is stress-changing. Group 2 is stress-neutral, always?
- Group 1 make the resultant word look as much as possible like a (simple) word.

うして ふゆう ふほう ふほう ふしつ

#### Combinations of Class 1,2

## Derivational suffixes in English

able	fixable, doable, understandable?
ant	claimant, defendant
(at)ion	realization, assertion, protection
er	teacher, worker
ing	the shooting, the dancing
ing	the sleeping giant, a blazing fire
ive	assertive, impressive, restrictive
ment	adjournment, treatment, amazement
ful	faithful, hopeful, dreadful
(i)al	presidential, national

▲□▶ ▲圖▶ ▲圖▶ ▲圖▶ ▲圖 ∽ のへで

(i)an	Arabian,	Einsteinian,	Minnesotan
-------	----------	--------------	------------

- ic cubic, optimistic, moronic, telephonic
- ize hospitalize, crystalize
- ize modernize, nationalize
- less penniless, brainless
- ous poisonous, lecherous
- ate activate, captivate
- en deaden, blacken, harden
- ity stupidity, priority
- ly quietly, slowly, carefully
- ness happiness, sadness

What is the generalization about stress?

ション ふゆ く は マ く は マ く む マ

## From Kiparsky 1983

Base	Class 1	Class 2
Mendel Mongol Parkinson Shakespeare	Mendelian Mongolian Parkinsonian Shakespearian	Mendelism Mongolism Parkinsonism
grammar nation capital	grammarian	nation-al-ism capitalism

▲□▶ ▲□▶ ▲□▶ ▲□▶ □ のへぐ

## 2 able's?

base	1	2
repair	reparable	repairable
prefer	préferable	preférable
compair	cómparable	compárable
defend	defensible	defendable
perceive	perceptible	perceivable
divide	divisible	dividable
cultivate	cultivable	cultivatable
educate	educable	educatable
demonstrate	demonstrable	demonstratable

### -ist-ic

X-ist X-is	-ic X-ist X-ist-ic
sex sexist *sex	
iaa iaaanot iaa	listic fascist fascistic tistic linguist linguistic
race racist *rac	0 0
rape rapist *rap putsch putchist *pu	stic jurist juristic schist sophist sophistic

# 2+ syllables -ist-ic

	X-ist	X-ist-ic	X-ist	X-ist-ic
fatal	fatalist	fatalistic	masochist	masochistic
regal	regalist	regalistic	plagiarist	plagiaristic
humor	humorist	humoristic	populist	populistic
social	socialist	socialistic	atheist	atheistic
human	humanist	humanistic	aphorist	aphoristic
real	realist	realistic	hedonist	hedonistic
commune	communist	communistic	anarchist	anarachistic

#### ist-ic: Word-final stress in base

	X-ist	*X-istic
cartoon	cartoonist	*cartoonistic
escape	escapist	*escapistic
falange	falangist	*falangistic
alarm	alarmist	*alarmistic
defeat	defeatist	*defeatistic
advent	adventist	*adventistic
conform	$\operatorname{conformist}$	*conformistic
extreme	extremist	*extremistic
reserve	reservist	*reservistic
career	careerist	*careeristic

#### -ist-ic

Strauss notes:

- -ic may not attach to an X+ist base if:
  - the final syllable of X is not primary stressed; and
  - X is a lexical item.
- Stress clash in English OK morpheme internally:
  - Revlon, nylon, Ticonderoga, Rangoon, Illini
  - Contrast *alarmistic* and *admonish*:
    - *admonish* is like *alarmist* in stress
    - but *admonition* sounds fine, while *alarmistic* does not.

ad	$\operatorname{mon}$	ish	$\rightarrow$	ad	mo	ni	tion		
2	1	3		2	2	1	3	3	
a	larm	$\operatorname{ist}$		a	lar	$\operatorname{mis}$	$\operatorname{tic}$		
0	1	2		?	2	1	0		
ab	nor	$\operatorname{mal}$	$\rightarrow$	ab	nor	ma	li ty		
2	1	3		2	2		$3 \ 3$	_	_
								▶ ★ 문 ▶ ★ 문 ▶ .	E *) Q (*

#### Bad surface pattern: \* $\dot{\sigma} \# \dot{\sigma}$

base	-ist	-ist-ic
alárm	alárm#ist	alárm#íst+ic
fátal	fátal#ist	fátal#íst+ic

▲□▶ ▲□▶ ▲□▶ ▲□▶ □ ● ● ●

#### -ize and stress

- distinguish *catholicize* or *notarize* from *Bermudaize*.
- Standardize and cannibalize suggest Stratum 2.

winterize summerize autumnize *fallize *springize	alphabetize radicalize departmentalize *? cartoonize * journalize *magazinize *reviewize *bookize	*Montrealize *New Yorkize Bostonize ?Chicagoize
	*bookize publicize legalize	

#### -ment

develop	development	developmental
employ recruit govern	employment recruitment government	* employmental * recruitmental * governmental
	ornament government supplement	ornamental governmental supplemental

◆□▶ ◆□▶ ◆目▶ ◆目▶ 目 のへぐ