

Morphological change

Principles of language change

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The origins of bound morphemes

Where do bound morphemes such as English *-ly* (adverb) and *-ed* (past tense) come from?

Derivational morphemes often develop from compounds:

-ly N meaning 'body' ('mann-lic')

-hood N meaning 'person', 'sex', 'quality'

The origins of bound morphemes

Inflectional morphemes often develop from function words:

hus-et (Swedish) <-> *hus det

walk-ed <-> *walk did

The origins of bound morphemes

Latin

V-INF have to

cant-are habeo

cant-are habes

cant-are habet

cant-are habermus

cant-are habetis

cant-are habent

The origins of bound morphemes

Latin V-INF have to	Spanish V-FUT-AGR	Gloss
cant-are habeo	cantaré	'I'll sing'
cant-are habes	cantarás	'you'll sing'
cant-are habet	cantará	'he'll sing'
cant-are habermus	cantaremos	'we'll sing'
cant-are habetis	cantareís	'you'll sing'
cant-are habent	cantarán	'they'll sing'

Latin - Spanish

The origins of bound morphemes

Verb	
n-oa	'I'm going'
n-oa	'you are going'
d-oa	'he/she is going'
g-oaz	'we are going'
z-oas	'you are going'
d-oaz	'they are going'

Basque

The origins of bound morphemes

Verb		Pronoun	
n-oa	'I'm going'	ni	'I'
n-oa	'you are going'	hi	'you'
d-oa	'he/she is going'	-	'he/she'
g-oaz	'we are going'	gu	'we'
z-oas	'you are going'	zu	'you'
d-oaz	'they are going'	-	'they'

Basque

Analogy

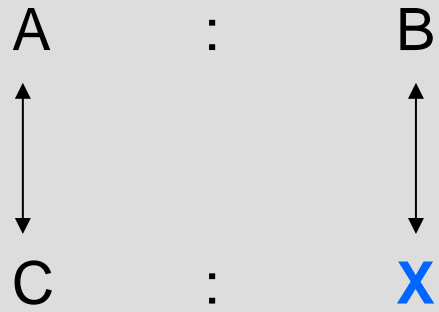
Analogy

A : B

Analogy

A : B
↕
C :

Analogy



Analogy

change : changable



wash

Analogy

change : changable
↑ ↓
wash : **washable**

Analogy

car	:	cars
↕		↕
ziff	:	ziff-[s]
zo	:	zo-[z]
zax	:	zax-[əz]

The English past tense

Analogy

Present

V

Past

V-ed

Analogy

Present

Past

V

V-ed



V

Analogy

Present

V



V

Past

V-ed



X-ed

Analogy

Old English

climb

step

laugh

clomb

stope

low

Modern English

climb

step

laugh

climbed

stepped

laughed

Analogy

Irregular

throw–threw–thrown
strive–strove–striven
dream–dreamt–dreamt
hang–hung–hung
light–lit–lit
cleave–clove–cloven

Regular

throw–threw–thrown
strive–strove–strove
dream–dreamed–dreamed
hang–hanged–hanged
light–lighted–lighted
cleave–cleaved–cleaved

Analogy

spoil	:	spoilt/spoiled
wake	:	woke/waked
speed	:	sped/speeded
stink	:	stank/stunk
thrive	:	throve/thrived
spill	:	spilt/spilled
learn	:	learnt/learned

Analogy

Original

dive dived
catch caught

New

dive dove
catch caught

Analogy

land

landscape

sea

seascape

moon

moonscape

Japan

Japanese

journal

journalese

mother

motherese

Hypercorrection

'dark'

[da(r)k]

'court'

[kɔ(r)t]

'avocado'

[avɔkardo]

Hypercorrection

Peter and me went swimming.

Peter and I went swimming.

Sally talked to Peter and me.

Sally talked to Peter and I.

Morphological reanalysis

a naddre



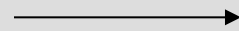
an adder

a napron



an apron

an ewt



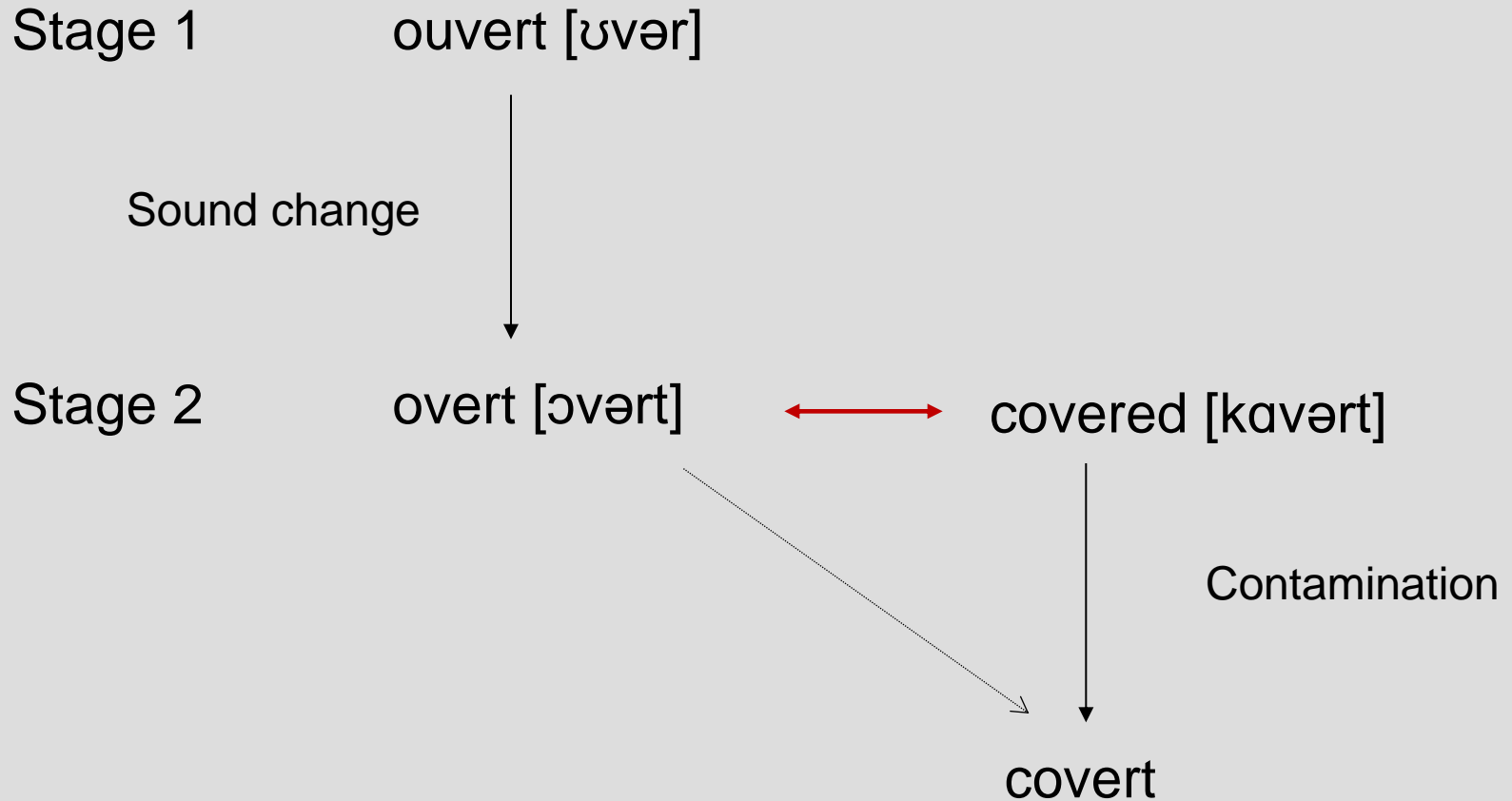
a newt

an ekename



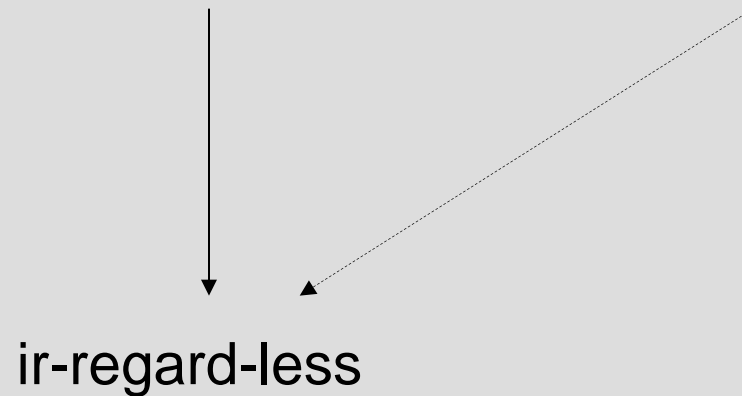
a nickname

Morphological reanalysis



Morphological reanalysis

regard : regard-less = irrespectiv



Morphological reanalysis

Frankfurter
Hamburger



Morphological reanalysis

Ham+Burger



Analogical extension

Cheese+Burger

Backformation

Established pattern

to exhibit – exhibit-or

printer – to print

maintenance – to maintain

>>

>>

>>

Back formation

editor > to edit

laser > to lase

surveillance > to surveille

Backformation

SG

pese

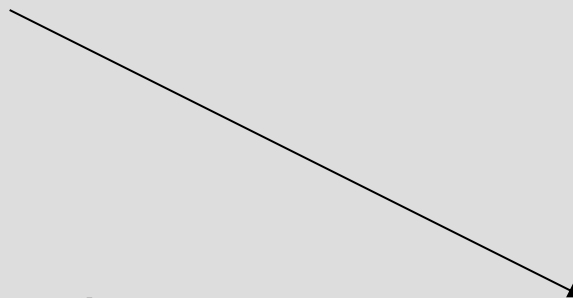
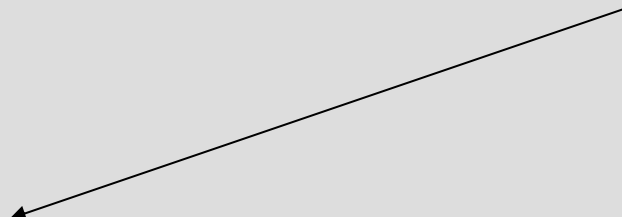
PL

pisan

[pis]

[pi] 'pea'

[pis] 'peas'



Competing patterns

‘sword’ [swɔrd] > [sɔrd]

[w] → Ø / s__o

‘swore’ [swɔr] ←→ ‘swear’ [swɛr]

‘swollen’ [swɔləŋ] ←→ ‘swell’ [swɛl]

Sturtevant's paradox

Sound change is regular, but produces irregularity;
analogy is irregular, but produces regularity.

Sturtevant's paradox

	Latin
1SG	ámo
2SG	ámas
3SG	ámat
1PL	amámus
2PL	anátis
3PL	ámant

Sturtevant's paradox

	Latin	Old French
1SG	ámo	aim
2SG	ámas	aimes
3SG	ámat	aimet
1PL	amámus	amons
2PL	anátiſ	amez
3PL	ámant	aiment

Sturtevant's paradox

	Latin	Old French	Modern French
1SG	ámo	aim	aime
2SG	ámas	aimes	aimes
3SG	ámat	aimet	aime
1PL	amámus	amons	aimons
2PL	anátiſ	amez	aimez
3PL	ámant	aiment	aiment

Sturtevant's paradox

Old English

Present	ce:os an	[z]
Past SG	ce:as s	[s]
Past PL	cu r on	[r]
Past PTC	geco r en	[r]

Sturtevant's paradox

	<i>Old English</i>		<i>Modern English</i>	
Present	ce:os s an	[z]	choose s e	[z]
Past SG	ce:as s	[s]	chose s e	[z]
Past PL	cu r on	[r]	chose s e	[z]
Past PTC	geco r en	[r]	chose s en	[z]

Sturtevant's paradox

OHG

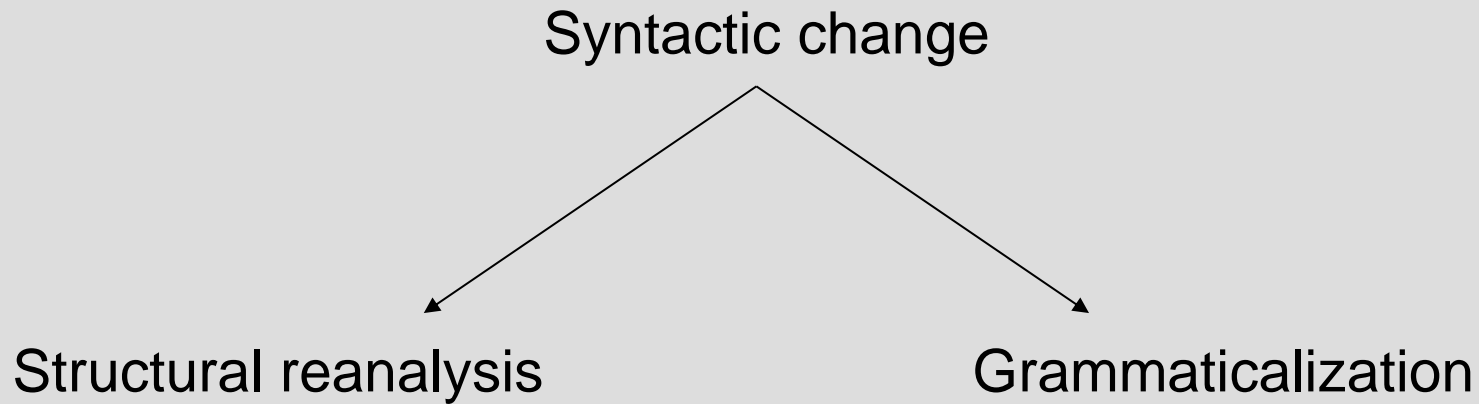
Present	kiu s an	[z]
Past SG	ko: s	[s]
Past PL	ku r un	[r]
Past PTC	giko r an	[r]

Sturtevant's paradox

	<i>OHG</i>		<i>PDG</i>	
Present	kiu s an	[z]	kü r en	[r]
Past SG	ko: s	[s]	ko r	[r]
Past PL	ku r un	[r]	ko r	[r]
Past PTC	giko r an	[r]	gekob r en	[r]

Structural reanalysis

Syntactic reanalysis



Syntactic reanalysis

Mir hat der Film nicht gefallen.

Mir leuchtet das nicht ein.

Mir sind viele Menschen begegnet.

Mir ist kalt.

I didn't like the movie.

I don't understand that.

I met many people.

I am cold.

Syntactic reanalysis

th**an** cyng**e** licoden peran.
The-DAT king-DAT **were**-pleasing pears
'Pears were pleasing to the king' (i.e. The king liked pears)

= Dem König gefallen die Birnen. OVS

Syntactic reanalysis

The king liceden peares

the king **were**-pleased pear-**s**

‘Pears were pleasing to the king’ (i.e. The king liked pears)

The king liked pears.

He liked pears.

Syntactic reanalysis

I believe **that** she will take the job.

English

Ich verstehe, **dass** Sie nicht kommen.

German

Ik weet **dat** hij veel vrienden heeft.

Dutch

Jag trodde, **att** hans sista stund var kommen.

Swedish

Syntactic reanalysis

Middle High German

joh gizalta in sâr **thaz**, thiu sâlda
and told them immediately that the luck
untar in uuas
among them was

‘And he told them immediately that good fortune was among them.’

I can tell you **this**: I won’t talk to that guy.

Syntactic reanalysis

Old English

ðæt gefremede Diulus hiora consul,
that arranged Diulus their consul

ðæt ðæt angin wearð tidlice ðurthogen
COMP that beginning was in.time achieved

‘Their consul Diulus arranged (it) that it was started on time.’

Syntactic reanalysis

- (1) Ic hæbbe [þo-**ne** fisc gefange-**ne**]
I have the-ACC fish caught-ACC
'I have the fish caught'
(=I have the fish in a state of being caught)

Syntactic reanalysis

(2) thin geleafa **hæfth** the **gehæled.**
your faith has you healed.∅
'Your faith has healed you.'

(3) thin geleafa **hæfth** **gehæled** the.
your faith has healed.∅ you
'Your faith has healed you.'

Otto Behagel

Things that belong together occur together.

The origins of head marking

[**The man**] **He**-him-**it**-gave [**the book**]




Swahili (Bantu)

The origins of head marking

(1) a. **Jean** donnera **le livre** à Marie.
SU V DO IO
'John will give the book to Mary.'

b. **Il** te **le** donnera.
SU IO DO V
'He you-it-will give'.

(2) **Jean**, **il-te-le**-donnera, **le livre**.
NP, SU-IO-DO-V, NP



Analogy

cact-us : cact-i

radi-us : radi-i

octopus : actopodes