

Morphological Reanalysis

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Course on Morphological

Change

Part I:
Examples and types of
morphological
reanalysis

Intro example 1

- * OHG *bētahūs* 'prayer house' (-*a* marks *bēta* unambiguously as a noun stem)
- * MHG (vowel reduction/loss) > *bēt(e)hūs* – first element can now be reanalyzed as a verb stem < *bēten* 'pray'
- * **Evidence** of reanalysis – new productive compound pattern: verb-stem+noun, e.g. *Esszimmer* 'dining room' *Schreibtisch* 'desk', literally 'write-table'

Intro example 2

- * PGmc. suffix *-assu* reanalyzed as *-nassu* based on frequent combination with stems ending in *-n*:
- * OE *forgifeness* = *forgife(n)* 'forgiven' + *-ess?* or *-ness?*
- * **Evidence** of reanalysis – *-ness* on forms that did not end in *-n*: *gōdness* 'goodness'; *beohrtness* 'brightness'

Covert reanalysis

- ✱ Reanalysis is commonly characterized as the covert side of grammatical change. Generally, reanalysis is **not directly observable** but manifests itself through the overt innovations that it licenses.
- ✱ This means: The morphological changes that we see in a language often reflect at least two kinds of innovation: covert reanalysis of existing surface forms and patterns and the overt analogical innovations thereby licensed.

Reanalysis vs. analogy

- * Many scholars see reanalysis as one of two basic mechanisms of endogenous grammatical change.
- * The other mechanism (the overt one) is referred to variously as: extension, deductive innovation, etc.
- * I follow Hopper and Traugott (2003) in calling the overt mechanism **analogy** and drawing a fundamental distinction between analogy (in this technical sense) and reanalysis.

Types of reanalysis

Paradigmatic vs. syntagmatic

OR

Revaluation vs. resegmentation

Revaluation (paradigmatic) = Reanalysis of one or more properties of a morphological element or pattern (e.g. the categories an item belongs to, the conditions under which a rule applies, etc.)

Resegmentation (syntagmatic) = Reanalysis of the location or existence of a boundary between morphological elements

(Textbook accounts often restrict their accounts of morphological reanalysis to resegmentation.)

Further examples of reevaluation

Common type: Reanalysis of the lexical category of the input base to a derivational rule:

(1) Gmc. **-ārjoz* (> agentive *-er*): originally suffixed to nouns: Go. *bōkareis*/OE *bócere* 'scribe'; nouns like Go. *dōmareis* 'judge' could be reanalyzed as derived from verb *dōmjan* 'to judge' rather than from *dōm-* 'judgement'.

(2) Ger. *-bar*/Du. *-baar* originally meant '-bearing' and attached to nouns (*fruchtbar* 'fruit-bearing'). Some bases reanalyzed as verb stems, leading to highly productive modern use, e.g. Ger. *tragbar* 'portable' < *tragen* 'carry'.

3 types of resegmentation

✱ Resegmentation can:

(1) spawn a new formative: Eng. *fork* reanalyzed as *four* + *k*, spawning suffix *-k* and licensing overt innovation *threek* 'fork with 3 tines' (Deutscher 2002:483)

(2) amalgamate previously separate formatives: Ger. *-er* + *-ei* reanalyzed as *-erei*, licensing words like *Wäscherei* < *waschen*, in absence of **Wäscher*

(3) relocate a boundary without changing the number of formatives, as in the *-ness* example above.

Further examples of formative spawning

- * These are often more or less ephemeral innovations (esp. in child language):
 - (1) *formation* -> *four* + *mation*, licensing *twomation*
 - (2) *irrigate* -> *ear* + *igate*, licensing *nosigate*
 - (3) *ace* 'do very well at a task' -> *A* + *-ce*, licensing *beece* 'do pretty well ...'
- * More consequential cases of formative spawning can come from productive series of blends:
 - (a)thon* < *marathon* -> *telethon*, *swimathon*, etc.
 - (a/o)holic* < *alcoholic* -> *workaholic*, *chocoholic*, etc.

Further examples of affix amalgamation

- * Ger. *-ig* + *-heit* > *-igkeit* based on cases where an underived adj. and a more or less synonymous formation in *-ig* existed side-by-side, e.g. *Müdigkeit* 'tiredness' orig. derived from **müdig*, but reanalysed as derived directly from the more common *müde*, licensing formations like *Gefühllosigkeit* < *gefühllos* (**gefühllosig*)

Opaque amalgamations

- * The original structure of suffixes like *-igkeit* and *-erei* is still transparent, and the parts still function separately in many instances.
- * Further fusion has occurred (to opacity) in:
 - Ger. *-chen* < *-ch-* (< Gmc. *-k-*) + *-īn*; *-lein* < *-(i)l* + *-īn*
 - Gmc. superl. *-est* < compar. *-er-* (< Pmc. **-ōz-/iz-*) + **-to-*
 - Eng. *-most* (*foremost*, *utmost*, etc.) < *-m-* + *-est* (followed by folk-etymological association with the unrelated superlative adj. *most*)

Further examples of boundary relocation

- * Common Gmc. *-ling* <- suffixation of *-ing* ('one belonging to') to stems ending in *-l* (often representing dim. suff. **-ilo-*): Eng. *darling*, *sapling*; Ger. *Lehrling*; etc.
- * Ger. *-ner* and *-ler* <- suffixation of *-er* to stems ending in *-n* or *-l*, licensing *Rentner*, *Sportler*, *Wissenschaftler*, etc.

Shifts across word boundaries

- * Eng. *an apron* < *a napron*; similarly in *adder*, *augur*, *aught/ought* 'zero'; reverse development in *nickname* < *eke-name*; *newt* < *ewt*; *nonce* < *once*.
- * *riding* ('political district') from OE **priding* based on resegmentation of *North/South priding*
- * A more complex case: colloquial Eng. *a whole nother* < *another*

A, B, C, and D-reanalysis

- ✱ From the perspective of the relationship between a covert reanalysis and the overt analogical innovations that it licenses, we can use Paul's proportional-equation formula to draw a four-way distinction among types of reanalysis:

A : B :: C : D

e.g. bull (A) : bulls (B) :: ox (C) : oxen (D).

Reanalysis of each of these terms opens a different door to overt morphological innovations.

A : B :: C : D

* where:

A form is the input to an existing morphological operation,

B is the corresponding output

C is a potential – but initially not actual – input to the same operation that relates A to B.

D is the original (pre-innovation) form that corresponds functionally to C in the same way as B to A. In other words, it is the form that would be replaced by an analogical innovation if the formal A:B operation were to be extended to apply to C.

D- reanalysis

- * Eng. *stretch–**straight*** > *stretch–**stretched***
- * What role does D-reanalysis play in this analogical development?
- * Further examples:
Eng. *work–wrought* > *work–worked*
melt–molten > *melt–melted*
brother–brethren > *brother–brothers*
Ger. *gedeihen–gediegen* > *gedeihen–gediehen*
- * (Cf. Kuryłowicz's 4th Law of Analogy.)

- * D-reanalysis clears the way for an analogical extension by reanalyzing (revaluating) the existing forms that originally **block** that extension.

C-reanalysis

- * = reanalysis of a form to which a morphological operation initially cannot apply, as one to which the operation can (or even should) apply.
- * Most examples in Germanic languages involve **backformation**:
- * *beans* : *bean* :: *pease* : ???

B-reanalysis

- * = reanalysis (resegmentation) of B, specifically: reanalysis of the formal relationship between the input (A) and the corresponding output (B) of a morphological operation.
- * The examples of **resegmentation** above are all B-reanalysis.

A-reanalysis

- * = reanalysis of the criteria that define the set of **inputs** to a morphological operation
- * (see the examples of **revaluation** above)

Part II:
Some broader
questions about
reanalysis and its role in
morphological change.

The role of ambiguity, 1

Surface ambiguity is widely regarded as a prerequisite for reanalysis:

A form or construction is associated with one structure and meaning/function in speakers' minds.

It must also be amenable to association with a different structure or meaning/function in order for hearers/learners to reanalyze it.

The role of ambiguity, 2

The ambiguities that license morphological reanalysis are often a result of other recent changes, which are usually not morphologically motivated, e.g. sound change, as in our initial *bētahūs* example.

This may shed light on why a particular morphological change happens when it does.

It has led some linguists (e.g. Wurzel) to propose that morphological change is always a reaction to changes with other motivations.

The role of ambiguity, 3

Changes that give rise to new ambiguity often merely make a reanalysis possible or more likely than before

– but in some cases they make reanalysis more or less inevitable – when crucial evidence for the old analysis is no longer present in the utterances that speakers are producing.

Example: Merger of *s* and *ʒ* in ModG makes it impossible to tell that (case ending) *-es* and (pron.) *es* (< MHG *-as/ë̄s*, not *-aʒ/ë̄ʒ*) are – in a number of constructions – genitive rather than accusative, leading to reanalysis of these constructions.

How crucial...

...is acquisition/transmission of language to new learners to reanalysis – and thus to grammatical change in general?

19th c. Neogrammarians, 20th c. generativists, and many other linguists have seen transmission to new learners as the primary locus of grammatical change: Grammars change mainly because learners analyze the utterances they hear differently from the speakers who produced those utterances.

Alternative views...

...downplay the importance for language change of transmission to new learners – and in some versions the importance of reanalysis itself.

They instead emphasize the effects of use and repetition on the mental representation of linguistic forms and patterns (e.g. Haspelmath 1998; Bybee 2006).

Some related questions

Is grammatical change largely unintentional/unwitting/inadvertent?

Many linguists argue or assume that innovators are generally not aware that they are innovating, either when they reanalyze the forms and patterns that they encounter, or when they apply their new analyses to produce novel forms.

An alternative view:

- ✱ Speakers' expressiveness and creativity is an important driving force in grammatical change. Much (overt) innovation is conscious and deliberate. It is not a "symptom" of covert reanalysis but may instead precede any reanalysis, with the real change in mental grammars coming as hearers (gradually) stop regarding the new forms as deviations, or learners (abruptly) fail to recognize them as such.

Morphologization...

✱ ... is the type of reanalysis that gives birth to new morphology:

(1) Morphologization from syntax is widely discussed in the **grammaticalization** literature:
e.g. ON def. art.: *úlfr* + *inn* > *úlfrinn* 'the wolf'
ON mediopassive: *kalla* 'to call' – *kallask* 'be named' < *kalla* + *sik* (refl. pron.)

(2) Morphologization from phonology occurs when an alternation that originally resulted from conditioned sound change is reanalyzed as an index of a morphosyntactic distinction.

Related to morphologization from syntax:

- * Reanalysis of the head of a set of compounds as a derivational suffix:

Ger. *-heit*/Eng. *-hood*/Du. *-heid* < Gmc. **haiduz* 'status'

Ger. *-schaf(t)*/Eng. *-ship*/Du. *-schap* < Gmc. **skapoz/-iz*

Ger. *-tum*/Eng. & Du. *-dom* < Gmc. **dōmoz* 'situation'

Ger. *-lich*/Eng. *-ly*/Du. *-lijk* < Gmc. **līka-* 'body'

Ger. *-sam*/Eng. *-some*/Du. *-zaam* < Gmc. **sama* 'same'

(along with still transparent cases like *-ful/-voll/-vol*)

- * How can you tell whether you're dealing with a derivational suffix or a set of compounds with the same head?

Examples of morphologization from phonology, 1

- * **Ablaut** in IE (esp. in Gmc. strong verbs):
sing–sang–sung; drive–drove–driven, etc.
Also in derivation: *brechen–Bruch; treiben–Trieb*; etc.
- * **Umlaut** noun plurals:
Ger.: *Gast–Gäste; Maus–Mäuse*; etc.
Eng.: *tooth–teeth; man–men*; etc.
- * **Umlaut** in denominal/deadjectival verbs:
Ger.: *Kuss–küssen; stark–stärken*; etc.
Eng.: *blood–bleed; full–fill*; etc.
- * **Umlaut** and **e~i/ie** in 2/3 pres. indic. of Ger. strong verbs:
geben–gibst; lesen–liest; schlagen–schlägt; etc.

Examples of morphologization from phonology, 2

- * Verner's Law in Gmc. strong verbs (orig. affected dozens of verbs):
e.g. OHG *ziohan–zōh–zugum-gizogan* 'pull';
rīsan–reis–rirum–giriran 'fall'
- * Vowel-length in ModE irregular weak verbs:
feed–fed; meet–met; creep–crept; hide–hid, etc.
and in deadjectival nouns:
wide–width; deep–depth; etc.
- * ModE "trisyllabic shortening": *opaque–opacity; serene–serenity;*
south–southern
- * Voicing in stem-final Eng. fricatives:
knife–knives; leaf–leaves; house (/s/) (n.) – house (/z/) (v.), etc.

Examples of morphologization from phonology, 3

Noun plurals and "Einsilberdehnung" in Central Bavarian:

sg	pl	gloss
Schiif	Schiff	'ship(s)'
Fleeg	Flegg	'spot(s)'
Briaɪf	Briaff	'letter(s)'
Riis	Riss	'rip(s)'
Fiisch	Fissch	'fish' (sg/pl)
Fuaɪs	Fiass	'foot/feet'
Soog	Segg	'sack(s)'

Morphologization vs. lexicalization

- * Some of these alternations might be better regarded as lexical idiosyncrasies rather than markers of morphological distinctions.
- * The case for analyzing a change as true morphologization is arguably strongest where:
 - (1) the association with one particular morphological distinction is clear (unlike, e.g. VL in OHG, OE, etc.)
 - (2) the alternation is morphologically productive:
Ger. umlaut plurals: MHG *vrosch–vrosche* > MSG
Frosch–Frösche; *boum–boume* > *Baum–Bäume*

Verner's Law pattern in Gmc. strong verbs

OHG <i>rīsan</i> 'fall'	
Inf.	<i>rīsan</i>
3 sg. pres. indic.	<i>rīsit</i>
1/3 sg. pret. indic.	<i>reis</i>
2 sg. pret. indic.	<i>riri</i>
1/3 pl. pret. indic.	<i>rirum</i>
1/3 sg. pret. subj.	<i>riri</i>
pret. partic.	<i>giriran</i>

Realignment of alternations upon morphologization (?), 1

OHG ziohan 'pull'	OHG	ModG
Inf.	ziohan	ziehen
3 sg. pres. indic.	ziuhit	zieht
1/3 sg. pret. indic.	zōh	zog
2 sg. pret. indic.	zugī	zogst
1/3 pl. pret. indic.	zugum	zogen
1/3 sg. pret. subj.	zugī	zöge
pret. partic.	gizogan	gezogen

Realignment of alternations upon morphologization (?), 2

'foot'	OE	late OE/ME
sg. nom/acc	fōt	fōt
gen	fōtes	fōtes
dat	fēt	fōte
pl nom/acc	fēt	fēt
gen	fōta	fēt(e)
dat	fōtum	fēt(e)

Realignment of alternations upon morphologization (?), 3

strength'	OHG	MHG
sg. nom/acc	kraft	kraft
gen	krefti	krefte, kraft
dat	krefti	krefte, kraft
pl nom/acc	krefti	krefte
gen	kreft(i)o	krefte
dat	kreftim	kreften

Exaptation: Recycling morphological "junk"

- ✱ Like morphologization, exaptation is a type of repurposing of formal distinctions that lose their original motivation, but in this case both the original and the new functions are morphological.

the and *that* in ModE

- * Two surviving sg. forms from the OE demonstrative paradigm:
that < OE *þæt*, neut. nom./acc.
the < non-neuter (+reduced/uninflected) forms
- * Expectation: One of these forms should have been lost upon loss of grammatical gender in Eng. (or realignment to natural gender?)
- * Instead the two forms are repurposed to mark an entirely different distinction: (distal) demonstrative vs. definite article

Interaction of sound change and exaptation?

- * There are a number of cases in Gmc. where the progressive loss of word-final unstressed segments has obscured the original function of a suffix but opened the door to a new function.
- * Derivational suffixes that once occurred throughout a paradigm may survive in some forms but not others, depending on whether they were originally followed by (enough) inflectional segments.

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