

# INTD0112 Introduction to Linguistics

Lecture #18  
April 24<sup>th</sup>, 2007

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## Announcements

- As I mentioned in the e-mail on Friday, there is only one homework left after the current one. Each of the last two is worth 75 points, though. So, take them seriously.
- Turning in homework assignments late.
- If you need to talk about your paper, please feel free to come to my office hours, or schedule an appointment.

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## So, do you speak English?

- Yes!
- And so did Shakespeare:  
*A man may fish with the worm that hath eat of a king, and eat of the fish that hath fed of that worm.*
- Translation?  
Not really!

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## So, do you speak English?

- Yes! And so did Chaucer:  
*Whan that Aprille with his shoures soote  
The droght of March hath perced to the roote.*
- Translation?
- Hmmm ... yes, please!  
When April with its sweet showers  
The drought of March has pierced to the root.

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## So, do you speak English?

- Yes! And so did the guy who wrote *Beowulf*:  
*Wolde guman findan þone þe him on sweofote sare geteode.*
- Translation?  
What language was that again?
- That was English, but an "Old" version of it, and the translation runs as follows:  
*He wanted to find the man who harmed him while he slept.*
- Well, at least there was a "him" in that Old English.

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## Languages change over time

- So, you get the point: Languages do change over time.
- There are two main questions with regard to language change:  
*First, how does a language change?*  
*Second, why does a language change?*
- It is probably more reasonable to answer the "how" question before we attempt to answer the "why". That's what we do today.

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## Language = Lexicon + Grammar

- Remember that a language has two components: a *lexicon* (simply a list of words) and a *grammar* (a system that manipulates the lexicon in several ways).
- The grammar of a language includes rules that affect pronunciation (phonology), word formation (morphology), sentence structure (syntax), and meaning (semantics).
- If so, then language change is expected to occur in all these areas, which is indeed the case. Let's see how.

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## Lexical change

- The lexicon of a language undergoes change in either one of two ways: "word gain" or "word loss".

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## Word gain

- New words are always added to the lexicon of every language, almost on a daily basis. We have already seen in our discussion of word-formation that there are systematic word-formation processes that create new words and add them to the dictionary of every language:  
*derivation, word coinage, conversion, clipping, blending, acronyms, borrowing and loan translations, compounding, back-formation, and eponyms.*

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## Word loss

- So, Shakespeare used *beseem* (= to be suitable), *wot* (= to know), *fain* (= gladly).
- And technology might drive some words out of use, e.g., *buckboard*, *buggy*, *dogcart*, *hansom*, etc.

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## Two bits?



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## Iceboxes?



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## Word loss

- Euphemisms can also eventually lead to loss of words:  
*lavatory, bathroom, restroom, lady's room/men's room, etc.*
- Hugh Rawson's *Dictionary of euphemisms and other doubletalk* includes:  
act of God *for* disaster  
administrative assistant *for* secretary  
associate *for* co-worker of lower rank

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## Semantic change

- Language change may also take the form of changing the meanings of actually existing words. There are three such cases: *broadening, narrowing, and semantic shift.*

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## Semantic broadening

- The Middle English *dogge* meant a specific breed of dog, but then it was broadened to refer to every member of the canine family.
- Same thing with "holiday" and "quarantine".

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## Semantic narrowing

- In 17<sup>th</sup> century English, "meat" meant "food". Not any more.
- "Hound" meant dog. More specific now.

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## Semantic shift

- "Knight" used to mean "youth", then shifted to mean "mounted man-at-arms".
- "Lewd" meant "ignorant".
- "Silly" meant "happy", and "nice" meant "ignorant".

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## Morphological change

- But languages also change morphologically over time. And morphological rules may be lost, added, or changed.

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## Loss of morphology

- Latin had case markings on nouns. Romance languages do not have any of these.
- Here's how the word for "wolf" inflected in Latin:

|       |              |
|-------|--------------|
| lupus | (nominative) |
| lupī  | (genitive)   |
| lupō  | (dative)     |
| lupum | (accusative) |
| lupe  | (vocative)   |
| lupō  | (ablative)   |

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## Loss of morphology: OE

- Old English actually did have case markings, as in the following example for the word meaning "stone" in OE:

| Case       | OE sing. | OE pl. |
|------------|----------|--------|
| Nominative | stān     | stānas |
| Genitive   | stānes   | stāna  |
| Dative     | stāne    | stānum |
| Accusative | stān     | stānas |

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## Loss of morphology: OE

- Of all cases, only genitive case remains.
- The loss of the case system was compensated by the use of prepositions, particularly "to" for the dative, and "of" for the genitive. It also led to restrictions on word order, as we'll discuss later.

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## Loss of a derivational morpheme

- A derivational rule may be lost with or without remnants. If there are many remnants, we say that the rule has become unproductive. This is what happened to the suffix *-t*, which was once used to derive nouns from verbs in English:

*draw* → *draft*  
*drive* → *drift*  
*shove* → *shift*

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## Loss of a derivational morpheme

- Old English had a suffix *-u* to make nouns from adjectives:

*menig* "many" → *menigu* "multitude"  
*eald* "old" → *aeldu* "old age"

- This was completely lost; there are no remnant words.

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## Adding rules: Borrowing of derivational affixes

- Latin *-bilis* was borrowed into English via French words (e.g., *change* → *changeable*). But it was afterwards applied also to native words, such as *wash* → *washable*.

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## Grammaticalization

- Grammaticalization is a process whereby a lexical item acquires a grammatical function in the language.
- English *-ly* developed from the word *lic* meaning "body", which then changed its meaning to "having the characteristics of."

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## Grammaticalization

- The possessive morpheme *bita:ʃ* in Egyptian Arabic is a metathesized form from the verb *tabaʃ* (=follow), a case of grammaticalization:

*?il-kitaab bita:ʃ Ahmad*  
*the-book Poss Ahmad*  
*"Ahmad's book"*

- Similarly, the negation suffix *-ʃ* is a grammaticalized form of the word *?jay?* (=thing):

*?ana ma-?arit-ʃ ?il-kitaab*  
*I Neg-read-Neg the-book*  
*"I didn't read the book."*

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## Grammaticalization

- Another example concerns the emergence of the inflectional suffix *-(r)ekin* 'with' in Basque which developed from the noun *kide* 'company':
  - gure kide-a-n*  
 our company-det-locative  
 "in our company"
  - gure kidean* → *gurekin* (= "with us")

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## Grammaticalization

- Basque also shows another case of grammaticalization where verbal inflections have arisen from free-standing pronouns:

|             |               |                           |
|-------------|---------------|---------------------------|
| <i>joan</i> | 'to go'       |                           |
| <i>noa</i>  | 'I go'        | (cf. <i>ni</i> 'I')       |
| <i>hoa</i>  | 'you go'      | (cf. <i>hi</i> 'you')     |
| <i>doa</i>  | 'he goes'     | (no pronoun)              |
| <i>goaz</i> | 'we go'       | (cf. <i>gu</i> 'we')      |
| <i>zoaz</i> | 'you-plur go' | (cf. <i>zu</i> 'you-pl.') |
| <i>doaz</i> | 'they go'     | (no pronoun)              |

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## New affixes from compounding

- A common source for new affixes lies in compounding. A N+N compound with a certain N in a certain position may become the model for a new suffixation rule due to the fact that the second N is reanalyzed as a suffix. A new affix may thus arise from compounding, as illustrated by the case of Dutch *boer*:

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## New affixes from compounding

- In Dutch the free form *boer* means "farmer". We find this form as the second part of many complex words where it merely means "supplier/seller of":

|                    |                              |
|--------------------|------------------------------|
| <i>groenteboer</i> | "one who sells vegetables"   |
| <i>visboer</i>     | "one who sells fish"         |
| <i>kolenboer</i>   | "one who sells coals"        |
| <i>patatboer</i>   | "one who sells French fries" |

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## New affixes from "false" analysis

- New affixes may also arise from a *false* analysis of words that have a morphological structure. The process is also called *folk etymology*.

*alcoholic* leads to *workaholic*,  
*chocaholic*, *shopaholic*

*hamburger* leads to *cheeseburger*,  
*fishburger*, *chickenburger*

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## New affixes out of "nowhere"

- In some cases, there's no morphological structure at all, or at least not one that falls within the realm of English morphology:  
*watergate* leads to *Irangate*, *contragate*

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## Extending affixes to new categories

- Sometimes, morphological change takes place when an affix is used with categories that it normally does not apply to, thereby deriving new words:
  - able* in *objectionable*
  - ese* in *motherese* and *journalese*
- This is an example of change of "input" to the morphological rule.

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## Extending affixes to new categories

- Morphological rules can also change with respect to their output. An example concerns the diminutive suffix in Afrikaans, a language that stems from Dutch.
- Dutch has a diminutive suffix that can be added to nouns, attributing the meaning 'little':  
huis "house" → huisje "little house"
- An extension of the input requirement occurred already in Dutch when it became possible to add the suffix to adjectives (making nouns):  
groen "green" → groentje "greenhorn" or "a specific green candy"

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## Extending affixes to new categories

- As it turns out, in Afrikaans, the diminutive suffix can be added to nouns, adjectives and verbs without changing the lexical class of these words.
- This is a change in output. The rule that used to produce only nouns (from nouns and then also from adjectives) in Dutch, produces nouns from nouns, verbs from verbs, and adjectives from adjectives in Afrikaans.

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## Syntactic change: word order

- Word order in a language could change over time. For example, Old English (OE) had more variable word order than Modern English (ModE) does.
- So, we do find SVO order in simple transitive clauses:  
Hē geseah þone mann  
He saw the man

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## Syntactic change: word order

- When the clause began with an element such as *þa* (=“then”), the verb would follow that element, therefore preceding the subject:

*þa sende sē cyning þone disc*  
then sent the king the dish  
“Then the king sent the dish.”

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## Syntactic change: word order

- When the object was a pronoun, the order in OE was typically SOV:

*Hēo hine lærde*  
She him saved  
“She saved him.”

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## Syntactic change: word order

- The same SOV word order also prevailed in embedded clauses, even when the object was not a pronoun:

*þa hē þone cyning sōhte, hē bēotode*  
when he the king visited, he boasted  
“When he visited the king, he boasted.”

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## Syntactic change: word order

- As we noted earlier, case markings were lost during the Middle English (MidE) period, and, as you should expect, SVO order became the unmarked word order in the language. The following table shows the change in word order that took place around 1300 and 1400:

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## Syntactic change: word order

| <i>Year</i> | <i>1000</i> | <i>1200</i> | <i>1300</i> | <i>1400</i> | <i>1500</i> |
|-------------|-------------|-------------|-------------|-------------|-------------|
| OV %        | 53          | 53          | 40          | 14          | 2           |
| VO %        | 47          | 47          | 60          | 86          | 98          |

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## Syntactic change: word order

- Modern Arabic dialects are SVO for the most part, even though Classical Arabic was VSO for the most part.
- And while more word orders were possible in Classical Arabic because of the presence of case morphology, many of these orders are not possible in Modern Arabic dialects due to the loss of the case-marking system.

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## Syntactic change: negation

- Negation in OE was done by placing the negation marker *ne* before a verbal element:  
þæt he na siþþan geboren ne wurde  
that he never after born not would-be  
"that he should never be born after that"
- Notice word order and the use of double negatives.

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## Syntactic change: negation

- Proto-Indo-European is believed to have had a negation marker *ne*.
- In old Latin, a new form arose from combining *ne* with the word for "one" (*ūnum*). This led to the form *non*.
- Hence, Old French ended up with both *non* and *ne*.

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## Syntactic change: negation

- Both forms developed a division of labor, where *ne* became the used form when the negation word is placed before verbs, and *non* for other cases of negation:  
Il ne dorme pas  
he not sleeps (not)  
Vous venez ou non?  
you come or not
- Interestingly, many French speakers today are dropping the *ne*:  
J'ai pas dit ça  
I've not said this

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## Double comparatives and superlatives

- Examples:  
*more gladder, more lower, moost royallest, moost shamefullest*
- These were all ok in Middle English. Not any more.

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## Genitives

|                           |        |
|---------------------------|--------|
| The Wife's Tale of Bath   | (MidE) |
| The Wife of Bath's Tale   | (ModE) |
| The man's hat from Boston | (MidE) |
| The man from Boston's hat | (ModE) |

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## Phonological change

- Perhaps the most noticeable change in the grammar of a language happens in pronunciation.
- Even though change can affect all areas of phonology (e.g., tone, stress, and syllable structure), we will focus here primarily on change involving individual sounds as they occur in sequence. We call this *sequential change*.

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## Assimilation in place or manner

- Assimilation takes place when a sound changes to become similar to a neighboring sound:

Old Spanish [sem̄da] → Modern Spanish [senda] "path"  
 Early Latin [inpossibilis] → Late Latin [impossibilis]  
 Early OE [stefn] → Later OE [stemn] "stem"  
 Latin [octo] (c = k) → Italian [otto] "eight"

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## Assimilation: Affrication

- Affrication is a form of assimilation in which palatalized stops become affricates, either [ts] or [tʃ] if the original stop was voiceless, or [dz] or [dʒ] if the original stop was voiced, e.g.,

Latin *centum* [k] → Old French *cent* [ts] "one hundred"  
 Latin *medius* [d] → Italian *mezzo* [dz] "half"

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## Assimilation: Nasalization

- Vowels may get nasalized before nasal consonants, followed by deletion of that nasal consonant (typically when it is final). This is how nasal vowels were created in French and Portuguese, e.g.,

|       |            |          |        |
|-------|------------|----------|--------|
| Latin | Portuguese | French   |        |
| bon-  | bom [bõ]   | bon [bõ] | "good" |

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## Assimilation: Umlaut

- Umlaut is the effect of a vowel or sometimes a glide in one syllable on the vowel of another syllable, usually a preceding one, e.g.,

|          |          |          |       |         |
|----------|----------|----------|-------|---------|
| Pre-OE 1 | Pre-OE 2 | Early OE | ModE  |         |
| [gõs]    | [gõs]    | [gõs]    | [gus] | "goose" |
| [gõsi]   | [gõsi]   | [gøsi]   | [gis] | "goose" |

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## Dissimilation

- Dissimilation is the process whereby one sound is made less like a neighboring sound:

Late Latin [amna] → Spanish [alma] "soul"  
 Latin [arbor] → Spanish [arbol] "tree"  
 Italian [albero]  
 (but cf. French *arbre*).

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## Epenthesis

- Epenthesis is the insertion of a vowel or a consonant:

Earlier OE [ganra] → Late OE [gandra] "gander"  
 Latin [schola] → Spanish [escuela] "school"

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## Metathesis

- Metathesis involves a change in the positioning of two sounds:  
 Earlier OE *waps* → Late OE *wasp* "wasp"  
 Earlier OE *þridða* → Late OE *þirðda* "third"
- Also at a distance:  
 Latin *mīraculum* → Spanish *milagro*

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## Vowel deletion

- A vowel may be deleted from a word, resulting in *apocope* (if the vowel is final) or *syncope* (if the vowel is medial):
- Apocope:  
 Latin [ōrmāre] → French [orner] "decorate"
- Syncope:  
 Latin [pérdere] → French [perdre] "lose"

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## Vowel reduction

- Vowel deletion is frequently preceded by vowel reduction, where a vowel is reduced to schwa, followed by syncope or apocope, e.g.,

| OE                  | MidE                 | Early ModE       |
|---------------------|----------------------|------------------|
| stan <u>a</u> s [a] | stone <u>ə</u> s [ə] | stone <u>ə</u> ø |
| nam <u>a</u> [a]    | name <u>ə</u> [ə]    | name <u>ə</u> ø  |

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## Consonant deletion

- Consonants may also delete from a word giving rise to another instance of pronunciation change, e.g., Old and Middle English had [kn] and [gn], but the initial consonant underwent deletion.
- And of course French provides a great example of loss of word-final consonant deletion:  
 gros [gro] "large"  
 chaud [ʃo] "warm"

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## Consonant weakening

- Like vowels, consonants may also get weakened. The scale consonant strength is as follows:

|          |   |                                    |
|----------|---|------------------------------------|
| stronger | ↑ | voiceless stops                    |
|          |   | voiceless fricatives, voiced stops |
|          |   | voiced fricatives                  |
|          |   | nasals                             |
|          |   | liquids                            |
| weaker   | ↓ | glides                             |

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## Cases of consonant weakening

- Degemination: Geminates weaken to nongeminates.
- Frication: Stops weaken to fricatives.
- Voicing: Voiceless stops and voiceless fricatives weaken to voiced stops and voiced fricatives.  
 tt → t → θ or d → ð → ø

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## Cases of consonant weakening

- Degemination:  
Latin *mittere* → Spanish *meter* "put"
- Voicing  
Latin *matūrus* → Old Spanish *maduro* "ripe"
- Frication:  
Old Spanish *maduro* → Spanish *maduro* [ð] "ripe"
- Deletion:  
Old French [maðʏr] → French *mûr* "ripe"

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## Consonant weakening: Rhotacism

- Rhotacism involves the change of [z] to [r]. Compare Gothic with other Germanic languages, for example:

| Gothic | English | German | Swedish |
|--------|---------|--------|---------|
| maiza  | more    | mehr   | mera    |
| diuzam | deer    | Tier   | djur    |

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## Substitution

- Substitution involves the replacement of one segment with another similar-sounding segment:  
MidE [x] → ModE [f] in "laugh"  
Standard English [θ] → Cockney [f] in "thin"

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## Phonological split

- A phonological split happens when two allophones of the same phoneme become contrastive due to the loss of the conditioning environment.
- This is how [n] and [ɲ] came to be phonemes in English: [ɲ] was an allophone of /n/ before velar consonants, but when consonant deletion in MidE took place, it resulted in minimal pairs such as sin [sɪn] and sing [sɪɲ], making the difference phonemic.

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## Phonological merge

- Phonological merge happens when two phonemes collapse into one, e.g., the case of Cockney English /f/ and /θ/:  
*fin* [fɪn] and *thin* [fɪn]

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## Phonological Shift

- A phonological shift is a change in which a series of sounds is systematically modified so that their organization with respect to each other is altered.
- A well known example of this phonological change is the so-called *Great Vowel Shift* (GVS) in the history of English, where the seven long vowels underwent the series of modifications between 1400-1600, as shown in the following table:

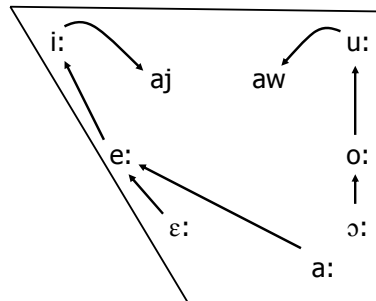
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## The Great Vowel Shift

| Shift |        | Example |           |         |
|-------|--------|---------|-----------|---------|
| MidE  | ModE   | MidE    | ModE      |         |
| [i:]  | → [aj] | [mi:s]  | → [majs]  | "mice"  |
| [u:]  | → [aw] | [mu:s]  | → [maws]  | "mouse" |
| [e:]  | → [i:] | [ge:s]  | → [gi:s]  | "geese" |
| [o:]  | → [u:] | [go:s]  | → [gu:s]  | "goose" |
| [ɛ:]  | → [e:] | [brɛ:k] | → [bre:k] | "break" |
| [ɔ:]  | → [o:] | [brɔ:k] | → [bro:k] | "broke" |
| [a:]  | → [e:] | [na:mə] | → [ne:m]  | "name"  |

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## The Great Vowel Shift



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## The Great Vowel Shift

- We can see effects of the GVS in the alternation between long and short vowels in word pairs like those below:

*please-pleasant*  
*serene-serenity*  
*sane-sanity*  
*crime-criminal*

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## The Great Vowel Shift

- The alternation is the result of the GVS taking place after the Early Middle English Vowel Shortening rule affected the second word in each pair. When the GVS occurred, it affected only the first word of each pair since it was the one that had the long vowel by then.

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## Summary of language change and transition to "reconstruction"

- To sum up, a language undergoes change in its lexicon as well as all components of grammar (morphology, syntax, phonology, and semantics).
- Over time, these changes might become considerable enough to the point where we become unable to tell if two historical varieties of the same language are actually related. Luckily, though, historical linguists developed ways to establish historical relations among languages. We discuss this on Thursday.

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## Next class agenda

- Reconstruction of "dead" languages. The comparative method. Cognates.
- Why do languages change?

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## Acknowledgement

- Much of the content on morphological change for this lecture is based on materials and data from Harry van der Hulst's online notes on language change at the University of Connecticut.

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