

Ling 110 Final Review

- Final: Tuesday April 18, 8:30- 11:30
- C 9001
- Extra Office Hours: Tuesday April 11 from 12-2:00 & on Thursday April 13 from 10:30 to 11:30.
- If you wish to see your final exam: You can come by the Linguistics Department Office the first or second week of the Summer 2006 term. I will not be around during the Summer term.

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- For the Final:
 1. The exam will be written to take approximately two hours long, but you will have the full 3 hours to write it.
 2. Please remember to bring photo ID with you.
 3. Please do not bring food into the exam room with you. It's distracting to other students. Drinks are OK.
 4. All hats must be taken off during the exam.
 5. No electronic devices will be allowed on your desk top.
 6. No pencil cases will be allowed on your desk top.
 7. There will be NO bathroom breaks except by prior arrangement or in the case of dire emergency.

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8. When you come into the exam room, please space yourselves so that there is at least one seat between you and the next person.
9. The questions on the exam will be much the same as on the Assignments and the Midterm.
10. Please keep your eyes on your own paper- it is your responsibility to make sure that your answers are covered. I would hate to have to take away your final exam and give you a '0'.
11. All materials must be placed under your seat before beginning the exam.
12. You may write in pencil.

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- Chapter I: Introduction (not a lot of information here)
- Chapter II:
 1. Vowels
 2. IPA
 3. Vocabulary: The composition of language etc.
- Chapter III:
 1. Vocabulary
 2. Dictionary entries (will be provided)
 3. PIE
 4. Germanic Consonant Shift

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- Chapter IV: Writing Systems
 1. Definitions of different types of Writing systems
 2. The Rebus principle
 3. What went into the making of our modern alphabet
 4. The history of the alphabet, and its letters
- Chapter V: The structure of Words
 1. What is a word?
 2. Inflectional vs. Derivational
 3. Read Lexeme and Interpret Rules
 4. The Structural Taxonomy of Morphemes/Affixes
 5. Vocabulary

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- Chapter VI: Integration
 1. Structure
 2. Borrowing
 3. Change
 4. Hybrids
- Chapter VII: Identifying Morphemes
 1. Homonyms
 2. Synonyms

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- Chapter VIII: The Latin Verb
 1. The structure of the verb
 2. Derivations of the Latin verb
 3. Past Participle
 4. Present Participle
- Chapter IX: Latin Prefixes
 1. Identification
 2. Rules
 3. Processes
- Chapter X: Other operations in Latin
 1. The Nasal Increment & the 's' Increment
 2. Medial Vowel Weakening
 3. Other Alternations: Epenthesis, Reduplication

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- Chapter XI: Latin Suffixes
 1. Identification
 2. Rules
 3. Processes
 4. Extensions
- Chapter XII: Greek Borrowings
 1. Prefixes (identify, rules, processes)
 2. Suffixes (identify, rules, processes)
 3. Ablaut
 4. Compounding

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- Chapter XIII: The French Partition
 1. History
 2. Lenition
 3. Vocalization
 4. Clusters of Rules
 5. Syncope
 6. Epenthesis
 7. Cluster Simplification
 8. Prothesis
 9. Assibilation
 10. Contraction

Chapter IV: Types of Writing Systems

Rebus:

- One way to work around the representation of an abstract concept.
- Borrow the symbol for a concrete object whose name is a homophone for that of the abstract concept.

For example: son = sun

- We do this often with letters and numbers:
b4 = before k9 = canine
- This begins the process of associating symbols with sounds in the language instead of pictures or concepts.

Different Types of Writing Systems

Different Writing Systems

- We can distinguish among a number of different writing systems based on what the symbols represent.
 1. Pictographic
 - The symbols are actual pictures of the objects that they represent.
 - Disadvantages to a purely pictographic system.
 - 1. Not everyone is an adequate artist.
 - 2. Some concepts are not easily/obviously pictured.

Different Types of Systems con't

2. Ideographic

- A symbol represents a concept, abstract or concrete.
- Advantages:
 - 1. Greater expressiveness.
 - 2. Understandable by speakers of different languages.
 - 3. It is possible to read literature in an Ideographic system.

Different Types of Systems con't

3. Symbols Representing Sounds
 - Significantly reduces the number of symbols required (the number of sounds in a system is vastly less than the number of concepts that a language must potentially represent).

Different Types of Systems con't

3. Symbols Representing Sounds con't

I. Syllabary

A writing system in which symbols represent syllables.

Ex. Japanese

II. An Alphabet

Each symbol ideally represents a single sound.

Note: Need to qualify this definition.

1. Relationship over time becomes distorted. Ex. English

Different Types of Systems con't

II. Alphabet con't

2. We usually don't want to represent every possible sound in a language, we only want to represent those that are distinctive.

3. Sometimes we don't want the orthographic system to accurately represent the sounds at all.

In order to develop a syllabary or alphabet, it is necessary to do a deeper analysis of the sounds and words of language that is required for a simple pictographic system.

It is necessary to understand what the distinctive sounds of the language are.

Different Types of Systems con't

Also:

- Vocabulary: Including the different types of writing systems and how they are defined.
- You won't be responsible for the history or the forms.

Chapter V: Rules

- We have two kinds of rules.
 1. Those which map lexemes onto words we call *inflectional rules*.
 2. Those which create new lexemes we call *derivational rules*.
- This is an important distinction.
- Inflectional rules add information that the grammar of the language requires, such as marks for subject/verb agreement or the number of a noun.
 - These rules must apply if words are to be used correctly.
- Derivational rules are a mechanism by which the lexicon of a language can be enriched in response to the invention of new artifacts and ideas.

Derivational Rules

- Derivational rules have 2 possible consequences that are different from inflectional rules.
1. A derivational rule might, but not necessarily, create a word with a meaning different from that which the basic form had.
 - This contrasts with inflectional rules which only add grammatical information.
 - Compare: *table* vs. *tables* and *antibacterial* from *bacterial*.
 - The inflectional rule adds information about number to the original word.
 - The derivational rule creates a new lexeme with a very different meaning from the original *bacteria*.

Derivational Rules

2. A derivational rule can change grammatical category.
 - Adjectives like *clear* and *quick* create
 - Adverbs *clearly* and *quickly* by adding *-ly*.
 - Inflectional rules, since they elaborate the paradigm of a lexeme, do not change grammatical category.

In addition to different functions, inflectional and derivational rules have different structural properties as well.

Derivational rules can apply to lexemes that have been created by previous derivational rules.

The same cannot be said of inflectional rules (in English).

Morphological Rules

- This establishes an important principle about morphemes:
A persisting property of a morpheme is its meaning. Each instance of a morpheme will be used with the same meaning.
- If two identical strings have the same meaning, then they are instances of the same morpheme.
- If two identical strings are not used with the same meaning, then they must be instances of different morphemes.
- *un-^l* is added to adjectives to create adjectives the meaning of which is the negation of the original adjective.

Negative: $\text{Lex}_A \Rightarrow un + \text{Lex}_A$

Hybrids

- Derivationally pure: words should be derivationally Latin, Greek or English but not a mixture.
- Note: For most derivational processes this is true.
- However, occasionally hybrids are created.
- A hybrid is a lexeme that contains elements from more than one language.
- If we want to create hybrids we will need to include a mechanism that directs lexemes to other derivational modules.

Negative Prefix

in <u>a</u> ctive	il <u>l</u> egal	ir <u>r</u> eplaceable
in <u>t</u> olerant	il <u>l</u> egible	ir <u>r</u> edeemable
in <u>c</u> apable	il <u>l</u> icit	ir <u>r</u> egular
in <u>f</u> lexible	il <u>l</u> egitimate	ir <u>r</u> elevant

Negative Prefixes con't

- Consequently, this property suggests that when we discover different forms with the same meaning we must consider whether they are synonyms, or different forms of the same morpheme.
- What is important to note in this specific case is that the variants are very similar in form and their differences are completely predictable.
- The *il-* and *ir-* forms are predictable.
- The *in-* form seems to occur in a variety of unpredictable places (before *a, t, c, f, etc.*) that have nothing in common.

Negative Prefixes con't

- What we want to propose is a single morpheme with a single lexeme building rule.
- Since we can not predict where the *in-* variant will occur (widest distribution) we select it as representative of the morpheme.
- We will generate the other forms of the morpheme by using the '→' rules that we have previously suggested are necessary for getting spelling right.
- From now on we will refer to these rules as *phonological rules*. Phonological rules are responsible for adjusting how morphemes are pronounced given the context that morphological rules have created.

Negative Prefixes con't

- The proposed negative prefix rule:

$$\text{Lex}_A \Rightarrow in + \text{Lex}_A$$

In addition, two rules to generate the variants of *in-*:

$$n + l \rightarrow l + l$$

$$n + r \rightarrow r + r$$

- The lexeme building rules apply first.
- After the lexeme (and word) have been built, the phonological rules apply to readjust how components of the morphemes are pronounced given the new context they are found in.

Deriving Negative Adjectives

active	legal	regular	
<i>in</i> + active	<i>in</i> + legal	<i>in</i> + regular	$\text{Lex}_A \Rightarrow \textit{in} + \text{Lex}_A$
“	<i>il</i> + legal	“	$n + l \rightarrow l + l$
“	“	<i>ir</i> + regular	$n + r \rightarrow r + r$
inactive	illegal	irregular	Remove ‘+’

The Prefix *con-*

form	conform	respond	correspond	mission	commission
duct	conduct	relate	correlate	measure	commensurable
test	contest	lateral	collateral	press	compress
genial	congenial	lapse	collapse	pact	compact
strict	constrict	labor	collaborate	patriot	compatriot
sign	consign			passion	compassion
join	conjoin				
figure	configure				
verge	converge				

Chapter VIII: Latin Verbs

- Be able to recognize the structure of the verb
- The past participle and the present participle.
- The phonology of the past participle and the present participle.

Chapter IX & X: Latin Prefixes

- Latin Prefixes:
- Rules transform roots when suffixes are added.
- Latin prefixes add meaning.
- Recognizing prefixes is part of the process of recognizing the root of a word.
- Chapter IX: recognize the prefixes in this chapter and the processes that they trigger.
- Processes:
 1. Assimilation
 2. Assibilation: $t + t \rightarrow s + s$
 3. Cluster Simplification: $[s + s \text{ consonant} \rightarrow + s \text{ consonant}]_{\text{Latin}}$

Extensions

- Latin prefixes are derived from what were once independent prepositions.
- Some prepositions can inflect like adjectives.
- Some Latin prepositions could inflect like adjectives.
- When converted to a prefix these inflections would be retained.
- We will simply consider these to be extensions to the original prefix, indicating a prefix with a slightly different meaning than the original.

Extensions con't

- The prefixes that we are interested in are:
 - *in-* locative
 - *con-* collective
 - *ex-* egressive
 - *sub-* subordinate
- There are 3 extensions that can be added to these, although not all are added to each prefix.
 - *-ter-*; *-tra-* ; *-tro-*
- The comparative of the Latin *in* was *inter*
- From *inter-*, the other possible prefixes *intra-* and *intro-* were created.

The Nasal Increment con't

ex + pos + n + e + nt	pro + pos + n + e + nt	
ex + poz + n + e + nt	pro + poz + n + e + nt	[Voicing Assimilation] _{Latin}
ex + po + n + e + nt	pro + po + n + e + nt	[zC --> C] _{Latin}
exponent	proponent	Remove “+”

Processes

- Processes in Latin:
 1. Metathesis
 - A Metathesis rule is a phonological rule that switches the position of 2 sounds.
 - $[C + n \rightarrow nC]_{\text{Latin}}$
 2. Medial Vowel Weakening
 3. Rhotacization
 4. Vowel Raising
 5. Epenthesis
 6. Reduplication

Medial Vowel Weakening

- One of the dramatic changes that occurs to Latin vowels is a raising (for example, from [a] to [e] to [i]) when they appear in the middle of words.
- When the vowel of the root is *e*, it will raise to *i* if it is in the middle of the words and there is only 1 consonant following.
- The vowel does not raise if:
 - It is the first vowel in the word
 - The last vowel in the word
 - If it is followed by more than 1 consonant

Medial Vowel Weakening

√spec	<i>see</i>	species	inspection	susp <u>i</u> cion
√reg	<i>rule</i>	regal	correction	incorr <u>i</u> gible
√sed	<i>sit</i>	sediment	session	ins <u>i</u> dious

Rhotacising Roots

- Often when [s] appears between vowels it will rhotacise to [r].
- As long as the [s] is followed by a consonant, it appears as such.
- However, whenever it appears between vowels, it transforms to [r].
 - [VsV --> VrV]_{Latin}
 - Note: English has a rule that inserted [t] between [s] and [r].

Vowel Raising

- English has two versions of *l* depending on where in the syllable it is located.
 - When it appears at the beginning of a syllable, it is produced relatively forward in the mouth and is called a “light *l*” (*light*).
 - When it appears at the end of a syllable it is produced farther back and is called a “dark *l*” (*full*).
 - Latin also had these different forms of *l*.
 - When a vowel appeared before a “dark *l*” it assimilated by moving back and high.
 - Thus roots that ended in *l* will often show *u* when the root is followed by a consonant.
 - The rules states that any vowel will change to *u* if followed by *l* and another consonant.
- [VIC --> ulC]_{Latin}

The “s” Increment

- Some verb roots have been augmented with *s*.
- The function of this increment is unknown.
- What effect does it have on the root?
- When the final stop is [k], as in the root *noc*, the resulting sequence is [ks], which is represented by the character *x*.
- When the final stop is a [g], the resulting sequence [gs] converts to [ks].
- When the final consonants are *gh* then:
 - $gh + s \rightarrow g + s$
 - $g + s \rightarrow k + s$

The “s” Increment con’t

- Roots that end in [l], or more properly [ll].
- Although the roots end in a geminate [ll], there is only 1 [l] after the [s] is added.
 - [l + s --> s + s]
- This sort of rule will feed into the rule that we have already proposed that converts [ss] to [s] if preceded by a consonant:
 - [C s s --> C s]_{Latin+}
- Given this set of rules, the sequence of changes would be:
 - ll + s --> lss
 - lss + ls

Epenthesis

- A consonant cluster can be broken up by the insertion of another consonant.
- The common root to which this rule applied is \sqrt{em} .
- The rule applied in the past participle.
- This rule inserted p between the m of the root and the past participle t .
- The rule is:
 - $m + t \rightarrow mpt$

Reduplication

- The repetition of some part or all of a linguistic unit.
- An ancient formation that required the root be reduplicated was preserved in Latin in only a few forms.
- One root $\sqrt{\text{sta}}$ “stand” was borrowed into English in both its reduplicated and unreduplicated forms.
 - Example: *statue* and *resistant*
 - *sta* \Rightarrow *stasta*
 - *stasta* \Rightarrow *stista*
 - A dissimilation rule: the rule will delete a portion of a consonant cluster whenever the cluster is repeated in the lexeme.
 - *stista* \Rightarrow *sista*

Chapter XI-Processes: Latin Suffixes

- The type of affix added to the end is called a *suffix*.
- Latin used both suffixes and prefixes to modify the meaning of the base lexeme.
- Unlike prefixes, Latin suffixes also created forms with grammatical categories different from the original.
- In this chapter- examining some of the more frequently appearing Latinate suffixes.
- Processes not seen with prefixes:
- Dissimilation

Chapter XII: The Greek Prefixes

- Chapter XII gives the Greek Prefixes
- Similar processes as seen with Latin Prefixes.
- Be able to distinguish a Greek Prefix from a Latin Prefix.
- Ablaut

Chapter XIII: After the French Invasion

- History (from course book)
- Borrowed Germanic Words
- Lenition (labial stops, dentals, velars)
- Vocalization
- Intervocalic velars could develop in either of 2 directions.
- In addition to lenition, they could also become more vowel like.
- The rule:
- $V \{k/g\} V \rightarrow VyV$
- Sometimes the *y* appears as *i*.

After the French Invasion con't

- Clusters of Rules
- Often phonological rules are organized into clusters that apply to obscure the morphological structure.
- Sometimes a morphological structure creates the opportunity for a single rule to apply, often a phonological rule will create opportunities for another phonological rule which itself creates opportunities for further rules, and so on.
- It is useful to keep this in mind when trying to find relations among lexemes.

After the French Invasion con't

- Syncope: the loss of an unstressed vowel
- By bringing consonants into contact syncope provides opportunities for other rules to apply:
 1. Epenthesis
 2. Cluster Simplification
- Prothesis: the addition of a vowel to the front of any word that began with [s] followed by a consonant.
- Assibilation (velars, labials, nasals)
- Contraction: The Latin diphthong *au* contracted to *o* in French.