



LIN 001: Introduction to Linguistics (Spring 2024)

Week 7 Discussion - Sections A05 and A06

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Agenda

- 1. Assignment 4 Questions [Part A]**
2. Key Terms and Concepts Not Covered in Assignment 4
3. Office Hours

Materials Needed for Today

- Week 7 Lecture Slides (Language Typology)
- Homework (Assignment 4)

Agenda

1. Assignment 4 Questions [Part A]

- **Language Universals [Q1]**
- Typologies [Q2, Q3, Q4]
- Language Change [Q5]
- Sound Change [Q6]
- Borrowing [Q7]

Language Universals

- 2 types of universals: absolute and implicational
- Absolute Universal: a property of all languages (relatively rare)
 - ex. All languages have vowels and consonants.
- Implicational Universal: “if a language has X, it also has Y” (more common)
 - ex. If a language has voiced stops, it also has voiceless stops.
- **Note that this slide answers Question 1 in Assignment 4, Part A.**

Agenda

2. Assignment 4 Questions [Part A]

- Language Universals [Q1]
- **Typologies [Q2, Q3, Q4]**
- Language Change [Q5]
- Sound Change [Q6]
- Borrowing [Q7]

Linguistic Typology

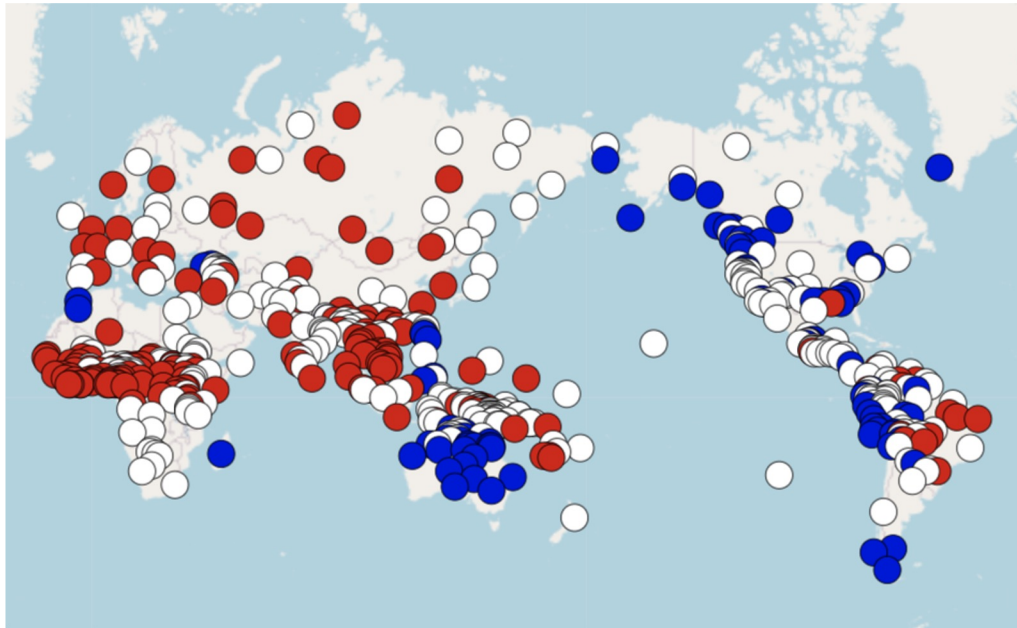
- Linguistic Typology: the study of how languages vary
 - Phonological Typology
 - Morphological Typology
 - Syntactic Typology
 - Semantic Typology

Linguistic Typology

- Linguistic Typology: the study of how languages vary
 - **Phonological Typology**
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Phonological Typology

- Example: Number of vowels



Values



Small (2-4)

93



Average (5-6)

287



Large (7-14)

184

Linguistic Typology

- Linguistic Typology: the study of how languages vary
 - Phonological Typology
 - **Morphological Typology**
 - Syntactic Typology
 - Semantic Typology

Morphological Typology Preview: Glosses

- gloss: a way of annotating text or transcribed speech
 - used in linguistics to mark the meanings and grammatical properties of words
- In linguistics, glosses often have 3 different components:

tuntu- ssur- qatar- ni- ksaite- ngqiggte- uq

[reindeer- hunt- FUT- say- NEG- again- 3SG.IND]

"He had not yet said again that he was going to hunt reindeer."

- ex. In the Yupik example above (see Lecture 3, Slide #38), there are 3 lines:
 - Line 1: words in Yupik
 - Line 2: grammatical categories and meanings of words in English
 - Line 3: English translation

Morphological Typology Preview: More About Glosses

tuntu- ssur- qatar- ni- ksaite- ngqiggte- uq

[reindeer- hunt- FUT- say- NEG- again- 3SG.IND]

"He had not yet said again that he was going to hunt reindeer."

- Notice that the second line contains both dashes and dots...
 - Dashes = different morphemes
 - Dots (or slashes) = different meanings within the same morpheme
 - Spaces = different words
- ex. In the Yupik example above, there are 7 morphemes total (only 1 word).
- The final morpheme "uq" has two simultaneous meanings (3SG, IND)
 - [You don't have to worry about what "3SG" or "IND" actually mean

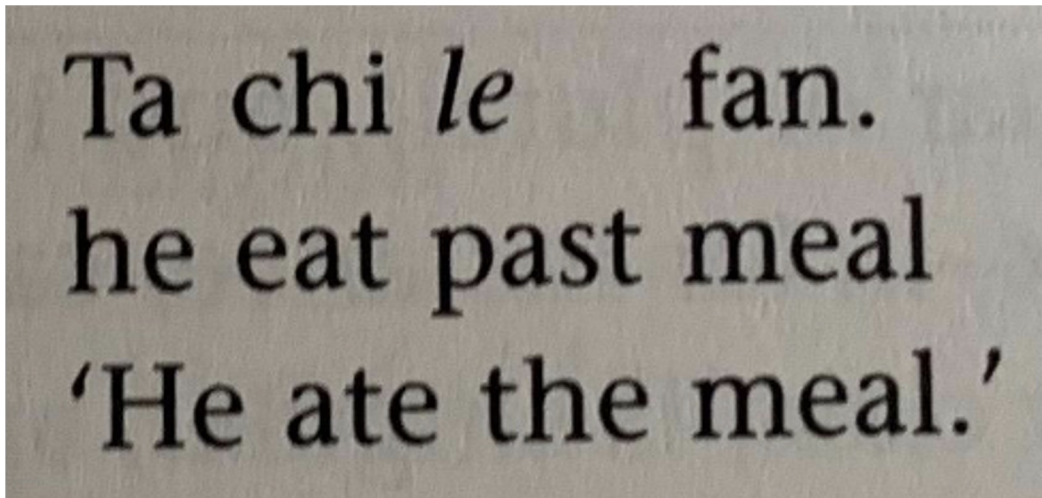
Morphological Typology

- 4 types of languages:

1. Isolating: One-to-one correspondence between words and morphemes.
2. Fusional: Single morphemes have multiple meanings.
3. Agglutinative: Words contain several morphemes, each having their own meaning.
4. Polysynthetic: Extremely high morpheme-to-word ratio (a single word could be translated as a full sentence in English)

Isolating Morphology

Isolating Morphology: One-to-one correspondence between words and morphemes.



Chinese: Each word in Line 1 (“ta”, “chi”, “le”, “fan”) is associated with only 1 morpheme (“he”, “eat”, “past”, “meal”).

Fusional Morphology

Fusional Morphology: Single morphemes have multiple meanings.

A photograph of a piece of paper with text illustrating fusional morphology. The text is: "mi vid'im ruk-u", "we see hand-fem/sg/Acc", and "We see a/the hand." The text is written in a dark, serif font on a light-colored, slightly textured paper background.

Russian: The suffix “-u” contains multiple meanings that are *fused* together (feminine gender, or “fem”; singular, or “sg”; accusative case, or “acc”)

- Note the slashes between “fem”, “sg” and “Acc”.

Agglutinative Morphology

Agglutinative Morphology: Words contain several morphemes, each having their own meaning. Think: “beads on a string”.

koy-ler-in
village-plural-genitive

Table 9.5 Affixes in Turkish

köy	‘village’ (singular)
köy-ler	‘villages’ (plural)
köy-ler-in	‘of the villages’ (genitive plural)

Turkish: “Of the villages” is a single word (koylerin). Each morpheme within the word (“koy”, “ler”, “in”) has a single meaning (“koy” = “village”; “ler” = plural; “in” = genitive).

- Note that there are only dashes (no slashes or dots).

Polysynthetic Morphology

Polysynthetic Morphology: Extremely high morpheme-to-word ratio (a single word could be translated as a full sentence in English)

Qasuiirsarvigssarsingitluinarnarpuq.

Qasu -iir -sar -vig -ssar -si -ngit -luinar -nar -puq
tired not cause-to-be place-for suitable find not completely someone 3/sg.
'Someone did not find a completely suitable resting place.'

Let's practice classifying languages by morphology!

Look at the 2 glosses below for Azeri (#1) and German (#2). Would you classify the languages as isolating, fusional, agglutinative, or polysynthetic?

1. pis-a kar hiçvaxt k'iy-ğar sanxan-de-d-miş
bad-a work never heart-SUPEL forget-NEGPRS-N-EVID
'A bad deed is never forgotten.'

2. Yael weiß dass Remy Eis läuft
Yael knows that Remy ice runs
'Yael knows that Remy is ice-skating.'

Let's practice classifying languages by morphology!

Look at the 2 glosses below for Middle Welsh (#3) and Classical Ainu (#4). Would you classify the languages as isolating, fusional, agglutinative, or polysynthetic?

3. ac ny allvs y dewinyon atteb idav
and NEG able.PRET.3SG the sorcerer.PL answer.VN him
'The sorcerers could not answer him.'

4. usaopuspeaeyaykotuymasiramস্যুপা
Usa-opuspe-a-e-yay-ko-tuyma-si-ram-suy-pa
various-rumors-1s-APL-REFL-APL-far-REFL-heart-sway-ITER
'I wonder about various rumors.'

Linguistic Typology

- Linguistic Typology: the study of how languages vary
 - Phonological Typology
 - Morphological Typology
 - **Syntactic Typology**
 - Semantic Typology

Syntactic Typology

- Example: Word Order Differences
 - SOV (Subject-Object-Verb)
 - SVO (Subject-Verb-Object)
 - VSO (Verb-Subject-Object)
 - VOS (Verb-Object-Subject)
 - OSV (Object-Subject-Verb)
 - OVS (Object-Verb-Subject)

7)

SOV (Turkish):

Hasan öküz-ü al-di.

Hasan ox-Acc bought

'Hasan bought the ox.'

8)

SVO (English):

The athlete broke the record.

9)

VSO (Welsh):

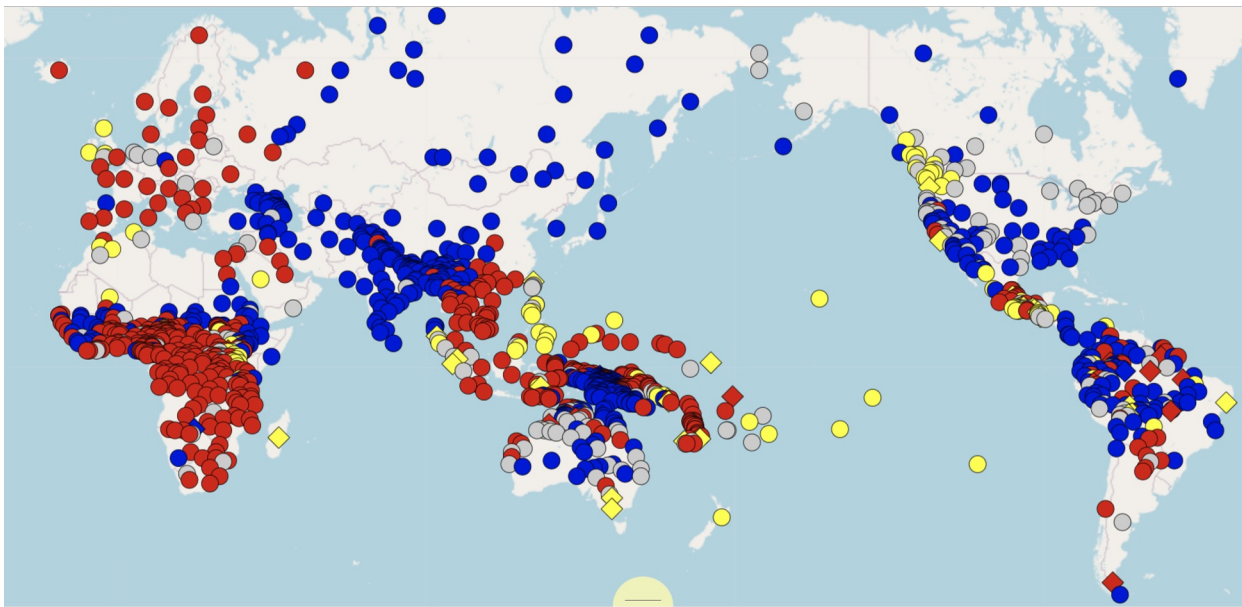
Lladdodd y ddraig y dyn.

killed the dragon the man

'The dragon killed the man.'

See Slide 21 in the Week 7 Slides

Syntactic Typology



Values			
<input type="checkbox"/>	<input type="radio"/>	SOV	564
<input type="checkbox"/>	<input type="radio"/>	SVO	488
<input type="checkbox"/>	<input type="radio"/>	VSO	95
<input type="checkbox"/>	<input type="radio"/>	VOS	25
<input type="checkbox"/>	<input type="radio"/>	OVS	11
<input type="checkbox"/>	<input type="radio"/>	OSV	4
<input type="checkbox"/>	<input type="radio"/>	No dominant order	189

Note that SOV (the blue circles) and SVO (the red circles) are by far the most common word orders among the world's languages.

Linguistic Typology

- Linguistic Typology: the study of how languages vary
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Semantic Typology

- Example: Verbs of Motion (See Slide 25 of the Week 5 Lecture for more info)
- In verb-framed languages, like Spanish, the verb encodes direction of motion
 - Bongo **entró en** la cocina corriendo. (“Bongo entered the kitchen running”)
 - Bongo **salió de** la cocina corriendo. (“Bongo left the kitchen running”)
 - In Spanish, the verbs (entró en, salió de) are indicating the direction of motion (into the kitchen or out of the kitchen); “corriendo” or “running” stays the same across sentences
- In satellite-framed languages, like English, something besides the verb (“a satellite”) encodes the direction of motion.
 - Bongo ran **into** the kitchen vs. Bongo ran **out** of the kitchen.
 - In English, the verb “run” doesn’t change across sentences (and thus, doesn’t encode motion). What encodes motion is the following preposition (“in” vs. “out”).

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2. Assignment 4 Questions [Part A]

- Language Universals [Q1]
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- **Language Change [Q5]**
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Forces of Language Change

- Slide 28 in the Week 7 Lecture:

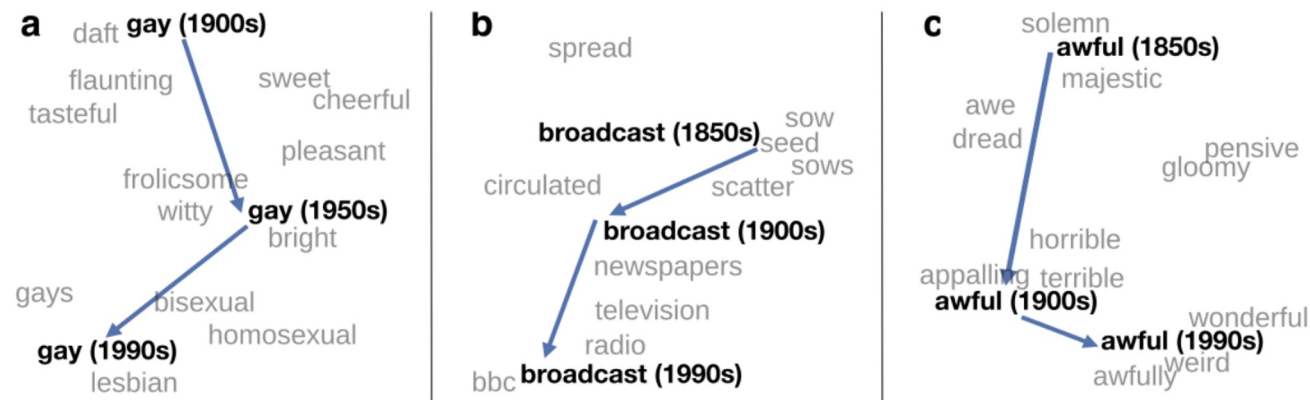
1. Destruction: craving for economy and least effort
2. Creation: craving for expressivity
3. Analogy: craving for order

Forces of Destruction: Loss of English Gender

- Many languages assign a “gender” to nouns, such as Spanish (la vs. el):
 - “the pillow” = la almohada (feminine)
 - “the bridge” = el puente (masculine)
- English also used to assign gender to nouns (seo vs. se), but lost this distinction over time:
 - “the goat” = seo gat
 - “the cat” = se catt
- The loss of English gender reflects a desire to simplify the language’s grammar.

Forces of Creation: Semantic Change

- Many words have developed new meanings over time (“force of creation”):



- If you're interested, click [here](#) to learn how the figures above were created!

Forces of Analogy: English Past Tense

- Recall: English often adds a suffix to verbs to indicate past tense (wait => waited), but there are some exceptions (eat => ate).
- In Old English, there were actually more irregular verbs (climb => clomb) that have become regularized over time (now, the past tense of “climb” is “climbed”).
- The shift from “clomb” to “climbed” is an example of *analogical change* - a shift away from irregularity and towards systematicity in language.

Agenda

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Sound Change: Old English to Modern English

Fæder ūre þū þe eart on heofonum,
Father ours, thou who art in heaven
Sī þīn nama ġehālgod.
Be thy name hallowed
Tōbecume þīn rīce,
Come thy riche (kingdom)
ġewurþe þīn willa, on eorðan swā swā on heofonum.
worth (be done) thy will, on earth as in heaven
Ūrne ġedæġhwāmlican hlāf syle ūs tō dæg,
Our daily loaf (bread), sell (give) us today
and forġyf ūs ūre gyltas, swā swā wē forġyfað ūrum gyltendum.
and forgive us our guilts (sins) as we forgive our guilters (those that sin against us)
And ne ġelæd þū ūs on costnunge, ac ālȳs ūs of yfele.
And do not lead thou us into temptation, but alese (release/deliver) us of (from) evīl
Sōþlice.
Soothly (truly) amen!

Listen to this prayer in Old English and look at the modern English translation...what sound differences do you notice? Click on [this link](#) to hear the prayer!

Grimm's Law - Question 6a

- Sound changes are often systematic, affecting multiple sounds in the same way:

6a. The shift from Proto-Indo-European **b d g** to Proto-Germanic **p t k** involves a change in just one phonetic feature. What is that feature?

Some Phonetic Symbols for American English Consonants

	Bilabial	Labiodental	Interdental	Alveolar	Palatal	Velar	Glottal
Stop (oral)							
voiceless	p			t		k	ʔ
voiced	b			d		g	
Nasal (voiced)	m			n		ŋ	
Fricative							
voiceless		f	θ	s	ʃ		h
voiced		v	ð	z	ʒ		
Affricate							
voiceless					tʃ		
voiced					dʒ		
Glide							
voiceless	ɱ						
voiced	w				j	ɰ	w
Liquid (voiced)							
(central)				r			
(lateral)				l			

Grimm's Law - Question 6b

- Sound changes are often systematic, affecting multiple sounds in the same way:

6a. The shift from Proto-Indo-European **p t k** to Proto-Germanic **f θ h** involves a difference in manner of articulation: voiceless stops to voiceless fricatives. But it also involves some small differences in place of articulation. What are they?

Some Phonetic Symbols for American English Consonants

	Bilabial	Labiodental	Interdental	Alveolar	Palatal	Velar	Glottal
Stop (oral)							
voiceless	p			t		k	ʔ
voiced	b			d		g	
Nasal (voiced)	m			n		ŋ	
Fricative							
voiceless		f	θ	s	ʃ		h
voiced		v	ð	z	ʒ		
Affricate							
voiceless					tʃ		
voiced					dʒ		
Glide							
voiceless	ɱ						
voiced	w				j	ɰ	w
Liquid (voiced)							
(central)				r			
(lateral)				l			

Agenda

2. Assignment 4 Questions [Part A]

- Language Universals [Q1]
- Typologies [Q2, Q3, Q4]
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- **Borrowing [Q7]**

Question 7

Define borrowing and give two examples. Briefly explain why they happened.

- borrowing: when one language takes (borrows) features from another language
 - could be lexical (borrowing words), phonological, morphological, syntactic, or semantic (but lexical borrowing is by far the most common)
- Example 1: English has borrowed many novel culinary terms due to immigration and contact (sushi, burrito, pizza...)
- Example 2: Since the Norman conquest of England in 1066, English has borrowed many French features due to contact and the perceived prestige of French.
 - Lexical: rendezvous, fiance, bourgeois...
 - Morphological: suffixes such as -tion (“organization”) and “-ment” (government)

Agenda







1. Housekeeping
2. Assignment 4 Questions [Part A]
- 3. Key Terms and Concepts Not Covered in Assignment 4**
4. Office Hours

Key Terms for Week 4

Key terms

- Genetic classification
- Phonological, morphological, syntactic and semantic typology
- Universals: absolute & implicational
- Language change in sound, structure and lexical meaning
- Grimm's Law
- Language Contact & Borrowing
- Pidgins and Creoles

What we've covered in discussion so far:

- Genetic Classification 
- Phonological, Morphological, Syntactic, and Semantic Typology 
- Absolute and Implicational Universals 
- Language Change 
- Language Contact and Borrowing 
- Pidgins and Creoles 

Where to Learn More About the Key Terms We Haven't Covered So Far

- Genetic Classification (4 min video):

<https://www.youtube.com/watch?v=iWDKsHm6gTA>

- Pidgins and Creoles (6 min video):

<https://www.youtube.com/watch?v=qqJI7SdS9Gg>

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1. Housekeeping
2. Assignment 4 Questions [Part A]
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Any questions, comments, or concerns?

**Office Hours: Tuesday (10am-1pm), Thursday (12-3pm)
in Kerr 261**