Introduction to Linguistics:
fundamental concepts and sociolinguistics

Robert Borges

Welcome

- Today
  - Part I: fundamental concepts
  - Part II: sociolinguistics and variation
- Goals
  - acquaint you with terminology and concepts
    - attempting to be theory neutral
    - hope: discussion will be stimulating and you will be able to integrate *something* in your work
 - keep it fun and interesting

Let's get to know each other

- me
  - specialty 1: 'language contact' and multilingualism
    - PhD: 2014 *Dynamics of Language Contact in Suriname* Linguistics -- Radboud University Nijmegen (NL)
  - specialty 2: research engineering
    - self-taught → corpus linguistics / handling data
    - current: SWERIK

Let's get to know each other

- Language "name tags"
  - mother/father tongue
  - languages you can speak
  - languages you studied, know something about, and /or plan to work with
  - (to help me keep things interesting)
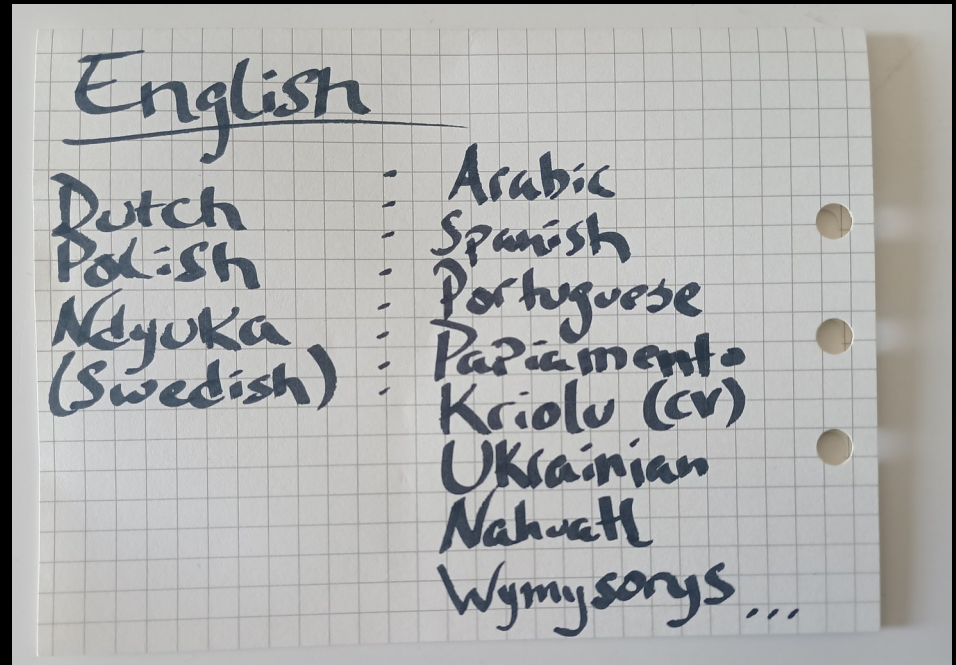
Part I: Fundamental Concepts

Coverage

- phonetics
- phonology
- orthography
- morphology
- syntax
- semantics

Coverage

- phonetics: physical speech sounds
- phonology: conceptual speech sounds
- orthography: writing conventions
- morphology: components of word forms
- syntax: order of words and constituents
- semantics: meaning

Discussion

What is language?

Phonetics

- Articulatory phonetics: study of how speech sounds are produced in the vocal tract

  - consonants:
    - place
    - manner
    - voice

  - vowels
    - vertical
    - horizontal
    - (nasal, aperture)

9

Phonetics

- Articulatory phonetics: study of how speech sounds are produced in the vocal tract
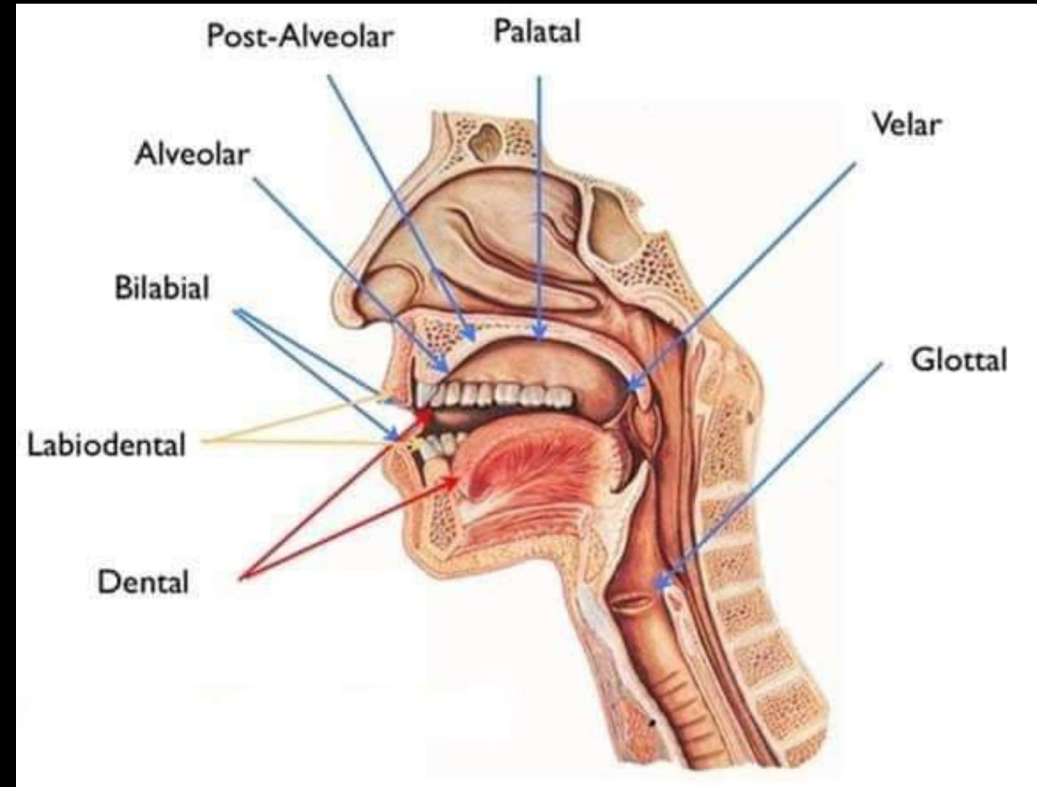
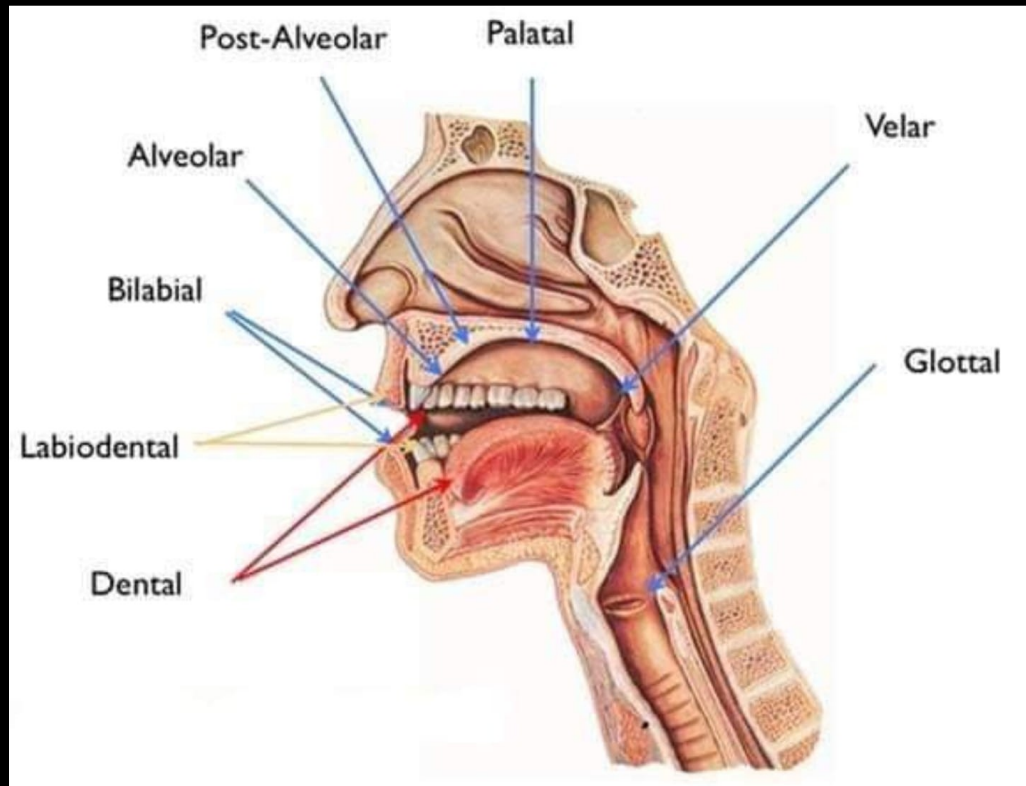 - consonants:
    - place
    - manner
    - voice

  - vowels
    - vertical
    - horizontal
    - (nasal, aperture)

Try it:
mama
dada
kaka

tata
lala
fafa

say "ah" (@ dr)
say "cheese"

Phonetics

THE INTERNATIONAL PHONETIC ALPHABET (revised to 2015)
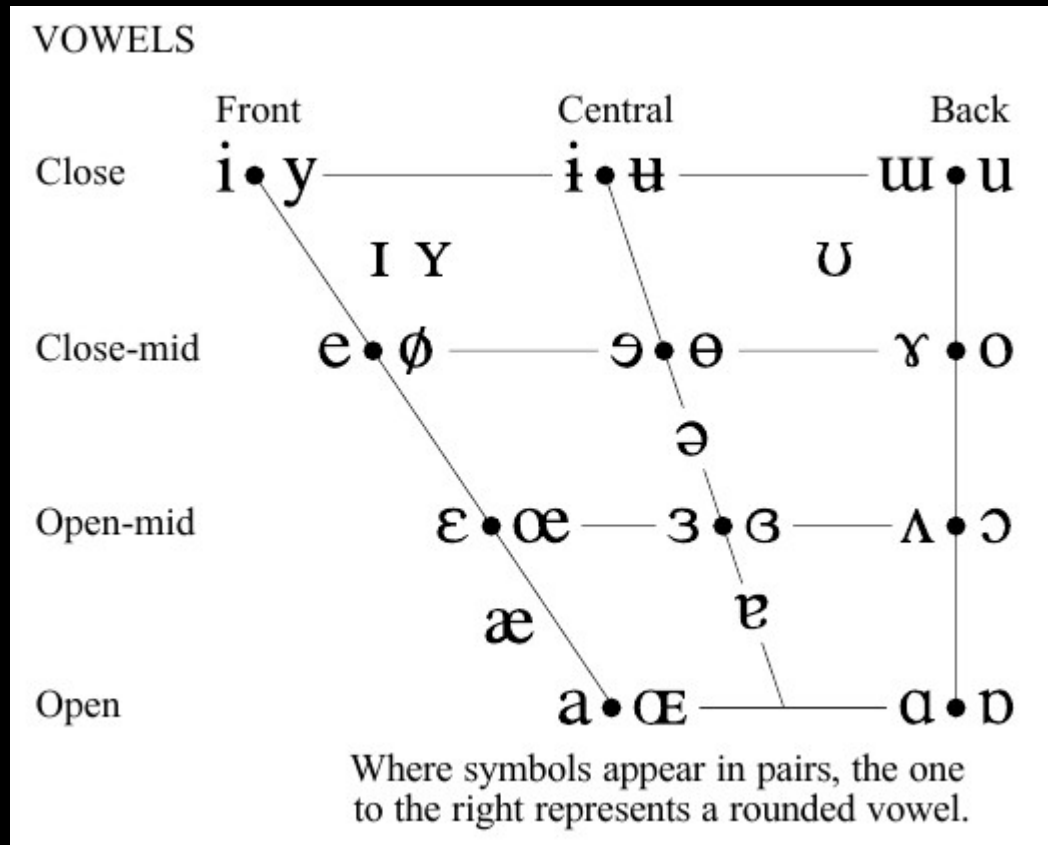
CONSONANTS (PULMONIC)   © 2015 IPA

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill	ʙ			r					ʀ		
Tap or Flap		ⱱ		ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		ʋ		ɹ		ɻ	j	ɰ			
Lateral approximant				l		ɭ	ʎ	ʟ			

Symbols to the right in a cell are voiced, to the left are voiceless. Shaded areas denote articulations judged impossible.

Phonetics

VOWELS. A vowel chart showing Front, Central, and Back positions across the top, and Close, Close-mid, Open-mid, Open positions down the side. Where symbols appear in pairs, the one to the right represents a rounded vowel.

Phonetics

THE INTERNATIONAL PHONETIC ALPHABET (revised to 2015)

CONSONANTS (PULMONIC)   © 2015 IPA

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	N		
Trill	ʙ			r					R		
Tap or Flap		ⱱ		ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		ʋ		ɹ		ɻ	j	ɰ			
Lateral approximant				l		ɭ	ʎ	ʟ			

Symbols to the right in a cell are voiced, to the left are voiceless. Shaded areas denote articulations judged impossible.

CONSONANTS (NON-PULMONIC)

Clicks		Voiced implosives		Ejectives	
ʘ	Bilabial	ɓ	Bilabial	ʼ	Examples:
ǀ	Dental	ɗ	Dental/alveolar	pʼ	Bilabial
ǃ	(Post)alveolar	ʄ	Palatal	tʼ	Dental/alveolar
ǂ	Palatoalveolar	ɠ	Velar	kʼ	Velar
ǁ	Alveolar lateral	ʛ	Uvular	sʼ	Alveolar fricative

OTHER SYMBOLS

ʍ Voiceless labial-velar fricative
w Voiced labial-velar approximant
ɥ Voiced labial-palatal approximant
ʜ Voiceless epiglottal fricative
ʢ Voiced epiglottal fricative
ʡ Epiglottal plosive

ɕ ʑ Alveolo-palatal fricatives
ɺ Voiced alveolar lateral flap
ɧ Simultaneous ʃ and x

Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary.

t͡s k͡p

VOWELS

	Front	Central	Back
Close	i • y	ɨ • ʉ	ɯ • u
	ɪ Y	ʊ	
Close-mid	e • ø	ɘ • ɵ	ɤ • o
		ə	
Open-mid	ɛ • œ	ɜ • ɞ	ʌ • ɔ
	æ	ɐ	
Open	a • ɶ		ɑ • ɒ

Where symbols appear in pairs, the one to the right represents a rounded vowel.

SUPRASEGMENTALS

ˈ Primary stress ˌfoʊnəˈtɪʃən
ˌ Secondary stress
ː Long eː
ˑ Half-long eˑ
˘ Extra-short ĕ
| Minor (foot) group
‖ Major (intonation) group
. Syllable break ɹi.ækt
‿ Linking (absence of a break)

TONES AND WORD ACCENTS

LEVEL			CONTOUR		
e̋ or ˥	Extra high		ě or ˧˥	Rising	
é	˦ High		ê	˥˩ Falling	
ē	˧ Mid		e᷄	High rising	
è	˨ Low		e᷅	Low rising	
ȅ	˩ Extra low		e᷈	Rising-falling	
↓	Downstep		↗	Global rise	
↑	Upstep		↘	Global fall	

DIACRITICS Some diacritics may be placed above a symbol with a descender, e.g. ŋ̊

̥	Voiceless	n̥ d̥	̤ Breathy voiced	b̤ a̤	̪ Dental	t̪ d̪
̬	Voiced	s̬ t̬	̰ Creaky voiced	b̰ a̰	̺ Apical	t̺ d̺
ʰ	Aspirated	tʰ dʰ	̼ Linguolabial	t̼ d̼	̻ Laminal	t̻ d̻
̹	More rounded	ɔ̹	ʷ Labialized	tʷ dʷ	̃ Nasalized	ẽ
̜	Less rounded	ɔ̜	ʲ Palatalized	tʲ dʲ	ⁿ Nasal release	dⁿ
̟	Advanced	u̟	ˠ Velarized	tˠ dˠ	ˡ Lateral release	dˡ
̠	Retracted	e̠	ˤ Pharyngealized	tˤ dˤ	̚ No audible release	d̚
̈	Centralized	ë	̴ Velarized or pharyngealized	ɫ		
̽	Mid-centralized	e̽	̝ Raised	e̝ (ɹ̝ = voiced alveolar fricative)		
̩	Syllabic	n̩	̞ Lowered	e̞ (β̞ = voiced bilabial approximant)		
̯	Non-syllabic	e̯	̘ Advanced Tongue Root	e̘		
˞	Rhoticity	ə˞ a˞	̙ Retracted Tongue Root	e̙		

Typefaces: Doulos SIL (metatext); Doulos SIL, IPA Kiel, IPA LS Uni (symbols)
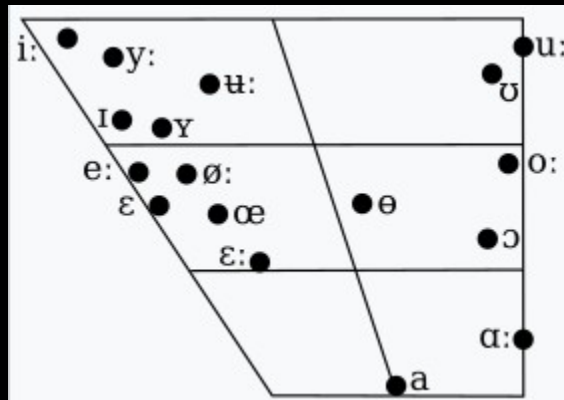
13

Phonology

- The study of
    - categorical delimitation of speech sounds
    - interaction of categorical speech sounds
    - categorical organization of speech sounds

Phonology

- Delimitation, inventories

	Labial	Dental/Alveolar	Palatal	Velar	Glottal
Nasal	m	n		ŋ	
Plosive voiceless	p	t		k	
Plosive voiced	b	d		g	
Fricative	f	s	ɕ	ɦ	h
Approximant	v	l	j		
Rhotic		r			

	Front				Central		Back	
	unrounded		rounded					
	short	long	short	long	short	long	short	long
Close	ɪ	iː	ʏ	yː		ʉː	ʊ	uː
Close-mid	e	eː		øː	ɵ			oː
Open-mid	ɛ	ɛː	œ				ɔ	
Open					a			ɑː

Phonology

- Delimitation, inventories

Tamazight vowel phonemes[60]

	Front	Central	Back
Close	i		u
Open		a	

Tamazight consonants (Ayt Ayache)[57][58]

		Labial	Alveolar		Palatal	Velar		Uvular		Pharyngeal[3]	Glottal[3]
			plain	pharyngeal		plain	labialized	plain	labialized		
Nasal		m	n	nˤ							
Stop	voiceless		tʰ	tˤ		k¹		q	qʷ		
	voiced	b	d	dˤ		g¹					
Fricative	voiceless	f	s	sˤ	ʃ	(x)	xʷ	χ	(χʷ)	ħ	h
	voiced		z	zˤ	ʒ	(ɣ)	ɣʷ	ʁ	(ʁʷ)	ʕ	
Approximant			l	lˤ	j		w				
Trill			r	rˤ							

Phonology

- Minimal pairs, minimally contrastive words, usually a kind of litmus test for whether a sound is a phoneme or not.

- Let's test out the concepts...

Phonology

- Same thing only different…allophones and variants
  - one *conceptual* sound different physical realizations
  - English – stop allophones
    - *spin* and *pin*
    - *stop* and *top*
  - *Spanish /b/*
    - *vino* 'wine' ['bino] or ['vino] ("free" variation)
    - *haber* 'to have' ['aβɛr]

Phonology

- possible arrangement of sounds
  - Hawaiian
    - *humuhumunukunukuapua`a* 'reef tiger fish'
    - maximal syllable structure: CV
  - Polish
    - *W Szczebrzeszynie chrząszcz brzmi w trzcinie* 'In Szczebrzeszyn the beetle buzzes in the reeds'
    - *wszczniesz* 'you will start', b*ezwzględny* 'ruthless'
    - maximal syllable: CCCCVCCCC(C)

Writing and orthography

- Polish
  - *wszczniesz* 'you will start'
  - CCCCVCCCC(C) – maximal syllable
  - ['fʃcɲɛʃ]   / 'fʃcɲɛʃ /

Writing and orthography

- Types of orthographies
  - logographic:
    - 'pictograms' represent words/words/phrases/concepts
    - Egyptian hieroglyphics, Chinese writing
  - syllabic:
    - symbol represents a syllable
    - Japanese, Amharic
  - alphabetic
    - symbol represents a "sound"
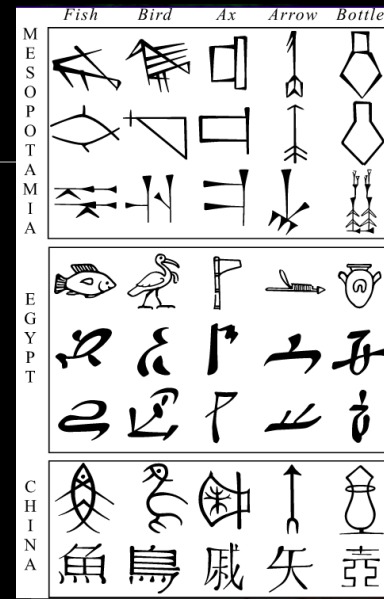
Chart of Amharic fidäls[48]

Writing and orthography

- English vowels
  - a e i o u, and sometimes y
  - some rules, e.g.:
    - final <e> makes penultimate vowel long
    - *rat*, *rate*
  - some chaos
    - polish, Polish
    - bass, bass
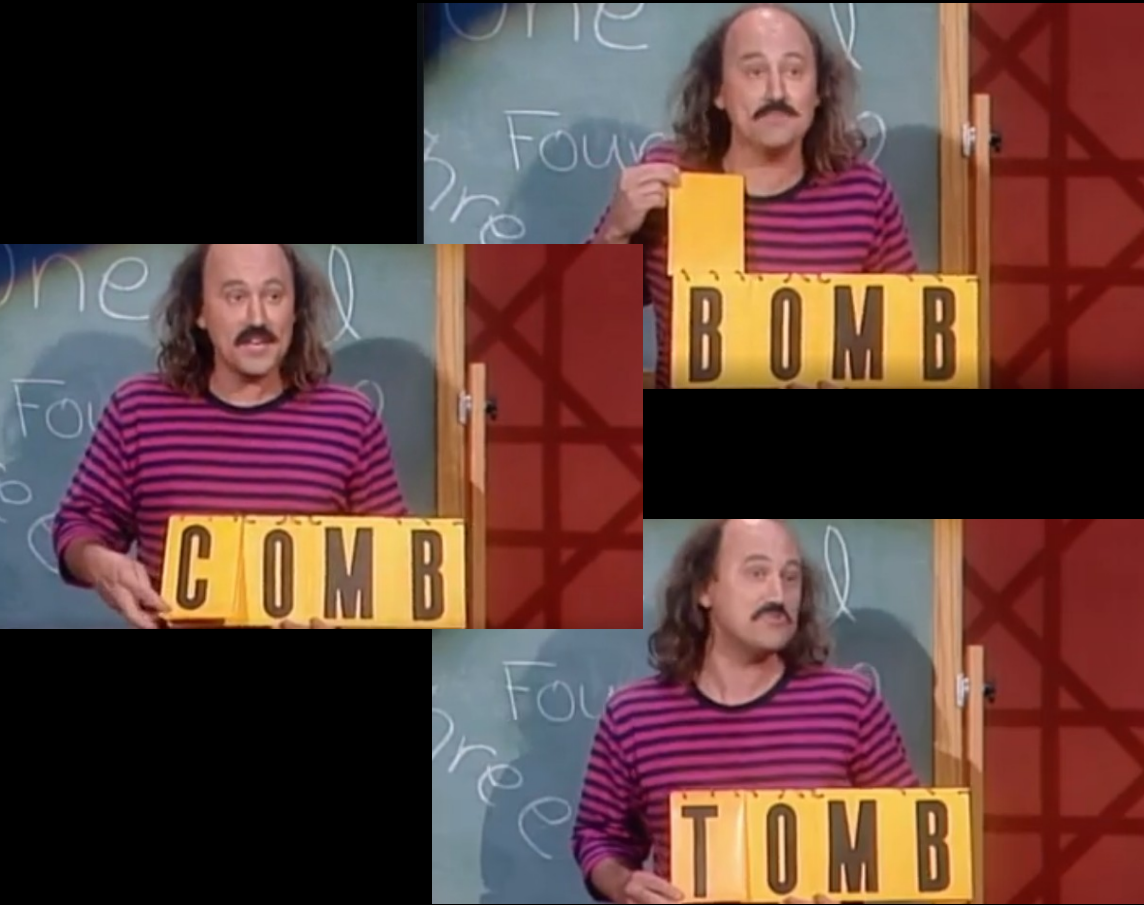
Figure 2. 1
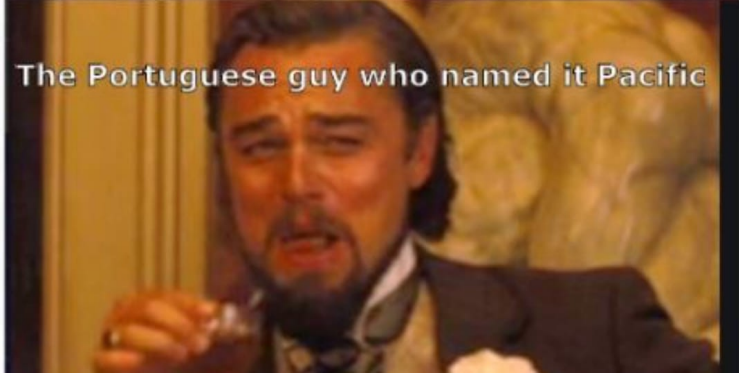
Writing and orthography

- mapping of character to sound is arbitrary, differs from language to language

- bad science example
  - estimate difference between two languages based on Jaccard distance of parallel texts
  - discussion: Why bad?
    - How to make it better?
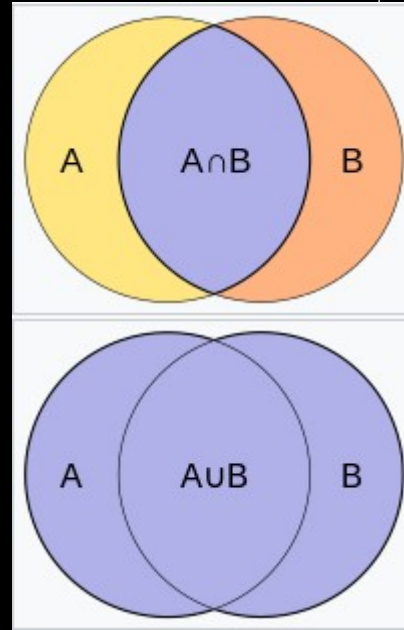
$$J(A, B) = \frac{|A \cap B|}{|A \cup B|}$$

Words 1 – lexical semantics

- simple semantics
  - word <—> concept

    (sign)   (signified)
  - works b/c of implicit social agreement

    (meaning)
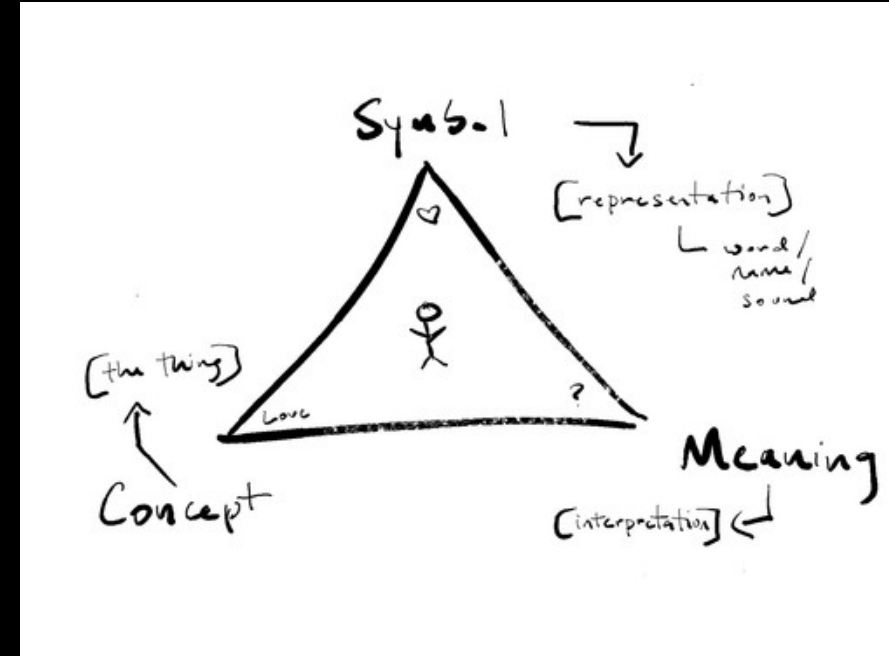
Words 1 – lexical semantics

Words 1 – lexical semantics

- Semantic primes and semantic molecules
  - essential (universal) concepts that can't be broken into other componential concepts
  - 'root of the tree'
- taxonomy
  - hierarchical organization of related concepts
- components
  - defining sub-concepts that distinguish macro concept
- languages vary widely in how related concepts are organized

Words 1 – lexical semantics

- Exercise:
  - (folk) taxonomy
    - types of plants
  - componential analysis
    - man & woman types of human

Words 2 – morphology

- Formal composition of word forms, often:
  - schematic
  - paradigmatic
- morpheme
  - smallest meaningful unit
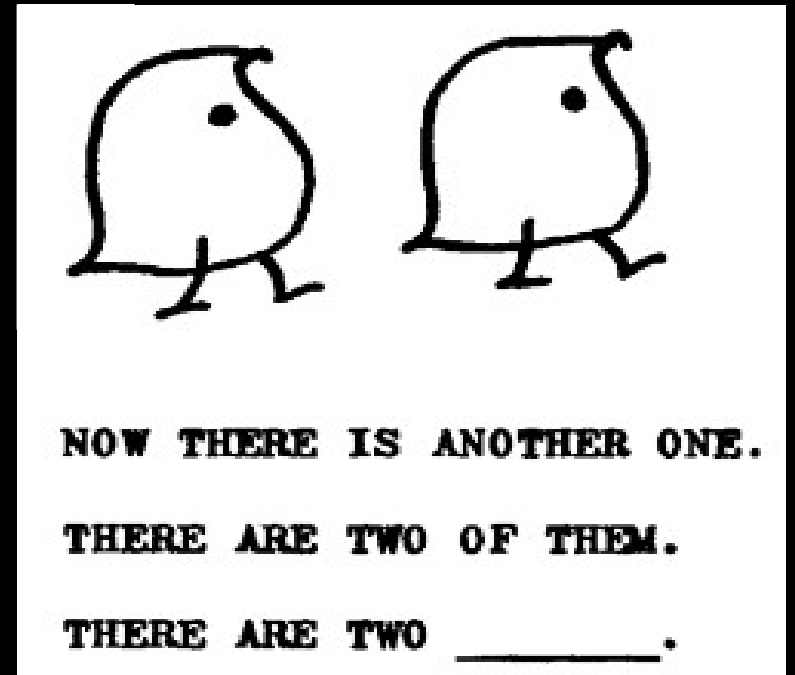
THIS IS A WUG.

NOW THERE IS ANOTHER ONE.

THERE ARE TWO OF THEM.

THERE ARE TWO _____.

Words 2 – morphology

Words 2 – morphology

Words 2 – morphology

Words 2 – morphology

- types of morphemes (forms):
  - prefix: before
  - suffix: after
  - circumfix: before+after
  - infix: inserted – *abso-__?__-lutely*
  - apophony

    (non-concatinative morphology)
    - ablaut: *man–men, sing–sang–sung*
    - transfixation - transfixes

Word	Gloss	Alternation pattern
kat**a**b**a**	'he wrote'	(a - a - a)
kut**i**b**a**	'it was written'	(u - i - a)
yaktubu	'he writes'	(ya - ∅ - u - u)
yuktabu	'it is written'	(yu - ∅ - a - u)
kaat**i**b	'writing (active participle); writer'	(aa - i)
kutt**aa**b	'writers'	(u - :aa)
maktuub	'written'	(ma - ∅ - uu)
kit**aa**b**ah**	'(act of) writing'	(i - aa - ah)
kit**aa**b	'book'	(i - aa)
kutub	'books'	(u - u)
kaat**a**b**a**	'he corresponded with'	(aa - a - a)
katt**a**b**a**	'he caused to write'	(a - :a - a)
kutt**i**b**a**	'he was caused to write'	(u - :i - a)

Words 2 – morphology

- types of morphology (function)
  - inflectional morphology
    - situates word in grammatical context – no change to lexical semantics, typically:
      - plural, definiteness, gender, case
      - constituent agreement: _duż<u>a</u> piłka_[(f)] _duż<u>y</u> samochód_[(m)]
      - argument indexing (conjugation), tense-mood-aspect, valency altering operations
    - languages differ widely in
      - what _grammatical categories_ are encoded
      - how they are encoded (form, category to form mapping)
  - discussion: differences in grammatical categories

Words 2 – morphology

- Types of morphology (function), cont'd…
  - derivational morphology
    - create derivative words
      - altered lexical semantics
        - happy → <u>un</u>happy
      - change of lexical category
        - happy (adj)→ happi<u>ness</u> (n)
        - quick (adj) → quick<u>ly</u> (adv)
        - dust (n) → dust<u>y</u> (adj)
        - run (v) → runn<u>er</u> (n)
        - walk (v) → walk (n)
      - composite concept
        - football, cupcake, etc

GERMAN SCRABBLE

Words 3 – lexical categories

- i.e. parts of speech
  - languages differ in the categorization of words
  - noun-verb distinction "universal"
    - how to distinguish? (hint: NO semantics)
  - other parts of speech differ per language
    - Do all languages have adjectives?
    - Do all languages have adpositions?

Ansa 2014

Ca ī-pan petlatl in mistōn.

Be its-on mat the cat

"The cat is on the mat.'

6. **Akutu** [**né** **bo** **ɔfa**] RELC
   orange REL has sweetness
   'sweet orange(s)'.

7. **Ama** **wòrɛ̀** **n-ataale** [**né** **bo** **oni**] RELC
   Name PRES.wear PL-dress REL has hardness
   'Ama wears expensive dresses.

Putting it all together – syntax

- I eat.   Subj.-Verb
- I eat breakfast.   Subj.-Verb-Obj.
- I run.   Subj.-Verb
- I run to the station.   Subj.-Verb-compl. (PP)
- *I run the station.   Subj.-Verb-Obj.
- My run was exhausting. Subj.-Verb-compl

Putting it all together – syntax

- I lend you money.   Subj.-Verb.-iO-dO
- English: red ball   *ball red
- Port. bola vermelha   *vermelha bola
- [*]Throw me down the stairs my shoes.

Putting it all together – syntax

- Ik schopte een hond.   Subj.-Verb-Obj.
- Gisteren schopte ik een hond.   ??
- Toen ik een jongen was, schopte ik een hond.

- What is basic word order in Dutch?

Putting it all together – syntax

- Rzucam ci piłkę.   'I throw you the ball.'

  Piłkę ci rzucam.   'I throw you the ball.'

  Ci piłkę rzucam.   'I throw you the ball.'

- Piłka jest czerwona.   'The ball is red.'

- Ty jesteś osobą.   'You are a person.'

Epilogue

Epilogue

- Where to go from here?
  - pragmatics – lexical semantics + formal logic + set theory + situational awareness
  - conceptual metaphors
  - linguistic anthropology: language-culture-thought

Part II: Sociolinguistics and Variation

Regional variation

- "dialectology" (*dialect* can be a dirty word)
- Quite visible/audible, even to non-specialists
- long tradition
  - lots of (older) literature on English (UK) dialects
  - world Englishes, thx to the Empire
  - Swedish, Danish, German…
    - studies on many languages
- What do we know about Swedish regionalisms?

Regional variation

- Swedish
  - Mälmo: <r> == uvular fricative == [ʁ]
    - (the French 'R')
  - Västerås: "whiny"
  - Stockholm / Uppland: creaky vowels (posh?)
  - Umeå: "whoop" == yes
  - Finland: monotone syllable machine gun

Regional variation
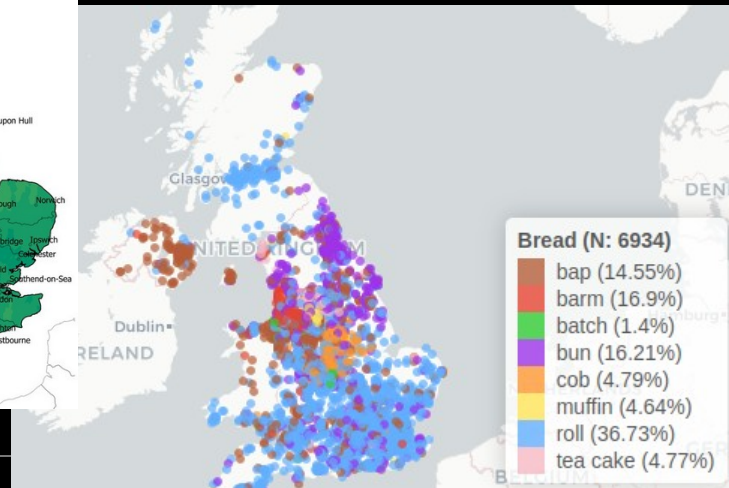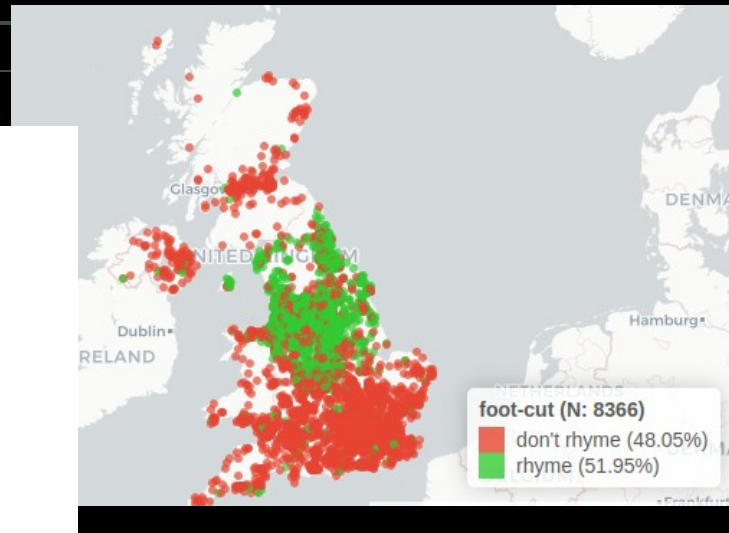
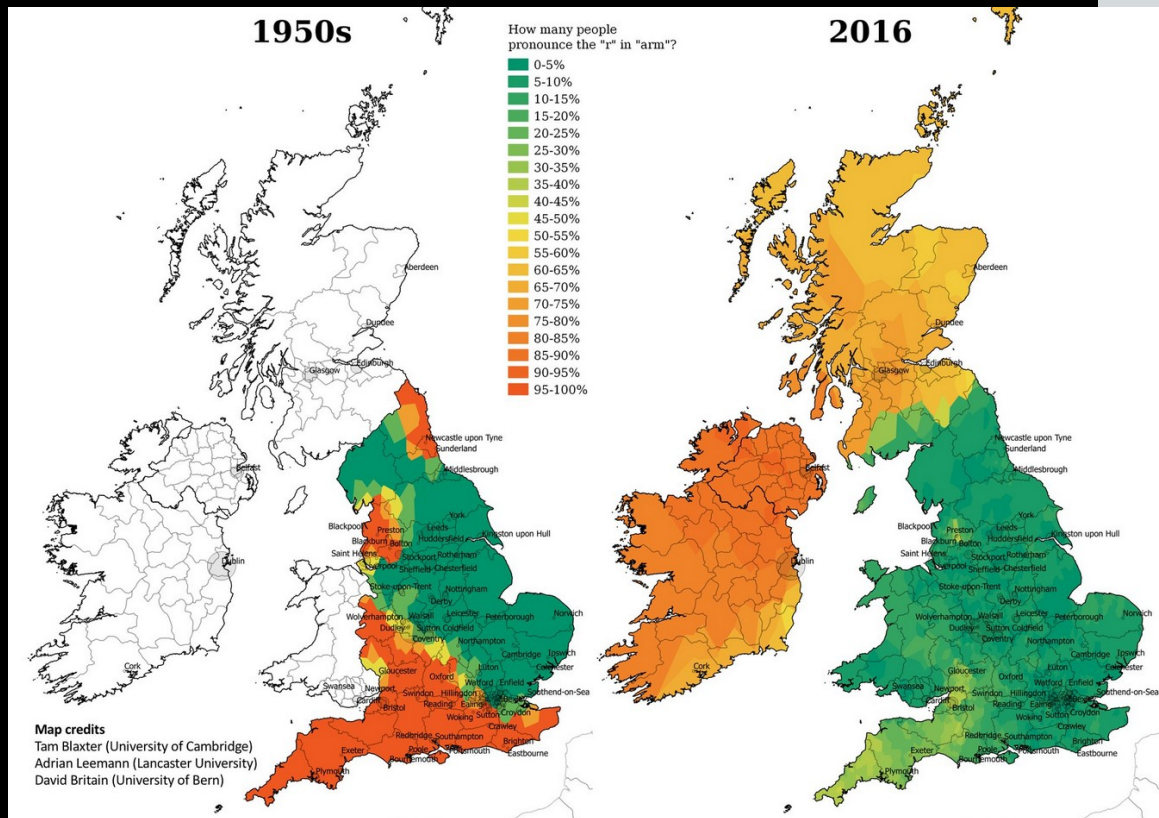- What about German?

Regio

- Wh

Regional variation

- Tendency to target
  - phonetic / phonological features
  - lexical feature

- In theory, anything
  - morphology
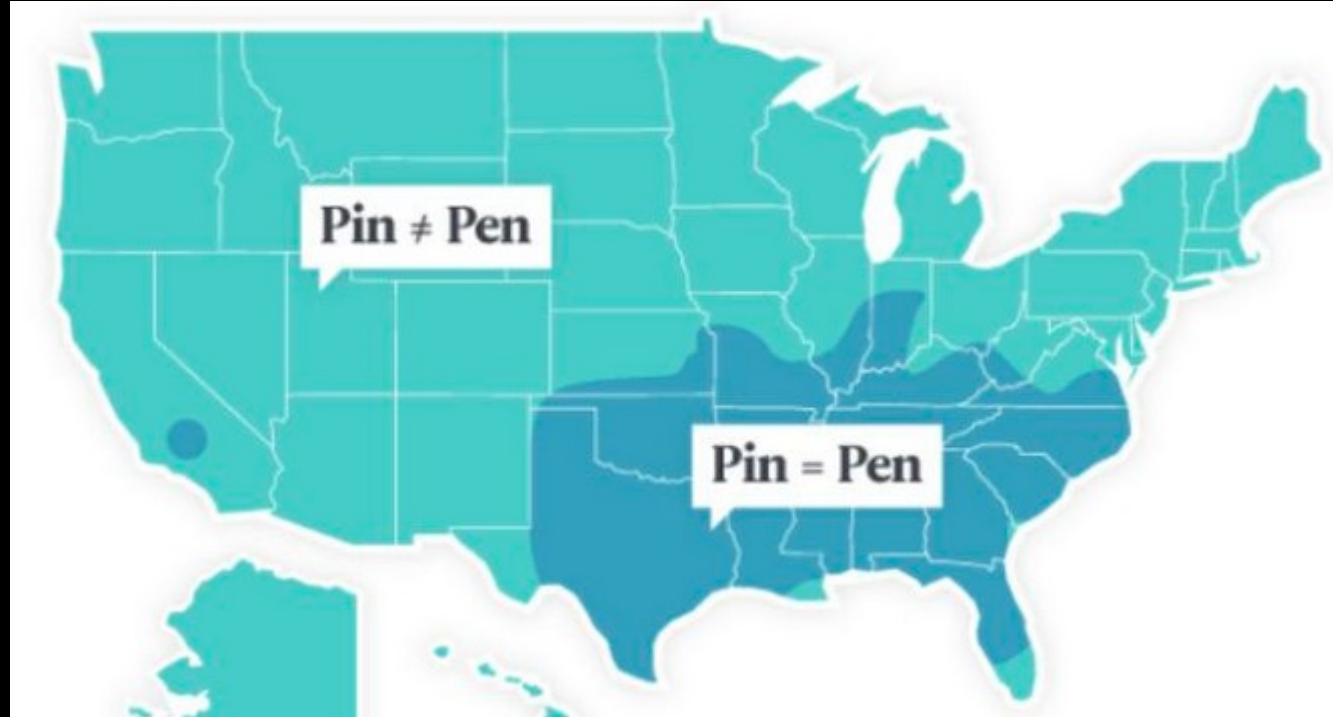 - syntax
  - whatever...
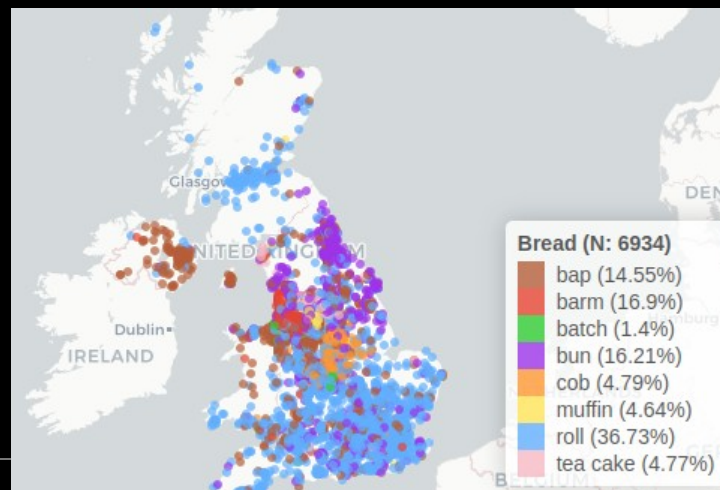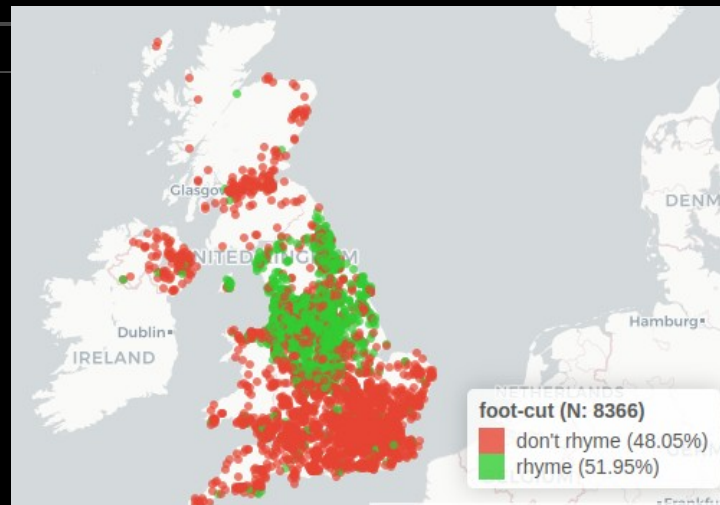
Regional variation

Regional variation

Regional variation

- Maryland / Washington DC area
  - "might could"

    I might could google that for you.

    Let me google that for you.

- Dutch in Suriname
  - less-strict V2 syntax → SVO

    EU: Gisteren ging ik naar school.

    SU: Gisteren ik ging naar school.

Social variation (1)

- Classical dialectology & NORM bias
  - Non-mobile, Older, Rural, Male

- Cue application of variationist principles across <u>*social*</u> space

- Two studies by Labov set the stage for modern sociolinguistics
  - NYC dept. store (1966) *Social stratification of English in NYC*
  - Martha's Vinyard (1972) *Social motivation of sound change*

- General observations
  - variation operates across social space like geographical space
  - individual's ideas about where they belong in social space are also relevant

Social variation (1)

- All kinds of top-down social categories explored as correlates of linguistic variation
    - socio-economic status
    - education level
    - ethnicity / race
    - gender
    - sexual orientation, etc...

Social variation (2)

- Broad social categories are not always meaningful at an individual level
- Cue – what activities do you do you do and what company do you keep?
  - jock or burnout?
  - sk8er boi or ballerina?
  - PhD student or trade-school graduate?
- New-wave hypothesis: emic identity related to *Communities of Practice* is a better explanatory mechanism / predictor of variants

Social variation (2)

- The question is:
  - variation because of group membership?
    - Wave 2
    - passive individuals
  - variation as *an index* of group membership?
    - Wave 3
    - individuals are active agents of variation in order to mark their identity with variants associated with whatever identity.

Social variation (2)

- Discussion:
  - What are you all thinking?
  - Does it relate to what you're doing / what you want to do in any way?
  - questions?

Social variation (2)

- Discussion:
  - What are you all thinking?
  - Does it relate to what you're doing / what you want to do in any way?
  - questions?
- https://www.youtube.com/watch?v=x2quIhxCEmc

Situational variation

- In all interactional contexts, participants have roles defined by the context, which also dictates linguistic behavior
  - most obvious in formal situations
  - violation of norms: ignorance or statement?

    examples….

Situational variation

- examples
  - Omar in court *the Wire* – https://www.youtube.com/watch?v=44JL1luLfE0 t=30s
  - Taystee in court *OITNB* – *s06e12 19m from end*
  - *Horsemouth and Joe Gibbs Rockers*
    - *https://www.youtube.com/watch?v=DoTZiky0nBo* *17:20*
  - *Horsmouth applies for a job* *– 26:20*

Situational variation

- Situation → doc type
- Apply this to your documents:
  - special formats
  - jargon / specialized vocabulary
  - potential consequences in analyses?

Wrapping up

- Linguistics POV, How to understand a text?
  - complex, multidimensional endeavor
    - forms and structures create layers of meaning
    - social background of participants adds a layer
      - broad overarching categories
      - narrow emic identities
    - participants' agency in
      - indexing identities
      - indexing relative social roles

Wrapping up

- Open to questions and further discussion
- be in touch
  - robert.borges@statistik.uu.se