

Language Emerges from a Dynamic System

Aetalects: Generational Terminology

Mutability: Languages change constantly

Identify and discriminate by a given *time*

Greaser



Dude



Pansy



Comb/Sunglasses: wenchiawang/iStock/Thinkstock; Peace symbol: apatsara/iStock/Thinkstock; Hippies: St_Aurora72/iStock/Thinkstock; Greaser: University of Waterloo

Aetalects: Generational Terminology

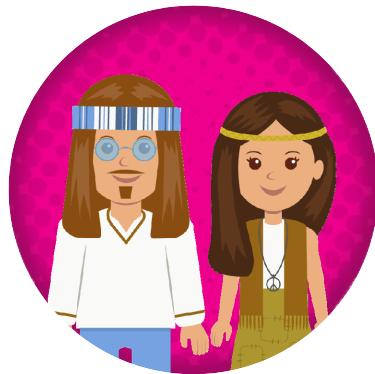
Mutability: Languages change constantly

Identify and discriminate by a given *time*

"groovy"

"far out"

"outasite"



Comb/Sunglasses: wenchiawang/iStock/Thinkstock; Peace symbol: apatsara/iStock/Thinkstock; Hippies: St_Aurora72/iStock/Thinkstock; Greaser: University of Waterloo

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Aetalects: Generational Terminology

Identify and discriminate by a given *time*

Dude

- Dude ranch
- Changed associations



Greaser

- Completely harmless



Comb/Hat: wenchiawang/iStock/Thinkstock; Peace Symbol: Apatsara/iStock/Thinkstock; Football: Jupiterimages/liquidlibrary/Thinkstock

Aetalects: Generational Terminology

Identify and discriminate by a given *time*

Aetalect

Identify

Discriminate ←

Discriminate →

Comb/Hat: wenchiawang/iStock/Thinkstock; Peace Symbol: Apatsara/iStock/Thinkstock; Football: Jupiterimages/liquidlibrary/Thinkstock

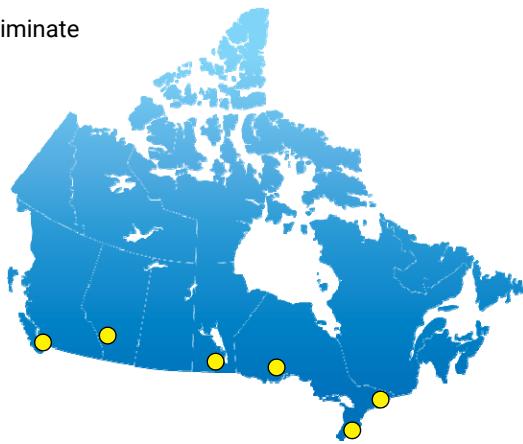
Historical Residue

Historical Residue

• Night Knight Knee

Regiolects: identify and discriminate by a given region

- Subtle regiolect differences



bergserg/iStock/Thinkstock

Sociolects

Sociolects (socio-economical-lect): identify and discriminate by language activities



Cockneys



Regiolect

Sociolect

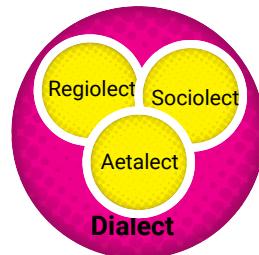
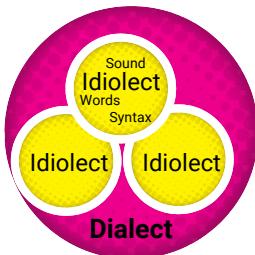
Aetalect

Vacation, Girl: S-S-S/iStock/Thinkstock

Idiolects

Etymology: *idios* “one’s own,” individual

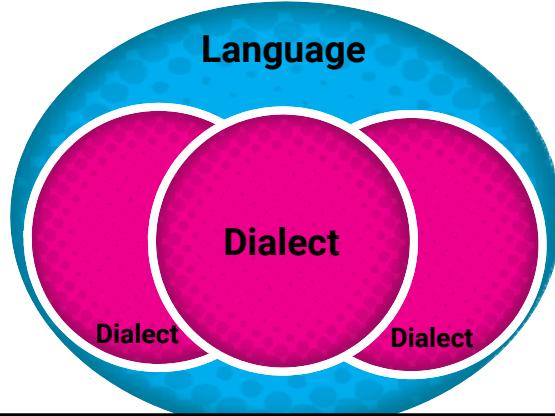
- A unique version of English
- We are defined by our language



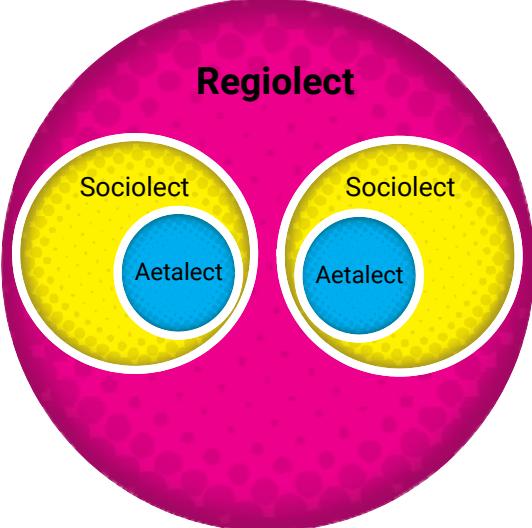
Idiolects

Etymology: *idios* “one’s own,” individual

- A unique version of English
- We are defined by our language



Idiolects



Two Kinds of Change

Internal Change

Language changes without outside influence

Internal
pressure

Isolation

Fashion



Icons: University of Waterloo

Internal Change

Language changes without outside influence

Internal
pressure

Isolation

Fashion



Neat
Groovy
Rad
Cool
Sweet
Really
“Rilly” [rɪlij]

Icons: University of Waterloo

Internal Change

Language changes without outside influence

Internal
pressure

Isolation

Fashion



What does fashion do?

- Identifies you as being part of a group
- Distinguishes you within that group

Icons: University of Waterloo

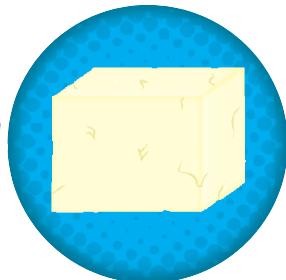
External Change

Pressures from outside the language (linguistic pressures)

Contact
with other
languages

Trade

Technology



English often borrows
from *Greek* and *Latin*

Icons: University of Waterloo

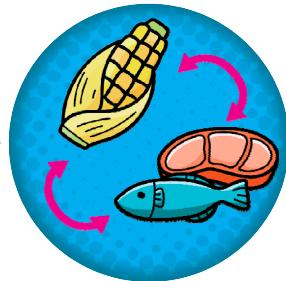
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External Change

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Icons: University of Waterloo

External Change

Hostile ways languages change

Borrowing

'Skunk', 'toboggan', 'muskrat'
'Chocolate', 'tomato', 'potato'

Imperialism



War

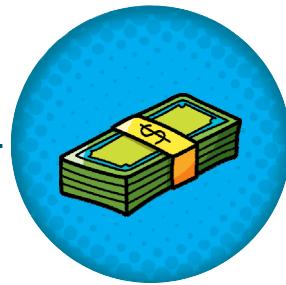
Icons: University of Waterloo

External Change

Hostile ways languages change

Borrowing

Imperialism



Financial
Physical taking over

War

Icons: University of Waterloo

External Change

Hostile ways languages change

Borrowing

Imperialism



War

Icons: University of Waterloo

Change can occur on all levels



Fashion, Isolation, Prestige



Trade, War, Imperialism



Phonological



Morphological



Lexical



Syntactic

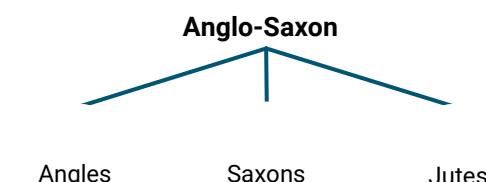


Semantic

Icons: University of Waterloo

Mutability Example: History of English

Old English (aka Anglo-Saxon)



Caedmon's Hymn

Now shall praise kingdom of heaven ward
Nu sculon herigean heofones-es-rices weard,
meotodes meahte, ond his modgeþanc.



Old English Middle English Early Modern English
We are here

Homo sapien 1

Map: University of Waterloo

External Change

What happened?

- Picked up Celtic and Pictish words
- Attacked by the Norse (Vikings)
- Infusion of a great amount of Romance (French, Latinate) vocabulary
- 11th century English changed into its modern form

Superstratum:
Latinate

Content words

- Nouns, verbs, adjectives, adverbs

German vocabulary

Substratum:
Germanic

Function words

- articles, prepositions, particles

Lexical Change: Sociolectal Residue

Germanic



Latinate



Religious terminology

Bureaucratic terminology

Legal terminology

Medical terminology

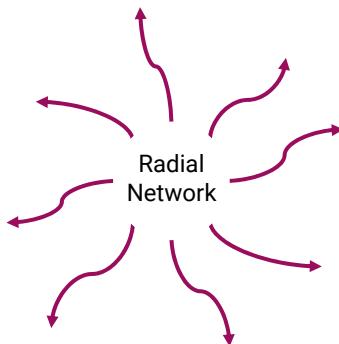
German vocabulary

Animals: VectorGift/Stock/Thinkstock, Meat: Gurzzza/Stock/Thinkstock

What Changes: Radial Networks

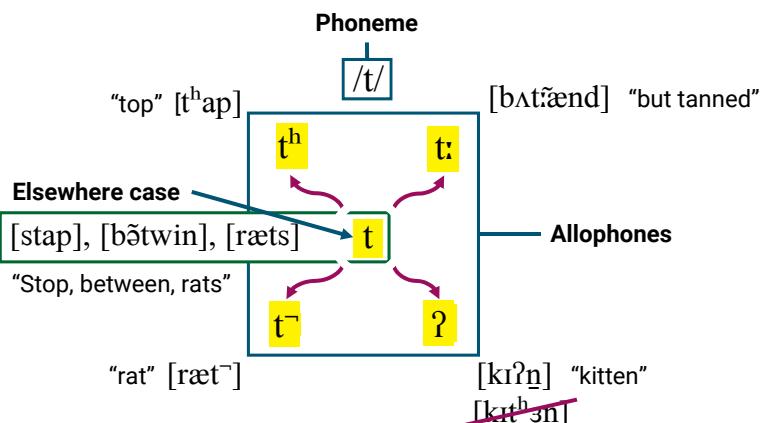
Radial Network

A network with a center (usually called the “prototype” of the network)
Phoneme: a set of sounds



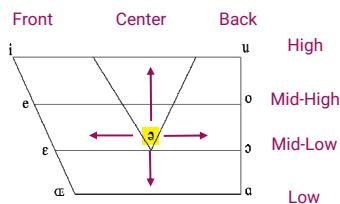
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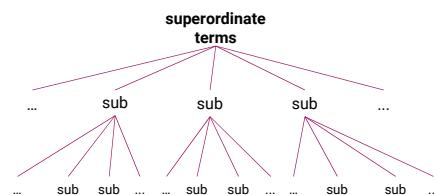


Radial Network Examples

Phonetic
 Vowel height; front/backness



Lexical

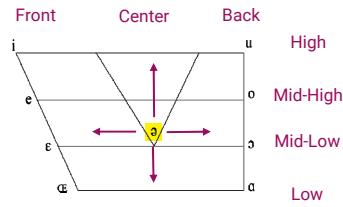


Dirven & Verspoor, p. 117

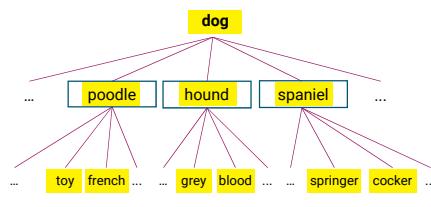
Radial Network Examples

Phonetic

Vowel height; front/backness



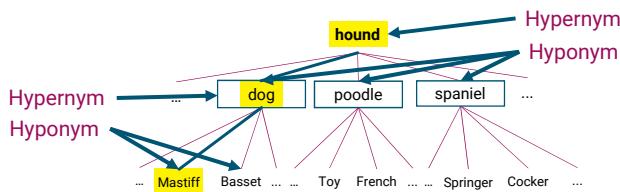
Lexical



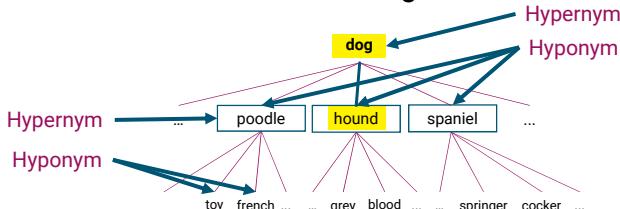
Dirven & Verspoor, p. 117

Kinds of Changes to Radial Networks

Middle English



Modern English



cole matt/istock/Thinkstock

Shrinkage



'mete'

- Any comestible
 - Solid comestibles
 - Edible portions of fruit, nuts, eggs, etc.
 - Animal flesh for food
 - A meal

‘meat’

- Animal flesh for food

Meat: Gurzzza/iStock/Thinkstock; Hand: Noedelhap/iStock/Thinkstock

Philology

Studying Changes

Philology

Looking at old texts

- Looking for noteworthy signifier/signified links



Signifier

Noise, writing on the page



Signified

Concept

superstratum



Paper: wenchiawang/iStock/Thinkstock, Mouth: Vector Story/iStock/Thinkstock, Brain: kraphix/iStock/Thinkstock

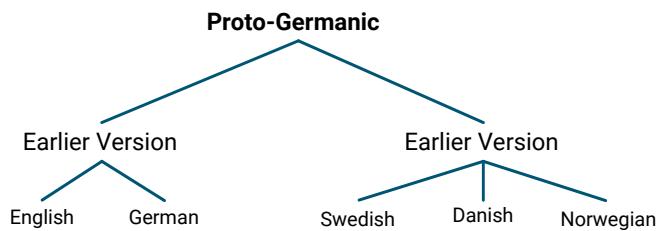
Studying Changes



Philology

Looking at old texts

- Looking for noteworthy signifier/signified links
- Compare/Contrast



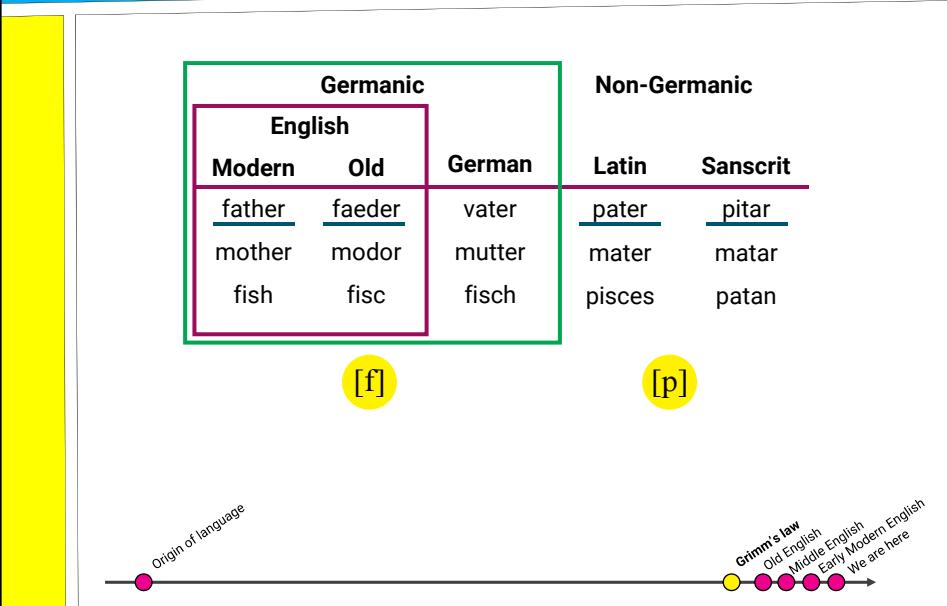
Paper: wenchiawang/iStock/Thinkstock

Reconstruction

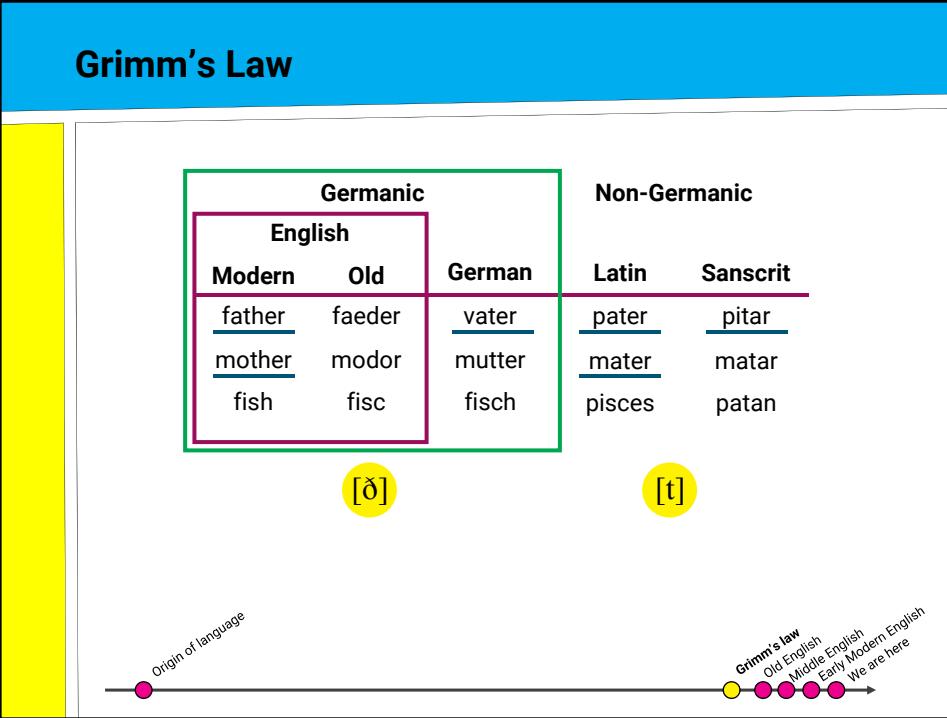
proto-Germanic	
Middle English	Old High German
father	vater
mother	mutter
brother	bruder
sister	schwester
king	konig
milk	milch
meat	fleisch

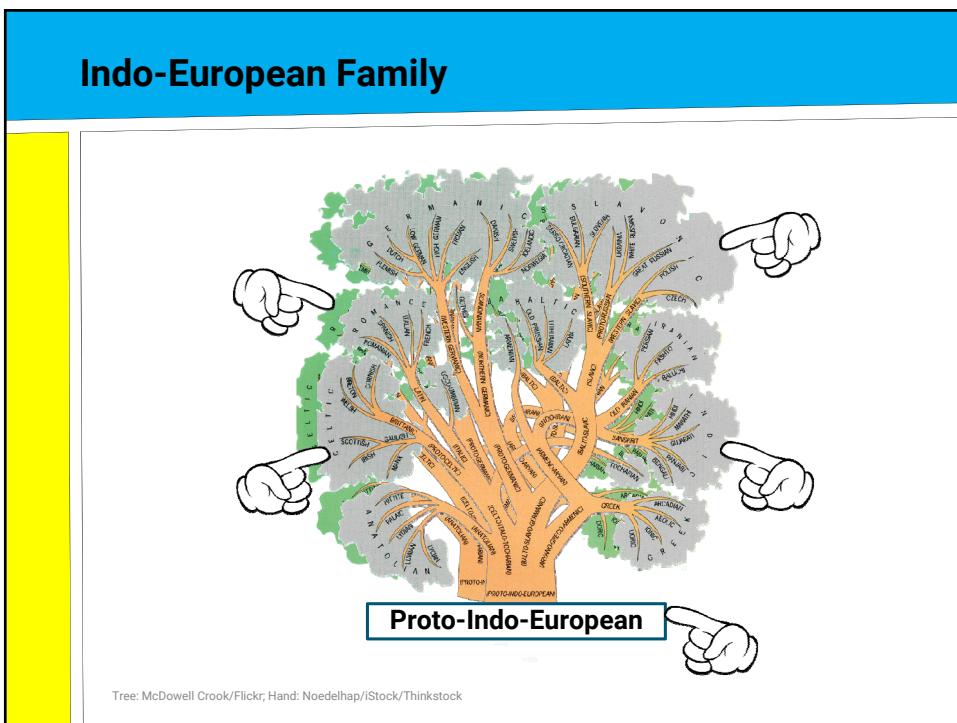
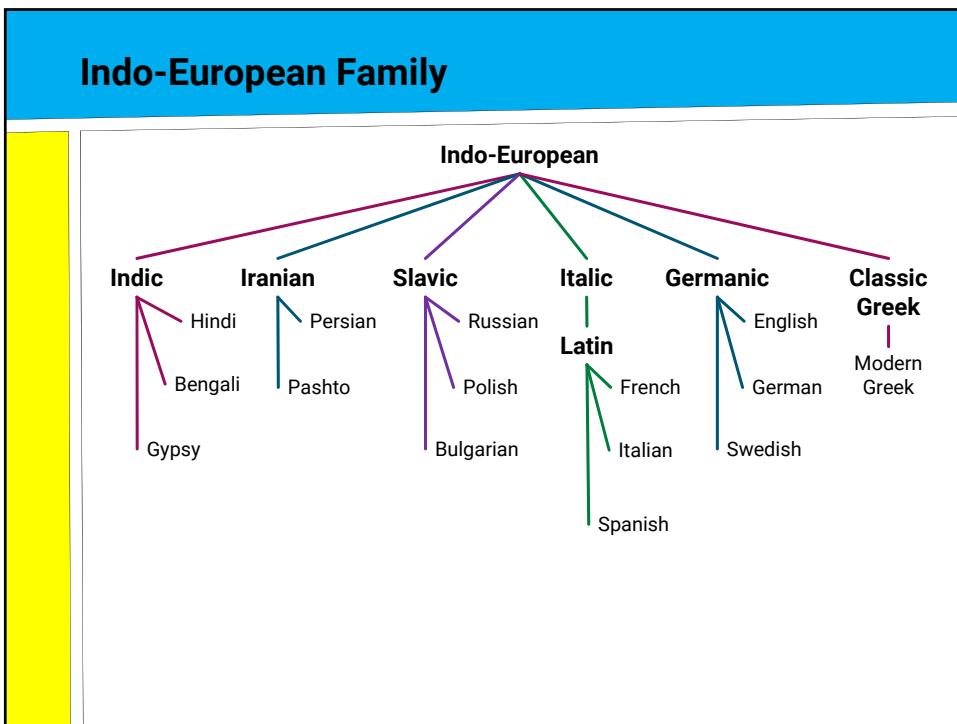
A comparison table showing reconstructed words from proto-Germanic. The first column lists Middle English words, and the second column lists Old High German words. A double-headed arrow between the columns is labeled "Increasing convergence".

Grimm's Law



Grimm's Law





Indo-European Family

*Proto-Indo-European	English
*pH₂tér	father
*tríH₂	three
*ped-	foot
*dékmt̚	ten
*dkm̚-tóm	hundred (note the relation to *dékmt̚)
*wiH-ro	man
*bhréH₂ter-	brother
*sen-	old
*bher-	carry
*gʷH₃wo	alive

Homo sapiens 1

Proto-Indo-European
Grimm's law
Old English
Middle English
Early Modern English
We are here

Language Families

North and Central America



Caddoan, Chimakuan, Coahuiltecan, Eskimo-Aleut, Gulf, Hokan, Huavean, Iroquoian, Keres, Kiowa-Tanoan, Mayan, Misumalpan, Mixe-Zoque, Muskogean, Na-Dene, Oto-Manguean, Penutian, Salishan, Siouan, Subtiaba-Tlapanec, Totonacan, Uto-Aztecán, Wakashan, Yuki



South America and the Caribbean

Alacalufan, Araucanian, Arawakan, Arutani-Sape, Aymaran, Barbacoan-Paezan, Cahuapanan, Carib, Chapacura-Wanham, Chibchan, Choco, Chon, Jívaroan, Katukinan, Lule-Vilela, Macro-Ge, Makú, Mascoian, Mataco-Guaircurú, Mosetenan, Mura, Nambiquaran, panoan, Peba-Yaguan, Quechuan, Salivan, Tacanan, Tucanoan, Tupí, Uru-Chipaya, Witotoan, Yanomam, Zamucoan



Africa, Europe, and Asia

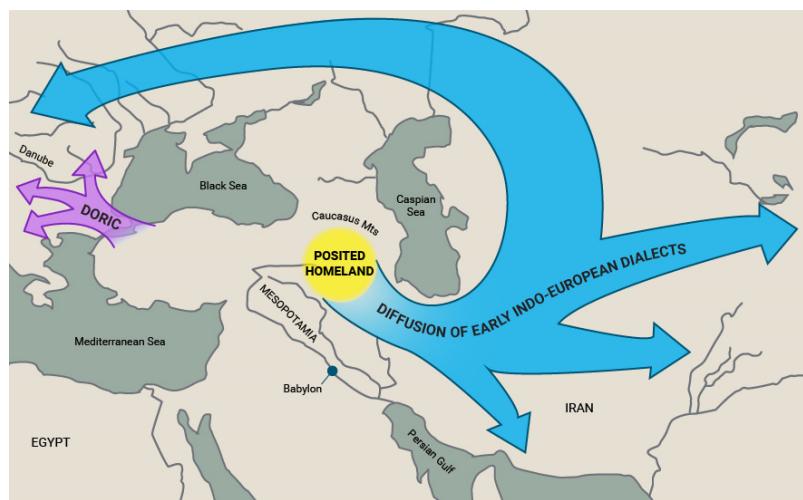
Afro-Asiatic, Altaic, Andamanese, Austro-Asiatic, Austronesian, Basque, Chukotko-Kamchatkan, Daic, Dravidian, Hmong-Mien, Indo-European, Japanese, Niger-Congo, Nilo-Saharan, North Caucasian, Sino-Tibetan, South Caucasian, Uralic, Yenesei-Ostyak, Yukaghirs



Amto-Musan, Australian, East Bird's Head, East Papuan, English-Tahitian Cant, Geelvink Bay, Kwomtari-Baibai, Left May, Sepik-Ramu, Sko, Torricelli, Trans-New Guinea, West Papuan

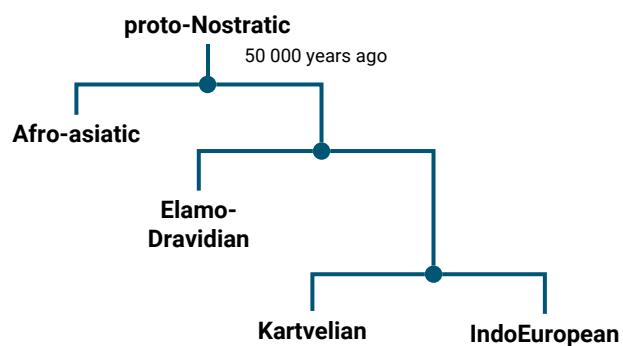
Countries: mokhtari/istock/Thinkstock

Language Families



Map: Adapted from Gamkrelidze, T. V., & Ivanov, V. V. (1990). The Early History of Indo-European Languages. *Sci Am Scientific American*, 262(3), 110-116. doi:10.1038/scientificamerican0390-110

Nostratic Hypothesis

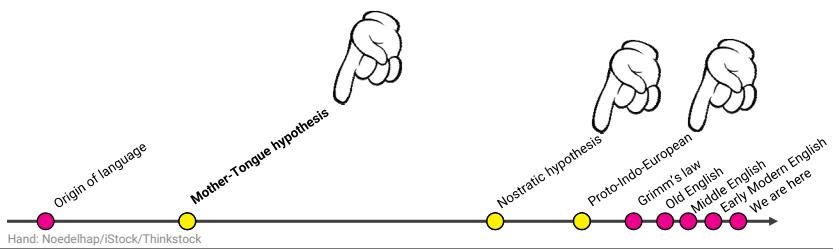


Homo sapien 1

Nostratic hypothesis
Proto-Indo-European
Grimm's law
Old English
Middle English
Early Modern English
We are here

Mother-Tongue Hypothesis

tik	one, index-finger, digit
pal	two
bur	ashes
tali	tongue, talk



Language's Origins

How Languages Arose



'Bow-wow theory'

language arose from onomatopoeia

Making noises to represent elements in the environment: animals, rain, expulsive gas, etc...



'Pooh-pooh theory'

language arose from spontaneous emotional noises



'Yo-he-ho theory'

language arose in muscular and rhythmic efforts accompanying group work
Gathering, distributing, distance-pursuit of prey, etc...

Homo sapien
Origin of language

Lexical Theories



'Bow-wow theory'



'Pooh-pooh theory'



'Yo-he-ho theory'

- Words are not the central aspect that distinguishes human talk
- It's the combinatorics (the ability to group words together)
- Not mutually exclusive
- Speech is very rhythmic
- Only 'Yo-he-ho' theory includes rhythm, sequence, structure.

Dog: colematt/iStock/Thinkstock; Baby: Bullet_Chained/iStock/Thinkstock; Caveman: hchjjl/iStock/Thinkstock

Neuron-Packing 'Theory'



Noam Chomsky

Theory: language is innate

- Neural density, big-bang theory
- Non-lexical
- Non-social

John Soares/Wikimedia Commons/Public Domain

Throwing Madonna Theory



William Calvin

Neural biologist

Theory: language developed from women

- Women nurse predominantly on the left side
- Language is left dominant
- Motor/linguistic
- Sequencing
- Non-lexical
- Piggy-backing theory
 - Language arose parasitically on some other process

Bill Calvin/Wikimedia Commons/CC BY 2.0

Yadda-yadda-yadda theory

"Verbal grooming" or "language as gossip" theory

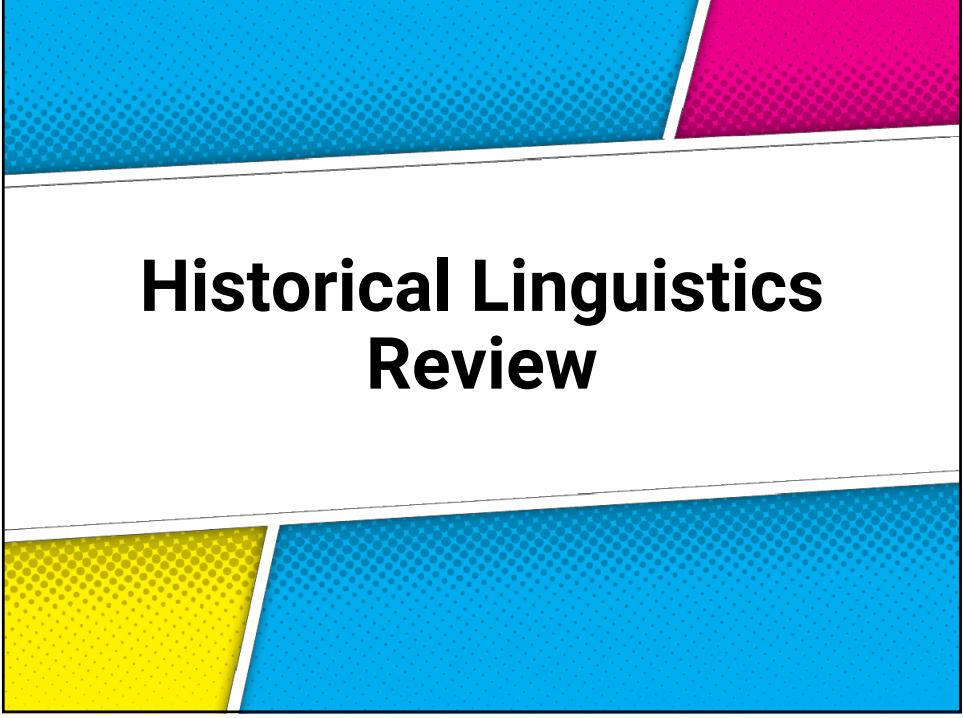


Robin Dunbar

Theory: language is verbal grooming

- Human tribes got too big, social bonds too intricate, to manage them physically
- Social theory
- Non-lexical

Robin Dunbar/Wikimedia Commons/CC BY 2.0



Historical Linguistics Review

Review

Mutability (languages change over time)

- External (war, imperialism, trade)
- Internal (fashion, prestige, isolation)

Categorical changes

- Radial networks (phonological, lexical)

Genealogical relationships

- Between language families
- Reconstructed proto-languages

Language origins

- Lots of guesses, no clear solutions
- Lexical and non-lexical variants