# Variability of languages in time and space Intro

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https://ufal.mff.cuni.cz/courses/npfl100

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# Living languages around the world

- The number of languages in printed and online resources:
  - Ethnologue (26th ed., 2023): 7,168 languages
  - Ethnologue (25th ed., 2022): 7,151 languages
  - Ethnologue (24th ed., 2021): 7,139 languages
  - Ethnologue (23rd ed., 2020): 7,117 languages
  - Ethnologue (22nd ed., 2019): 7,111 languages
  - Ethnologue (21st ed., 2018): 7,097 languages
  - ...
  - Ethnologue (16th ed., 2009): 6,909 languages
  - . . .
  - Ethnologue (7th ed., 1969): 4,493 languages
  - . . .
  - Encyclopedia Britannica (1911): app. 1,000 lang.

not an increase in the number of languages,
but rather steadily improving documentation efforts

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## • A first language (L1)

is a language which a person acquires first in her/his life, usually naturally as a child.

## • A second language (L2)

is a language which a person acquires next to her/his first language.

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## A living language

has at least one speaker for whom it is a first language.

- e.g. English, Catalan, Japanese, Swahili, French Sign Language
- distinguished from dead languages
  - a **dead language** is no longer the native language of any community but is still in use, e.g. Latin

 - a more subtle insight provided by the
Expanded Graded Intergenerational Disruption Scale (EGIDS; Lewis & Simons 2010)

• from *internationally used* languages to *extinct* languages

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#### Expanded Graded Intergenerational Disruption Scale (EGIDS)

1	Level	Label	Description	
	0	International	The language is widely used between nations in trade, knowledge exchange, and international policy.	
	1	National	The language is used in education, work, mass media, and government at the national level.	
			The language is used in education, work, mass media, and government within major administrative subdivisions of a nation.	
	3	Wider Communication	The language is used in work and mass media without official status to transcend language differences across a region.	
	4	Educational	The language is in vigorous use, with standardization and literature being sustained through a widespread system of institutionally supported education.	
	5	Developing	The language is in vigorous use, with literature in a standardized form being used by some though this is not yet widespread or sustainable.	
	6a	Vigorous	all generations, but it is losing users. The child-bearing generation can use the language among themselves, but it is not being transmitted to children. I The only remaining active users of the language are members of the grandparent generation and older.	
	6b	Threatened		
	7	Shifting		
	8a	Moribund		
	8b	Nearly Extinct		
	9	Dormant		
	10	Extinct	The language is no longer used and no one retains a sense of ethnic identity associated with the language	
			sevcikova@ufal.mff.cuni.cz Variability of languages	

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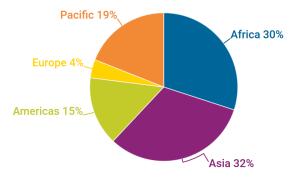
# Regions of origin of languages



Each language is located in its **primary country**, i.e. it is shown **just once**; e.g. English in the United Kingdom, Esperanto in Poland.

## Ethnologue (2018):

- 2,300 languages (out of 7,097) are from Asia
- 2,143 languages are concentrated in Africa
- 288 languages belong to Europe



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# Languages by region and by size (number of L1 speakers)

### Languages

Population

Africa

980M speakers



Europe (yellow): 288 languages

Americas (green): 49M Pacific (orange): 7M speakers

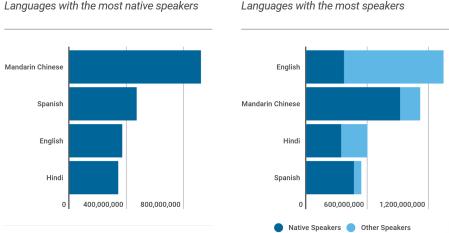
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- English listed as a language belonging to Europe. Therefore, all L1 speakers of English (e.g. incl. English speakers living in the USA) categorized under Europe.

- nearly 7,900,000,000 speakers around the world
  - $\bullet\,$  nearly 90 % of speakers use languages from Asia or Europe as L1
  - 40 % of speakers use one of just 5 languages as L1
    - Chinese, Spanish, English, Hindi, Arabic

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## Number of L1 speakers vs. of L2 speakers



#### Languages with the most speakers

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Languages of the world share some features, but display differences at the same time – studied by **linguistic typology** ( = language typology)

En.	German	Czech	Slovene	Croatian	French	Spanish	Italian	
father	Vater	otec	oče	otac	père	padre	padre	

- WHY are they similar? WHY do they differ?
- due to a common origin ightarrow genealogical (genetic) classification
- due to language contact  $\rightarrow$  areal linguistics
- due to other factors

Some similarities can be explained by the **common origin** of languages.

En.	German	Czech	Slovene	Croatian	French	Spanish	Italian
father	Vater	otec	oče	otac	père	padre	padre

- languages that developed from the same ancestor language and belong to the same **language family** share common features
  - English and German belong to Germanic languages
  - Czech, Slovene, and Croatian to Slavic languages
  - French, Spanish and Italian to Romance languages
- different genealogical classification in different resources

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Languages that display systematic similarities and differences are assumed to have descended from *a common source language* = **ancestor language / proto-language**.

- regular correspondences betweeen languages studied by comparative methods
- proto-languages not attested, they are **reconstructed** from available documents of the descendent languages

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# Language families

**Language family** is a group of languages that have developed from the same proto-language.

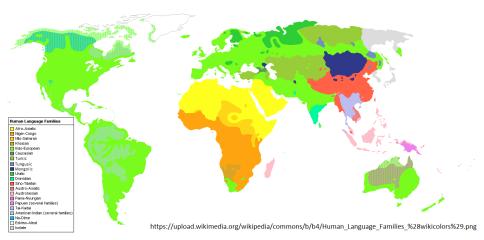
language family	languages	million of speakers
Niger-Congo	1,527	511
Austronesian	1,224	324
Trans-New Guinea	479	3.5
Sino-Tibetan	453	1,370
Indo-European	444	3,090
Afro-Asiatic	366	496

- plus another 150 language families in *Ethnologue* 2023: https://www.ethnologue.com/browse/families/

**Language isolates** are natural languages that cannot be assigned to any language family; e.g. Basque (= Euskera; spoken in Spain), Ainu (Japan).

- https://www.ethnologue.com/subgroup/79/\_\_\_\_

## Language families around the world



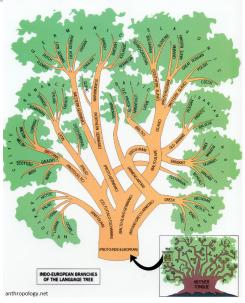
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# Indo-European language family tree

- proto-language: Proto-Indo-European (PIE)
  - reconstructed on the basis of Sanskrit, Ancient Greek, Latin, and others
  - assumed existence: 4,500–2,500 B.C.E.

Sanskrit	asmi	asi	asti
Greek	eimi	essi	esti
Latin	sum	es	est
Gothic	im	is	ist



# Genealogical classification in Ethnologue

#### multiple-level classification of languages

- language family
- sub-family
- —– group
- ——- subgroup
- ------ sub-subgroup
- ——— individual language
- classification of Slavic languages
  - Indo-European lang. family
  - Balto-Slavic sub-family
  - ----- group: Slavic lang.

  - ------ e.g. sub-subgroups of South Slav. lang.: Eastern, West.
  - ——— 20 Slavic languages in total

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• three-level genetic classification of languages:

language family

— genus

— individual language

• classification of **Slavic** languages:

Indo-European family

- genus: Slavic languages

----- 17 individual Slavic languages in total

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# 20 Slavic languages in *Ethnologue vs* 17 Slavic languages in *WALS*

Ethnologue	WALS		
Belarusian	Belorussian		
Russian	Russian		
Ukrainian	Ukrainian		
Bulgarian	Bulgarian		
Macedonian	Macedonian		
Bosnian	Bosnian		
Serbian	Serbian-Croatian		
Slovene	Slovene		
Czech	Czech		
Slovak	Slovak		
Kashubian	Kashubian		
Polish	Polish		
Lower Sorbian	Lower Sorbian		
Upper Sorbian	Upper Sorbian		

#### Ethnologue only:

- Croatian
- Montenegrin
- Church Slavonic
- Slavomolisano
- Silesian
- Rusyn

#### WALS only:

- Sorbian
- Polabian
- Slovincian

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But what about similarities between unrelated languages? They can result from **language contact**.

En.	Czech	Basque	Swahili	Maori	
pepper	$pep\check{r}$	piperra	pilipili	pepa	]

"The country of origin of black pepper is south India. The origin of the word can be found in Sanskrit pippali. The merchants from India distributed to other countries not only spice but also its name. In this way languages got in touch, in contact." (Körvélyessy 2017:80)

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#### Languages that are geographically in contact may influence each other

- based on the regional location of languages
- without respect to their genetic classification
- speakers of the languages interact and influence each other
  - pronunciation
  - grammatical constructions
  - borrowing of words

language	'woman' – ' <b>the</b> woman'	'man' – ' <b>the</b> man'
Bulgarian	жена — жена <b>та</b>	мъж – мъж <b>ът</b>
Romanian	femeie – fememi <b>a</b>	bărbat – <mark>băr</mark> bat <b>ul</b>
Albanian	grua – grua <b>ja</b>	burrë – burr <b>i</b>

#### Körtvélyessy (2017:2):

"Language typology is a system or study that divides languages into smaller groups according to similar properties they have. [...] These smaller groups are called **language types**."

#### a holistic approach to language typology

"The classification of languages into language types attempts to 'match' the complete language system with one language type."

## • a partial approach to language typology

"the classification is based on the analysis of a selected language construction and/or phenomenon (not the entire language), for example the size of the consonantal inventory, the presence vs. absence of articles in language, the order of words in a sentence etc."

- Typological classification is based on the study of structural and functional features at particular levels of the language system.
- Typological approach to phonology:
  - How many vowels and consonants are used in the language?
  - Which features do they have?
  - How are syllable formed in the language?
  - Which prosodic features are employed in the language?

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- Are grammatical categories conveyed by morphemes, auxiliaries, and/or by word order?
- How many morphological cases are available in the language?
- In holistic approaches to morphological typology, several language types discerned:
  - agglitinating
  - Insional
  - olysynthetic
  - isolating

- Which word-formation processes are available in a language to coin new words?
- How frequent are particular word-formation processes in a language?
- How are things/abstract phenomena/actions named in a language?

- How are sentence elements ordered in a linear sequence (sentence)?
  - focus on three main elements: subject, verb, object
  - the order of the elements analysed in simple indicative sentences

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#### A language universal

is a feature that all languages have, or a statement that holds for all languages, or *less strictly* (more commonly), a feature or statement that holds for a majority of languages.

• morphological and syntactic universals listed in the *Universals Archive* 

https://typo.uni-konstanz.de/rara/category/universals-archive/

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