

Phon research

George Moroz

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Plan

Phonology vs. phonetics

Phonetics?

Phon research in the field

Phonological theory starts with [Trubetzkoy 1939]:

- relation of phonology to other studies
- the nature of phonemes
- how to determine the phonemes of a language
- ...
- phoneme neutralization
- ...

Phonological theories

- Kazan School (Jan Baudouin de Courtenay, N. S. Trubetzkoy);
- Prague linguistic circle (R. Jakobson, N. S. Trubetzkoy);
- American Descriptivism (L. Bloomfield);
- Feature theory [[Jacobson et al. 1952](#)];
- Generative phonology [[Halle 1962, 1964](#); [Chomsky 1964](#); [Chomsky and Halle 1965](#)];
- Natural phonology [[Stampe 1969](#)];
- Autosegmental phonology [[Goldsmith 1976](#)];
- Metrical phonology [[Lieberman 1975](#)];
- Atomic phonology [[Dinnsen 1980](#)];
- Government Phonology [[kaye85](#)];
- Feature Geometry [[Clements 1985](#)];
- Lexical phonology [[Mohanan 1986](#)];
- Harmonic phonology [[Legendre et al. 1990](#)];
- Element theory [[Harris and Lindsey 1995](#)];
- Optimality Theory [[Prince and Smolensky 1993](#)];
- ...

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- ... it is just the end of the slide not theories...

Phonological research

- classification of phonological units
 - segments
 - features
 - syllables
 - stress
 - tone
 - foot
 - phonological words
- geographical distribution of phonological units, see [WALS](#)
- statistical distribution of phonological units
- universals, see [Konstanz Universals Archive](#)
- phonological alternations (historical and synchronic)
- phonologization

Databases of phonological inventories

- LAPSyD [Maddieson et al. 2013];
- PHOIBLE [Moran and McCloy 2019];
- The database of Eurasian phonological inventories [Nikolaev 2018];

Phonology of Sign Languages

- Sign Languages are languages! [[Stokoe 1960](#)]
- articulatory features:
 - orientation of the hand;
 - handshape;
 - movement;
 - non-manual components;
- handedness
- signs vs spelling

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Phonology vs. phonetics

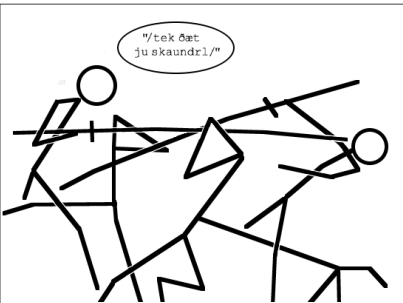
Phonetics?

Phon research in the field

Phonetics?



Phonetics



Phonology

from <http://specgram.com/CLIII.1/09.parenchyma.cartoon.e.html>

Phonetics is generally assumed to be a subfield that deals with **articulatory**, **acoustic** and **perceptual** aspects of phonological units. Phonology and phonetics together are supposed to describe organization of sounds in languages.

Articulatory phonetics

- air stream mechanisms

	egressive	ingressive
pulmonic	majority of sounds	rare
glottalic	ejectives	implosives
velaric		clicks

- larynx and vocal cords: phonation types
 - modal voice
 - cracky voice
 - breathy voice
- articulation

Articulatory phonetics research

- X-ray
- electropalatography
- endoscopy
- ultrasound
- magnetic resonance imaging
- ... and others

Acoustic phonetics

Acoustic phonetics is the study of the acoustic characteristics of speech:

- frequency,
- intensity,
- duration.

Perceptual phonetics

Acoustic signal is not ears.

- Our perceptual systems are tuned by linguistic experience
- Phoneme restoration

Perceptual phonetics research: experiments!

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