Phon research

George Moroz

7th of September, 2023

Outline of the lecture

Phonology vs. phonetics

Phonetics?

Phon research in the field

Phonology

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 (Liberman 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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- Optimality Theory (Prince and Smolensky 1993);
- ... 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 sinchronic)
- 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

Outline of the lecture

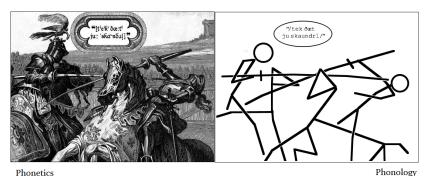
Phonology vs. phonetics

Phonetics?

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Phonetics?



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 perceptional 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 glottalic velaric	majority of sounds ejectives	rare implosives clicks

- larynx and vocal cords: phonation types
 - modal voice
 - creacky 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.



Perceptional phonetics

Acoustic signal is not ears.

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

Perceptional phonetics research: experiments!



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