



THE THEORY OF PHONETICS

Lectures 1+2

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[COURSE REQUIREMENTS]

- Attendance
- Participation
- Home assignment
- Project
- Reports for seminars
- Continuous assessment + final exam

What is GOOD PRONUNCIATION?

Ways to acquire good pronunciation:

- 1) Ear training
- 2) Imitation
- 3) Overcoming of the native tongue interference
- 4) Memory work
- 5) Theoretical knowledge

Is it possible to acquire native-speaker-like pronunciation?

What science is PHONETICS? What does it study?

Phonetics as a science is concerned with the human noises by which the thought is actualized in audible shape: the nature of these noises, their combinations, and their functions in relation to the meaning

Phonetics studies	the sound system of the language
	word stress
	syllabic structure and intonation
	expression level + content level

METHODS OF INVESTIGATION

1. The direct observation method :

- by ear
- by sight
- by muscular sensation

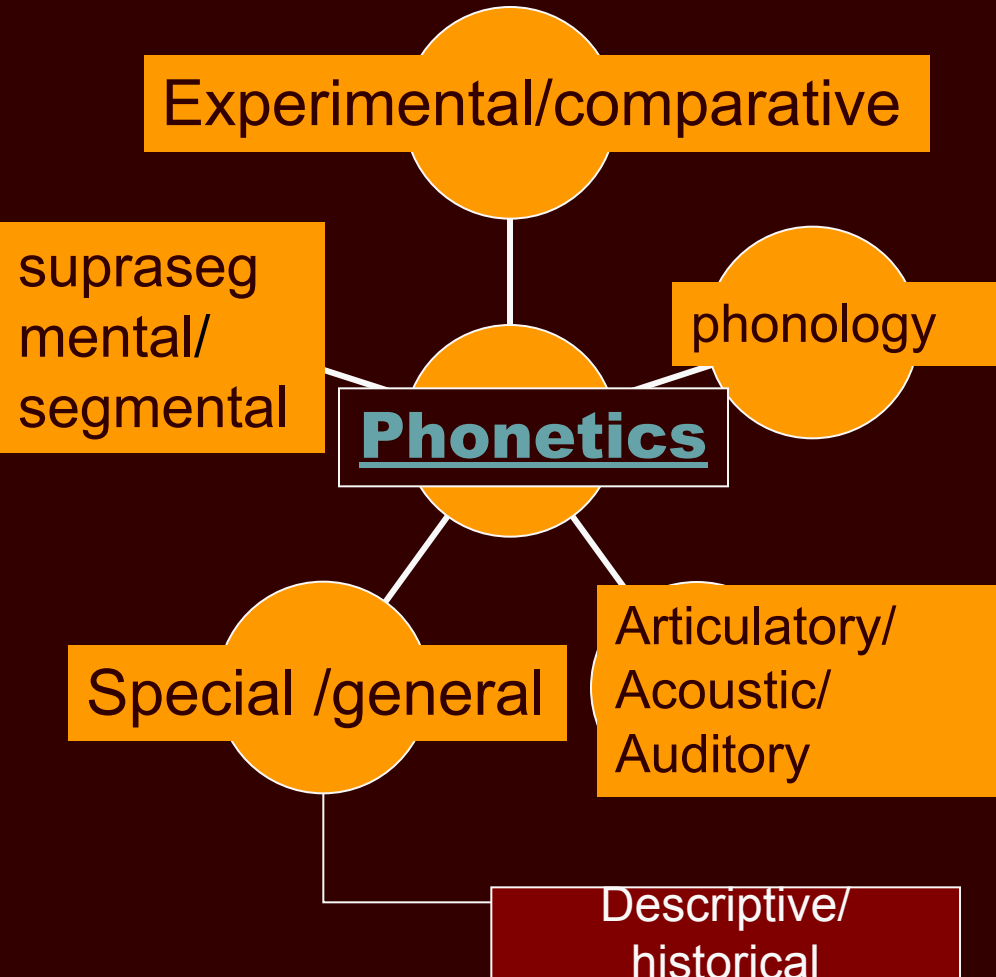


2. The linguistic method (to determine in what way all phonetic features are used in a language to convey a certain meaning)

3. The experimental method (use of special apparatus or instruments)

the laryngoscope, the artificial palate, the kymograph, the magnetic tape recorder, the oscillograph, the spectrograph, X-ray photography, slow motion films, speech synthesizers

Branches of Phonetics



Phonetics:

- Sociophonetics
- Psychophonetics
- Russian phonetics
- Theoretical phonetics
- Practical/ applied phonetics

[PHONETICS VS. PHONOLOGY]

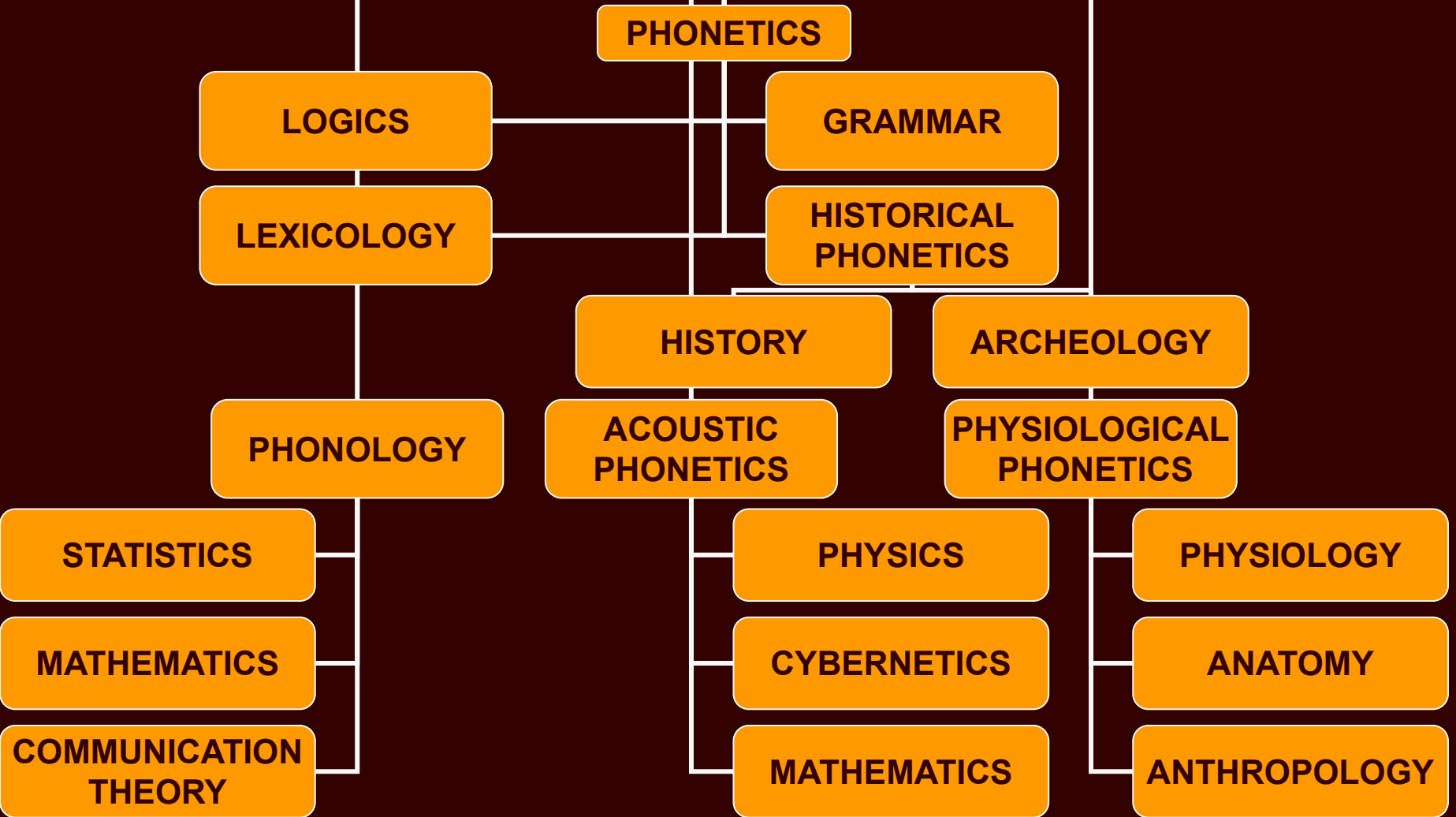


Nikolay Sergeevich
Trybetskoy

Phonetics is a biological science, and is concerned with the physical and physiological characteristics of speech sounds.

Phonology is a linguistic science, and is concerned with the social functions of different phonetic phenomena. Phonology is a convenient term to indicate that section of phonetics in which the social functions of speech sounds are discussed.

PHONETICS and other sciences



Practical application of phonetics

- teaching correct pronunciation and eliminating dialect features from the pronunciation;
- logopedics and curing speech defects;
- teaching normal oral speech to deaf & dumb people;
- devise alphabets for unwritten languages & spelling reforms;
- technical acoustic & sound technology;
- information & communication, cybernetics.

SPEECH SOUNDS and their aspects



[m, n, ŋ];

nasal (articulatory aspect)

resonants (acoustic aspect)

sonorant (auditory aspect)

all these sounds are realizations of different phonemes in English, while [ŋ] is an allophone of the phoneme [n] in Italian (functional or linguistic aspect)

Functions of speech sounds:

- 1. constitutive

- they constitute the material forms of morphemes, words & sentences;

- 2. distinctive

- they differentiate morphemes, words & sentences (e.g. *zero-oppositions; minimal pair*).

- 3. recognitive

- the use of the right allophones in the right places facilitates normal recognition, and, consequently, understanding, of speech.

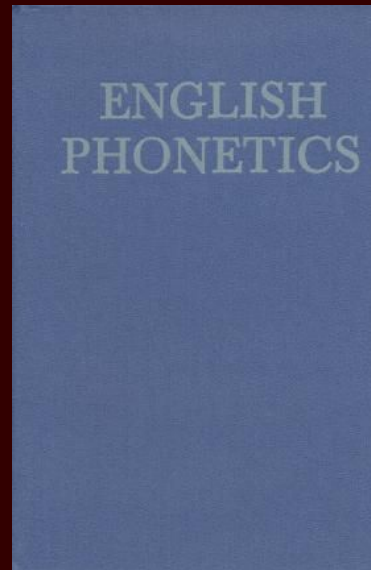
THE PROBLEM OF THE PHONEME



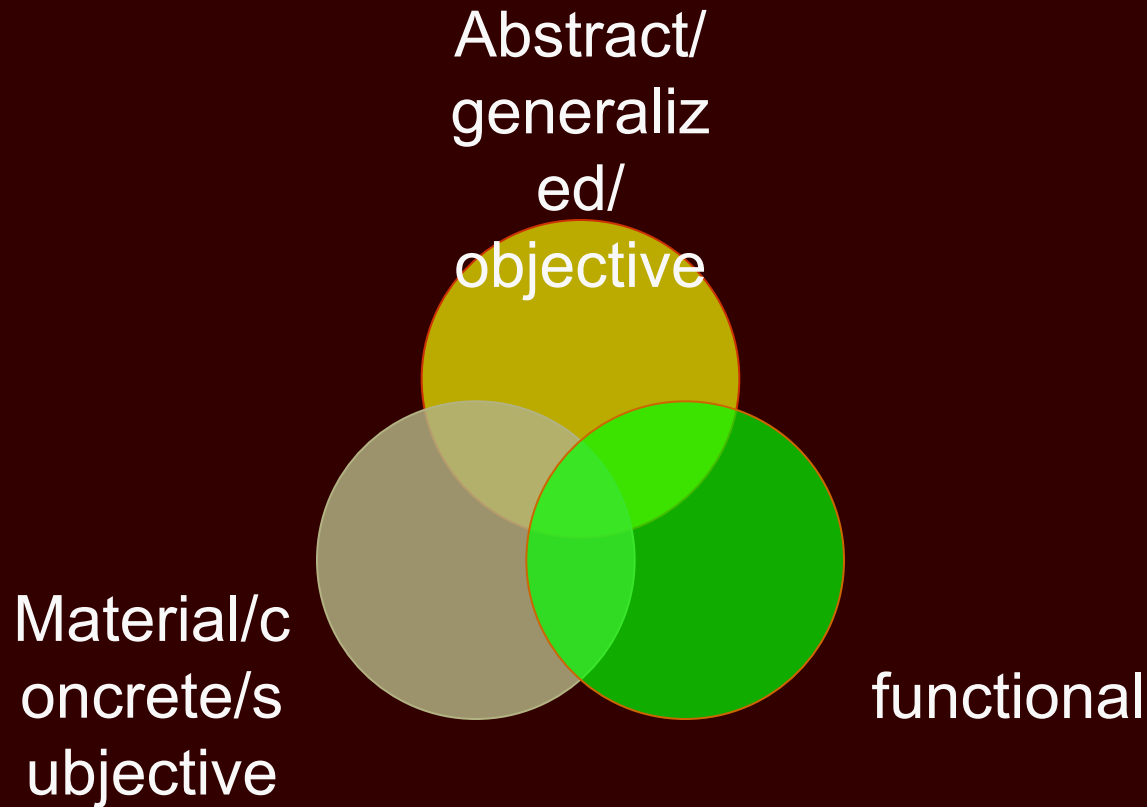
- **L.V. Shcherba**: the phoneme may be viewed as a functional, material and abstract unit.
- **V.A. Vassilyev**: the phoneme is the smallest (i.e. further indivisible into smaller consecutive segments) language unit (sound type) that exists in the speech of all the members of a given language community as such speech sounds which are capable of distinguishing one word of the same language or one grammatical form of a word from another grammatical form of the same word".

Concise working definition (by V.A.Vassilyev)

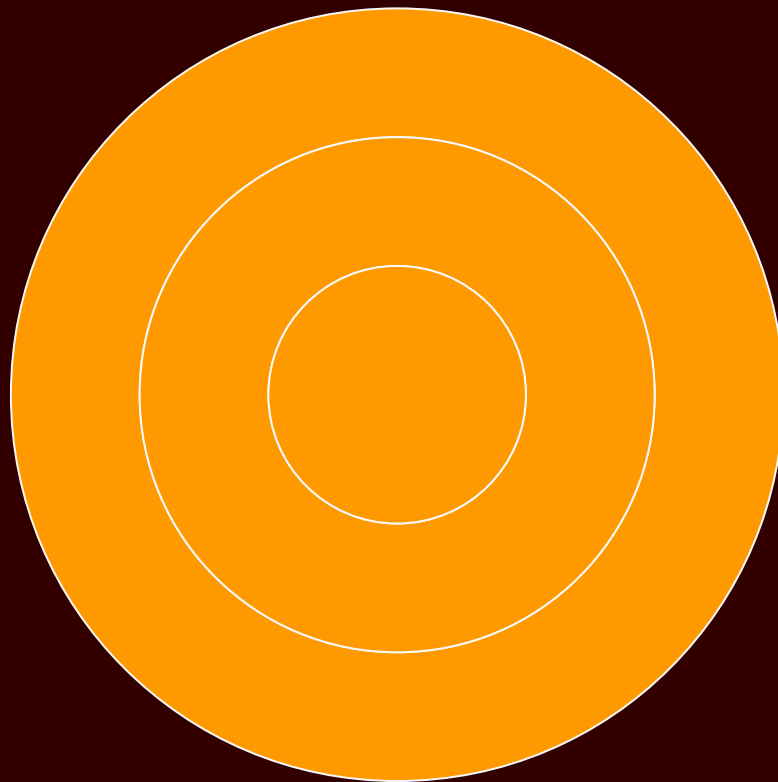
“The *phoneme* is a minimal abstract linguistic unit realized in speech in the form of speech sounds opposable to other phonemes of the same language to distinguish the meaning of morphemes and words.”



ASPECTS OF THE PHONEME

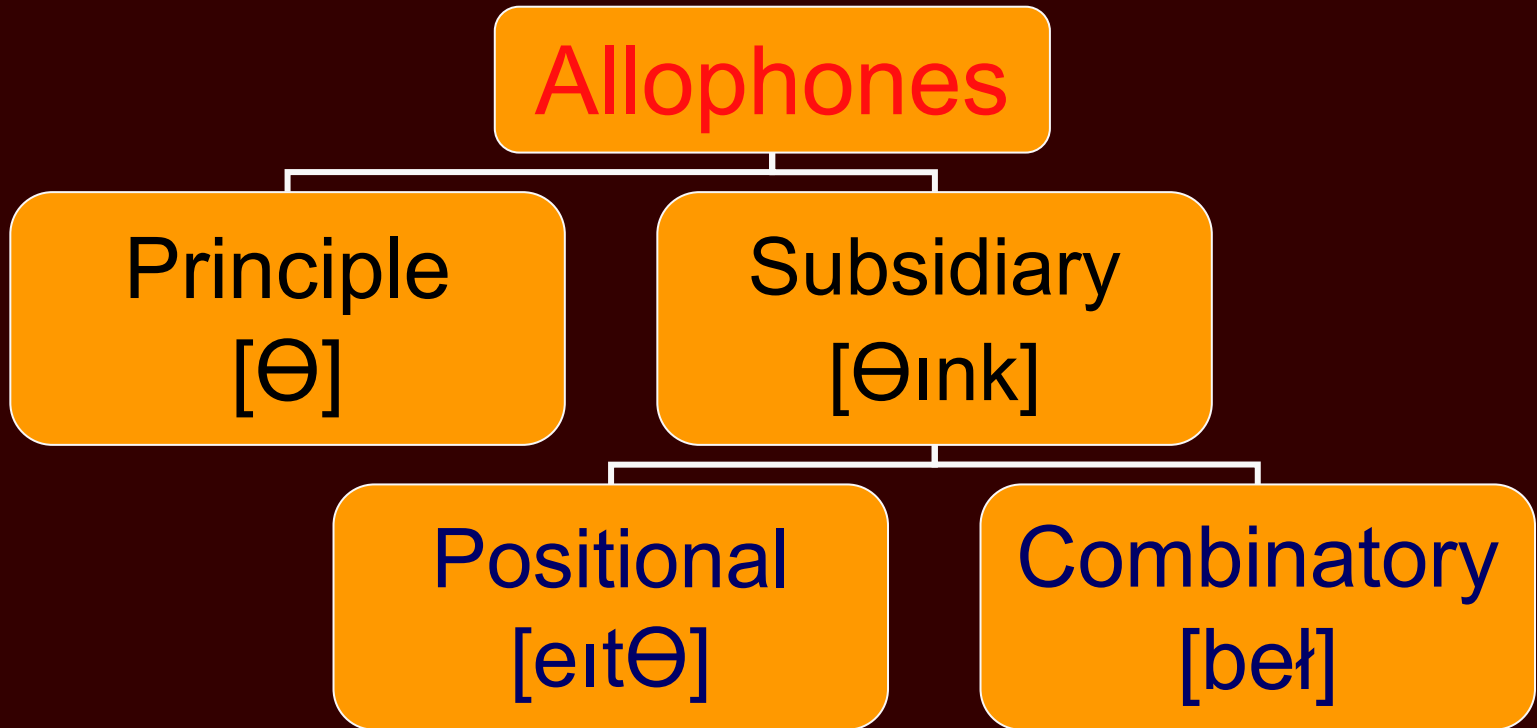


PHONEME, SPEECH SOUND, ALLOPHONE



Speech
h
sound
Phone
me
Alloph
one

Classification of allophones



FUNCTIONS OF THE PHONEME

Are the functions of the phoneme related to the functions of the speech sounds?

- 1) Constitutive (e.g. think)
- 2) Distinctive (e.g. think-thing)
- 3) Recognitive (e.g. [tɪnk])

MAIN TRENDS IN THE PHONEME THEORY

- 1) Mentalistic/ psychological
- 2) Functional
- 3) Abstract
- 4) Physical
- 5) Cybernetic

MENTALISTIC/ PSYCHOLOGICAL VIEW

GENERAL IDEA

- The phoneme = "mental image", or psychical image of a sound.
- Allophones of the phoneme are varying materializations of it.
- There's a discrepancy between an intended sound and the one actually pronounced.

REPRESENTATIVES

I.A.Baudouin de Courtenay, E.D.Sapir, Alf. Sommerfelt (*phonemes = "models which speakers seek to reproduce"*), N.S.Trubetsky's (*phoneme = sound image, the intention to pronounce a sound but later phoneme = a language, not psychological unit*).

CRITICISM

It is definitely not possible to establish such ideal sounds which do not exist in reality (Bloomfield and his followers, D.Jones)

PHONEME ASPECT?

- ABSTRACT

[FUNCTIONAL VIEW]

■ GENERAL IDEA:

- The phoneme = the minimal sound unit by which meanings may be differentiated without much regard to actually pronounced speech sounds.
- Distinctive features of the sound make up the phoneme corresponding to it (*ladder*: lenisness distinctive only in the third sound [d], otherwise *latter*).
- Non-distinctive features are extracted from the phonemes thus divorcing the phoneme from actually pronounced speech sounds.

■ REPRESENTATIVES:

N.Trubetskoy, L.Bloomfield, R.Jakobson, M.Halle.

■ PHONEME ASPECT?

FUNCTIONAL

ABSTRACT VIEW

■ GENERAL IDEA

- A stronger form of the "functional" approach.
- Phonemes = essentially independent of the acoustic and physiological properties associated with them, that is of speech sounds.
- Phonemes = conceptions existing in the mind but not in human speech, speech sounds being only phonetic manifestations of these conceptions.

■ REPRESENTATIVES

F. de Saussure, L.Hjelmslev and his associates in the Copenhagen Linguistic Circle, H.J.Uldall and K.Togby.

■ PHONEME ASPECT?

ABSTRACT AND FUNCTIONAL

PHYSICAL VIEW

■ GENERAL IDEA

- The phoneme = a "family" of related sounds satisfying certain conditions:
 - a) The various members of the "family" must show phonetic similarity to one another;
 - b) No member of the "family" may occur in the same phonetic context as any other.
- The phoneme = a group of articulatorily similar sounds without any regard to its functional and abstract aspects.

■ CRITICISM

it is not easy to see how sounds could be assigned to the same phoneme on any other grounds than differentiating between words?

■ REPRESENTATIVES

D.Jones, B.Bloch and G.Trager

■ PHONEME ASPECT?

MATERIAL

CYBERNETIC VIEW

■ GENERAL IDEA

- The phoneme cannot be perceived by means of direct observation; therefore it is a construct.
- Subject of the "two-level theory of phonology": theoretical phonology ("the study of the nature of phonological reality"), and general phonology ("typology of concrete phonological systems"),
- The "construct" requires a special conceptual apparatus in order to be cognized.

■ CRITICISM

- Phonemes can be perceived and are daily perceived by members of the same linguistic communities (alphabets).
- Separate phonemes can be recognized (the Cockney dialect: [aɪ] instead of [eɪ], shift the [h]-phoneme in initial positions of words: [ɪz], [eə] for his, hair, and [hea] for air).

■ REPRESENTATIVES

S. K. Showmyan.

■ PHONEME ASPECT?

ABSTRACT

Linguistic transcription

BROAD

(phonemic)

1 symbol = 1
phoneme

e.g. /pen/

NARROW

(allophonic)

1 symbol = 1
allophone

e.g. [pen]



phoneme do

are there in

English the
How many
emes did you



Thank you for your attention!