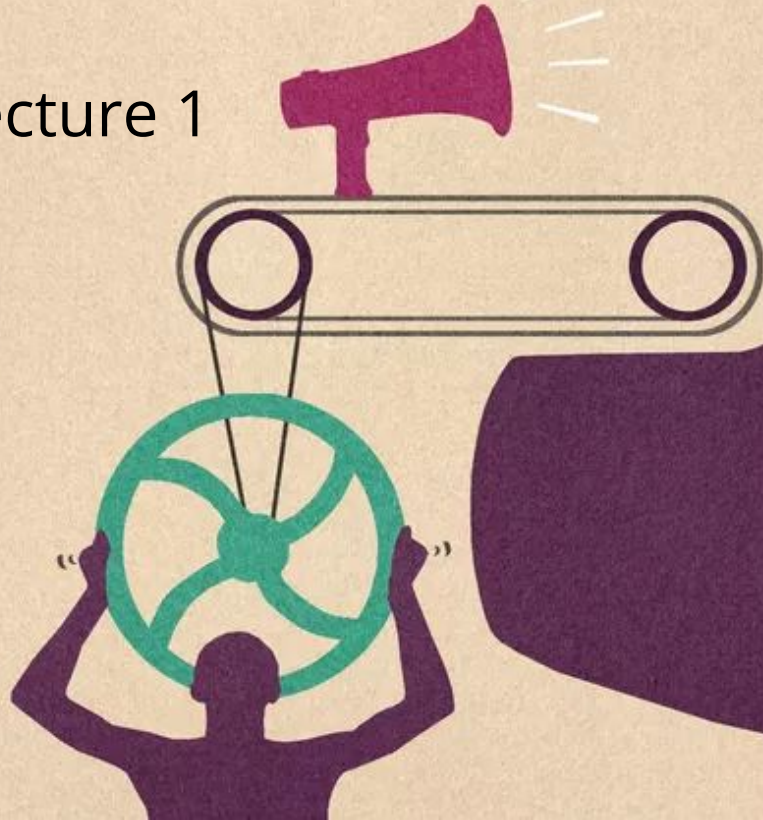


Theoretical Phonetics

Lecture 1



Theoretical Phonetics

1. Phonetics as science
2. Branches of Phonetics
3. Phonetics and other disciplines
4. Methods of Phonetic Investigation

<https://www.thoughtco.com/phonetics-definition-1691622>

Communication

Writing

Sign Language

Art

Gestures

Facial expressions



The Speech Chain

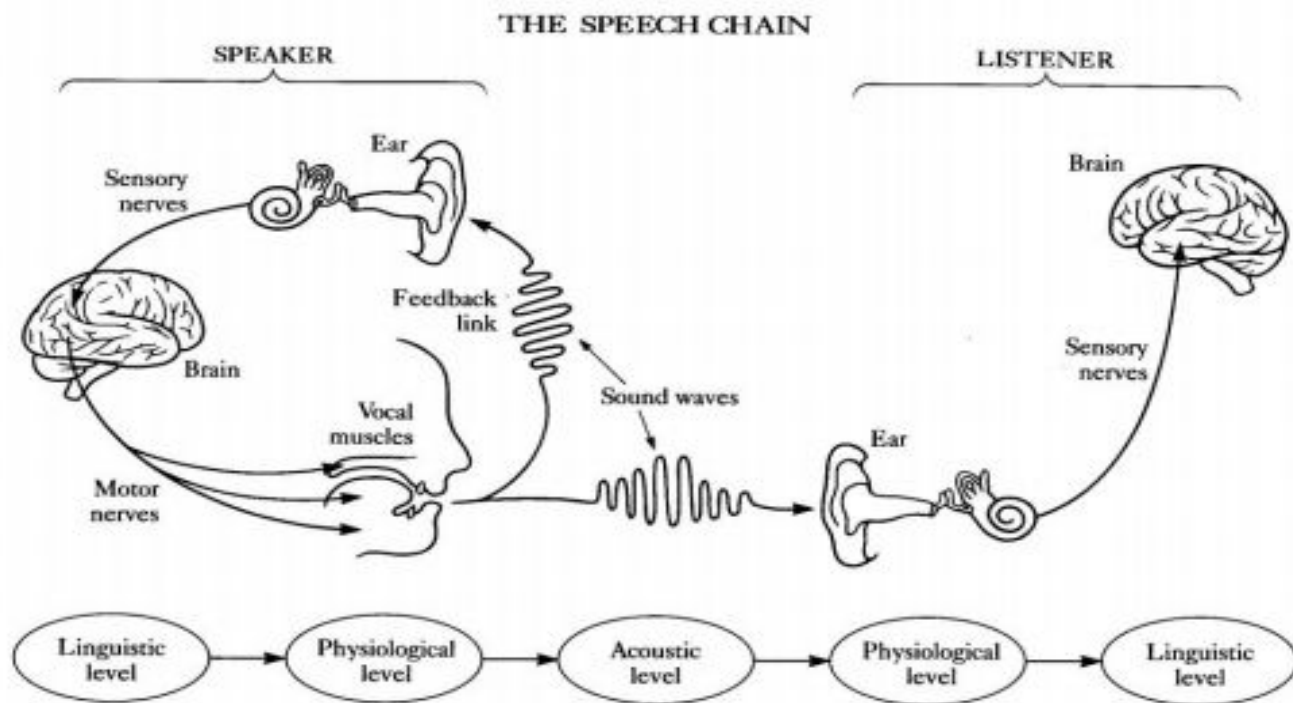
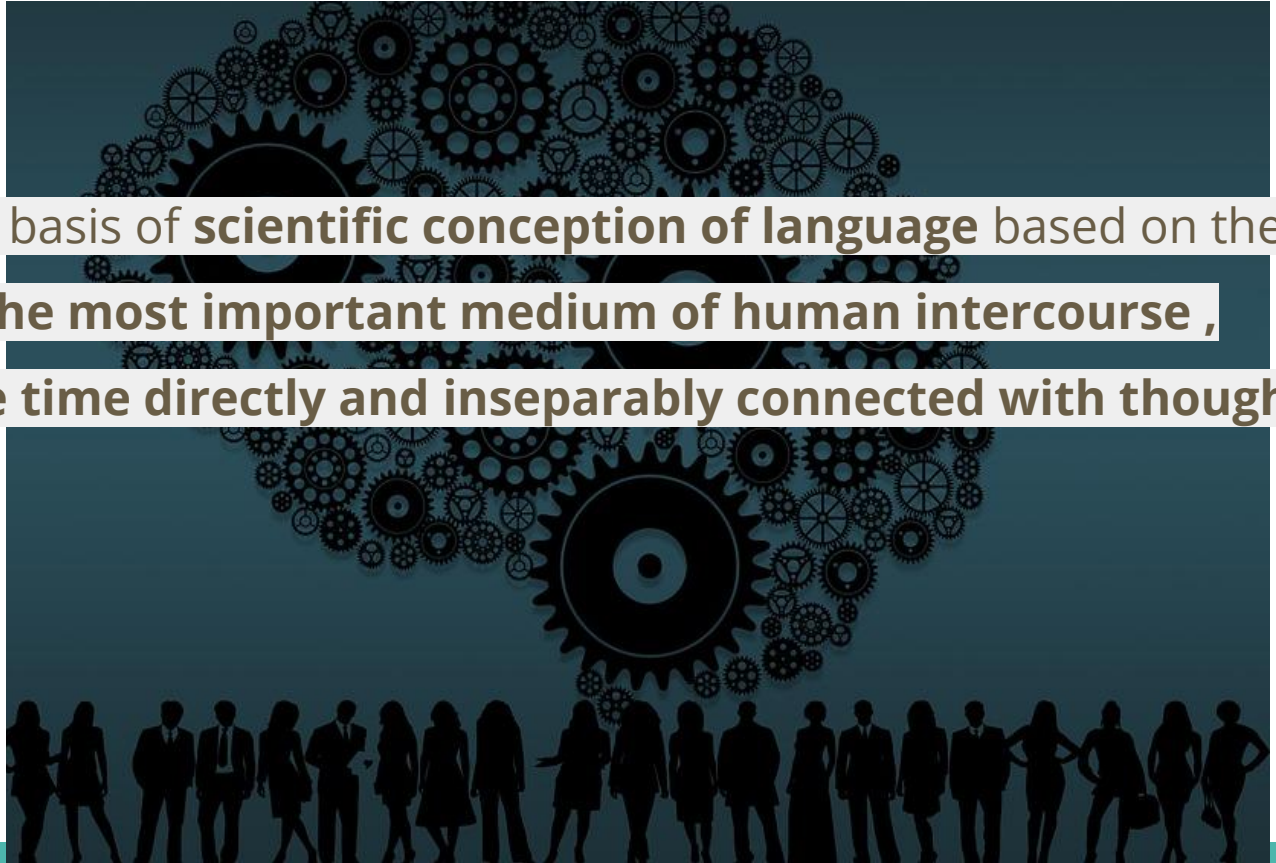


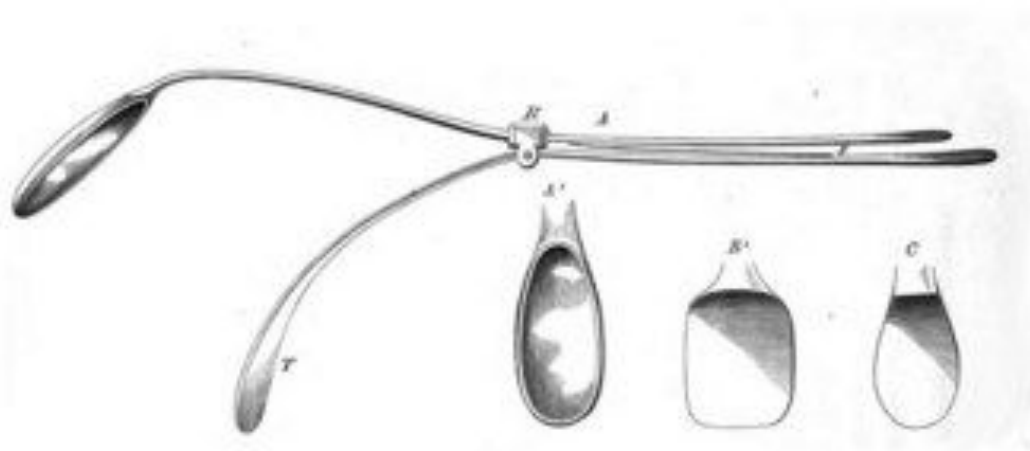
FIGURE 1.1 The speech chain: the different forms of a spoken message in its progress from the brain of the speaker to the brain of the listener.

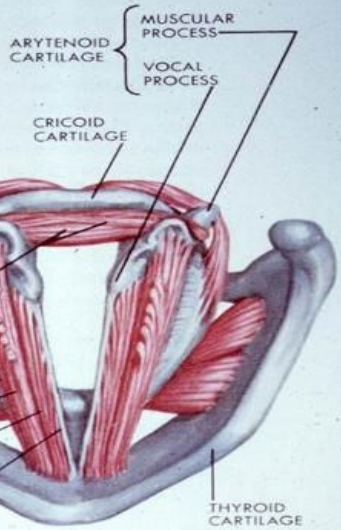
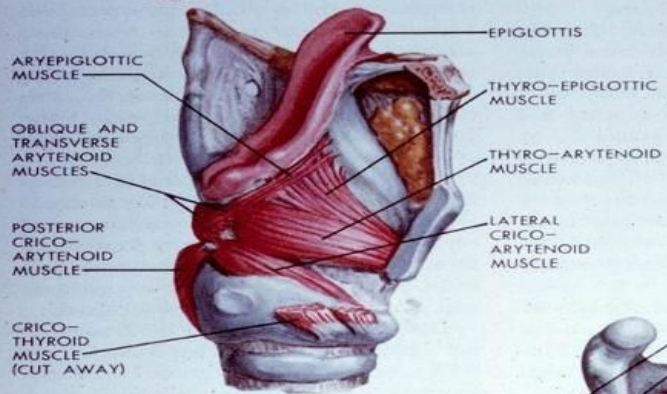
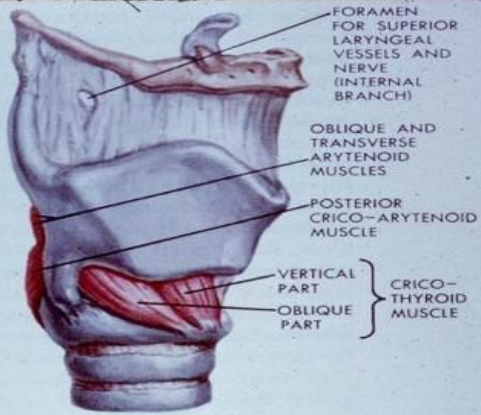
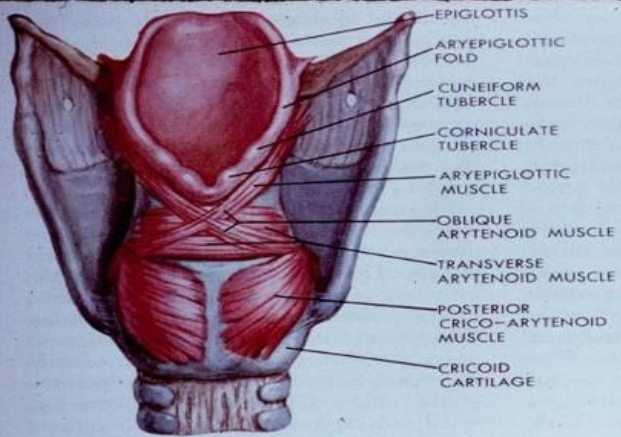
The objects, aims and value of Phonetics

are defined on the basis of **scientific conception of language** based on the thesis that **being the most important medium of human intercourse , language is at the time directly and inseparably connected with thought**



History of phonetics





POSTERIOR CRICO-ARYTENOID MUSCLE
 LATERAL CRICO-ARYTENOID MUSCLE
 TRANSVERSE AND OBLIQUE ARYTENOID MUSCLES
 CRICOTHYROID MUSCLE
 THYRO-ARYTENOID MUSCLE

THYROID CARTILAGE

J. Netter
 M.D.
 © CIBA

International Phonetic Alphabet

- Dictionaries, textbooks, phrase books
- Creating new writing systems for previously unwritten languages
- Non-native speakers learning English
- Clinicians in speech language pathology and related disciplines

I	I:	U	u:	Iə	eI	International Phonetic Alphabet	
ship /ʃɪp/	sheep /ʃi:p/	put /put/	you /ju: /	hear /hɪə/	name /neɪm/		
e	ə	ɜ:	ɔ:	ʊə	ɔɪ	əʊ	sound
ten /ten/	letter /letə/	girl /gɜ:l/	saw /sɔ:/	poor /puə/	toy /tɔɪ/	no /neʊ/	symbol
æ	ʌ	ɑ:	ɒ	eə	aɪ	aʊ	chart
cat /kæt/	sun /sʌn/	car /kɑ:/	hot /hɒt/	where /weə/	my /maɪ/	how /haʊ/	
p	b	t	d	tʃ	dʒ	k	g
pot /pɒt/	bed /bed/	tap /tæp/	door /dɔ:/	chair /tʃeə/	jam /dʒæm/	come /kʌm/	gum /gʌm/
f	v	θ	ð	s	z	ʃ	ʒ
four /fɔ:/	very /veri/	think /θɪŋk/	the /ðe/	son /sʌn/	zoo /zu:/	she /ʃi:/	vision /vɪʒən/
m	n	ŋ	h	l	r	w	j
man /mæn/	nose /noʊz/	angry /æŋɡri/	happy /hæpi/	late /leɪt/	red /red/	want /wɒnt?	yes /jes/

Vowels

Short: /ɪ/ kit; /e/ dress; /æ/ trap; /ʌ/ strut; /ɒ/ lot; /ʊ/ foot

Long: /i:/ fleece; /ɑ:/ palm; /ɜ:/ bird; /ɔ:/ thought; /u:/ goose

Diphthongs: /əʊ/ goat; /aʊ/ mouth; /aɪ/ price; /eɪ/ face;

/ɔɪ/ choice; /ɪə/ near; /eə/ square; /ʊə/ cure

Weak: /ə/ letter, comma; /i/ happy, she; /u/ thank you

Consonants

/p/ pin; /t/ tin; /k/kin; /b/ bin; /d/ din;
/g/ give; /f/ fin; /θ/ think; /s/ sing; /ʃ/ shin;
/h/ hymn; /v/ van;

/ð/ this; /z/ zoo; /ʒ/ measure; /tʃ/ chin; /dʒ/ gin;
/m/ more; /n/ no; /ŋ/ sing; /l/ low;

/r/ red; /w/ wet; /j/ yet

Spelling

She bought some chairs and a table

Transcription: / ʃi bɔ:t səm tʃeəz ən ə teɪbl/

What is it? Phonetics as science

- an independent branch of linguistics
- studies the Outer form of language- its SOUND MATTER

phonemes and their allophones

the syllabic structure

the distribution of stress and intonation

- about sounds and their meaningful usage in speech
- historical changes of sounds
- how sounds form syllables and words

Branches of Phonetics

- ❖ ARTICULATORY Phonetics
- ❖ ACOUSTIC Phonetics
- ❖ AUDITORY Phonetics
- ❖ PHYSIOLOGICAL Phonetics

Branches of Phonetics according to the subject and area a branch of Phonetics covers

- ❖ GENERAL PHONETICS
- ❖ SPECIAL PHONETICS :
 - descriptive
 - historical
- ❖ THEORETICAL PHONETICS
- ❖ COMPARATIVE PHONETICS
- ❖ PRACTICAL OR APPLIED PHONETICS
- ❖ PHONOLOGICAL/FUNCTIONAL PHONETICS

Two major components

Segmental Phonetics

individual sounds

(i.e. “segments” of speech)

Suprasegmental Phonetics

larger units of connected speech

(syllables, words, phrases and texts)

Phonetics and its connection with other Disciplines

Lexicology

- **can distinguish certain nouns from verbs:** *a `record - to re `cord;*
- ***with the help of stress we can distinguish between words and word groups***

a blackboard – a black board;

- ***homographs:*** *bow - лук, бант; - поклон*

row - ряд row- шум

Grammar

system of rules of reading

singular vs. plural of nouns, *e.g. a man- men; goose-geese; foot-feet*

present (or infinitive) vs. past, *e.g. to build - built*

basic forms of irregular forms: *e.g. sing-sang -sung*

Syntax

partition of sentences is realized with the help of pauses, sentence stress, melody

One of the travelers / said Mr. Parker / was likeable (direct speech)

One of the travelers said / Mr. Parker was likeable

You know him - statement

You know him - general question

Stylistics

through repetition of sounds words and phrases

e.g. **alliteration** - *зремучие раскаты грома;*

"Listen, you hear the grating roar of pebbles..."

e.g. **onomatopoeia** - *a combination of sounds which imitates sounds produced in nature (e.g. twitter, smack, bang, crash etc.)*

e.g. **frequent use of logical stress** or *parallel constructions can be a peculiarity of an author's style.*

- Regular recurrence of accented elements, or rhythm, may be used as a special device not only in poetry, but in prose as well.

In the extract given below the repetition of the word fact helps Ch. Dickens to characterize his hero, Mr. Gradgrind as a narrow-minded person unable to see anything behind bare facts.



For example:

“ Now , What I want is Facts. Teach these boys and girls nothing but Facts. Facts alone are wanted in life. Plant nothing else and root out everything else. You can only form the minds of reasoning animals upon Facts; nothing else will ever be of any service to them.”

“ Thomas Gradgrind , sir. A man of realities. A man of facts and calculations. A man who proceeds upon the principle that two and two are four, and nothing over, and who is not to be talked into allowing for anything over. Thomas Gradgrind, sir – peremptorily Thomas – Thomas Gradgrind .



In the description of Gradgrind's " mental introduction" rhythm is achieved through the repetition of parallel constuctions, beginning with the word man , which gradually develop and help to achieve the climax of significance.

Phonostylistics

Studies the way phonemic means are used

intonational functional styles

- 1 informational (formal) style;
2. scientific (academic) style;
3. declamatory style;
4. publicistic style;
5. familiar (conversational) style

Phonosemantics

investigates the connection between the sound form and the meaning

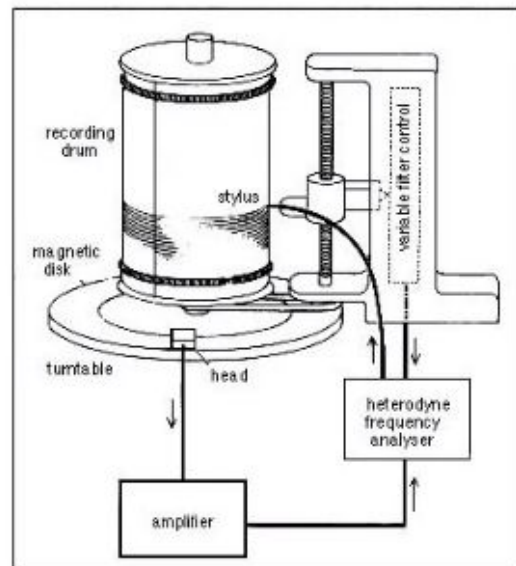
slime, slush, slum, slop

Methods of Phonetic Research

- direct observation
- instrumental

Spectrograph (1950)

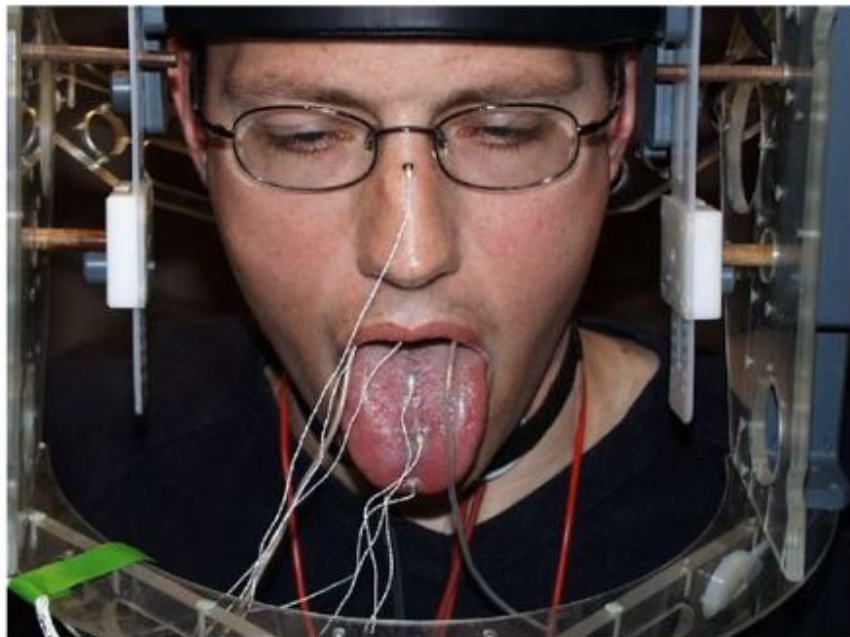
- ◆ signal recorded on magnetic drum
- ◆ energy in various frequency regions is determined
- ◆ blackening of paper in proportion to energy



Early tools: Henrici analyser (1940)



Articulation research today



EMA:
electromagnetic
measurement of
tongue movement

palatography

laryngography

Panini



King Sejong of Korea



1397-1450

Sir William Jones

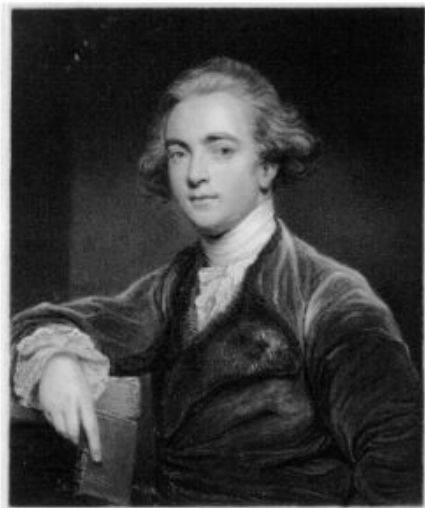


Image from Lidohibu. "William Jones." 2016. Accessed 5/20/16. <http://lidohibu.com/redns/11/>

1746-1794

Henry Sweet



1845-1912

Daniel Jones



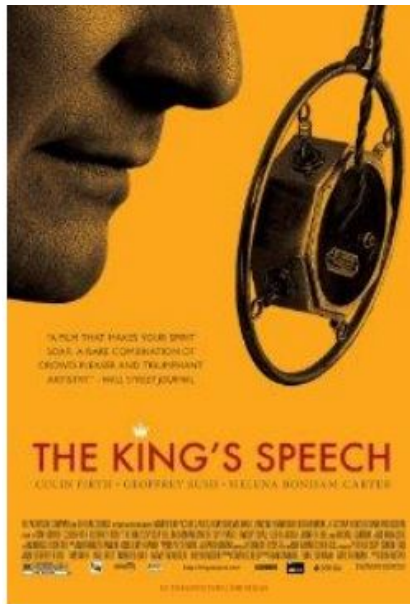
1881 - 1967

Abbé Rousselot



Image accessed 5/20/16.

Lionel Logue



Professor Henry Higgins

