#### HS 133: Introduction to Phonetics

Instructor: Priyankoo Sarmah

### Phonetics?

Systematic study of human speech sounds

# Human Speech Sounds?

About 6912 languages
About 150 consonants and 30 vowels

# Human Speech Sounds

Where/ How are they produced?

How do they look like?

How do we hear them?

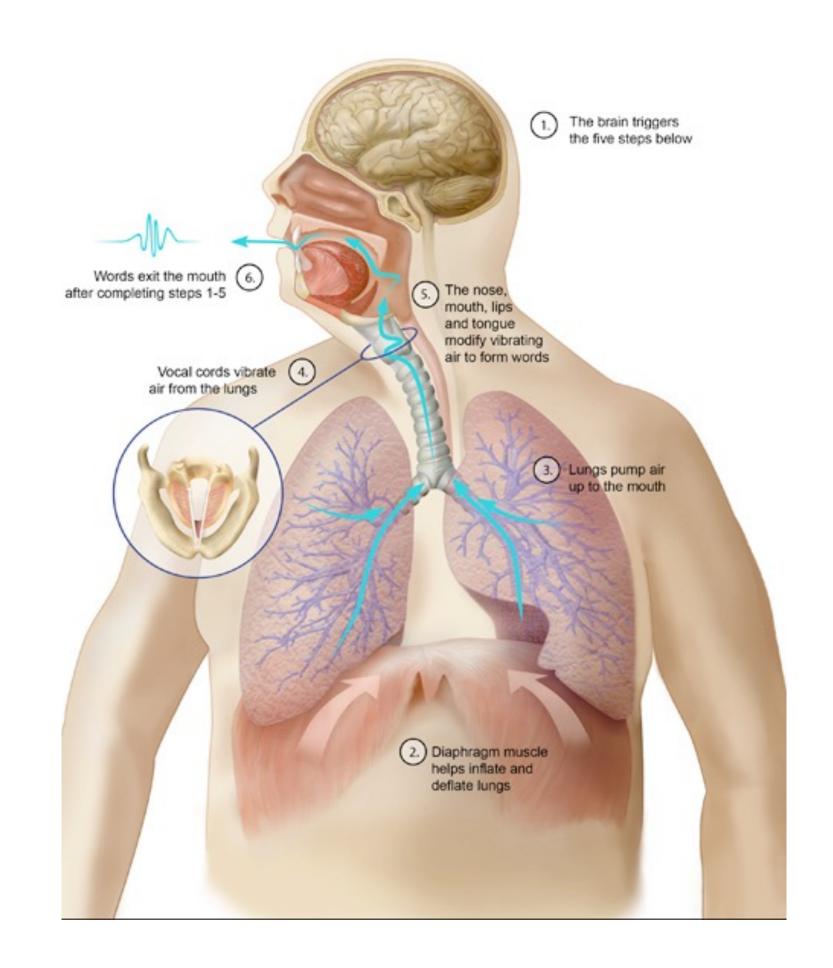
### Phonetics

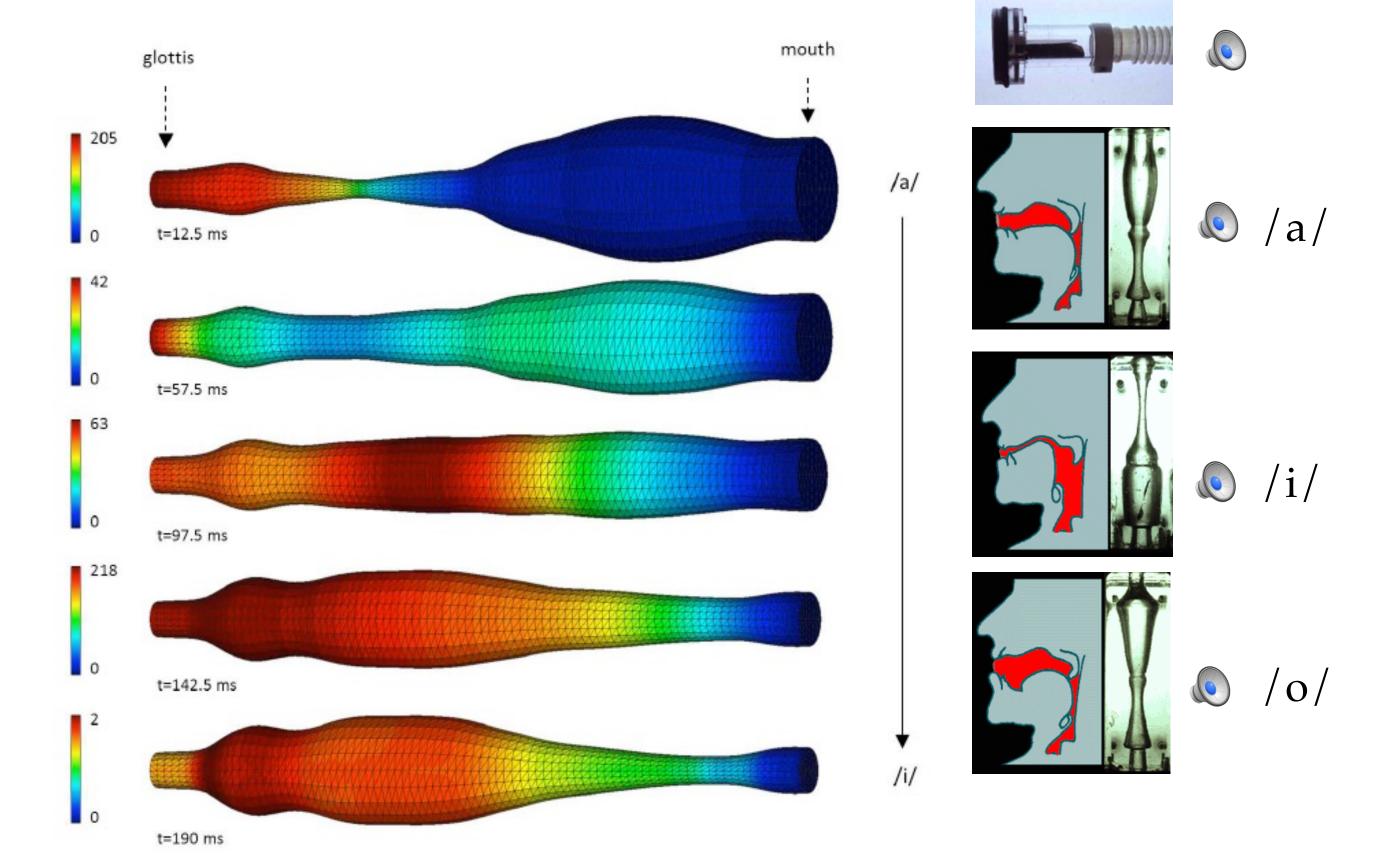
Articulatory phonetics

Acoustic phonetics

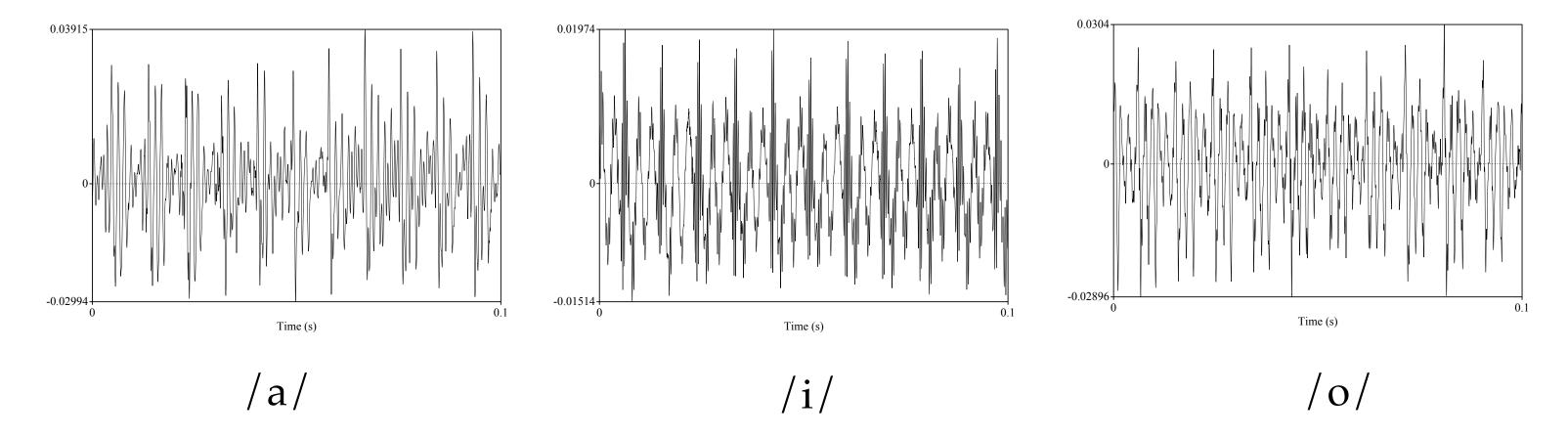
Auditory phonetics

# Articulatory phonetics



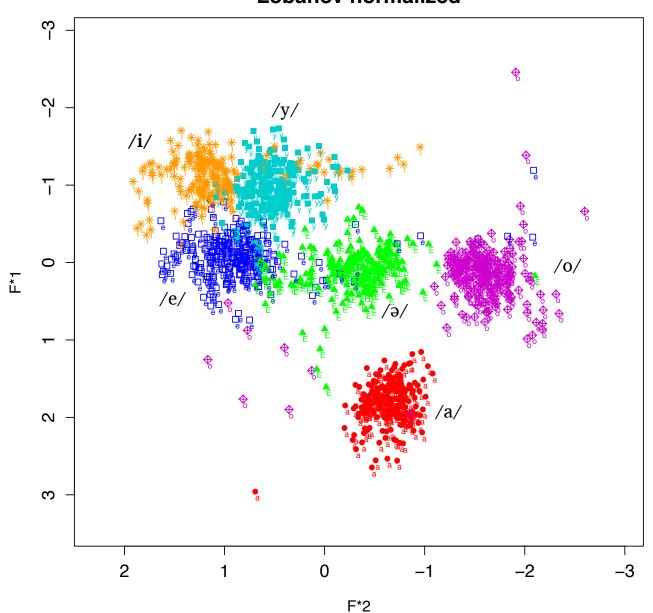


### Acoustic Phonetics



### Acoustic Phonetics

#### Individual vowel formant values Lobanov normalized



### Languages and Writing Systems

• 国 'guo'

• संस्कार, संबंध

• Cut, put, hour, psycho

### Languages and Writing Systems

• 国 `guo' /guo/

• संस्कार, संबंध /sənska:r/, /səmbəndh/

• Cut, put, hour, psycho /knt/, /pot/, /aus/, /saiko/

### Languages and Writing Systems

• No one to one correspondence between written and spoken forms

• Special notation required to represent sounds i.e. /sənska:r/

• This special representation is International Phonetic Alphabet (IPA)

• Supposed to represent sounds of all languages

# Grading

Quizzes (3): 25%

Mid term exam: 30%

Final exam: 45%

Grades: Relative to the highest

### Class notes

All slides will be available on Moodle

## Opportunities

• Working with us on our projects

#### Contact

Priyankoo Sarmah

Email: priyankoo@iitg.ac.in