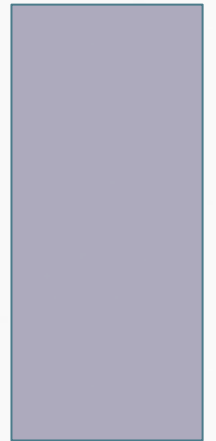


THE SYSTEM OF ENGLISH CONSONANT PHONEMES

BY FILIMONOVA A. ELENA



Describing Speech Sounds

- Is the air-flow blocked?

vowel vs. consonant

- What are the vocal folds doing?

voiced vs. voiceless

- Where is the air-flow blocked?

labial, alveolar, palatal, velar etc.

- Where/how is the air flowing?

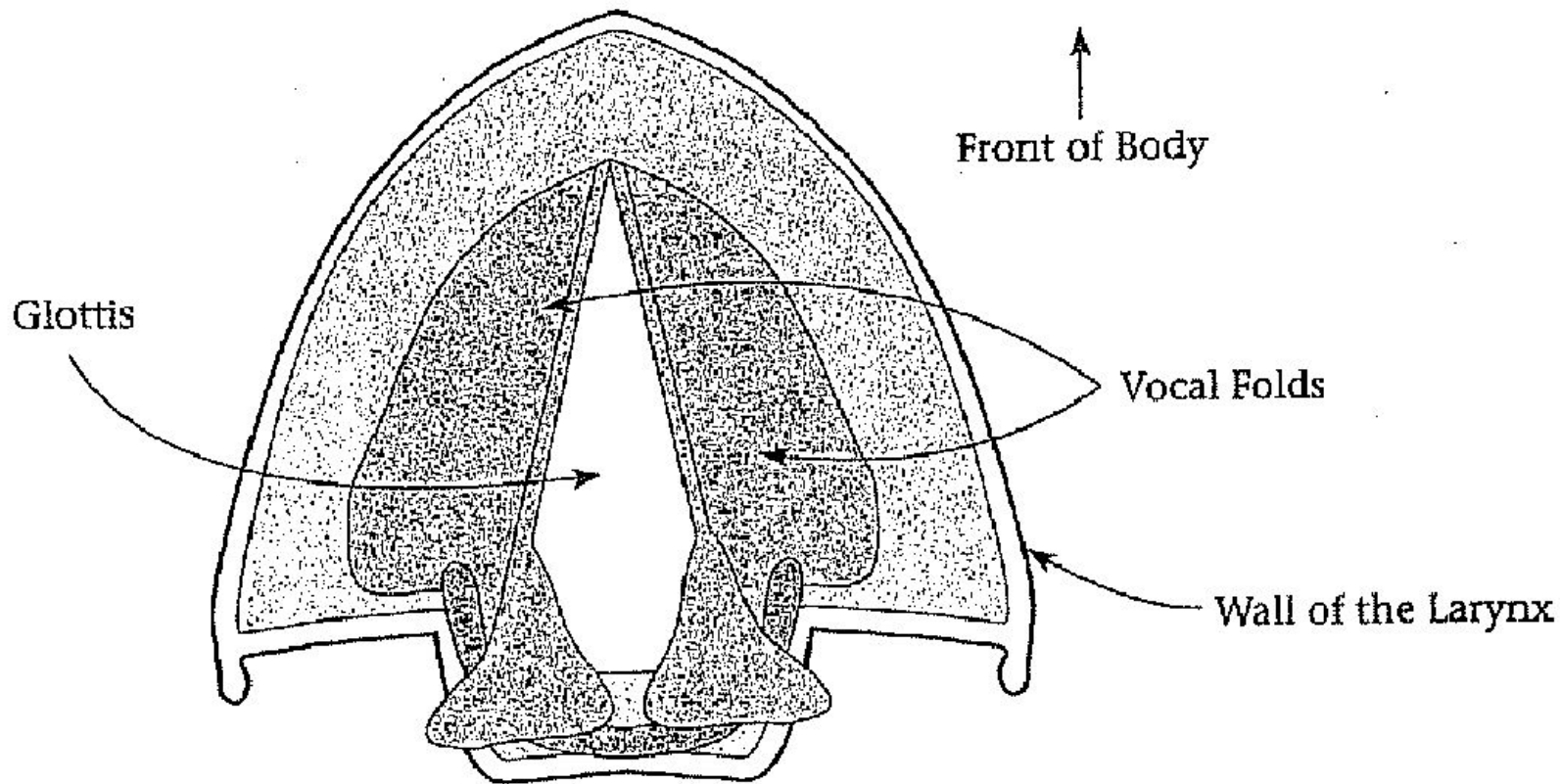
nasal/oral, stop, fricative, liquid etc.

Describing Speech Sounds

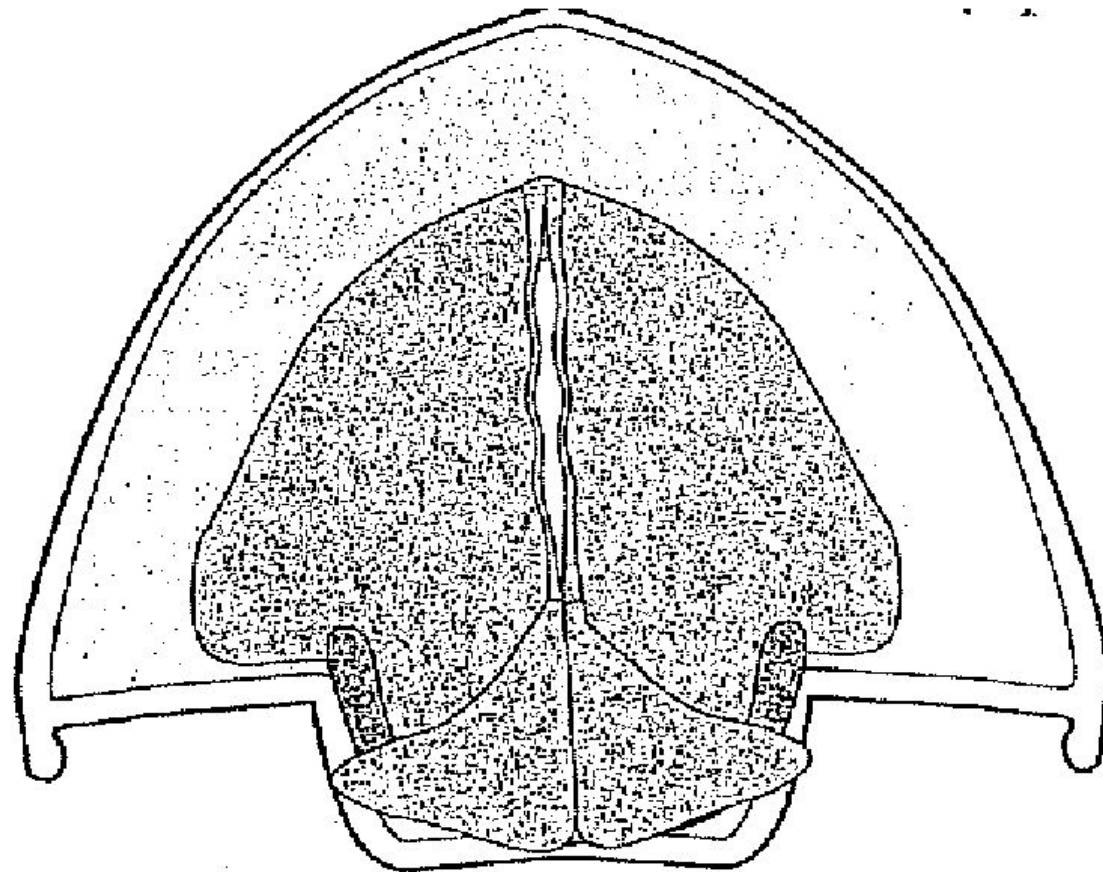
- Is the air-flow blocked?
vowel vs. consonant
- What are the vocal folds doing? (=voicing)
voiced vs. voiceless
- Where is the air-flow blocked? (=place)
labial, alveolar, palatal, velar etc.
- Where/how is the air flowing? (=manner)
nasal/oral, stop, fricative, liquid etc.

Voiced & voiceless consonants

- Consonants either **voiced** or **voiceless**.
- English pairs:
 - b/p
 - v/f
 - d/t
 - z/s
 - ð / θ



(a) Voiceless
(Open Vocal Folds)

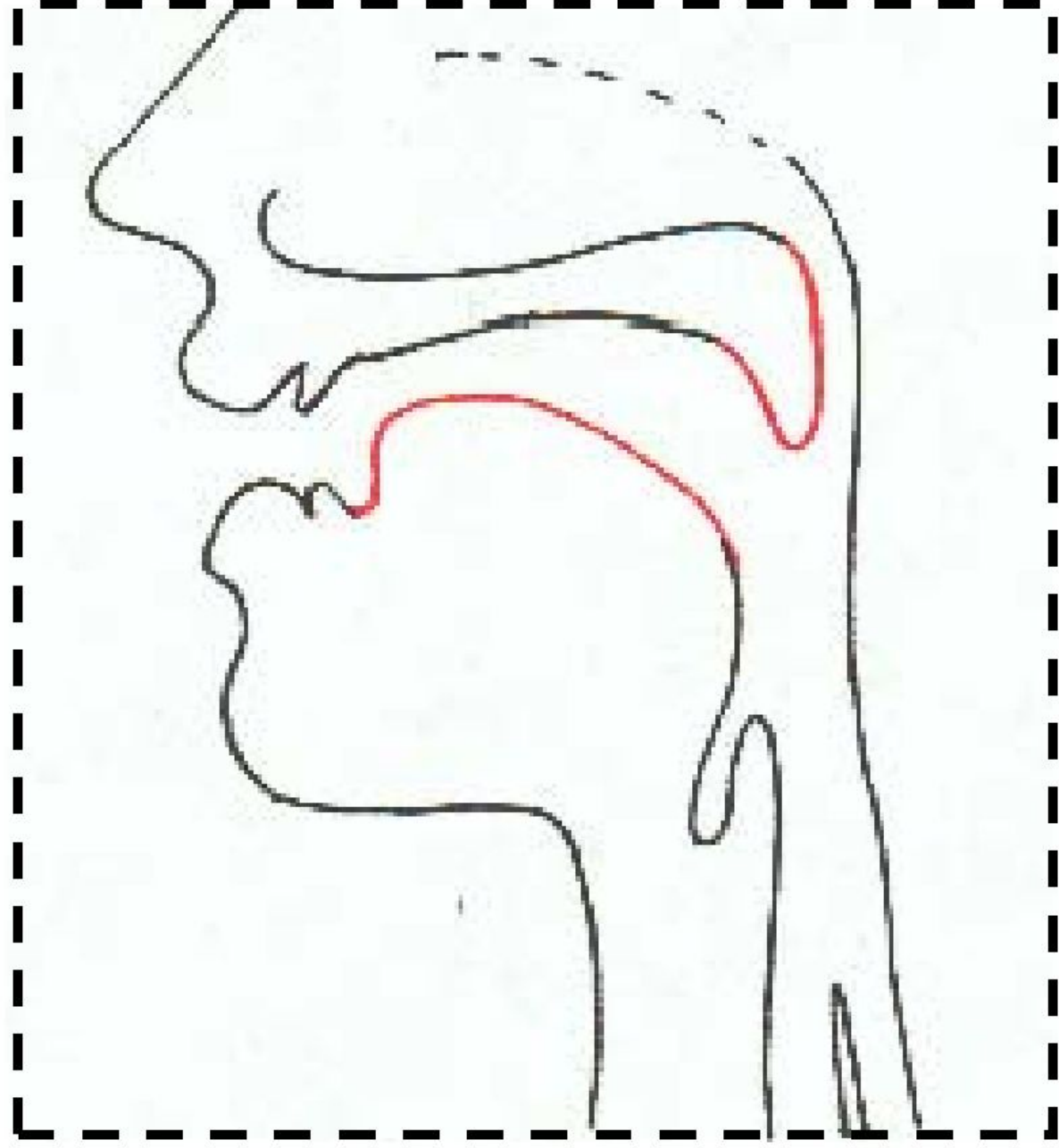


(b) Voiced
(Approximated Vocal Folds)

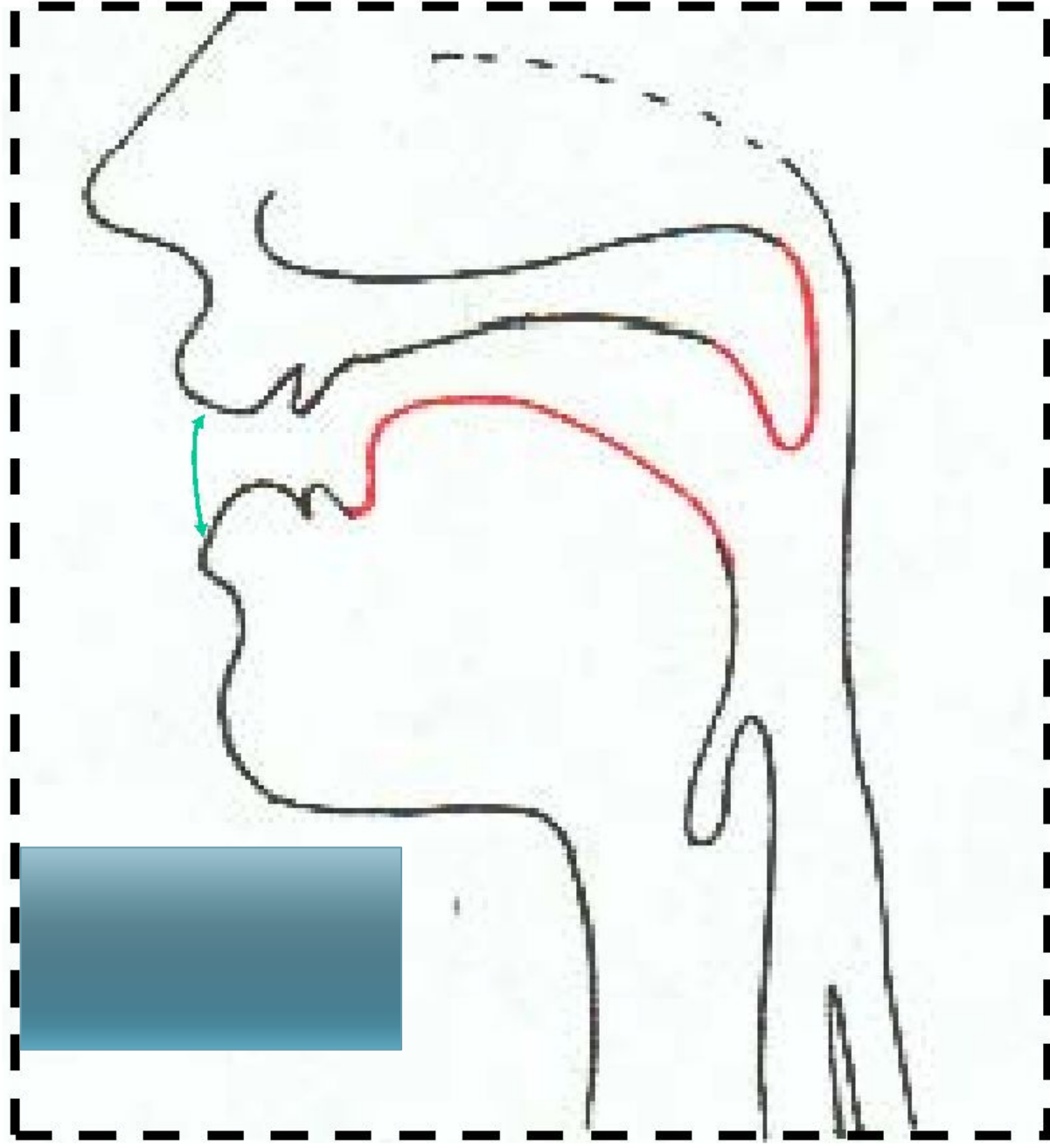
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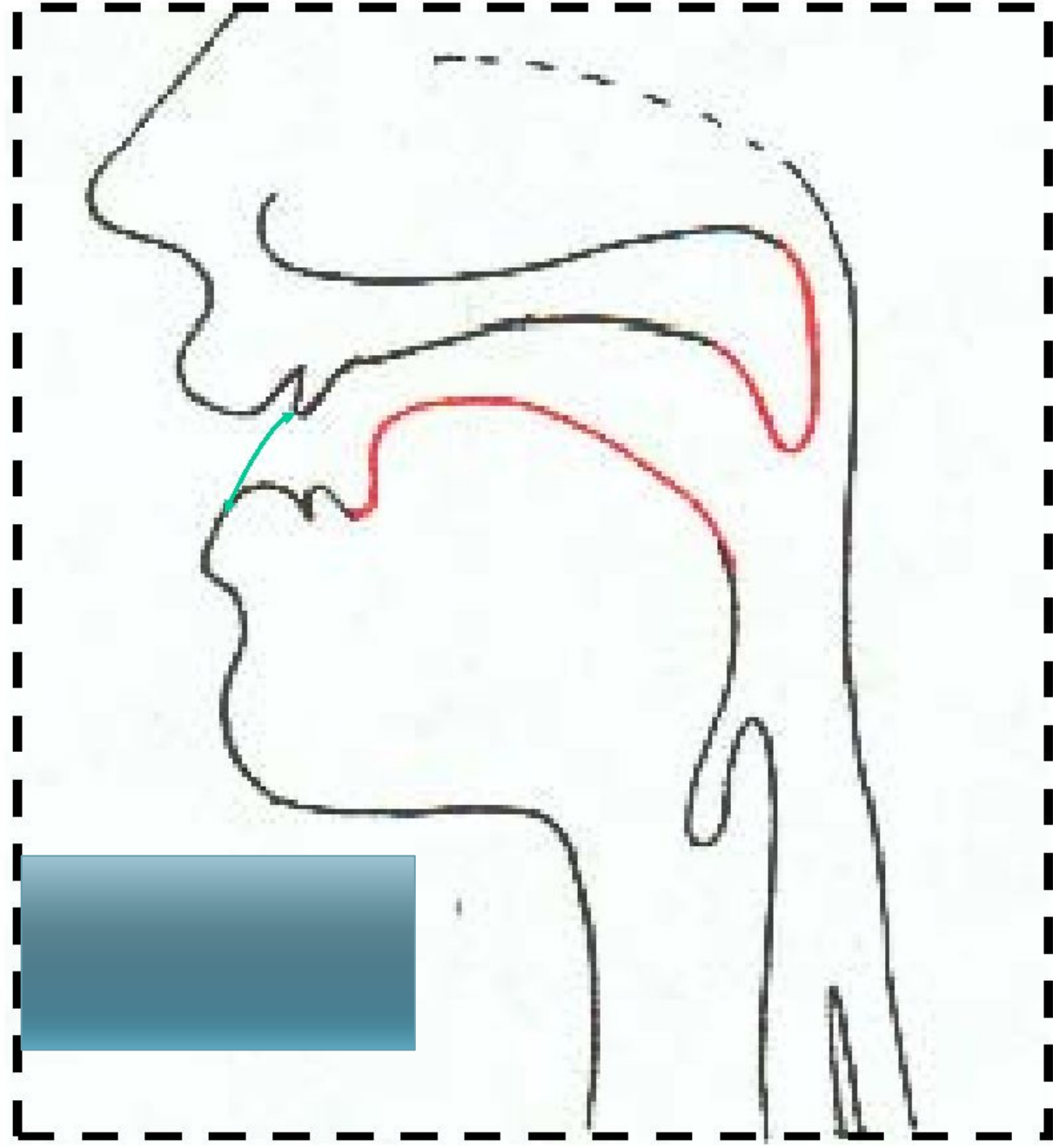
Where can you stop the airstream?



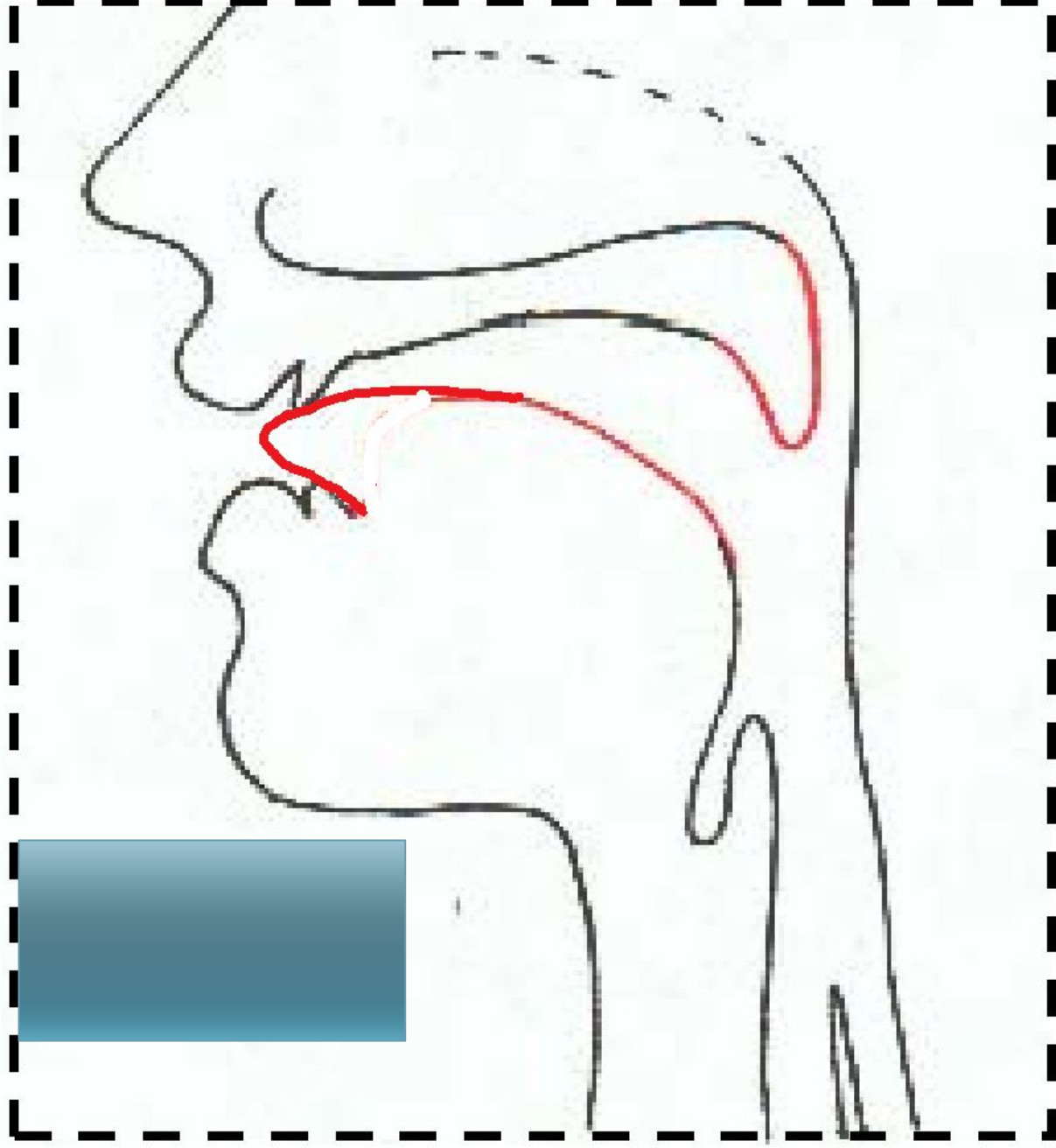
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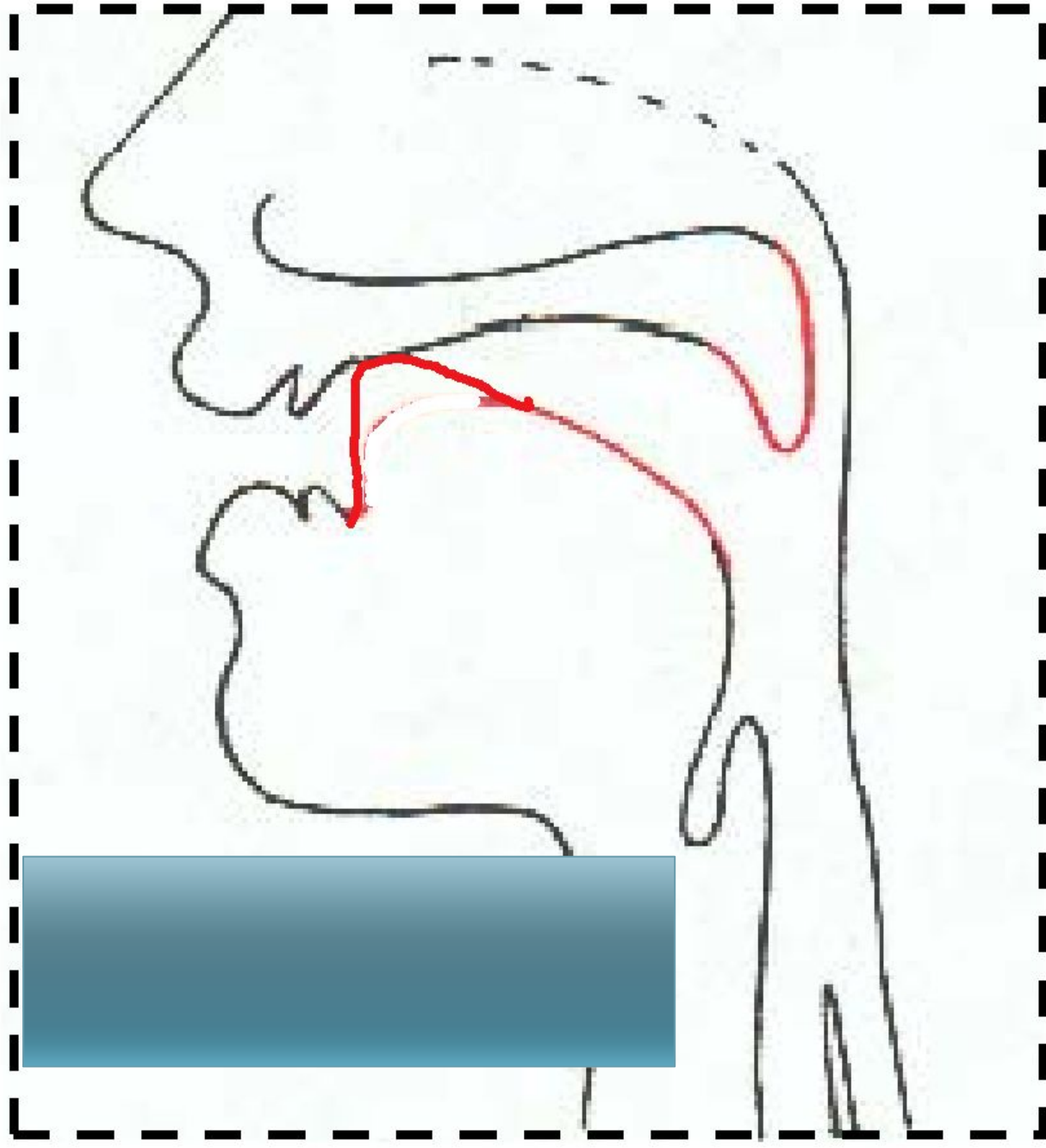
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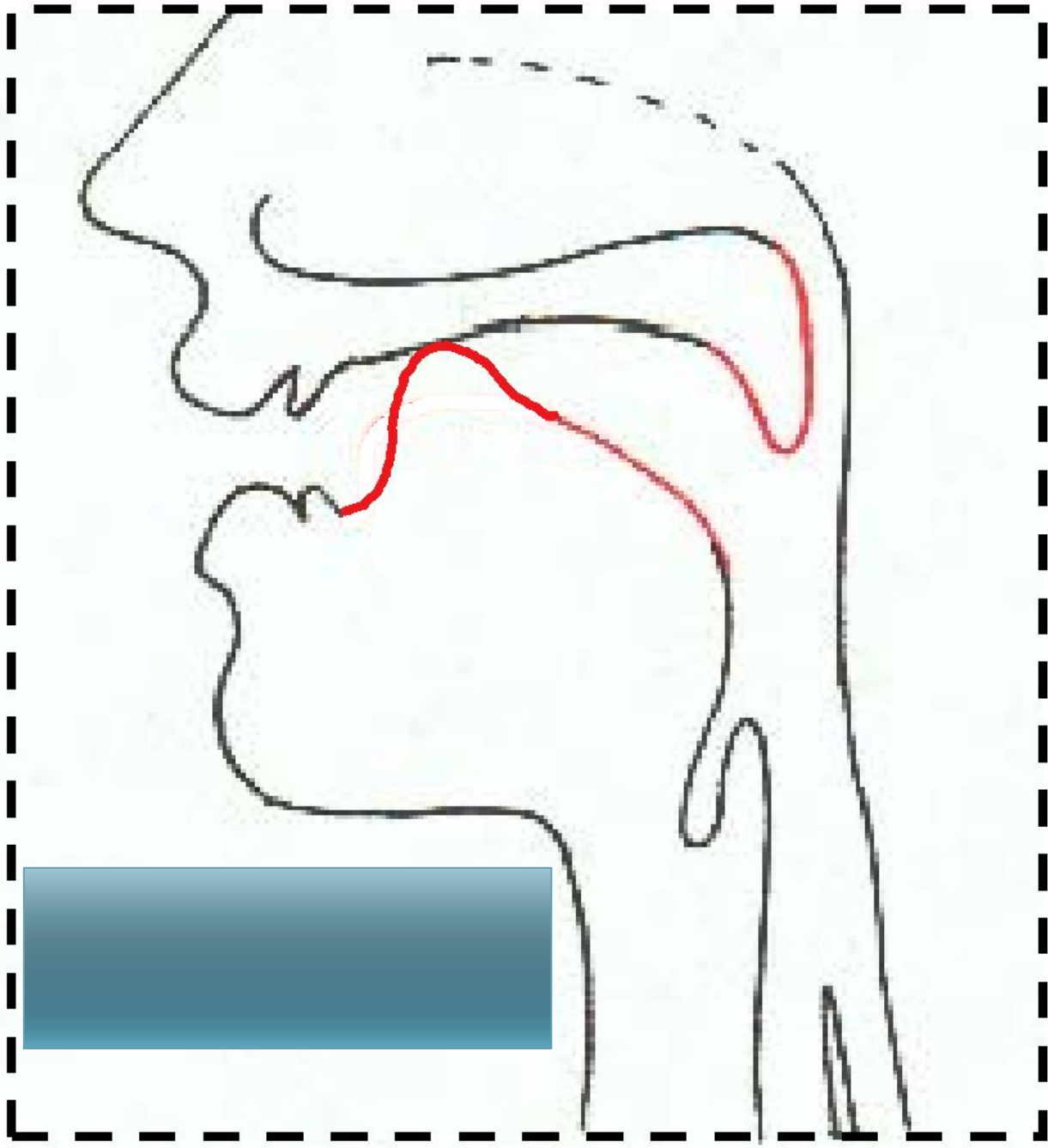
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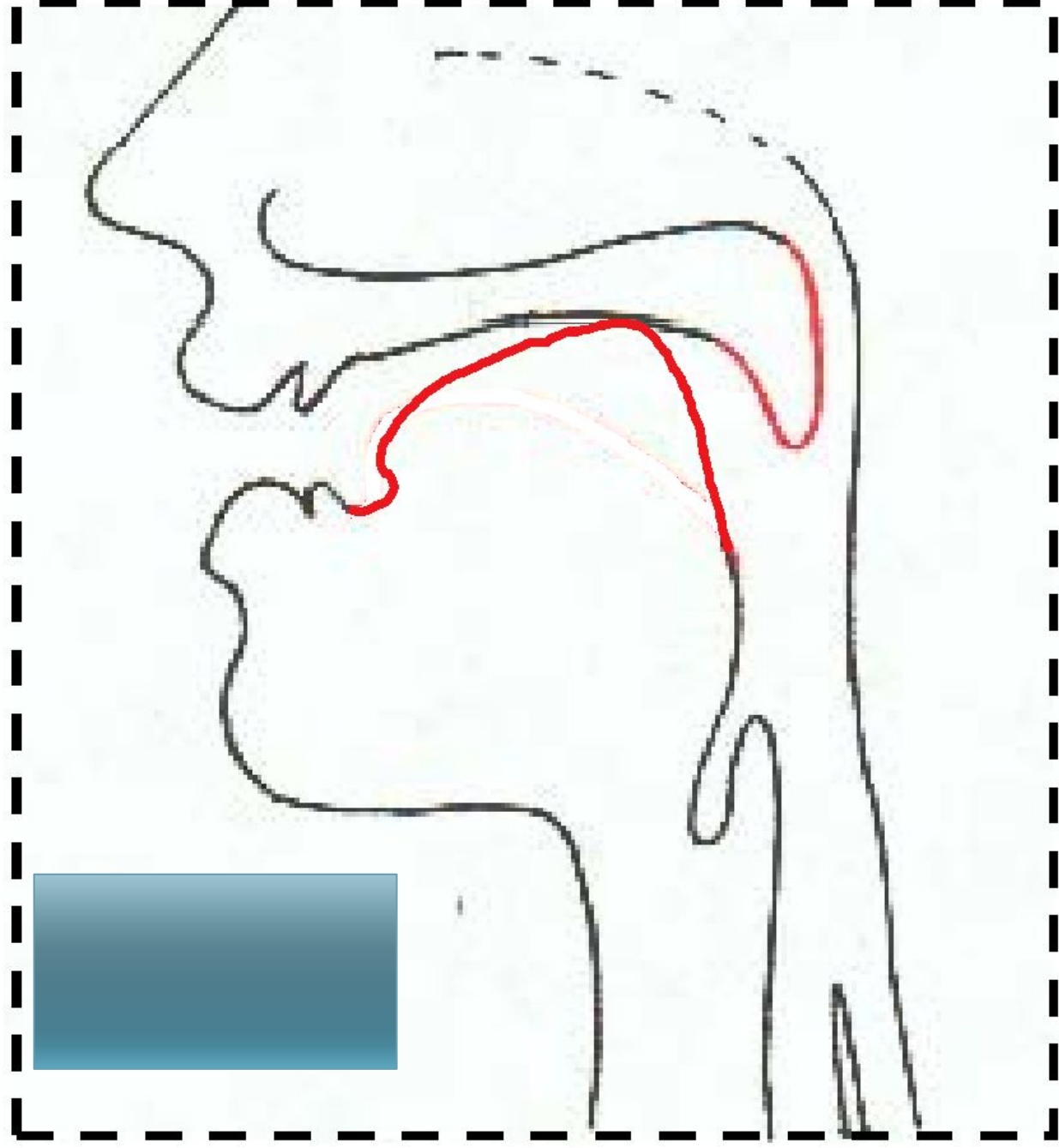
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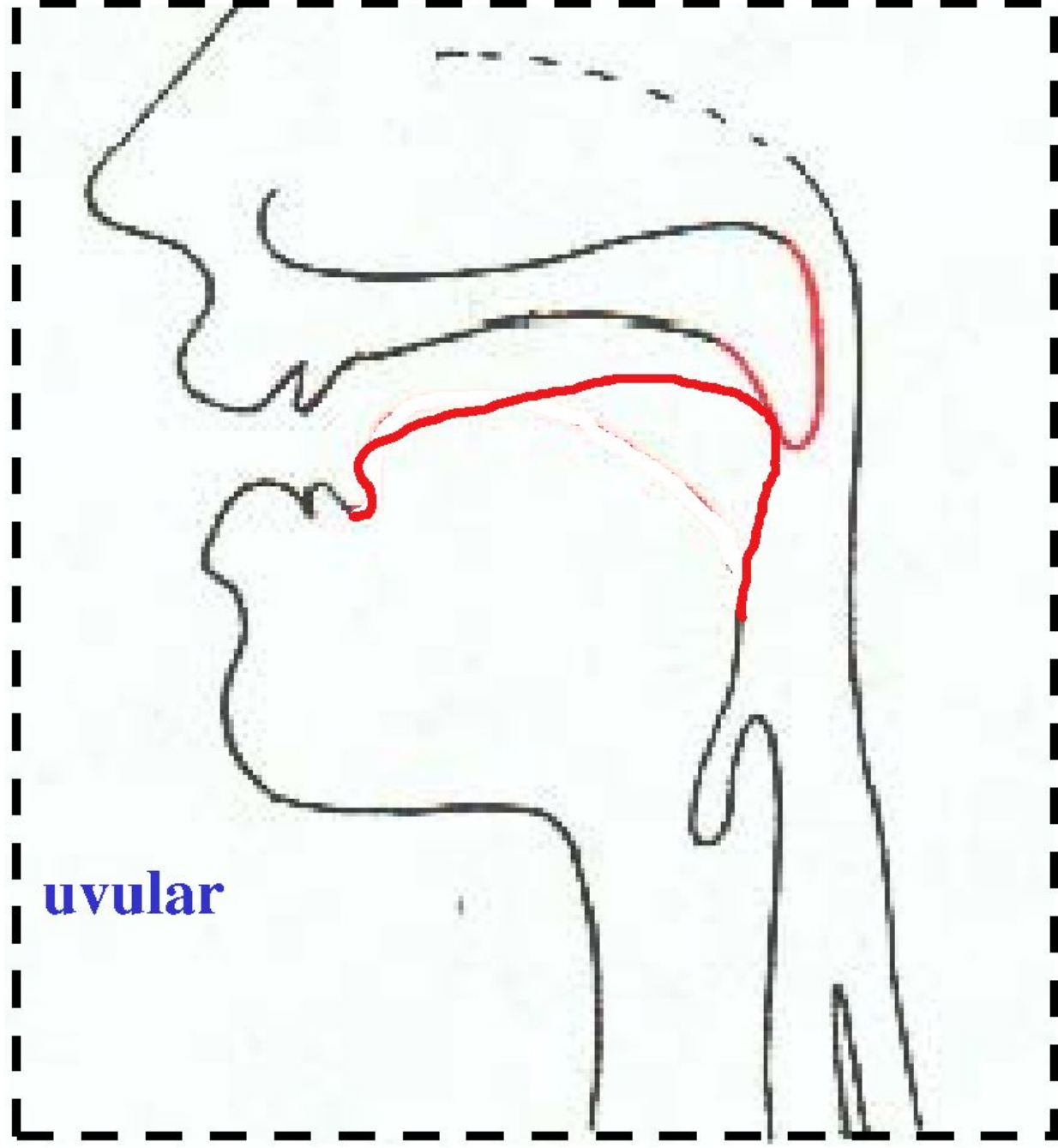
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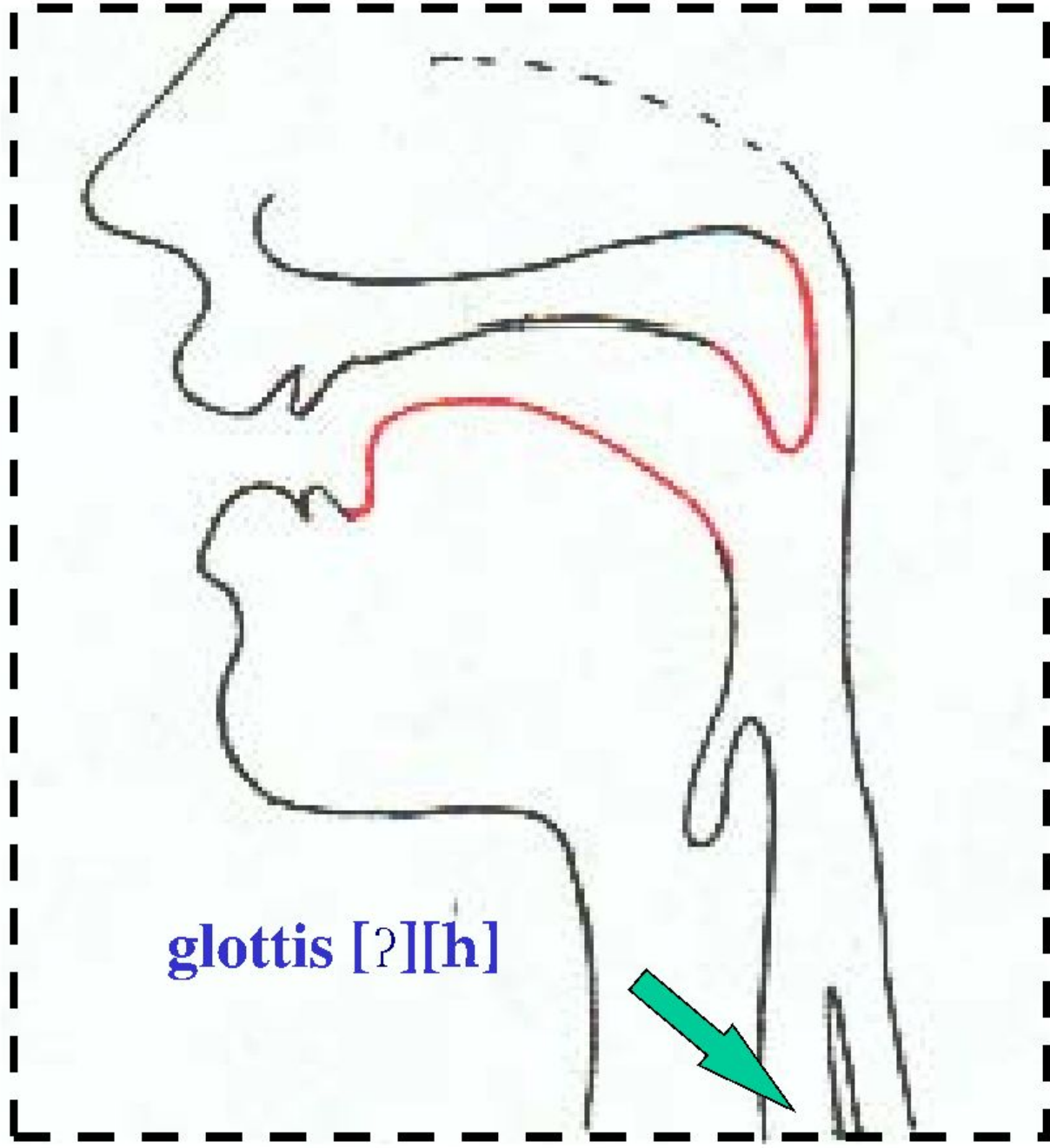
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Where can you stop the airstream?



Where can you stop the airstream?



Describing Speech Sounds

- Is the air-flow blocked?
vowel vs. consonant
- What are the vocal folds doing? (=voicing)
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nasal/oral, stop, fricative, liquid etc.

Manner

- Stops: complete stoppage of air
[p] [b] [t] [d] [k] [g]...
- Fricatives : airflow is severely obstructed causing friction
[f] [v] [θ] [ð] [s] [z] [ʒ] [ʃ] [h] []

Fricatives & Affricates

- Palatal sounds [ʃ] [tʃ] [dʒ]
- Palatal Fricatives - [ʃ] [ʒ]
[note: according to IPA chart these are strictly ‘post-alveolar’]
- Affricates - combination of stop + fricative - [tʃ] [dʒ] as in *judge*, *church*

Liquids, glides

- Liquids

 - [l][r]

 - Lateral [l] : air escapes along sides of tongue

 - Retroflex [r]: tongue is bunched upward and back in mouth

- Glides: semi-vowels, semi-consonants

 - [w] [j]

nasal

- Nasal: velum is lowered, and air flows through nasal cavity
[m] [n] [ŋ]

Putting them all together □

□ Voicing, Place, Manner □

□ how do we describe [p]?

Voiceless, bilabial stop

What about [b]?

Features

- Ways of *describing* sounds
e.g., [p] = voiceless bilabial stop
- Stronger claim: features are the *smallest building blocks of language*, used to store sounds in the mind
- *Atoms of Speech*

Roman Jakobson, 1896-1982



Chart

(6) The consonants of English classified by voicing, place of articulation, and manner of articulation.

		Place of Articulation													
		Bilabial		Labio-dental		Inter-dental		Alveolar		Palatal		Velar		Glottal	
Manner of Articulation	Stop	p	b					t	d			k	g	ʔ	
	Fricative			f	v	θ	ð	s	z	ʃ	ʒ			h	
	Affricate									tʃ	dʒ				
	Flap								r						
	Nasal		m						n				ŋ		
	Lateral Liquid								l						
	Retroflex Liquid								ɭ						
	Glide	w	w								j				

State of the Glottis: Voiceless Voiced

Write the symbol that corresponds to each of the phonetic descriptions, then give an English word that contains this sound.

1. voiceless bilabial stop
2. voiced labiodental fricative
3. voiced alveolar lateral liquid
4. voiceless palatal affricate
5. voiced alveolar nasal
6. voiced bilabial glide

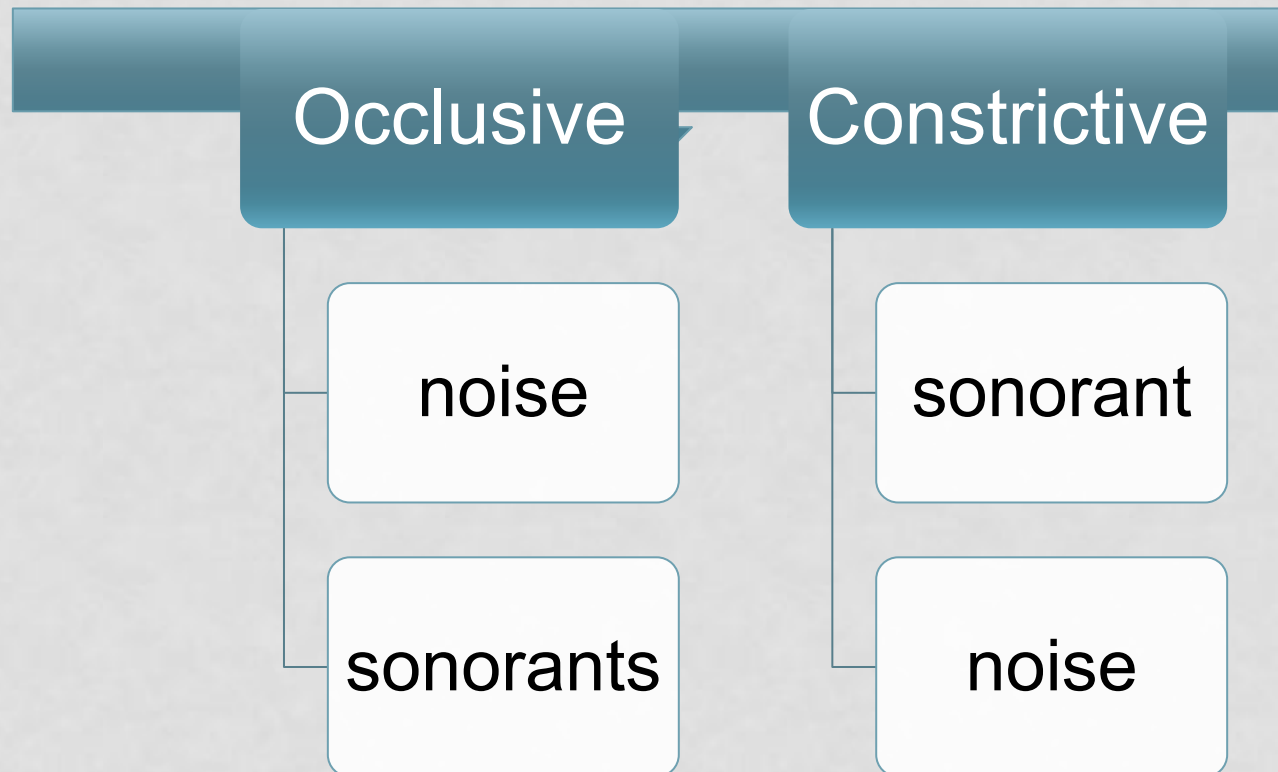
- What are the features of the following sounds:

1. [t]
2. [ð]
3. [ʃ]
4. [dʒ]
5. [ŋ]
6. [h]
7. [w]

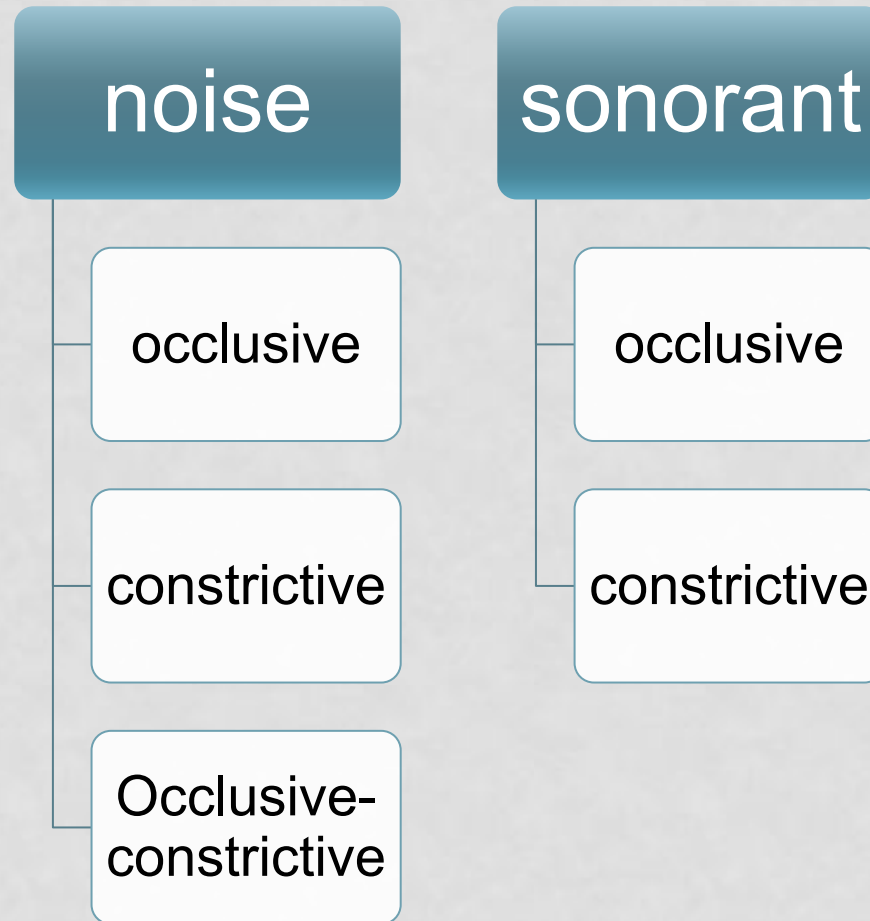
PRINCIPLES OF CLASSIFICATION

TYPE OF OBSTRUCTION + MANNER OF NOISE PRODUCTION

Prof. Vassilyev



DEGREE OF NOISE (SOKOLOVA, GINTOVT)



PLACE OF ARTICULATION

- 1) labial
- 2) lingual
- 3) glottal

Oppositions:

Pan-tan

Weil-yale

Pick-kick

WORK OF THE VOCAL CORDS

Tone + Energy

POSITION OF THE SOFT PALATE

Oral

Nasal

PROF. DIKUSHINA

Classification by oppositions:

- 1) Manner of articulation (stops - constrictives)**
- 2) Articulating organ (labial – bilabial)**
- 3) Passive speech organ (dental, alveolar, palatal, velar)**
- 4) Shape of the narrowing (slit or aperture)**
- 5) Voice presence (voiced-voiceless)**
- 6) Prevalence of voice/tone (noises and sonorants)**
- 7) Kind of resonance (oral-nasal)**
- 8) 1 or 2 producing obstacles (single-point – double-point)**
- 9) Manner of releasing closure (plosives – affricates)**

AFFRIATES

Monophonemic?

Trubetskoy:

- 1) Belong to the same syllable
- 2) 1 articulatory effort
- 3) Duration does not exceed duration of either element (+-)

D.Johnes:

Number of affricates = number of fricatives

6 affricates + [tr, dr, ts, ds]

Gimson:

8 affricates = phonological extreme,
indivisible entities

RELEVANT PRINCIPLES

- 1) type of obstruction
- 2) place of obstruction + active speech organ
- 3) force of articulation

**THANK YOU FOR
ATTENTION!**