

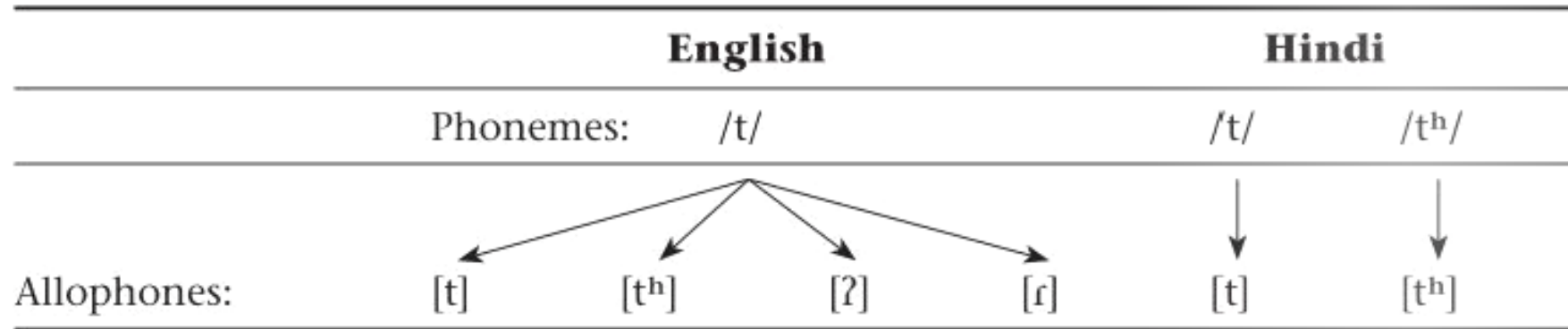


# SPAU 133

Lecture 12

# Allophones and Phonemes

(4)



## Nasalized /i/

(5) dean [dɪ̃n]    lean [lɪ̃n]    mean [mɪ̃n]    team [tɪ̃m]    scream [skɪ̃m]  
deed [diːd]    leap [liːp]    mere [miːr]    seat [siːt]    see [siː]

## /p/+ Aspiration

(6)	spat	[spæt]	pat	[p <sup>h</sup> æt]
	spool	[spul]	pool	[p <sup>h</sup> ul]
	speak	[spik]	peek	[p <sup>h</sup> ik]

# Complementary Distribution VS Contrastive Distribution

(7)

	<b>Contrastive</b>	<b>Allophonic</b>
<i>Relation to phonemes</i>	Allophones of separate phonemes	Allophones of the same phoneme
<i>Predictability of distribution</i>	Unpredictably distributed	Predictably distributed
<i>How you can tell</i>	Contrastive distribution; minimal pairs	Complementary distribution

## Arabic

ḥuru:b	'wars'	mahdu:d	'destroyed'
tarhi:b	'intimidation'	faḥm	'coal'
abah	'similarity'	maḥdu:d	'limited'
habba	'gust'	huru:b	'flight'
abaḥ	'ghost'	ḥa:l	'condition'
fahm	'understanding'	tarḥi:b	'greeting'
ha:l	'cardamom'	ḥabba	'grain, seed'

<b>a.</b> [p̥ɪsɛnmɔŋ]	'hair'	<b>h.</b> [masak]	'hard'
<b>b.</b> [t̥ɔp̥ɔkda]	'bought'	<b>i.</b> [liŋ]	'beautiful'
<b>c.</b> [p̥ɔko]	'basket'	<b>j.</b> [pilda]	'to choose'
<b>d.</b> [p̥iɰfɪmɛnɛ]	'this pig'	<b>k.</b> [poki]	'to strike something'
<b>e.</b> [s̥ɔp̥wɔ]	'firewood'	<b>l.</b> [luɰ]	'to jump'
<b>f.</b> [s̥iko]	'to talk about'	<b>m.</b> [kurɰ]	'to grind'
<b>g.</b> [uduk]	'flesh'	<b>n.</b> [rik]	'to gather'

## 24. Standard Italian

Consider the following data from Standard Italian, an Indo-European language of the Romance family, spoken in Italy. Answer the questions that follow.

<b>a.</b> [tinta]	'dye'	<b>g.</b> [tiŋgo]	'I dye'
<b>b.</b> [tenda]	'tent'	<b>h.</b> [teŋgo]	'I keep'
<b>c.</b> [dantsa]	'dance'	<b>i.</b> [funŋo]	'mushroom'
<b>d.</b> [nero]	'black'	<b>j.</b> [bjaŋka]	'white'
<b>e.</b> [dʒente]	'people'	<b>k.</b> [aŋke]	'also'
<b>f.</b> [sapone]	'soap'	<b>l.</b> [faŋgo]	'mud'

- i.** Are there any minimal pairs? If so, what are they, and what can you conclude to be true of Italian from those minimal pairs?
- ii.** State the phonetic environments in which the sounds [n] and [ŋ] appear. Identify any natural classes of sounds that appear in the environments you've provided.
- iii.** Given what you know about the distribution of sounds and the environments you listed in (ii), are [n] and [ŋ] in complementary or contrastive distribution? Please explain your answer.



### 23. Sindhi

The following data are from Sindhi, an Indo-European language of the Indo-Aryan family, spoken in Pakistan and India. Examine the distribution of the phones [p], [p<sup>h</sup>], and [b]. Determine if the three are allophones of separate phonemes or allophones of the same phoneme. What is your evidence? Is the relationship among the sounds the same as in English? Why or why not? [ŋ] and [d] are the voiced retroflex nasal and oral stop.

<b>a.</b> [pənʊ]	'leaf'	<b>g.</b> [barʊ]	'weight'
<b>b.</b> [ɖak <sup>h</sup> ə]	'grape'	<b>h.</b> [k <sup>h</sup> irʊ]	'milk'
<b>c.</b> [ɖəpʊ]	'fear'	<b>i.</b> [put <sup>h</sup> i]	'back'
<b>d.</b> [p <sup>h</sup> əŋʊ]	'hood of snake'	<b>j.</b> [bənʊ]	'forest'
<b>e.</b> [kənʊ]	'ear'	<b>k.</b> [p <sup>h</sup> ərʊ]	'arrow head'
<b>f.</b> [perʊ]	'foot'	<b>l.</b> [abʊ]	'water'