LINGUISTICS 221 **LECTURE #11**
Introduction to Phonetics and Phonology

Features

1. THE FEATURE SET: PRELIMINARIES

An utterance is composed of a sequence of discrete segments.

Is the segment indivisible?

Is the segment the smallest unit of phonological analysis?

If it is, *segments ought to differ randomly from one another*.

Yet this is not true:

p t k *p r s*

What is the relationship between members of the two groups?

- *p t k*

  the members of this set have an internal relationship: they are all voiceless stops.

- *p r s*

no such relationship exists:

p	*b*	*d*	*s*
bilabial	bilabial	alveolar	alveolar
stop	stop	stop	fricative
voiceless	voiced	voiced	voiceless

Note: similarities and differences!!

Segments may be viewed as composed of *sets of properties* rather than indivisible entities. We can show the relationship by listing the *properties* of each segment.

DISTINCTIVE FEATURES

- enable us to describe the segments in the world's languages: all segments in any language can be characterized in some unique combination of features;
- identifies groups of segments → *natural segment classes*: they play a role in phonological processes and constraints;
- distinctive features must be referred to in terms of phonetic -- articulatory or acoustic -- characteristics.

Requirements on distinctive feature systems:

- they must be capable of characterizing natural segment classes;
- they must be capable of describing all segmental contrasts in all languages;
- they should be definable in phonetic terms.

The features fulfill three functions:

a. They are capable of describing the segment: a *phonetic function*

b. They serve to differentiate lexical items: a *phonological function*

c. They define *natural segment classes*: i.e., those segments which as a group undergo similar phonological processes.

Feature values: Binary feature: the feature has either + or – value

2. MANNER FEATURES

Sonority hierarchy: manners of articulation of speech sounds are arranged in a hierarchy based on (loosely) acoustic sonority (loudness) -- see. p. 75.

Study Table 4.1

Similarities and differences of major classes can be indicated by reference to the features *syllabic, consonantal, approximant, sonorant*.

Vowel:	[+syllabic]
Glide:	[-syllabic, -consonantal]
Liquid:	[+consonantal, +approximant]
Nasal:	[-approximant, +sonorant]
Obstruent:	[-sonorant]

Study p. 77.

Classifying the stops, fricatives, and affricates → we use two features:

[continuant]
↓
the air flows out of the oral cavity: [+continuant]
the air is blocked in the oral cavity: [-continuant]

[delayed release]
↓
this feature is used to specify affricates.

Stops:	[-continuant, -delayed release]
Affricates:	[-continuant, +delayed release]
Fricatives:	[+continuant, - delayed release]

Study Table 4.2, p. 79

Basic vowel features: [front] [back] [high] [low] [tense]

Study Table 4.3 (p.81) and Table 4.4 (p. 82)

Other vowel features: [ATR] (Advanced Tongue Root), [long] [nasal] (for nasalized vowels), [stress]

(to be continued)