



FINAL EXAMINATION
(Two Hours)
January 23, 2004

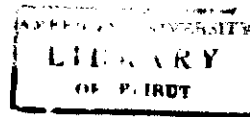
Answer the first two questions and any two of the remaining four questions.

1. Mark the following statements as TRUE or FALSE. (24 points)

- _____ a. The secondary articulation labialization is characterized by the constriction of the pharynx.
- _____ b. Children and women normally have a higher pitch than men.
- _____ c. The retroflex sound [r] is marked by the general lowering of the third formant on a spectrogram.
- _____ d. Nasals and laterals show faint formants on a spectrogram.
- _____ e. The two vowels in a diphthong belong to two different syllables.
- _____ f. Rhotacization is one type of secondary articulation.
- _____ g. English has a tendency to alternate strong and weak stresses in a sentence.
- _____ h. A laminal articulation is an articulation made with the tip of the tongue.
- _____ i. The Arabic language has no short vowel sounds.
- _____ j. Cardinal vowels are those vowels that are extreme in their placement on a vowel chart.
- _____ k. The term "marked" refers to the natural occurrence of sounds. Thus [i] is marked, but [y] (front rounded vowel) is unmarked.
- _____ l. The loudness of a sound depends on the size of the variations that occur in air pressure.

2. Fill in the blanks in the following sentences with the appropriate terms. (24 points)

- a. A nasal is a consonant sound in which the soft palate is _____ so that air may go out through the nose.
- b. A _____ is a fricative sound in which there is high-pitched, turbulent noise, as in the initial sounds of *ship*, *chip*, *jump*, *sit* and *zit*.
- c. An example of uvular articulation is the [] sound in Arabic.
- d. The [f] sound that occurs in the expression *if peter* ... is not a labiodental fricative but rather a _____ one.
- e. A _____ is a sound produced when the vocal cords are only slightly apart so that they vibrate while allowing a high rate of airflow, as in Hindi [ɦ].
- f. The airstream mechanism that is used in some languages to produce sounds with outward going air only is the _____ airstream mechanism. Stops made with this mechanism are called _____.



- g. The position of the fourth and higher formants in most vowels is indicative of a speaker's _____.
- h. Some women sound like men because they have a _____ pitch.
- i. A closed syllable is a syllable that ends in a _____.
- j. The secondary articulation of velarization is characterized by _____ the soft palate. On the other hand, the secondary articulation which is characterized by the raising of the front of the tongue is _____.

3. Transcribe the following sentences, as they would be said by native speakers of English in conversational exchanges, using a fairly broad (phonemic) transcription.

- a. She's playing with the team's distinctive features.

[_____]

- b. Have you ever imagined that phonetics would be so much fun?

[_____]

- c. The French lieutenant preferred that you deal with the colonel.

[_____]

- d. I'd like to have sugar and cream in my coffee. Many thanks.

[_____]

- e. Studies of speech production and perception are extensive.

[_____]

- f. His unbelievably incoherent remarks about accents irritated him.

[_____]

4. What are the features that acoustic phoneticians have identified, through spectrographic analyses of human speech, which would explain the following:

- a. Height and backness of vowels



b. Classification of sounds into sibilants, voiced, nasals, liquids, and vowels

c. Gender differences in pitch

d. Intonation patterns of utterances

5. Indicate the intonation patterns that might occur in the following situations. Identify the number of tone groups in each item and assign the tonic accent.

a. How do you intend to get there, by car or by train?

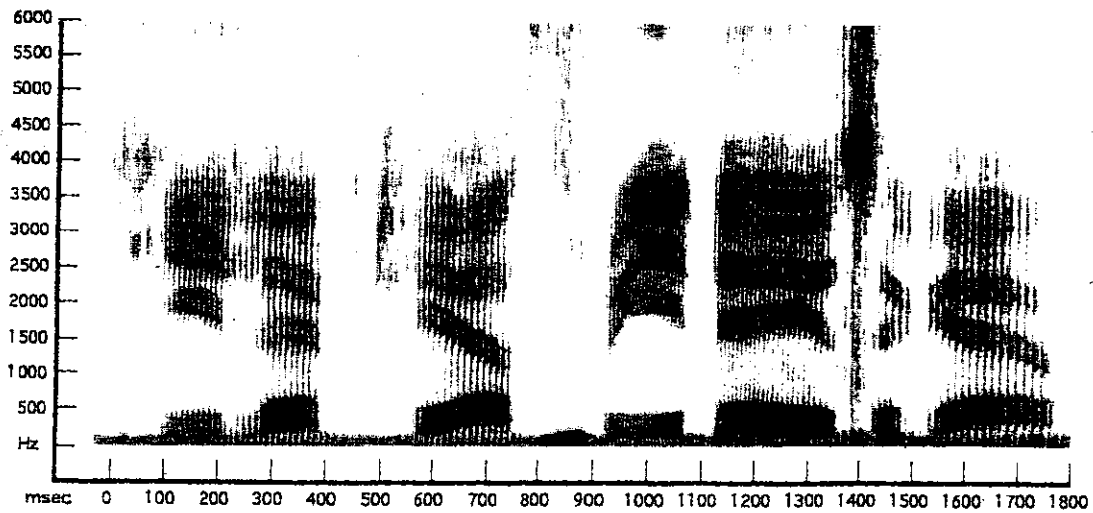
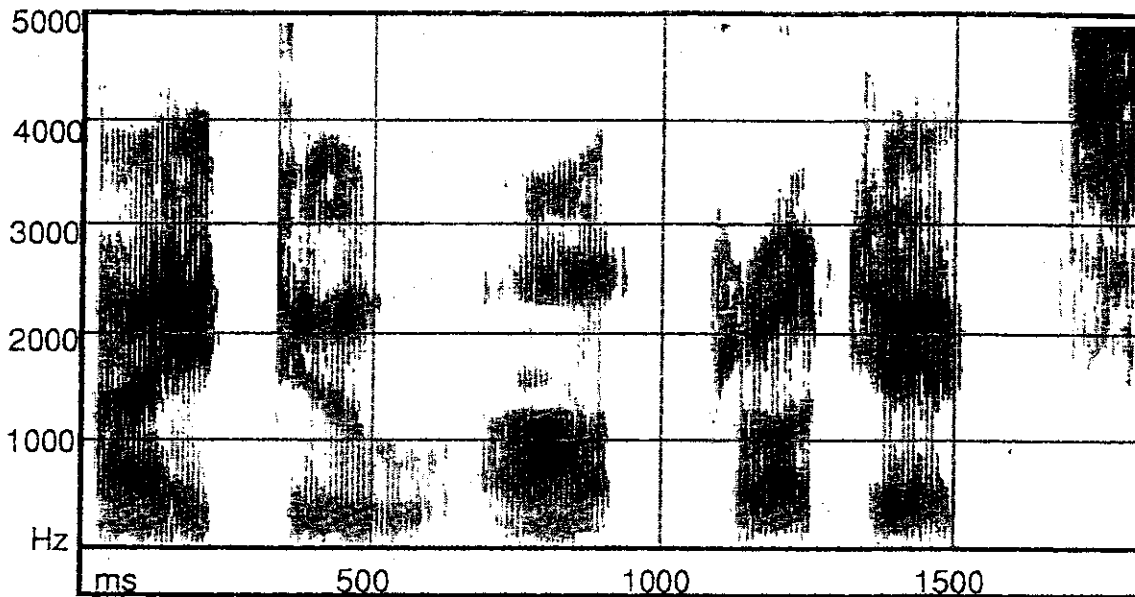
b. Did you know what you were saying?

c. The queen has abdicated! She gave us no hint at dinner last night.

d. James was born in Wisconsin, lived in London, and died in Moscow.

e. Get out of my house, you idiot. (Angry man to intruder)

6. The following spectrograms show the sentences "I do art projects" and "she came back and started again." Put a transcription above each spectrogram, and show the segment boundaries in as much as you can.



G O O D L U C K