Ant/Lin 322/522 Spring 2004 Hour Exam 1 Key

Total points: 85, as indicated.

1. 2 @ 4pts, 8 pts total.
   a. sonorants: all speech sounds whose primary noise source is in the larynx, where the vocal cords vibrate (i.e., they're ordinarily voiced); includes vowels and resonants (i.e., non-obstruents).
   b. fricatives: class of obstruents formed with partial obstruction in oral cavity, generating turbulence perceived as friction (hissing).

2. 4 points:
   a. stress b. velarization c. syllabic d. voiceless

3. 16 points, as indicated:
   a. voiceless alveodental ejective stop (4)
   b. voiced velar fricative (3)
   c. nasal lax mid central unround vowel (5)
   d. tense high central unround vowel (4)

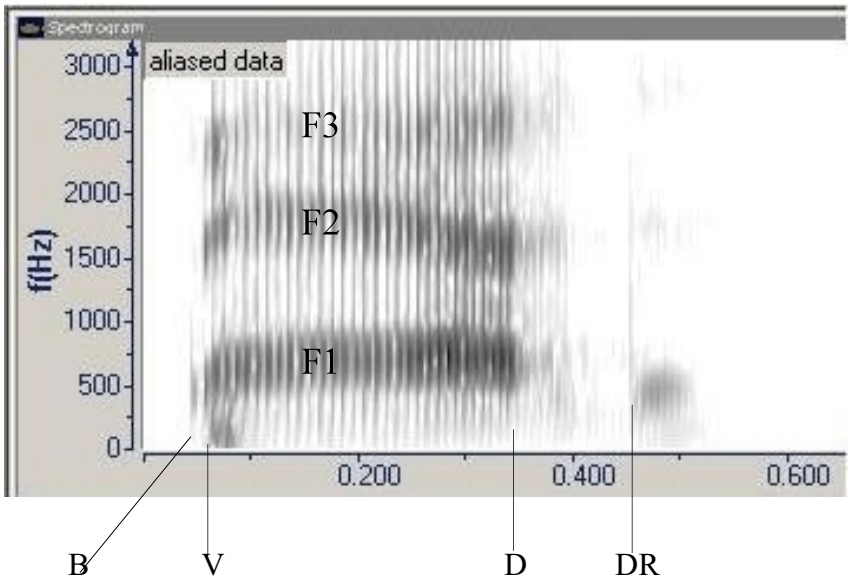
4. 13 points, as indicated:
   a. [ɴ] (2) b. [ɑ] (4) c. [ʊ̈] (4) d. [β] (3)

5. 3 points: [i] : [ ɪ] :: [e] : [ɛ] :: [ü] : [ʊ̈] :: [ɔ] :: [ö]

6. 6 points: The lips are open; the velum is up (the sound is oral); the tip of tongue is between the teeth. The sound is an interdental fricative, either [ð] (voiced) or [θ] (voiceless).

7. no question.

8. 10 points.



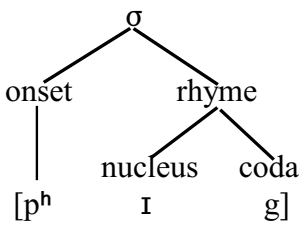

   e. Fundamental frequency = 110Hz

9. 5 points: The spectrogram was used to illustrate the articulatory and acoustic properties of glides, in this instance [y]. The spectrogram to the left is [ya], that to the right is [ay]. It is clear from the spectrogram that the glides are essentially moving formants that begin or end where the formants of the vowel [i] are found during the center of the articulation of the vowel. That is, in forming a glide, the tongue simply moves from or to where [i] would be pronounced.

10. 5 points:
    a. [r] is voiceless  b. "tt" is tap/flap  c. [t] deleted, [l] velarized and syllabic.

11. 6 points: 1, 4, 5

12. 5 points




13. 4 points: The diagram illustrates a Russian palatalized consonant. While the bilabial articulation is being made, the body of the tongue takes the position of the high front nonround vowel [i]. This has the effect of making the cavity in the front of the tongue smaller and raising the perceived pitch of the consonant. In other words, the tonal properties of [i] are added to the consonant.

Scale and grades

| | | standard bell curve (n=40) |
|---|---|---|
| A | 77–85 (7) | (4) |
| B | 68–76 (14) | (8) |
| C | 54–76 (16) | (16) |
| D | fewer (2) | (8) |
| E | | (4) |