Phonetics: Exercise 2

[1] Thai has nine vowel phonemes. Listen to the following nine Thai words and try to determine the best phoneme categorization. Then measure the first and second formants of each vowel (taking your measure in the center of the vowel). Plot the vowels with F1 on the y axis and F2 on the X-axis, with lowest values in the NE corner (as in Fig. 8.10 in Ladefoged). Rank the nine vowels in terms of their value for each formant. Does this help to identify the vowels?

|  |  |  | V: | F1 | F2 |
|---|---|---|---|---|---|
| 1. | hV: | fishing net | | | |
| 2. | jV: | to dwell | | | |
| 3. | V:t | to lament | | | |
| 4. | dV: | to be good | | | |
| 5. | sV: | to buy | | | |
| 6. | hV:t | shoal | | | |
| 7. | kV: | then | | | |
| 8. | hV:t | reason, cause | | | |
| 9. | thV: | she | | | |

F1 rank:
F2 rank:

[2] Thai stops are unreleased in the coda of the syllable. Listen to the following nine words and try to identify the place of articulation of the final stops: [p,t,k]. Then examine the formant transitions from the preceding vowel to see if they help to identify the stop.

|  |  |  | C | F2 | F3 |
|---|---|---|---|---|---|
| 1. | khì:C | to draw a line | | | |
| 2. | cì:C | to fold | | | |
| 3. | sí:C | sector | | | |
| 4. | à:C | to take a bath | | | |
| 5. | bà:C | money | | | |
| 6. | tà:C | to dry | | | |
| 7. | khù:C | to rub off | | | |
| 8. | thù:C | cheap | | | |
| 9. | cù:C | to kiss | | | |