

Artikulation für Fortgeschrittene Übung mit Echtzeitkernspinfilmern von VCV-Sequenzen

There are 24 short films, each containing one VCV sequence.

6 consonants: **t, z, l, ʃ, k, p**

4 vowels: **i, a, u, o**

(V1=V2)

The task is to identify each VCV sequence.

The following steps are similar to those in the first exercise with x-ray films:

1. Log on to the matlab account (if you have your own Linux account you can use it; then you need to type `cd ~matlab` before step 2)
2. `cd rtmri/vcvuebung`
3. Start each film with command lines like the following:
`xanim +Sr vcv1x_01.avi&`

the last two digits range from '01' to '24'

It can be a good idea to open multiple films at once, in order to be able to compare them. (Resize the windows if necessary. If you resize the window while the film is halted, it is necessary to step to the next frame for the film to display correctly at the new size.)

Each film is opened with a small control panel, but if multiple films are open at once it is difficult to keep track of which control panel belongs to which film. So for controlling playback of the films the following keyboard and mouse commands are more useful:

Window commands.

<code>q</code>	<code>quit.</code>
<code><space></code>	<code>Toggle. Starts/Stops animation.</code>
<code>.</code>	<code>Single step forward one frame.</code>
<code><</code>	<code>Go back to start</code>
<code>-</code>	<code>Increase animation playback speed.</code>
<code>=</code>	<code>Decrease animation playback speed.</code>

Mouse Buttons.

<code><Middle></code>	<code>Toggle. Starts/Stops animation.</code>
<code><Right></code>	<code>Single step forward one frame.</code>

When looking at a film frame by frame the frame number (starting at 0) is displayed at the right end of the title bar. Each film is about 16 frames long.

4. The worksheet is numbered from 1 to 24, and shows one frame of each film, taken from the centre of the consonant.
Note below each film frame the identity of the VCV sequence for that film.
It may be difficult to decide between several candidates, particularly between /t, z, l/, and especially when the vowel is /i/.
If necessary, for some films it may be better to write down several candidates for this

first stage of the exercise.

5. If you get completely stuck (or desperate) you will receive a second worksheet also showing a rough sonagram of each VCV sequence.
The recordings were made in very noisy conditions so there are limits on what the sonagrams can show. However, they should at least help to decide on the manner of articulation of the consonant (note, for example, that the second formant of /i/ is only shown very weakly).
6. As a hint, here are the solutions for two films:
15 is aza, 08 is ala