## Composition: Electronic Media I Sept. 17, 2007 Repeatability in Peak

- 1. Discussion of liveliness, literal repetition, and varied repetition at the individual soundfile level.
- 2. Discussion of operations to vary the original sound:
  - a. Fade in
  - b. Fade out
  - c. Change pitch
- 3. Open one of the soundfiles that you created for Assignment 1. Using the "save as" command from the File menu, make a copy of the soundfile and rename it. Using copy, paste, and silence commands from the edit menu, create 5 iterations of the original file, as shown below.



- 4. Modify the attack of the second sound to a minute degree by fading in, as described below:
  - a. With the I-beam cursor, highlight the attack of the second sound, as shown below on the left:



- b. Go to the DSP menu and select "Fade in." The highlighted area will be faded in, as shown above on the right.
- 5. Modify the tail of the sound to a minute degree by fading out, as described below:
  - a. With the I-beam cursor, highlight the tail of the second sound, as shown below on the left:



- b. Go to the DSP menu and select "Fade out." The highlighted area will be faded out, as shown above on the right.
- 6. Repeat steps 4 and 5 with the other sounds. Make sure to vary the edit points so that each sound has a unique envelope.

- 7. Vary the pitch of the second sound to a minute degree as follows:
  - a. Highlight the entire second sound.
  - b. Go the the DSP menu and select "Change Pitch." A window like the one below will appear:

Change Pitch				
Interval:				
-8va M7 M6 P5 P4 M3 M2 0 M2 M3 P4 P5 M6 M7 +8va				
	C	hange Pitch by	0	Cents
Fine Tune:				
	-100 -75 -50	-25 0 25 5	0 75 10	0 Cents
		·	1 1 1	
		Fine Tune by	-6	Cents
Preserve Duration				
Cancel		Prefs (	Play	) ОК

- c. Set the values to those shown above.
- d. Discussion of the following parameters:
  - i. Cents (100 cents per semitone in 12-note equal-tempered scale).
  - ii. Interval (sometimes called "Coarse").
  - iii. Fine tune (sometimes called "Fine").
  - iv. Preserve duration: a) unchecked will apply a varispeed transformation, resulting in a higher-quality sound with a change in duration proportional to change in pitch; b) check will apply a pitch-shift algorithm that preserves the original duration but results in a lower-quality sound; c) since we are trying to create minute variations in sounds, unchecking the box is a good idea, since each sound will have a unique duration.
- 8. Repeat step 7 with the other sounds.
- 9. Having 5 unique sounds that represent a single idea of a sound is a good number. If you vary the order in which these sounds are presented, the result should be a lively, non-canned, non-computerized set of sounds.