

## 025:251 COMPOSITION: ELECTRONIC MEDIA II

Spring 2013

### Assignment 1

1. Assignment 1 will be presented in class on Monday Feb. 4 (optional), and Wednesday Feb. 6 (required).
  - a. The purpose is to develop some good source sounds that will be triggered in Max/MSP.
  - b. If you decide later that you would like to use different sounds in your Max patch, it is easy to make such a change.
2. The sounds must be in the following format:
  - a. aiff
  - b. 44.1 khz
  - c. 24-bit
  - d. stereo
  - e. Normalized, with no silence at the beginning or end of the soundfile.
3. The origins of the sounds may be from any source. Consider the following:
  - a. Sounds that you record for your final project should be strongly considered.
  - b. If time is a constraint, then sounds from other sources may be used.
  - c. Sounds from the EMS.Library may be used for this assignment alone, or they may be used in your final project.
  - d. Other sound sources may be used, but they should be of the highest audio quality.
  - e. Any sounds that you use must conform to the format described above in Item 2.
4. Watch out for sounds that are varisped transformations of each other.

Name	QTY	Pitch	Duration	Fade In	Fade Out

YIA<sub>n</sub>

YIB<sub>n</sub>

YIC<sub>n</sub>

YID<sub>n</sub>

YIE<sub>n</sub>

YIF<sub>n</sub>

0	Low	Pitch, frequency	double bass, bass drum
1	Medium		clarinet, flute, violin
2	High		flute, violin
0	Short	Duration	staccato, percussive, pizz, 16 <sup>th</sup> -note, 8 <sup>th</sup> -note, spoken syllable
1	Medium		wind inst., sung note,
2	Long		violin, choral
0	Soft	Attack	
1	Medium		
2	Sharp		
0	Dark, full	Timbre	
1	Bland, pleasant, neutral		
2	Hard, bright, piercing, shrill		
0	Noise	Hamonic	
1	Pitched		
2	Inharmonic, chordal		

0	Steady, smoothed end	Decay	
1	Smooth decay, ramp down		
2	Sharp decay, exponential		

0	Low	Pitch, frequency	double bass, bass drum
1	Medium		clarinet, flute, violin
2	High		flute, violin
0	Short	Duration	staccato, percussive, pizz, 16 <sup>th</sup> -note, 8 <sup>th</sup> -note, spoken syllable
1	Medium		wind inst., sung note,
2	Long		violin, choral
0	Noise	Hamonic	
1	Pitched		
2	Inharmonic, chordal		

First name initial	Last name initial	Pitch	b	c		
Y	I	0	0	0	X	y
Y	I	0	0	1	X	y
Y	I	0	0	2	X	y
Y	I	0	1	0	X	y
Y	I	0	1	1	X	y
Y	I	0	1	2	X	y
Y	I	0	2	0	X	y
Y	I	0	2	1	X	y
Y	I	0	2	2	X	y
Y	I	1	0	0	X	y
Y	I	1	0	1	X	y
Y	I	1	0	2	X	y
Y	I	1	1	0	X	y
Y	I	1	1	1	X	y
Y	I	1	1	2	X	y
Y	I	1	2	0	X	y
Y	I	1	2	1	X	y
Y	I	1	2	2	X	y
Y	I	2	0	0	X	y
Y	I	2	0	1	X	y

Y	I	2	0	2	X	y
Y	I	2	1	0	X	y
Y	I	2	1	1	X	y
Y	I	2	1	2	X	y
Y	I	2	2	0	X	y
Y	I	2	2	1	X	y
Y	I	2	2	2	X	y

2. Clean up and organize all of your sounds from Assignment 1, including:
  - a. No silence at the beginning or ending of files.
  - b. No mini-compositions, so that each file consists of only one sound, with exceptions discussed in class.
  - c. Files should be mono, 24-bit.
  
3. Meet with Dan and Will to set up a Pro Tools sessions as follows.
  - a. 24-bit
  - b. Mono tracks only, as discussed in class.
  - c. 10-20 tracks should be sufficient.
  
4. Drag and drop your Assignment 1 files to import into Pro Tools.
  
5. Create different types of gestures, including:
  - a. Gesture A will be single, complex sound made up of 3 individual sounds that overlap. The perception should be that the result is a single sound, not 3. There should be 4 of these, named GAa, GAb, GAc, GAd. The total duration of each should be 0.2 – 0.9 seconds. If you use a sound with a longer tail, that would be allowed.
  - b. Gesture B will be a very short non-literal repeating sound that sounds like a drum roll. It can be fast, medium to fast, slow to fast, fast to medium, and fast to slow. There should be 4 of these, named GBa, GBb, GBc, GBd. The total duration of each roll should be 0.5 – 1.8 seconds. If you prefer, these could be done in Peak.
  - c. Gesture C will be a swoop comprised of 3 overlapped sounds. Use fade-ins on each sound, as well as automated volume. The fade-ins can be created in Peak or in Pro Tools, with the help of Dan and Will. There should be 4 of these, named GCa, GCb, GCc, GCd. Gca should be 0.1 - 0.3 seconds; Gcb should be 0.3 – 0.5 seconds; Gcc should be 0.5 – 0.7 seconds; Gcd should be 0.7 – 1.0 seconds.
  - d. A musical motive comprised of 3-6 identifiably different sounds. It should be primarily sequential, although overlaps are fine. There should be 4 of these, named GBa, GBb, GBc, GBd. The total duration of each motive should be 0.5 – 1.8 seconds. If you prefer, these could be done in Peak.
  - e. A sound mass/cloud, as discussed on Monday in class. It should be made of 1 source file that has been micro-varied in pitch, duration, envelope, and EQ. It can be static in pitch, as well as descending, ascending, wedging inward, and fanning outward. The register may be low, middle, or high. There should be 4 of these, named GBa, GBb, GBc, GBd. The total duration of each should be 3 – 6 seconds.
  - f. A sound group made of 10 sounds within 2 seconds, 15 sounds within 3 seconds, and 20 sounds within 4 seconds. There should be 4 of these, named GBa, GBb, GBc, GBd.
  
6. The Pro Tools skills needed include:
  - a. Moving, copying, cutting, and pasting regions.
  - b. Fading in/out.
  - c. Grouping regions.
  - d. Using volume automation.
  - e. Using pan automation.
  - f. If your Peak files have many individual sounds, you might need to use Strip Silence, as shown in class.

7. Audiosuite plug-ins to be used include:
  - a. Pitch 'n Time Pro
  - b. Q10 EQ
  - c. Normalize
  - d. Reverse
  
8. All of the gestures should be panned in stereo.
  - a. The maximum left pan should be <80 and the maximum right pan should be 80>.
  - b. Each sound should be fixed in the stereo field, and not travel from one side to the other.
  
9. To create a large number of sounds, do some of the following in Peak, using Batch Processing:
  - a. Change pitch by a range of +/- 12 cents, using the varispeed method.
  - b. Change pitch by +/- 1-2 semitones. This will create a sense of voice-leading in your music.
  - c. Change pitch by +/- 10-11 semitones. This prevents octaves. Some sounds will sound quite different under this kind of transposition.
  - d. Change pitch by more extreme values, taking care to avoid octaves and their multiples. You will need to consider the octave relations between all of the transposed sounds.
  - e. Apply a moderately slow fade-in to the sounds.
  - f. Reverse the sounds.
  - g. At the conclusion of the batch processing above, consider the following:
    - i. Normalize
    - ii. Change pitch by +/- 12 cents.
  - h. Consider using a suffix, such as:
    - i. +1, +2, +0.3, -0.11
    - ii. Fade in
    - iii. R (for reverse)
    - iv. EQ1, EQ2, etc.
  
10. All of the actions above in Peak can be done in Pro Tools, as well.
  - a. To do this, consider lining up all of the desired sounds in one track.
  - b. Although you would want the plug-in to create individual regions, sometimes a continuous region is produced. If that occurs, use Strip Silence.
  
11. Feel free to use other DSP menu items in Peak not discussed in class, and other Audiosuite plug-ins in Pro Tools not discussed in class.
  
12. When each gesture is completed, select all of the regions and group them, using the Region>Group menu item. Double-click on the group and give it the appropriate name, such as GAa, GBc, etc. Consider that all groups and regions can be moved anywhere in the Edit Window, so get used to using it as a workspace.
  
13. Be careful not to have the volume levels too high in the Edit Window. In general, any region should not be set higher than 0 db. Also, the cumulative effect of several regions sounding at the same time can produce overloading which cannot be seen in the track meters.