**Composition: Electronic Media I**
Sept. 7, 2005
Micromontage Techniques in Pro Tools

1. In this class, we will consider musical composition in the macrosonic sense and the microsonic sense:
   a) A <u>macrosonic composition</u> is an arrangement of sounds over a large time-span, say, 4-10 minutes.
   b) A <u>microsonic composition</u> is an arrangement of sounds over a very short time-span, say, 1 second.
   c) <u>Microsonic</u> refers to the manipulation of both generated sounds and soundfiles.
   d) <u>Micromontage</u> refers to the manipulation of soundfiles only.
   e) <u>Micromontage object</u> refers to the manipulation of soundfiles that fuse into a single object.

2. As discussed in class, soundfiles can be imported into **Pro Tools** and arranged in the **edit window** to create an arrangement of sounds. In a previous class, we had imported a variety of soundfiles to create the beginnings of a macrosonic composition. These techniques of importing, copy, and paste can be extended over a large time-span to create an entire macrosonic composition. Similarly, these techniques can be used to create micromontage objects, as discussed below.

3. Prepare to create a micromontage object as follows:
   a) Power up the studio
   b) Launch **Pro Tools**
   c) Create a new session with 5 mono tracks.
   d) Import several soundfiles and place them in the edit window, as shown below.
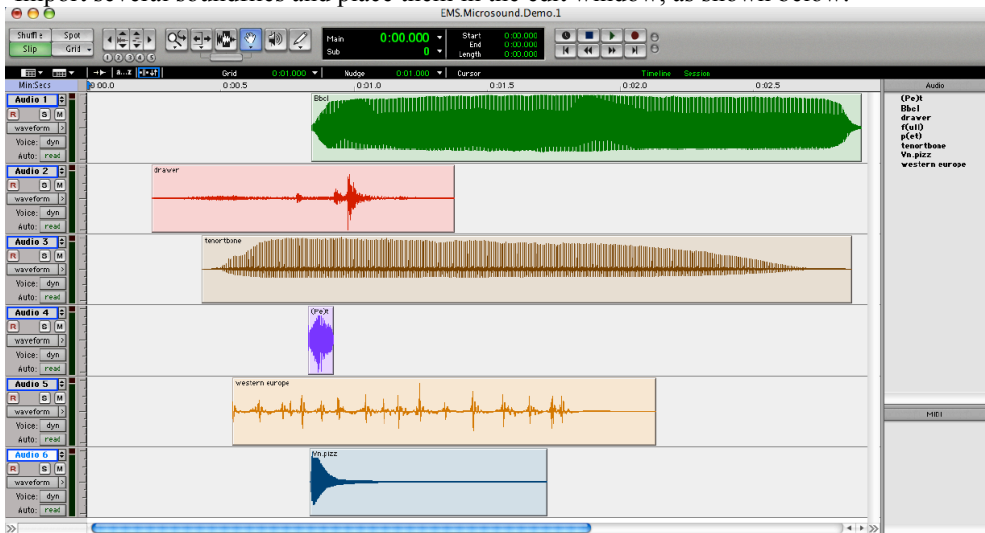

Note that each soundfile is displayed with its region name.

4. Zoom in horizontally, then use track volume automation amplify on those portions of each track that you wish to hear, as shown in Example 1a on the left.
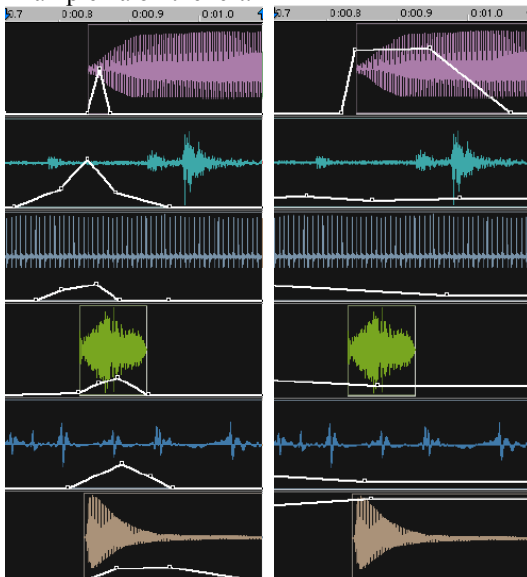
Example 1b on the right shows pan automation used to place the micromontage object in a stereo field.
Note that the black background indicates that a time range has been selected.

5. Examples 2-3, below, show other placement, volume, and pan possibilities to create new micromontage objects.

Ex. 2a, volume   Ex. 2b, pan   Ex. 3a, volume   Ex. 3b, pan   Ex. 4a, volume   Ex. 4b, pan
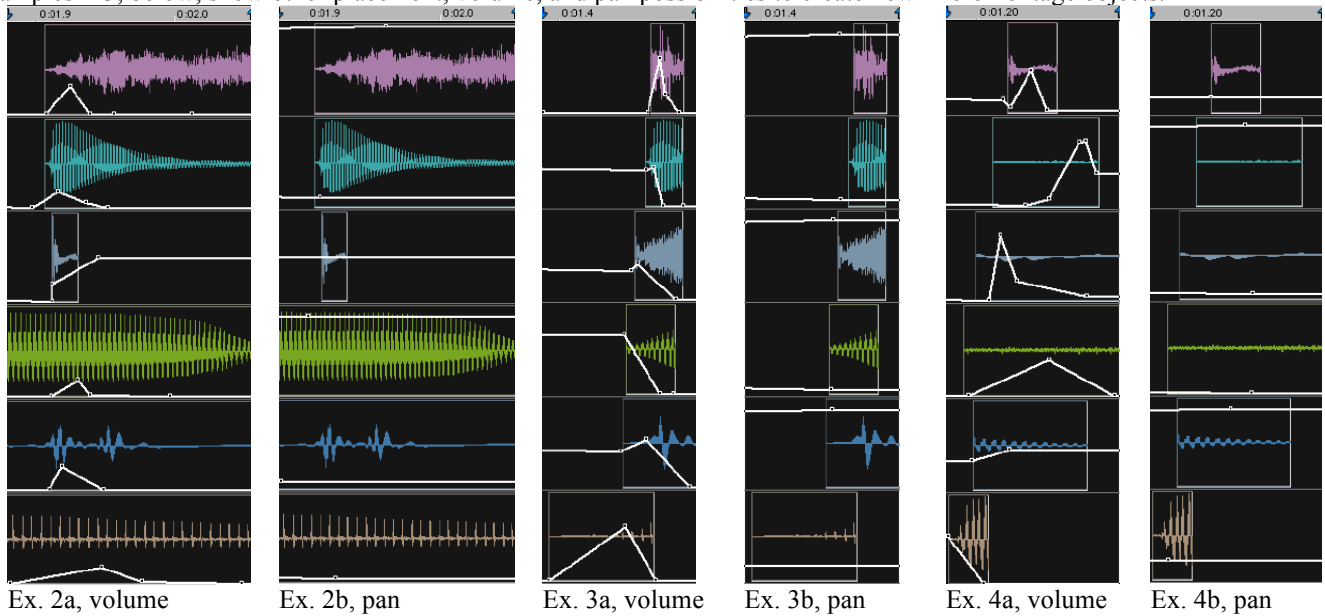
6. Experiment with other possibilities:
   a) Create variations of each micromontage object (subtly—this is a technique of nuance, not coarseness).
   b) Bounce them in stereo interleaved files, as discussed in class, then open in **Peak**.
   c) In **Peak,** normalize the soundfile (see **DSP** menu) and then change the pitch with or without changing the time (again in the **DSP** menu). Do this several times to create a pitch set of a micromontage objects.
   d) Repeat steps 6a-d on another micromontage objects to create other variations and pitch sets of micromontage objects.
   e) Try to blur the single note model developed here so that the microsounds flow into one another, creating the effect described below in a blurb for the book *Microsound* by Curtis Roads, published in 2002 by MIT Press:
   "Below the level of the musical note lies the realm of microsound, of sound particles lasting less than one-tenth of a second. Recent technological advances allow us to probe and manipulate these pinpoints of sound, dissolving the traditional building blocks of music -- notes and their intervals -- into a more fluid and supple medium. The sensations of point, pulse (series of points), line (tone), and surface (texture) emerge as particle density increases. Sounds coalesce, evaporate, and mutate into other sounds."