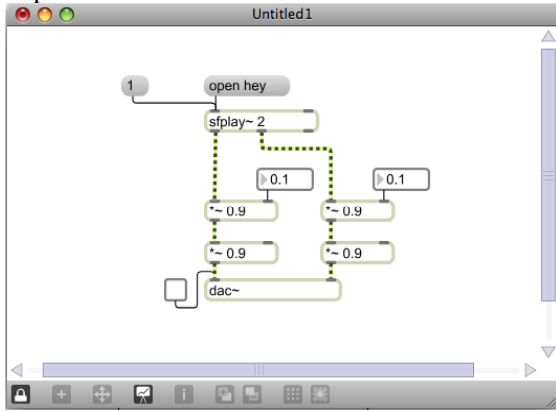










025:251 COMPOSITION: ELECTRONIC MEDIA II
Spring 2010
Max/MSP Patcher Window Tool Bar and Palette

1. A patcher window is shown below.



2. The tool bar is found in the lower left corner, as shown below.



- a.  The Lock/Unlock button locks and unlocks the patch.
 - i. A locked window will play, but cannot be edited.
 - ii. An unlocked window can be edited, but will not play.
 - iii. A window can be locked/unlocked by clicking on the icon, or typing ⌘ and clicking in the window, or typing ⌘ E.
 - iv. In earlier versions of Max, a patch could be saved only when the patcher was locked. In Version 5.x, unlocked patchers can also be saved.
- b.  The New Object button opens the palette, discussed later.
 - i. The palette can also be opened by double clicking in an unlocked patcher window, or by typing Shift ⌘ O.
- c.  The Zoom button is one method of zooming in and out.
 - i. Another method is ⌘ = and ⌘ -.
- d.  The Presentation Mode button is one method of hiding and showing different objects.
 - i. Other methods for viewing can be found in the View menu.
- e.  The Inspector button opens an Inspector window for a selected object.
 - i. Other ways of opening the Inspector window are to select an object, then selecting Object>Inspector, or typing Shift ⌘ I.
- f.  Move objects forward and back.
- g.  The Grid button shows or hides a grid in the window.
 - i. The dimensions of the grid are set in Max/MSP>Preferences.
- h.  The Snap to Grid button snaps new objects to the grid.

3. The object palette is shown below.



a. To place an object in the patcher window, point the cursor to the desired location, then double click. A red target like the one below will appear:



b. This is where the selected object will be placed. Its exact location is not important, since it can be easily moved.

c. Select one of the objects, which will appear in the window like the examples below:



d. To change the width of an object, move the cursor to the right edge until 2 arrows appear. Click and drag left or right, as shown below:



Note: a navigation window with coordinates will appear. However, it is not possible to take a screen shot of this.

e. To change the size of some objects in 2 dimensions, move the cursor to the lower right corner until 2 diagonal arrows appear. Click and drag in or out, as shown below:



4. The most commonly used objects are: Object, Message, Comment, Button, Toggle, Integer Number, and Float Number. These are discussed below.

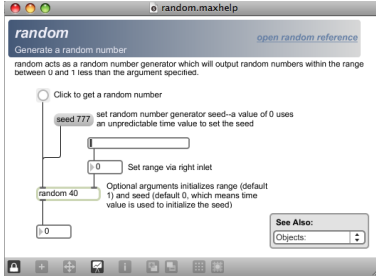


5. This object is called “Object.” An object is created by typing a given name in the field, as shown in the 2 objects below:









a. The random object is Max or control object, meaning that it operates on numbers and other objects, but does not generate or play sounds. The patch cords connecting this object will be plain, black lines. These are patched to the 2 inlets at the top and from the outlet at the bottom.

- b. The `sfplay~` object is an MSP or audio object, as denoted by the `~` or tilde at the end of the name. The patch cords connecting this object will be gold and black braided for the left and right inlets and outlets. (The right inlet and outlet will be discussed later.)
- c. To get help for an object, highlight it with the cursor, then select “help” in one of the following ways:
- Go to the Help menu.
 - Type Shift ⌘ H.
 - A window like the one below will appear:



- Using help patcher windows like this, it is possible to learn a great deal about Max.
- If you unlock the patcher, you can copy and paste the contents of that window into your own patcher.

-  This is the Message object. Here, you type certain words such as “open,” “open Larry,” and “320.” Like Object objects, Message objects have inlets and outlets that convey messages to other objects.
-  This is the Comment object. In it you type text that will appear in the patcher window that may be used as a label, definition, or reminder to the user. The Comment object has no inlets and outlets and performs no function in the patch.
-  This is the Button object, sometimes called Bang. Its sole function is to trigger an event by sending the number 0 from its outlet.
-  This is the Toggle object. When it is checked on, it sends the number 1 from its outlet. When it is checked off, it sends the number 0.
-  This is the Number box. It will send out its outlet a positive or negative integer (i.e., whole number). This number can be typed into the field in a locked patcher window, it can be scrolled up and down, and it can be sent into its inlet from another object.
-  This is the Float number box, also called Flonum, which uses decimal values. In class, it will be shown how each decimal place can be scrolled individually from the mouse.