the ongoing process for laptop duo (or quartet)

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# **Performance Instructions**

## **Basic Information**

This piece is a duo (or quartet, see below) for laptop/computer performers who also work as composers or improvisers, and have recordings of a few compositions and/or improvisations (an alternative quartet option is described below as well). Each performer will need a computer running MaxMSP or MaxMSP Runtime (5 or 6), the ability to connect to a network, and stereo output to two speakers (thus a total of four speakers are necessary for a performance).

The speakers should be distributed evenly in the performance space. The performers should either both be located on stage (or in a central performance space), or at opposite ends of the room. When the former setup is chosen, each performer's audio output should be sent to speakers that are diagonally oriented. When the performers are placed at opposite ends of the space, their output should be sent to the speakers that are closest. The diagrams below depict both situations.





## **Performance Process**

The total length of a performance can vary from fairly short to rather long depending on performer preference and the performance setting. A concert or other relatively traditional setting would likely lend itself to short to medium durations while the "installation" option is described below would more naturally support longer temporal bounds.

Each performer has two primary tasks during a performance: presenting their own musical material and modifying that of their fellow performer. Both tasks are accomplished using the MaxMSP interface provided by the composer that is depicted and explained thoroughly in the pages the follow. Each performer chooses recordings of six of their compositions and/or improvisations, which are used as source material for a performance (if desired, shorter excerpts rather than entire works may be used). These recordings are continuously looped, and each performer is able to select which pieces are played in their left and right channels. Alternately they may elect to randomly shuffle through all of their recordings in either or both channels, and select the time interval at which changes occur. While working with their own material, each performer also uses various processing tools to modify their fellow performer's output. These include fragmentation, degradation, delay, modulation and volume manipulation. Each performer will obviously have to switch between these tasks as the performance progresses.

The manner in which each performer approaches the two primary performance tasks (presenting their own material, modifying the other performer's) is shaped by their interpretation of graphic performance score pages. Each page features a large graphic image. The exact way that an image suggests performance gestures will vary significantly, as none have obvious sonic connotations and might be interpreted in a literal or abstract manner. Further, since the graphic is meant to shape both how a performer approaches his or her own material and how to modify his or her fellow performer's output, there are multiple ways of conceptualizing the image's relationship to these two tasks. For example, one could use the total image to structure the entirety of their actions on both fronts. Alternately, one could use portions of the total image to shape each activity, understanding the whole image as representative of the totality of their performance activities. Of course, other possibilities also exist, particularly when the image is understood in a more abstract manner. Performers are encouraged to be creative and explore!

Seven graphic score pages are provided in this score. In performance these pages can be used in any order, and performers may employ as few as two pages or as many as all seven. These choices may be made before or during performance, and the length of a performance may partially influence the number of pages used. Pages should not be repeated unless all seven have been used once. The performers need not coordinate which pages are chosen or in what order they are employed. The amount of time spent on each page is left to each performer's discretion.

#### **Installation Option**

In addition to programming this work on a concert, it could also be used as a sort of quasi-installation. For this option the performers and speakers should be placed in public spaces, and a longer duration adopted. In this case, the physical setup can be approached with more flexibility and creativity than in a concert setting. While it would be acceptable to place the performers and speakers in the same space (room, lobby, hallway, stairwell, etc.), they also could be located in different parts of the same building that might or might not be in earshot of each other. The performer's interpretation of one or more of this piece's score graphics, used in tandem with knowledge of a building's design, might suggest an interesting spatial configuration. The temporal aspect can be approached with similar flexibility and inventiveness. The piece could be simply performed for a longer span of time such as one or more hours. Alternately, it could be performed periodically over several days, weeks, etc., and in this case different performers could be used at different times.

#### **Quartet Option**

This piece can also be performed as a quartet, rather than a duo. For this configuration, four computers with MaxMSP are required (all with the same patch), though only two need to have audio output. Performers work in pairs, with one focusing on the "Mixing Your Own Material" portion of the patch, and the other working with the "Adjusting Your Fellow Performer's Output" section. Each pair can either share graphic score pages, or use different pages. Since each pair uses a total of six recordings, each member of the pair should ideally contribute three. It is important to note that the individual in each pair that uses the "Mixing Your Own Material" section needs to have and locate these recordings (the other member need not bother with this). Additionally it is that individual's IP address that should be entered by both members of the other pair. This individual also needs to use the "Recording" portion of the patch, if it is used. All four performers need to click "Begin Playback" to start a performance, as this toggle button also sets the processing defaults. Members of the same pair may choose to switch roles mid-performance (if this is done it is probably easier to also switch computers and avoid requiring all performers to enter new IP address data). Other possible quartet options exist (for example, each quartet member takes one output and processing channel), and ensembles are free to explore alternatives.

Performance Score















Computer Interface

Each performer has the same interface that is divided into four sections. This interface contains some basic instructions that are explained in greater detail here. The "Initial Setup" and "Recording" sections are used just before a performance, while the "Mixing Your Own Material" and "Adjusting Your Fellow Performer's Output" portions are used during performance.

Initial Setup	Mixing Your		Adjusting Your Fellow		
Click below to enter your fellow performer's IP address.	Own Material		Performer's Output		
symbol host The address must be preceeded by "host" (example: host 127.0.0.1).	Select which file to play in the left channel	Select which file to play in the right channel	Fragmentation	Left Channel	Right Channel
The result will print to the Max window.	0 1 2 3 4 5 6	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	and here to return to a continuous feed> Adjust the size of the fragments>	O Sm Lg	O Sm Lg
Choose sound files	or click here to randomly alternate (also set the	or click here to randomly alternate (also set the	Slow down their playback> Degradation	Reg Slow	Reg Slow
Composition 1 open Composition 2 open Composition 3 open	interval at which they change)	interval at which they change)	Adjust the sampling rate> Adjust the bit rate> Delay	Low High	Low High
Composition 4 open Composition 5 open			Click here to turn delay on or off> Adjust the delay interval>	Sm Lg	Sm Lg
Composition 6 open			Add feedback> Modulation	Low High	Low High
Begin playback			Frequency on or off> Severity>	Low High	Low High
Recording Click "open" to select a destination for the soundfile (both performers do this first)			Amplitude on or off>	Low High	Low High
should clic	mer (not both) k here to start and ding (enter IP love first)		Frequency of modulating signal> Volume	Low High	Low righ

### **Initial Setup**



Each performer should first enter their fellow performer's IP address by clicking the "symbol host" message and entering "host" followed by the IP address (example: host 127.0.0.1). The entered text will print to the Max window.

Each performer should choose six recordings of their own compositions and/or improvisations to use for a performance. The recordings should be in either WAV or AIF file format. Click open to access each recording.

Once recording is set up (if used, see below), IP addresses specified and soundfiles located, each performer should click this toggle button to begin playback.

# **Recording (optional)**



The "Recording" section is optional, but may be used to record a performance. Each performer should click "open" to select a destination for the recorded soundfile.

One of the two performers (but not both) should click the toggle button to start recording. Do not start recording until both performers have entered each other's IP addresses in the "Initial Setup" section, though do start before clicking "Begin playback" (above).



The numerical message buttons select which of the six identified recordings are heard through the left and right channels of that performer's output (selecting zero leaves that channel silent). All recordings loop and do not need to be restarted if they complete playback. Note that only the left channel of a recording will be heard in the left channel, and similarly only the right channel of a recording is heard in the right channel. The playback of the left and right channels of each recording is coordinated, so choosing the same numerical message for each channel will result is the synchronized playback of a single recording in both channels.

Performers can also choose to randomly alternate between their six recordings, in either channel or both, by clicking one or both

The rate in seconds at which the recording(s) change can be adjusted by typing in a number (with decimals if desired) into the

Adjusting Your Fellow Performer's Output					
•	Left Channel	Right Channel			
Fragmentation					
Click here to break up their output>	0	0			
and here to return to a continuous feed>	0				
Adjust the size of the fragments>	Sm Lg	Sm Lg			
Slow down their playback>	Reg Slow	Reg Sio			
Degradation					
Adjust the sampling rate>	Low High	Low High			
Adjust the bit rate>	Low High	Low High			
Delay					
Click here to turn delay on or off>					
Adjust the delay interval>	Sm Lg	Sm Lg			
Add feedback>	Low High	Low High			
Modulation					
Frequency on or off>					
Severity>	Low High	Low High			
Amplitude on or off>					
Frequency of modulating signal>	Low High	Low High			
Volume	Low Reg High	Low Reg High			

Numerous ways to modify the other performer's output are provided and organized into five categories: Fragmentation, Degradation, Delay, Modulation and Volume. Most of these modifiers employ sliders, which can be clicked and dragged (like a physical slider) or simply clicked at the desired position. Simple labels (example: Low/High) are provided on the sliders for quick orientation.

In addition to the sliders, one needs to click a button to initiate or terminate fragmentation, and use toggle buttons to begin or stop employing delay and modulation.

The Volume slider can be used either as a processing tool or to compensate for an increase or decrease in volume created by another modifier (significantly lowering the sampling or bit rates, for example, increases volume).

Each processing tool begins in a default position that does not in any way alter the other performer's output. Be aware that this default setting will return at random intervals during a performance (left and right at different times).