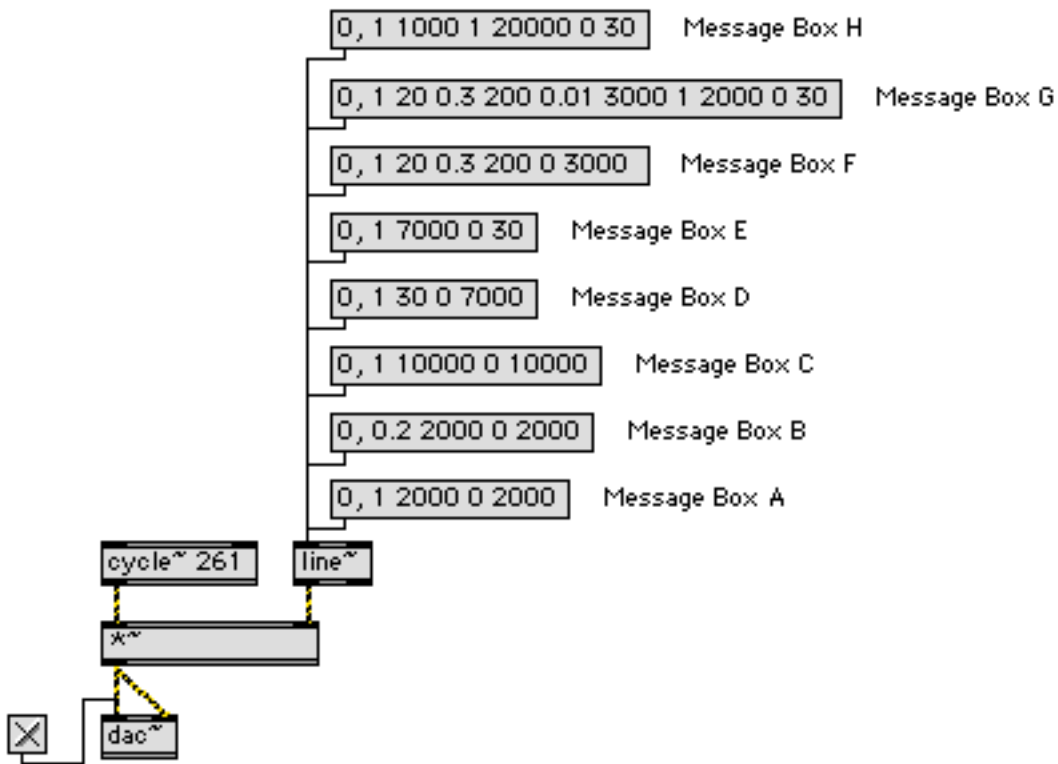**Electronic Media II**
Spring 2005
Using the line~ object to create amplitude envelopes in Max/MSP

1. The patch below plays a 261 hz sine wave with different amplitude envelopes, triggered by Message Boxes A-H.

a) Message Box A starts at amplitude 0, increases to amplitude 1 over 2000 milliseconds (ms), then decreases to 0 over 2000 ms.

b) Message Box A starts at amplitude 0, increases to amplitude 0.2 over 2000 ms, then decreases to 0 over 2000 ms.

c) Message Box C starts at amplitude 0, increases to amplitude 1 over 10000 ms, then decreases to 0 over 10000 ms.

d) Message Box D starts at amplitude 0, increases to amplitude 1 over 30 ms, then decreases to 0 over 7000 ms.

e) Message Box E starts at amplitude 0, increases to amplitude 1 over 7000 ms, then decreases to 0 over 30 ms.

f) Message Box F starts at amplitude 0, increases to amplitude 1 over 20 ms, decreases to 0.3 over 200 ms, then decreases to 0 over 3000 ms.

g) Message Box G starts at amplitude 0, increases to amplitude 1 over 20 ms, decreases to 0.3 over 200 ms, decreases to 001 over 3000 ms, increases to 1 over 2000 ms, then decreases to 0 over 30 ms.

h) Message Box H starts at amplitude 0, increases to amplitude 1 over 1000 ms, stays at 1 for 20000 ms, then decreases to 0 over 30 ms.