### Hardware mixer



Figure 1: SSL SL9000J (72 channel) console at Cutting Room Recording Studio, NYC

## $\mathbf{F}\mathbf{X}$

### SonicPainter

### Xenakis

#### Csound score

Table 1: CSound score represented as a table. Each row contains the data for each note.

Instrument	Start time	Duration	Start frequency	End frequency	Timbre	Start vibrato level	End vibrato level
1	0	2	440	880	3	.01	20
1	0	2	880	440	3	20	0.01
1	2	2	1320	660	6	0.01	20
1	2	2	660	1320	6	20	0.01
1	4	2	330	660	2	.01	20
1	4	2	660	330	2	20	.01
1	6	2	880	1720	1	.01	20
1	6	2	1720	880	1	20	.01
1	8	2	220	440	9	.01	20
1	8	2	440	220	9	20	.01



Figure 2: Skeuomorphic software FX

# Realization in DAW

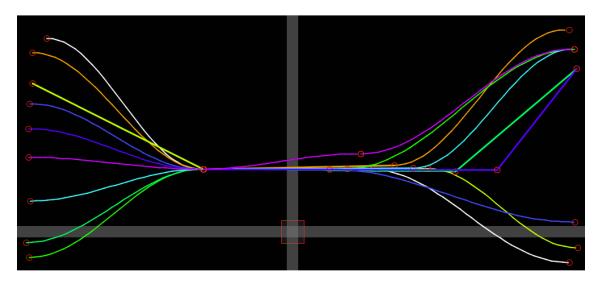
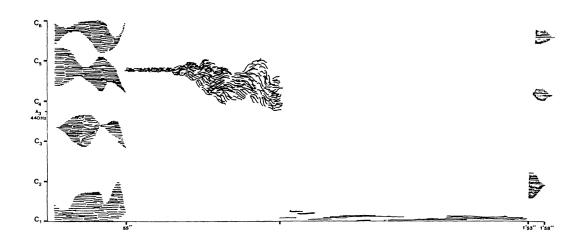


Figure 3: SonicPainter by William Coleman



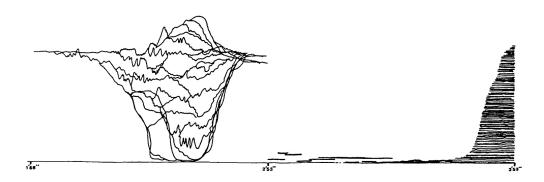
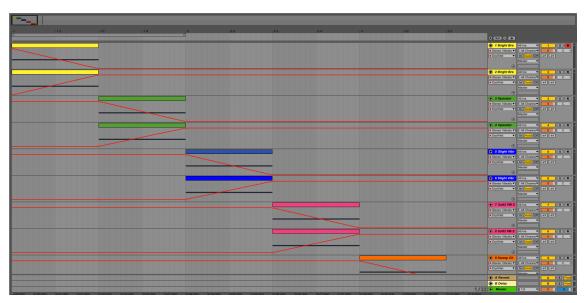


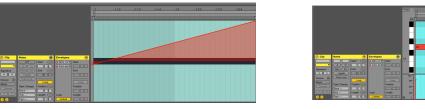
Figure 4: Iannis Xenakis - Mycenae Alpha score



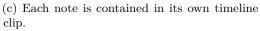
Figure 5: Iannis Xenakis showing UPIC to a younger audience



(a) The timeline showing the vibrato automation on each track.



(b) The pitch envelope. Requires multiple clicks to display.





(d) The instrument and effect chain. The small red dot on the DRY/WET knob indicates automation.

Figure 6: DAW realisation of composition