

## Overview

The Concrete Poets of the '60s, and their Dada and Futurist forebears, treated the visual appearance of text as a principal participant in the production of meaning. Their interests in such experimentation grew out of a deeply held belief that traditional forms of written communication, with its clean spacing, rectilinear layout, and sober letterforms, no longer could speak to the cultural schizophrenia of the modern age. Working within the constraints of traditional letterpress, these artists and poets managed to explore text's visual presence in ways that seem fresh even to the MTV-jaded eyes of today. As concrete poets practicing at the beginning of a new century, we have embarked upon the ActiveText Project, an on-going experiment in radical ways of treating and interacting with the visual appearance of text in ways which reflect our post-millennial data devotion. Users can set glyphs, words, or entire passages in motion, pull them apart, blow them up, infect them with dynamic behaviors and even reconstitute them, in an attempt to deconstruct standard notions of text presentation and reception.

## It's Alive!

The first major application of our project is *It's Alive!* This program allows the user to author dynamic and interactive texts in a fluid environment. Its functionality is best summarized as the mutant offspring of a text editor and Adobe AfterEffects. The user can enter, edit and lay out text as usual. Unlike a text editor, however, which requires her to constantly move from text to pull-down menu and back to adjust basic visual characteristics such as font, size and color, *It's Alive!* gives the user continuously variable controls which provide continuous feedback. By using pie menus instead of standard drop-down or palette menus, the user can do all of this without ever having to move away from the target text.

The true fun in *It's Alive!*, though, lies in the fact that the user can apply dynamic and interactive behaviors to the text, in real-time, as easily as she can change the font. If she wants some text to wander aimlessly around the screen, she selects the target text, picks "wander" from the menu, and off it goes. If she wants the text to pulse when the mouse is passed over it, she selects "pulse" from the menu. The text will then pulse in reaction to the mouse's proximity as it wanders around the screen. In this way behaviors can be layered on top of one another, at the level of an individual letter, a word or an entire passage. This provides a fluid way in which to create visually and dynamically rich texts.

## TextOrgan

Equal parts digital graffiti and digital concrete poetry, *TextOrgan* is the rave cousin of *It's Alive!* *TextOrgan* takes the *It's Alive!* environment, adds a MIDI keyboard for quick access to all the functionality, and allows the user to either input text directly or to select among a set of prepared texts that are then streamed onto the screen. She can quickly build up immensely rich collages of performance-specific poetry and found texts.

*TextOrgan* was developed for use in conjunction with a DJ at musical events. By collaborating beforehand, the DJ and the TextOrganist can choose a selection of texts and discuss what sort of mood or themes they want develop in the set. When the set begins, the two embark on a improvisational duet, each reacting to what the other is throwing into the media environment. The DJ plays his decks, and the TextOrganist uses the MIDI keyboard and a mouse to play the text. The output of the *TextOrgan*, projected above the crowd, oscillates between text as pure text, text as image, and pure image, creating an experience that is at times reading, at times watching and at times both.

The TextOrganist can also extract simple signal information such as pitch and intensity from either the ambient environment or directly from the DJ's decks. This provides a mean of automating some of the text dynamics to be in synch with the beat, or to ebb and swell as the intensity of the music decreases and increases.

*TextOrgan* has been performed once before, at a club in London, and was extremely well received. Many partygoers became TextOrganists, proving to us the user-friendliness of the MIDI-mouse interface. The version of *TextOrgan* we propose for Ars Electronica 2000 will feature enhanced signal processing to obtain more textured information from the audio input. It will also contain a much larger library of behaviors than those shown in the video. We propose to intervene in one or more of the several parties being held during the festival, adding our moving, morphing, mutating text to the other rich media experiences being offered.

## Technical Realization

*TextOrgan* is composed of the following components:

### Software

*It's Alive!*, custom-written application in C++  
Windows NT 4.0

### Computer

PIII 550 Mhz (or faster)  
Matrox Millennium G400 MAX 32Mb video card

### Full-size MIDI keyboard

Any standard MIDI keyboard

### Monitor

19" flat panel

### Projector

In Focus LP770 or equivalent

### Live musical input (optional)

This can be either from ambient sound or a line-in from any component source

The MIDI keyboard is set-up facing the projection surface, with the flat-panel display behind the keyboard and the mouse in front of it. The user plays the keyboard, triggering changes in the text and applying behaviors. She uses the mouse to direct the stream of text. The flat panel is used to monitor the results, as the projection surface is often rather large and not suitable for sustained interaction. This arrangement also allows for the projector to be placed in a location which may not be fully viewable by the artist but which could be the optimal place for the audience's appreciation.

If live musical input is going to be used, the DJ's equipment and the *TextOrgan* must be within connecting distance.