

languages, Pd makes for an excellent prototyping tool, enabling visual or sound artists to rapidly manipulate and test complex ideas and new methodologies. Pd and GEM feature heavily within the AGNULA (A GNU/Linux Audio Distribution) project, which, given perhaps an image makeover, could easily be viewed as the default distro for artists. AGNULA packs almost every usable Free Software multimedia app into two distros: DeMuDi, which is Debian-based, and the Red Hat-based ReMuDi. The project kicked off only recently and, with support from the European Community, has hired the excellent Dave Philips to produce quality documentation for the distro. This all sounds good, but few artists seem to be using the package yet.

“Given the seemingly deterministic nature of computer science, coding truly artistic apps may seem doomed to failure.”

TOWARDS AN ARTISTIC OS

At the other end of the spectrum when it comes down to usability, the ap collective (Jonathan Kemp and Martin Howse) present an extreme audiovisual lab, promoting new ways of thinking about code. Performances are intense, brutal and supremely loud, making use of custom virtual machine software clustered across junk PCs and outputting audiovisual data through custom hardware modules. These include computer-controlled record decks and laser projection devices. ap are hardcore, setting a radical agenda which includes the creation of a free, dysfunctional, artistic OS.

ap work purposefully against the secure OS model stressed throughout the industry, preferring instead an open promiscuity of mobile code nodes which can run on top of a virtual layer on any machine. Their latest performance app, gdapp, argues for a total flattening of all forms of data and code; audio, visual and code data are treated identically

within a self-configuring nodal space. The only user interface presented is a complex configuration text file which can be edited by Vi or GNU Emacs live, to change the node space and establish new linkages.

FREE THE VJ

Before many of today's artists had even heard of Free Software, a few lone pioneers hammered out a code base which is still in use today, particularly when it comes down to high speed, open source, video processing software. And as with any tight knit community, free software artist developers are quick to acknowledge their roots.

Andreas Schiffler, author of SDL_gfx, a library of super fast filtering, convolution and drawing tools, is one name which always seems to crop

up, with both Kentaro Fukuchi and Jaromil acknowledging his influence on the EfficTV and Freej apps respectively. Both of these coders have in turn inspired a second generation of artist-developers with ap making some use of this rich code base. Within a rich community of activists, hackers and artists, such is the nature of a Free Software development model which will surely inspire new coders. Already, youthful coder, Niels Elburg, is turning heads with his superbly rich Veejay live video manipulation and editing app which boasts over 84 effects, frame blending, editing and recording on the fly.

As custom-embedded, interpreted languages push beyond simple algorithmic models, we can look forward to truly flexible artistic apps. These are likely to be aware of both a formalist approach to coding, as evidenced by Paul Graham's essays on the aesthetics of code, and a more political, cultural agenda, perhaps best typified by the work of Graham Harwood and 0100101110101101.

Key Links

Pd
<http://pure-data.iem.at>

GEM
<http://gem.iem.at>

PDP
<http://zwizwa.fartit.com/pd/pdp/overview.html>

PiDiP
<http://ydegoyon.free.fr/pidip.html>

slub
www.slub.org

SuperCollider
www.audiosynth.com

Piksel
www.piksel.no

Jaromil
www.rastasoft.org

Erich Berger
<http://randomseed.org>

AGNULA
www.agnula.org

ap
www.1010.co.uk

SDL_gfx
www.ferzkopp.net/~aschiffler/Software/SDL_gfx-2.0

EfficTV
<http://effectv.sourceforge.net>

Veejay
<http://veejay.sourceforge.net>

Graham Harwood
www.mongrelx.org



Ap's gdapp (generic data app) software throws out video data generated from any data source within complex nodal arrangements of code

Left; The Skeezo crew hard at work debugging PDP patches during Piksel 2003 in Bergen, Norway