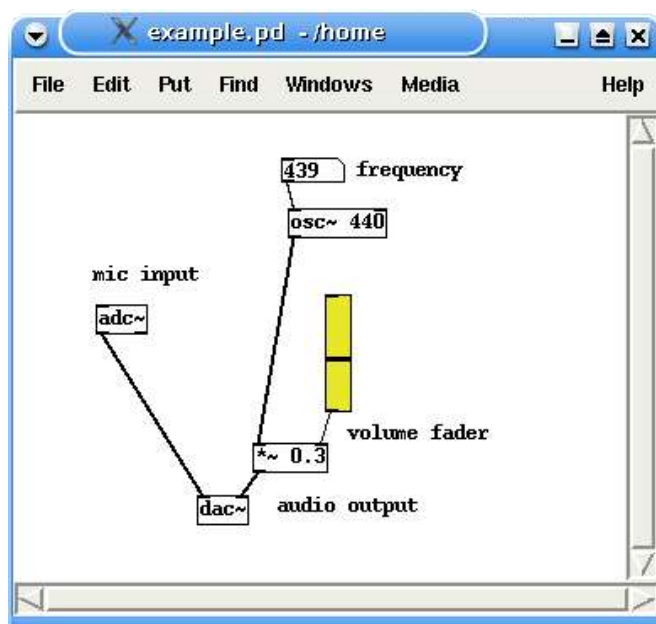


blind date – an audiovisual performance by Pd~graz

Pd

Pd (aka *Pure Data*) is a real-time graphical programming environment for audio, video, and graphical processing. Unlike in text-based programming languages, *Pd* programs ("patches") are built graphically by using "wires" to connect "boxes", which represent routines operating on the data. *Pd* is the third major branch of the family of patcher programming languages known as *Max* (*Max/FTS*, *ISPW Max*, *Max/MSP*, *jMax*, etc.) originally developed by Miller Puckette and others at the IRCAM (Institut de Recherche et Coordination Acoustique/Musique, Paris, France). The core of *Pd* is written and maintained by Miller Puckette and includes the work of many developers, making the whole package very much a community effort.



A typical Pd patch

Pd was created to explore ideas of how to further refine the *Max* paradigm with the core ideas of allowing data to be treated in a more open-ended way and opening it up to applications outside of audio and MIDI, such as graphics and video.

It is easy to extend *Pd* by writing object classes ("externals") or patches ("abstractions"). The work of many developers is already available as part of the standard *Pd* distribution and the *Pd* developer community is growing rapidly. Recent developments include a system of abstractions for building performance environments, a library of objects for physical modeling, and a library of objects for generating and processing video in realtime.

Pd is free software and can be downloaded either as an operating-system specific package, source package, or directly from CVS. *Pd* was written to be cross-platform and is therefore quite portable: versions exist for Win32, IRIX, GNU/Linux, BSD, and MacOS X, running on anything from a PocketPC to an old Mac to a brand new PC. It is possible to write externals that work with both, *Max/MSP* and *Pd* using *flex* and *cyclone*.

Pd~graz

The range of users and developers of Pd in the city of Graz, Austria covers a very wide spectrum, reaching from independent artistic production to academic research. Some of the most relevant extensions to the software are written and maintained by local developers (*iemlib* by Thomas Musil, *zexy* and *Gem* by Iohannes m zmölnig). Also, several local institutions have a long tradition of dealing with art in a technological context and contribute greatly to the community:

- *mur.at* as a cooperation for the promotion of network art (<http://www.mur.at>)
- the ESC gallery(<http://esc.mur.at>)
- the CC – mur.at's "competence center" (<http://cc.mur.at>)
- the *Institute of Electronic Music and Acoustics* (IEM) (<http://iem.at>)
- the *medien.KUNSTLABOR* (media art lab) at the Kunsthaus Graz (<http://www.medienkunstlabor.at>)

As the result of a Pd workshop in the CC in 2003, regular meetings (the "Pd Stammtisch") have resulted in a number of shared activities, such as:

- Workshops on Pd for beginners as well as for advanced users and developers at the CC, the medien.KUNSTLABOR, and the IEM
- *create destroy* – an audio/video installation at the ESC in 2003
- A 12-hour audio/video improvisation at the "Lange Nacht der Musik" (long night of music) at Graz in 2003

In 2004, community efforts have made it possible to organize and host the *First International Pd~Convention* in Graz, which represented the first meeting of Pd developers and users on an international basis. The exchange of ideas among more than 20 of Pd's most important developers in the course of lectures and workshops has had a lasting influence on the further development of the software. Along with local artists, they have also presented their artistic works in numerous concerts. About 15 theorists have been invited to hold discussion panels on the significance of Pd and free software in general. Beginners' workshops have been held as well.

In 2005, the *Pd~graz* group has been founded as a collaboration for the organization of artistic performances, workshops, etc. At the same time, the newborn *Pd~* record label has published its first release: a DVD including artistic works presented at the Pd~Convention 2004. Current members of Pd~graz are: Lukas Gruber, Reni Hofmüller, Florian Hollerweger, Georg Holzmann, Karin Koschell, Thomas Musil, Markus Noisternig, Renate Oblak, Michael Pinter, Peter Plessas, Nicole Pruckermayr, Winfried Ritsch, Romana Rust, Uwe Vollmann, Franz Xaver, Ales Zemene, Fränk Zimmer, Iohannes m zmölnig

blind date

blind date is an audiovisual performance which aims at an artistic extension of common patterns in computer programming: rather than featuring isolated programmers, two persons at a time are working together on a single Pd patch, both using their own physical

keyboard, mouse and monitor but actually operating the same logical interfaces, e.g. the same mouse pointer. Since they have to share access to the machine, the two players need to coordinate their work in order to produce a functioning patch. Rather than merely representing a technical tool, the patch therefore also becomes the primary means of communication between the programmers.

Since the performance features two computers – one for audio, one for video – four players are programming at a time. The performance starts with a blank canvas (i.e. an empty patch), and participants are exchanged at regular time intervals, so that different combinations of programmers continue the work on the patches as left by their predecessors. Besides the resulting audio and video works, the patches themselves are projected into the performance environment as well. As opposed to usual objectives of audiovisual programming, this allows for a deep insight of the audience into the processes of programming and communication among the players.



blind date performers

So far, *blind date* has been performed at two different occasions: the "musikprotokoll im Steirischen Herbst" festival and the "net community congress", both in 2005. In the first case, an additional referee (Harald Wiltsche) had control over the exchange of the players.



blind date: stage and audience with the projection of video work (left) and a Pd patch (right) in the background

further information

<http://pd-graz.mur.at>