# iMAL workshops tools for an emerging digital community

Yves Bernard



From 2001, iMAL organized what may have been among the first workshops in Belgium introducing artists and creative designers to new media art practices and related software tools. The "Hackers Techniques" workshop was given by FiftyFifty (Mia Makela alias Solu with Pedro Soler) in March 2002 at nadine, and in August 2002 Martin Robinson and HC Gilje (whom were invited in February 2002 to perform with 242.pilots) gave one of the first workshops in Belgium about real-time video using Max and the newly-released Jitter.

The success of these two workshops confirmed the importance and interest in such educational activities given by internationally recognized art practitioners for a small group of motivated participants. The value of the workshops lay in learning, networking and exchange between participants. At the end of 2002 we received funding from the Vlaams Audiovisueel Fonds to set up a new series of workshops given by artists such as Casey Reas (April 2003), David Rokeby (December 2003), Jasch (June 2004) and Eric Singer (February 2005).

Towards the end of 2005, the experience of nine workshops attended by participants from Belgium, but also from all over Europe and North America, naturally led us to a new experiment merging learning, artists' personal projects, and encounters with the public: "openLAB", a workshop and residence of two weeks organized in collaboration with *nadine* for about 20 artists invited to produce their digital art works. The residence ended with a public exhibition of the works and a weekend of performances.

Over the years, the workshops have become one of the key instruments for creating a burgeoning community of digital art practitioners in Brussels and Belgium as a whole. Through their own artistic experiments, some have acquired skills to teach to others while increasingly showing their artworks outside Belgium.

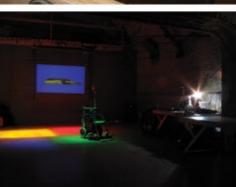


#### THE VIRTUAL BODY

30 Nov - 1 Dec 2001

Interdisciplinary think-tank meeting in the framework of the Cobrac workshops (Brussels, CIVA) with Danny Devos (BE), Alain Géronnez (BE), Maja Kuzmanovic (BE), Frank Theys (BE), Walter Verdin (BE), Tuomo Tammenpää (FI), Yacine Ait-Kaci & Naziha Mestaoui (FR), Armando Menicacci (FR), Sher Doruff (NL), Nat Muller (NL).





### MAX + LIVE VIDEO WORKSHOP

A five-day intensive workshop exploring the Max environment and video software for interactive installations and real-time audiovisual performances under the guidance of HC Gilje (Norway) and Martin Robinson (UK).

20 participants (BE).

Keywords: visual programming, real-time audio, real-time video, Max, sensors, MIDI, interactive environment, video analysis, installation.

## HACKERS TECHNIQUES WORKSHOP

21-24 March 20

A four-day workshop given by FiftyFifty laboratories (Barcelona, with Ero Carrera Ventura, Gerald Kogler, Mia Makela - aka Solu) and organized by iMAL in collaboration with nadine. Hackers explore the Internet in a profound way. Their tactics, techniques and tools open up new possibilities for artists. Workshop participants were taught to use a variety of hacker tools and introduced to the philosophy behind them.

13 participants (BE).

Keywords: online, network, network art, hackers, hacktivism, virus, code, memory.

#### **PROCESSING**

3-20 April 200

An introduction to computer programming by Casey Reas (USA).

Most artists think computer programming is too difficult or simply uninteresting. This workshop was specifically designed for artists and designers, to teach them the basics of programming while exposing them to the essence of computing for visual and electronic arts. The workshop introduced fundamental concepts of programming and participants explored them as a means of creation through writing programs for images, movement and behaviour.

18 participants (BE).

Keywords: software art, programming, code, behaviour, generative art, media arts.

#### **REAL-TIME 3D FOR VISUAL EXPRESSIONS**

11-13 June 2004

A workshop given by Jasch (CH).

This workshop explored abstract visual expressions using a real-time OpenGL environment within the Max/Jitter framework.

The main focus was on non-photorealistic INTERACTIVE INSTALLATIONS rendering, painting and drawing using 3D techniques. Participants learned to apply 3D geometry in Max/Jitter, doing image treatment and generation using pixel- and vector-based

> Another focus was on live interaction, using generative algorithms and direct gestures, as well as the possibility to explore synaesthetic connections between sound, video, and graphics with physical interfaces, networks and other mixed techniques.

> The workshop closed with a public event where Jasch gave an audiovisual concert followed by performances by participants.

12 participants (BE, US, UK, IT, FR)

Keywords: 3D, abstract geometry, real-time painting, live interaction, gestural interfaces, synaesthesia.

16 participants (BE, IT, NL).

ment, man-machine dialogues.







#### PHYSICAL COMPUTING

19-20 February 2005

A workshop given by Eric Singer (USA).

The workshop was structured around hooking up sensors and robotics for interactive computer art projects. As a prototyping platform Eric used his MidiTron, a computer interface board he developed for connecting sensors, actuators, and different kinds of devices measuring or acting on the physical world. He took the students through basic electronics, Max, sensors, robotics (motors, relays) and more, enabling them to begin their own projects at the conclusion of the workshop. Each pair of students received a MidiTron board plus a lab kit including protoboard, parts and sensors. 15 participants (BE).

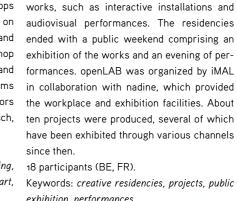
actuators.

#### SUMMER DIGITAL ART WORKSHOPS

A series of five workshops organized by iMAL during the whole summer and given for the first time in French (previous workshops were in English). Three workshops focused on Max/Jitter (introduction, motion tracking and gesture analysis, real-time 3D), one workshop was about Processing and software art, and another one on Content Management Systems for collaborative web sites. The instructors were: Yves Bernard, Yacine Sebti, Jasch, Emmanuel Lestienne, Stéphane Noël. About 60 participants (BE, NL, FR).

Keywords: max/msp/jitter, motion tracking, Keywords: electronics, sensors, robotics, gesture analysis, real-time 3D, computation art,

collaborative web.



19 November - 4 December 2005

openLAB was a project-based workshop

organized as a residency of two weeks for

about 20 artists invited to produce digital art

exhibition, performances.













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## A workshop given by David Rokeby (CA).

CONSTRUCTION EXPERIENCES IN

Interaction design for full body engagements,

complex systemic dialogues between groups

of machines and users, designing controls

from coercive to inexact, interfaces and man-

machine systems as experiences, motion

tracking with live video analysis, feedback

loops. The workshop was devised for artists

and designers who wanted to explore the de-

sign of interactive environments. Participants

had the opportunity to discuss their personal

projects with David Rokeby. As a closing event,

Keywords: user experience, immersive environ-

ment, feedback, motion tracking, body engage-

David Rokeby gave a public conference.

LIVE CINEMA LABORATORY

One-week immersion in the Max/MSP/Jitter programming environment for music and media applications under the guidance of Gideon Kiers and Lucas van der Velde (Telcosystems, Interfaculty of Sound and Image, The Hague, NL). The workshop was a unique opportunity for participants to start developing live audio/ video performances or interactive audiovisual projects in the Max environment. Public performances of participants with a final concert of Telcosystems closed the workshop.

13 participants (BE, RU, FI, BR).

Jitter, music, performance

Keywords: real-time audio and video, Max,

# participatory and critical appropriation of technology

#### History: CONTinENT and the Finnish attitude

In 1999, we initiated our very first project,

CONTinENT, in the framework of Brussels

2000 and Helsinki 2000 (cultural capitals of

Europe for the year 2000). CONTinENT was

a collaboration between Helsinki (with Minna

Tarkka, professor at Media Lab, University of

Art and Design, who then founded the m-cult

association), Paris (with Jean-Louis Boissier,

artist and professor at University Paris 8 and

ENSAD) and Brussels (Yves Bernard, iMAL).

CONTinENT was structured as a one-year

creative process for about 20 artists to pre-

pare an exhibition to be shown simultaneously

in Brussels and Helsinki in September 2000.

French and Finnish artists came to Brussels

for working residences throughout 1999 and

2000. Belgian participants were young tech-

nology-oriented artists from Brussels and

also some recognized traditional-media visual

artists such as Franky DC, Michel François,

and Alain Geronnez, with the proposal that

they could explore computer-based forms of

expression. The CONTinENT exhibition pro-

posed about 20 new media art works: web

projects, CD-ROMs, interactive installations,

and performances. Many of them continued

after September 2000: Michel François and

Alain Geronnez's projects were published

in 2001 and 2005; Franky DC's Objects of

Transfiguration were recently exhibited at

Eyecontact, a retrospective of the artist at

SMAK (Museum of Contemporary Art, Ghent,

April 2006); Erik Andersson has performed

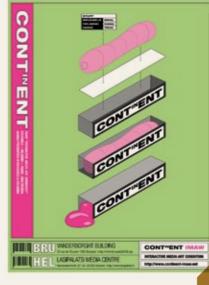
World Wide Chocolate Heart in Brazil and other

countries, Tuomo Tammenpää has continued

to refine and exhibit NEED internationally,

Mia Makela has shown Passenger at various

maintains a laboratory and an artists' workplace with a resource centre (equipment, documentation) and organizes various public activities in the field of digital culture, such as exhibitions ("CONTinENT" in 2000, "F2F" in 2003, "Infiltrations Digitales" in 2004, "openLAB" in 2005), concerts and performances, in order to create critical, interdisciplinary encounters between the public, artists, technology and society. iMAL works on three axes: creative workshops and the lab (the process), European or international (the creative, participatory and critical appropriation by the public of technology in the structurally supported by the Communauté française de Belgique and occasionally by the Vlaams Audiovisueel Fonds, the City of Brussels and the Brussels Region.



CONTinENT taught us a lot about the whole field of computer-based arts, about producing "new media" art and how to present it to a audience. The Finnish input was consider able and the Media Lab at UIAH (University of Art and Design, Helsinki) was at that time a example of both interdisciplinarity and educational methodology, an example of a pragmat and complex-free approach to the creative appropriation of technologies, a type of structure nonexistent in our country and impossible to set up in the rigid, conservative, and ur derfunded Belgian arts education system. became obvious that we needed to create ou own dynamic educational, critical, and explor atory processes targeted to all those artists willing to explore computer-based arts. So, we decided to organize both intensive workshops and public events, which eventually merged into a single activity.

#### Public Encounters in Open Contexts

In 2003, we invited to Brussels the "F2F new Media Art from Finland" exhibition after a long tour through the US and Canada. F2F Brussels was a new version with new works coproduced by iMAL: "White Square" by Hanna Haaslahti with Yves Bernard, and "Brand Body" by Tuomo Tammenpää. The exhibition was original in its content but also because of the building where we decided to hold it: the "Cité Administrative" in the centre of Brussels, a huge state office complex from the 1960s with an uncertain future, but still at that time daily populated by thousands of office workers: our goal behind this decision was to provoke an encounter between new media arts and another public than that of contemporary art galleries or specialized electronic arts festivals. The exhibition was a success and in 2004, we organized "Infiltrations Digitales", an exhibition featuring local and international artists (e.g. Scott Snibbe), with a series of nearly 20 concerts and performances by Belgian, European, and US artists. Again, the place hosting "Infiltrations Digitales" was carefully chosen: the great Vanderborght building, in the very centre of Brussels, which hosted Brussels 2000 and CONTinENT. This large functionalist building, nearly abandoned in 2004, was occupied by iMAL and two other organizations, "Komplot" and "Boups". "Komplot presented contemporary art exhibitions and performances, while "Boups" organized electronic music events, DJ-sets and parties. In this unique venue, our collective programme became exposed to an alternative audience.

# Interdisciplinarity and Connected

"New media" is an obsolete expression. Technology is everywhere in our daily life and percolates through art disciplines: dance, theatre, cinema, music, visual arts,... Media arts, i.e. arts based on technology, seem to be the arts of our time. Will the specialized field of media art slowly melt into the contemporary arts, or will contemporary arts become more and more technology-based, by integrating their original specificities such as computation and executable formalization, interactivity, networks, simulation? iMAL is increasingly exploring these questions through interdisciplinary projects, many of them initiated by traditional artists. For these artists and for us, the confrontation with computer-based languages and tools certainly is an enlightening process of exploration of the specificities of

The conditions of the experience of technology-based artefacts by the public is radically changing: the public space, the city, the networks have become the predominant spaces for experiencing, participating in, playing with... these created objects, processes and platforms (museums and art galleries are no longer the prime venues). Researching and experimenting with these new forms of artifacts deployed through connected spaces of different natures is one axis of our activities.



iMAL (interactive Media Art Laboratory) is a non-profit association created in Brussels in 1999. iMAL was founded by individual artists, media producers, interactive designers, software engineers, and by NICC (a Belgian association of visual artists) with the objective of supporting artistic forms and practices using computer and network technologies as their medium. iMAL provides opportunities for experimenting and producing media art projects, either through residences in the lab or through creative workshops.

Besides production and education, iMAL collaboration (the network) and public events context of the information society). iMAL is