#### Games, Art and Livecoding

Dave Griffiths

### Overview

- My background
- Livecoding
- Fluxus, a livecode-able game engine
- Some current projects
  - $^{\circ}$  Lirec
  - Groworld
  - AI Jazari installation

### My background





Computer games - Evolva (PC), The Thing (PC/XBox/PS2), EyeToy (PS3)

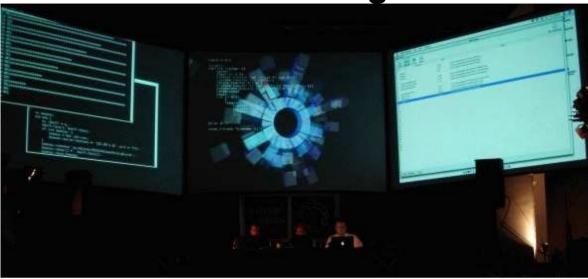
### My background



Film (crowds) - Troy and Kingdom of Heaven

Livecoding & fluxus

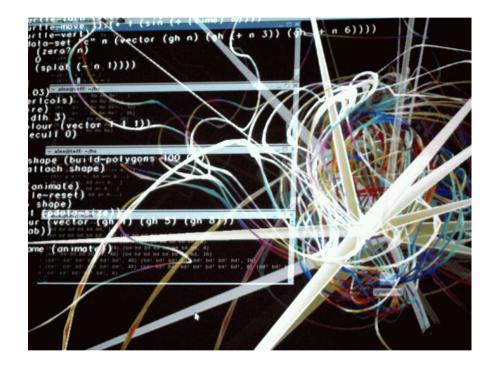
## Livecoding



- Programming in front of an audience
- Project your screens
- Comes from the computer music scene
- Promoted by TOPLAP (www.toplap.org)
- Visualisation of a thought process

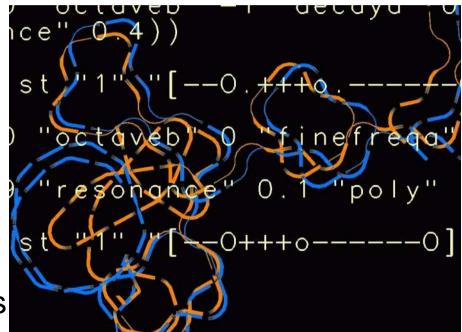
## Fluxus

- My contribution to livecoding
- Livecoding system/3D graphics engine for art
- Free Software
- Scheme programming language
- Originally for livecoded VJ performances
- Demo...



# Livecoding

- The livecoding focus leads to interesting places...
- - Rapid prototyping
- - Teaching
- Want to explore these areas further
- Different direction to normal games engines



### **Realtime Animation Workshops**

- Teach programming and 3D graphics
- Fit it in to the long history of abstract animation (rather than games)
- Adults/students/teenagers, artists and first time programmers
- Looking for more places to do workshops



Some current projects

#### Foam





- 'grow your own worlds' http://fo.am
- Based in Brussels
- Working with them on 2 projects

## Lirec

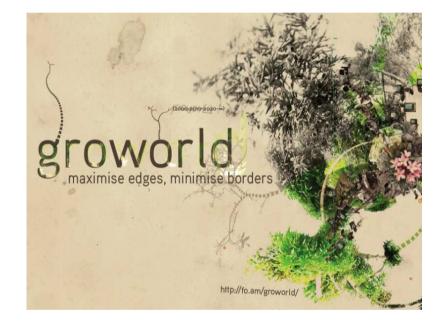
- Long term artificial companions
- Multiple platforms
  - Graphical system (PC)
  - Hand held devices (PDA/Phone)
  - Mobile or static robots
- EC funded project
- Research partners:

Queen Mary's University of Hertfordshire Heriot Watt Swedish Institute of Computer Science INESC-ID (portugal) University of Banberg Wroclaw University of Technology Eotovo University (Hungary) Cnotinfor (Portugal)



## Groworld

- All about plants
  - Real gardens
  - Online multiplayer plant game
  - Events
  - Installations
- Prototype phase for the rest of this year
- Looking for more people to work with for the production phase



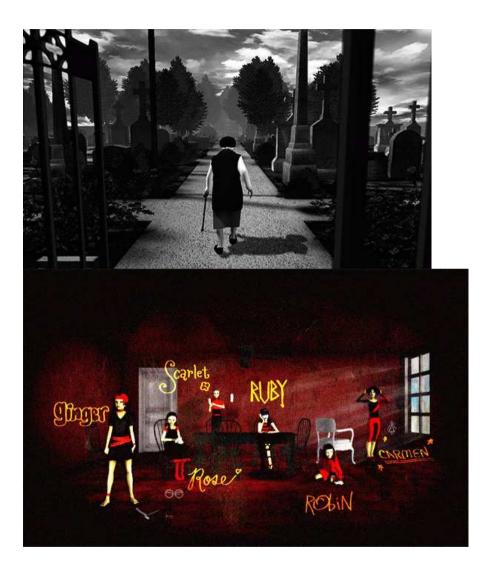
## Groworld

- Visualisation of the vegetal state
- Plant communication
- Augmented reality
- Bring people closer to the plants around them



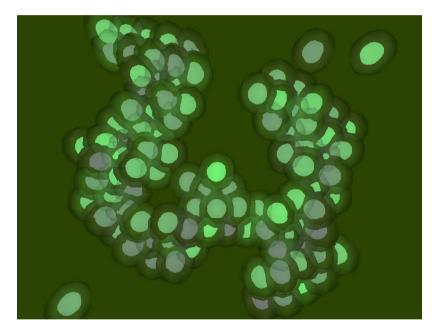
### **Tale of Tales**

- Games as art
- http://tale-of-tales.com/
- Endless forest
- The Graveyard (Independent Games Festival Award finalist)
- The Path



### Groworld game prototypes

- Use fluxus to churn out game prototypes
- Allocating a couple of days for each prototype
- These are very rough and ready!
- Demo...



Something finished...

## Al-Jazari

- 13th century scientist and inventor
  - First recorded use of gears
  - Crankshaft
  - Mechanical clock
  - Combination lock
- Programmable humanoid robot
  - Robot musicians for royal drinking parties



## Livecoding for royal drinking parties

- Gamepad livecoding
- Music performance 'game' written in fluxus
- Installation commissioned by the Seville Biennale
- The Palace of Charles V at the Alhambra, Granada, Spain
- 45,307 people were recorded visiting the exhibition
- Finish on one last demo...

