視覺音樂 Ｖ Ｖ Ｖ Ｖ – 保羅 普登士

Visual-Music with VVVV - Paul Prudence

VVVV 軟體是一套容易上手的圖形化程式語言，製作大型媒體裝置，實時影像創作或 VJ 表演的平台，並且易與其他硬體介面相容，也能夠架構多個使用者的同步互動環境。雖然 VVVV 不能定義為"開放源碼 (open source)" 軟體 (只有部份為開放)，但對藝術創作者下載或始用採免費的分享。PA12 中，我們也會討論何謂公平使用，數位藝術創作者選擇創作工具的時候，對創作本身的影響又在哪裡。VVVV 工作坊的主要以創作 現場影片 (live-cinema)、實時影音(real-time audiovisual)、VJ 表演等來全面檢視 VVVV 的功能與可能。

- ñ 實時 FFT (快速傳立葉變換Fast Fourier Transform) 音頻輸入＆RMS (平方平均Root Mean Square) 音量輸入。
- ñ 如何調整即時影像並與聲音同步的對拍或連結
- ñ MIDI & OSC 通訊協定控制VVVV 與其他聲音製作軟體的相容
- ñ VVVV 環境內使用 VST 聲音外掛
- ñ VVVV 製作效果、圖形、數位運算，即時 2D/3D 影像運算
- ñ 線性音樂創作的基礎
- ñ 聲音影像，影像聲音轉換的概念性與哲學性方法
- ñ 影像剪輯，動態圖片與抽象極簡表現之美學

依參與者團體的氛圍，我們將會進階來探索空間/太空殖民的議題性，不限定於太空之間的旅程，更探討螢幕空間的邏輯運算，應對聲音的呈現等等。相關領域：視覺音樂(Visual Music)，Vjing, 運算美學(Generative Aesthetics)，實時影音表演(Live Audio-Visual Performance)，現場影片(Live Cinema)。

課程基本要求:

要求經驗: 聲音或影像基礎剪輯，如無，請下載 "Audacity" [http://audacity.sourceforge.net]，安裝完成後，請開啓一首你喜歡的音樂並將其速度調製放慢兩倍以上，輸出。
要求硬體: 參與者需自備手提電腦 (windows 系統)
選項硬體: 若有MIDI 操作介面或外接 LCD 螢幕，請一併帶來。
要求軟體: 請下載並安裝好 VVVV [www.vvvv.org]
選項硬體: VST plugin 外掛軟體 (網上有許多免費的 VST 供下載，請搜尋)

VVVV is a graphical programming environment for easy prototyping and development of media art installation of a-v performance projects. It is designed to facilitate the handling of large media environments with physical interfaces, real-time motion graphics, audio and video that can interact with many users simultaneously. Although VVVV is not strictly open source [some parts are open source and some core parts are not] it is FREE for to use for artistic use. The aims of the workshop would be to facilitate a comprehensive overview of VVVV for use in live-cinema, real-time audio-visual and VJ performance projects.

ñ Real-time sound analysis using FFT (frequency input) and RMS (volume input)
ñ How to synch real-time graphic with music using beat matching and beat tapping
ñ controlling VVVV with time-line audio software using MIDI & OSC (open sound control)
ñ using VST plugins for sound-synthesis with VVVV
ñ Effects, shaders and mathematical approaches to real-time 2D/3D video synthesis in VVVV
ñ Fundamentals of building a time-line based visual music composition
ñ Philosophical and conceptual methods of video-sound and sound-video transcription.
ñ Video editing, animation, motion graphics for abstract language and minimalist aesthetics.

Depending on how the group dynamic of workshop is driven, we would like to investigate the metaphor of space colonisation not only in terms of interplanetary travel, but also speculate on space-filling algorithms in generative art, the array-aesthetics of the 'multiform' in 3D space, the colonisation of LCD screen and browser-space, and the effect of acousmatic and sonic inputs on these spaces. Related fields of practice : Visual Music, Vjing, Generative Aesthetics, Live Audio-Visual Performance, Live Cinema.

Requirements:

Required Experiences: basic audio or visual editing skills, if not, please install "Audacity" and try to import and edit one of your favour audio track to double of its original speed.

Required hardware: Participant must bring own Laptop/PC with windows operating system
Optional hardware: any preferable controlling interface (MIDI), external LCD monitor.

Required software: Participants must install in advance – VVVV [Available from www.vvvv.org]
Optional software: VST plugins (There are many free, widely available VST plugins

available for download on the web)

Paul Prudence CV
Artist and Teacher (Digital Media/Visual Music)

Paul Prudence is a audio-visual performer and installation artist working with computational, algorithmic and generative environments. His work, which had been shown internationally, focuses on the ways in which sound, space and form can be cross wired to create live-cinematic visual-music experiences.

Paul maintains the research weblog Dataisnature in which he writes about the interrelationships between natural processes, computational systems and procedural-based art practices. Dataisnature has been used on a number of academic course syllabus's worldwide. Paul has given lectures and workshops to a wide range of audiences and venues - from BA and MFA students to art-science conferences and through to digital arts festivals, worldwide

Personal Web
www.transphormetic.com
www.dataisnature.com
www.paulprudence.com

Selected Performances & Exhibitions

MRFU: 12th International Festival of Digital Arts, Maribor. [2011]
Seeing Sound II, Bath, UK
Dataisnature, Brighton Digital Festival, Brighton. [2011]
Störung 6, Barcelona. [2011]
Synthetic Cinema - Share Festival, Belgrade. [2011]
Hering AV, Leverkusen, Wuppertal & Cologne. [2011]
HAIP10/New Nature, Ljubljana. [2010]
MRFU: 11th International Festival of Digital Arts, Maribor. [2010]
The Root of The Root (exhibition), New York City, [2010]
Node10 - Forum For Digital Arts, Frankfurt. [2010]
ISEA (International Symposium of Electronic Art), Dortmund. [2010]
Spsound/Ambifonica, Amsterdam. [2010]
Electrovision, London. [2010]
Quartz Electronic Music Awards, Paris. [2010]
Sonic Acts XIII: The Poetics of Space - Planetarium Artis, Amsterdam. [2010]
Artware 5 (exhibition), Peruvian North American Cultural Institute, Lima. [2009]
Bridges Maths Art 2009, Banff. [2009]
Le Name Festival, Lille Planetarium*, Lille.* [2008]
Minitek Festival, New York City. [2008]
Cronosfera, Turin. [2008]
Immersion*, London.* [2007]
Tomorrow Now, Engage the Code*, Venice.* [2007]
Code In Motion - Sound Reaction, *Turin.* [2007]
Hacktronic, *Boston (US).* [2007]
Playgrounds Audio-Visual Festival*, Tilburg.* [2007]
Openlab3*, London.*[2007]

Art.ficial Emotion, *Sao Paulo.* [2006]
Decibelio, *Madrid.* [2006]
Generative Strategies, *Santa Cruz, Spain.* [2006]
Crystalpunk Workshop for Soft-Architecture, *Utretch.* [2006]

Selected Lectures, Presentations and workshops

Audiovisuology Workshop, MFRU Festival, Maribor, Slovenia. [2011]
Sound-Space Amalgamations – MFA Computer Art, School of Visual Arts, New York City [2010]
Dataisnature: Systems, Processes & Emergent Computation, HAIP10-New Nature, Slovenia [2010]
Computation and Feedback: Sonified Generative Artwork, London Knowledge Lab. [2010]
Vectors to Vertex - Communicating Maths Students, Leicester University, Leicester. [2010]
Mixed Media Metaphors - The London International Festival of Science Fiction.[2010]
Baltan Session – Baltan Laboratories, Philips STRP, Eindhoven. [2010]
Cymatic Feedback Tessellations - Royal Conservatoire of Music, Den Hague. [2010]
Synegetica - Optofonica Labs, Amsterdam [2010]
Generative Spaces: The Spatiotemporal Subroutines of Runtime Planet Earth – Sonic Acts XIII: Amsterdam [2010]
Transphormetic, Royal Institution, London. [2009]
Zero to Infinity, Dana Centre, London. [2008]
Rules: Algorithms, Structures & Intuition, Computer Arts Society, London. [2008]
Computational Creativity, Playgrounds AV Festival, Tilburg. [2008]
Recursion, Symmetry & Tessellation with Software based Video Feedback Systems Bridges Conference, Leeuwarden. [2008]
Node 08: Forum For Digital Arts, Frankfurt. [2008]
Autocatalytic Systems - Crystalpunk workshop for Soft Architecture, Utrecht [2006]

Publications

Belio Magazine Interview, Madrid [2010]
Generative Gestaltung, Verlag Hermann Schmidt Mainz. [2009]
Blogs - Mad About Design, Maomao Publications. [2009]
Websites II, Zeizs. [2009]
WIRED magazine (03/08 issue). [2008]
Sonified Video Feedback, Bridges Proceedings. [2007]
Fundamentals of Digital Art, AVA Publishing. [2006]
Rojo Magazine. [2005]
De:Bug Magazine. [2005]
Websites I, Zeizs. [2005]
Raw Vision Magazine. [2004]
Flash MX: Components Most Wanted, Apress, 2006 [Author of Chapter]
Interface & Application Design, Apress, 2005 [Author of Chapter]
Fresh Flash, Apress, 2005 [Author of Chapter]
Flash Math Creativity, Apress, 2004 [Author of Chapter]