THE ECOLOGY OF SELF-REPLICATING SYSTEMS

NEW MEDIA SYMPOSIUM

soil

The Ecology of Self-Replicating Systems is presented as a series of new media projects in interactive sculpture, sound art and virtual animation. The exhibitions were curated for their ability to draw attention to the phenomena of self-replicating systems in social, cultural and aesthetic fields and to provide a forum for discussion, in Canada, around new media as an art form that reaches beyond the concept of using digital tools for making film and video. The programs both respond to and anticipate changes occurring in the discipline of media art and look carefully into the idea of computer code and how this specialized, advanced cultural fiber has influenced the practice of artists and the lives of consumers.

Herein defined as processes that determine themselves or undergo transformations in their environments and are generally considered to be contagious, the phenomenon of the virus has direct relevance to the history and theory of culture when thinking about online networks, geo-politics, economics and aesthetics. The concern for new media studies extends beyond a concern for privacy and the inability of escaping or fully protecting ourselves from networked environments but also for the potential in new media with which to consider the virus as a species and process using assimilation and identity absorption. The cultural implications for these trajectories foreshadow what we can imagine or anticipate from science fiction, nanotechnology and the 'technological sublime' embedded, as we are, in various stages of fascination, paranoia and anticipation of new art forms and technology emerging between aural and visual manipulation.

The series came about through Soil and Neutral Ground's commitment to fostering a new media lab for inter/transdisciplinary research networks & experimental curatorial processes which included using an online avatar to explore art sites resulting in the project with Nonnatus Korhonen and one that highlights the significance of physical proximity in online networks including virtual reality.

Virutorium is the second joint project by the KIT Collaboration + Robert Saucier, both having been shown at Neutral Ground. Their first project, *Infrasense*, was a large-scale sound installation that dealt with the cultural economy of paranoia surrounding the word 'virus' in its sexual, coding and marketing forms. The project toured 11 galleries in Canada, UK, USA and Belgium from 2004 to 2006 and a book containing essays, images and a DVD about the work is due to be published in 2009. *Virutorium* is an interactive robotic sound installation and sculptural work that advances themes originated by the Infrasense project. This new project explores the extensive and pervasive cultural dynamics of the 'virus' and seeks to highlight how far viral systems and models are influencing bodily and computer based communication systems, modes of capitalism and socio-sexual relations[1].

The exhibitions open up areas where it is possible to speculate what is technically unique about audio art and the virus and why in terms of tactical media or activism, artists are involved with this area of human affairs. Characteristics are shared and unique between sound and the virus in so far as they are both phenomena that are functionally relational, invisible and can occur at frequencies outside the range of

[1] KIT and Robert Saucier

human hearing. While the future of the virus is open to speculation outside of the health sciences and medicine, the practical applications for investigation continue at this level. Art-science research is able to explore and expand the range of study particularly in terms of forecasting positive applications for viral technology.

INTERVIEW WITH ANDREW BURRELL: BRENDA CLENIUK

Cleniuk: How has your work been advanced by working in an on-line environment been shaped by Second Life?

Burrell: The object-based nature of building and scripting in SL and other 3D environments suits both my way of thinking of creation in a sculptural way and is also particularly suited to my projects that are investigating complexity through combination of simple elements. The online environment posed new challenges in dealing with the limitations of a pre-conceived system and pushing the boundaries of that system. It also allows easy proto-typing of ideas and the potential to extend my practice into a new environment which I consider an extension of the real world, that at the moment is far too interested in replicating rather than working alongside and augmenting the 'physical world'. SL has also opened up a whole new audience.

Cleniuk: Are you a gamer otherwise?

Burrell: Yes and no. I always get disappointed that games are just not quite how I would like them to be. There is always something unsatisfying about most games. While there is so much potential, (and so much money and infrastructure) there is usually a lack of real creativity. That being said, it is still a fairly new craft and I hope we are yet to experience the work of the game designs equivalent of Kubrick, for example. I have played World of Warcraft a lot but tired of the repetition and ended up exploring the world on my own terms without ever really advancing in level, which is the usual, ultimate goal of the game.

Cleniuk: What aspects of 'griefing' or the Griefers have informed your work, if any?

Burrell: I am fascinated mostly by the way things or people are labeled griefers and the almost irrational response to some perceived activities in SL and other virtual environments, and also that the self replication system as used by griefers is one of the most feared things in SL: Just search for SL griefing on Google to find some of the irrational tirades that have resulted from some 'griefing' events. This is not to say that there are people who are intent on disruption and destruction through griefing practice.

If you look at second life (and other mmuves) as communities, with social structures and internal power struggles and internal politics, activities seen as griefing are often a legitimate form of demonstration or protest in a place that really is ruled by the corporation that owns the 'virtual world' and hence specifies its association with its customers through their often quite restrictive terms of service.

Actions by artists are sometimes misunderstood as griefing who because they are exploring the boundaries and limits of a technology. Pushing these limits has brought some artists into conflict with terms of service or up against the wrath of other SL "residents".

Cleniuk: What are the Real Life implications for self-replicating systems?

Burrell: The implications for me reside in my interest in investigating the self / the site of the self and investigations of complexity through combining simple actions into complex

systems. I am interested in both the philosophical and psychological ramifications of notions of extreme reductionism upon notions of the self. I have always described the self as a definable and well manicured linear narrative. My current projects investigate the notion that even though we may be no more than the sum total of a complicated and meandering replication of something we call genes, then as narrative, we are an artifact of the way those genes are configured and this is what defines humans as a distinct.

I am interested in asking how artificial life impact upon personal identity and ones own perception of self as a grouping of these replicators.

Cleniuk: Do you consider your objects to be viruses or like viruses?

Burrell: Again, yes and no. On a metaphoric level this analogy works and on many levels, I work with metaphor. As Daniel C. Dennet put it, viruses are just a string of DNA (or RNA) with attitude whose sole purpose is replication. The purpose of some of my objects has been in some cases merely replication, but on other levels they have purpose built in through my expectations and inbuilt actions.

Cleniuk: How are your self-replicating systems secure vs. those kind of self-replicating objects intended to disrupt the SL environment?

Burrell: My objects are not intended to disrupt the environment at all. I am much more interested in finding stable systems that work with rather than against their environment, though I have come close to crashing a SIM a few times through unintended population explosions.

Cleniuk: Who is Nonnatus ? What is the nature of his identity?

Burrell: Mainly, he is just an extension of me into cyberspace. My Warcraft character is also Nonnatus. It is a name meaning not born in Latin (ie: non - natus). I don't really play a role when I am using him as my front in SL and he has looked the way his does since very early on.

To see *'uncharted pages from voyage of the beagle'*, TP to this location in Second Life (SL) which will also be on view in Real Life (RL) at Neutral Ground until October 31, 2008.

http://slurl.com/secondlife/Odyssey/121/47/25

Brenda Cleniuk
Director/Curator

Virutorium

Virutorium is an interactive new media installation that explores the notion of viral culture and seeks to highlight how far viral systems and models are influencing bodily and computer based communication systems, modes of capitalism and socio-sexual relations. This project seeks to place the audience in a position where, rather than portraying viruses in a pejorative fashion, they are asked to mourn a dead virus.

One of the most popular and widespread beliefs in today's society portrays viruses as parasitical offenders that randomly invade passive, powerless and innocent hosts. *Virutorium* questions this understanding of virus and host, and asks the viewer to reassess it. Not only can the relation of host / receiver be easily inverted and reassembled, but also, the identity of the host can be changed into that of a proactive agent. Rather than being a mere receiver, such a newly empowered individual can purposely use the virus' features or its very structure as an extension of his/her agency. Using a number of tactics, the host is able to select and appropriate features that characterize the virus and turn them to her/his advantage.

Virutorium suggests that a proactive interaction with and understanding of viruses as life forms is needed to help understand how we might reposition ourselves within this new paradigm shift. The virus, traditionally deemed to be a destroyer, is now a source of inspiration for biologists, computer programmers and marketing strategists alike, who wish to better understand and mimic the most efficient process for spreading an idea or an anti-body.

'uncharted pages from a voyage of the beagle'

Saturday, September 6, 2008 – Friday, October 31, 2008
Opening: September 6, 2008, 8:00pm
Neutral Ground (1856 Scarth Street, Regina)

'uncharted pages from a voyage of the beagle' is a new media, interactive work that invites gallery visitors to dramatize or otherwise act-out their fantasies of 'natural selection' in a self-replicating and evolving system in Second Life. Objects in Second Life will have a series of 'genes' coded in them that will randomly mutate over time. Viewers obtain the ability to 'select' objects they prefer and 'terminate' objects they dislike creating a situation where the selected are able to pass their mutations on to their offspring. These so called 'genes' will control such things as an objects shape, colour and noise as well as less obvious things such as life span, virility sturdiness etc. so while a viewer may choose to prefer a red object, they may also be unknow-ably choosing a creature with a slightly longer life span, or vice-versa.

The work is presented as the desk of a life scientist observing and studying these objects in Second Life. A combination of real switches and dials will create the user interface for the system. The desk will face the projection screen (or monitor) as a portal into the Second Life world. The desk will also be covered with notes and journals giving the viewer some guide and history into the work[1].

This work will integrate a gallery-based interactive installation with Second Life the virtual and controversial on-line world that has taken the art world by storm.

Currently set to open at Odyssey Contemporary Art and Performance site in Sec-ond Life a massive multiplayer universe set in a 3D virtual world created by San Francisco-based software maker, Linden Labs. There are roughly 9.4 million users or people who have logged in and at one time, created an online 'avatar' to represent themselves in the online world.

Second Life is important to the field of new media in terms of its relationship to and involvement with virtual reality, graphics, animation, interactivity, Web 2.0, performance, immersive environments, popular culture, advanced coding, relational aesthetics, craft, audio art and Web cinema.

[1] Andrew Burrell

Panel Presentations

KIT AND ROBERT SAUCIER

Recurring assumptions, connotations and common perceptions accompany any entity, organism or string of code that deserves the label of virus. One of the most popular and wide-spread beliefs in today's society portrays viruses as parasitical offenders that randomly invade passive, powerless and innocent hosts. However, this relation between host and virus is idiosyncratic and needs to be reassessed. Not only can the relation of virus / host be easily inverted and reassembled, but also, the identity of the host can be changed into that of a proactive agent. Rather than being a mere receiver, such a newly empowered individual can purposely use the virus' features or its very structure as an extension of her agency. Using a number of creative tactics, the host is able to select and appropriate features that characterize the virus and turn them to her advantage. A number of well-documented cases magnify how effective the utilization of viruses can be. Examples include but are not certainly limited to;

- The virus' distributed behavior has been appropriated by commercial enterprises to launch effective viral marketing campaigns,
- Franchise enterprises have spread across the globe, as a result of a systemic shift in the current capitalist structure,
- The viruses' phenomenology and structure have been employed by activists, Hacktivists and tactical media practitioners as a countercultural tool against the above capitalist restructuring,
- A nineteen-year-old German boy created and propagated the Sasser virus, "which crippled hospitals, closed banks, grounded planes and trains, and even delayed the Taiwanese post" (the Guardian),
- The stockpiling of viruses by governments' agencies for the purpose of experimentation, manipulation and propagation in the event of war,
- Hip-hop culture has appropriated Burrough's notion that language is a virus. Invented words and expressions have spread among fans worldwide as a way of demarcating group identity (i.e. Snoop Dog's "Don't twizzle on my schnizzle, fo' shizzle").

This presentation will question the cultural balance which portrays viruses in a pejorative fashion by exploring new cultural dynamics created by the utilization of viral methods, models, codes or structures. By invoking research findings from media artists/activists, security experts, biologists and cultural theorists, a multidisciplinary approach to the study of viruses will be adopted in order to help understand how we might reposition ourselves within this new viral paradigm shift.

ANDREW BURRELL

Science fiction has long been fascinated by the notions of self-replicating and viral like entities, often created by technological feats of humanity, yet somehow lost to our control. One of the theatres in which we have seen these ideas played out are in speculations of possible future 'virtual' worlds (eg: Stephenson and Gibson) and post human civilizations living entirely as software (eg: Egan). At the same time biological reductionism (Dawkins et.al.) and theories of consciousness that remove any lingering notion of a mind/body duality (Dennett et.al.) combined with the ever increasing promise of expanding technologies to lead to the some fascinating theoretical, metaphorical and even potentially sci-fi prophesy fulfilling scenarios.

This paper will look my own practice in Second Life and other real-time 3d environments and in particular at my interests in models of biological replication, evolution and viral spread in relationship to narrative structures and the self. I will also look at the practice of other artists in Second Life who are interested in / or using notions of the viral and internally replicating and evolving systems of ideas, information and data. Throughout the paper I will draw interesting philosophical and cultural implications or observations that can be made around these ideas.

Touching the Ghost in the Machine:
Simple Real World / Computer Interfacing for Artists

Friday, September 5, 2008 – Saturday, September 6, 2008, 2:00–6:00pm daily
Neutral Ground (1856 Scarth Street, Regina)

DESCRIPTION

A 2-day hands-on, software-based workshop that introduces some easy ways to access and use 'real world data' for interactive computer controlled artworks. Participants in this workshop will have the opportunity to develop their own artistic practice, or to use the workshop as a platform for the development of an existing work.

   Day 1: Introduction to computer / real world interfacing and to Max/MSP as a tool for visually scripting interactive art works. Introduction to scripting in Second Life, and the possibilities for interactive art practices in SL, including 'mixed-reality' projects, where the 'real world' and SL can interact with each other. Participants will learn to break down complex projects into simple building blocks that become manageable 'parts' that can combined to create complex interactive systems for artworks, and to find and use the wealth of resources available to develop works.

   Day 2: Continued project development. The workshop will be taught largely from the point of view of the artists and will aim at facilitating further and directed learning on behalf of the participants as well as guided instruction.

BIO: NONNATUS KORHONEN/ANDREW BURRELL

Dr. Andrew Burrell is a new media artist and writer working across the disciplines of sculpture, installation, sound and the written word. He is currently based in Sydney and exhibits regularly both locally and internationally. Burrell works with interactive audio/visual sculpture and installation in both the physical and real-time interactive 3d environments. Much of his practice revolves around the collection, writing and representation of narrative "fictions" and the interplay of art, philosophy, technology and the life-sciences.

WORKSHOP

Intermediate and Advanced Sound Workshop for Artists

Monday, September 8, 2008 – Thursday, September 11, 2008, 2:00–6:00pm daily
Neutral Ground (1856 Scarth Street, Regina)

DESCRIPTION

A 5-day workshop based around field recording, sound editing and composition with sound software 'Pro Tools', 'Logic Audio' and 'Recycle' led by Battery Operated.

Day 1: Introduction to the work of Battery Operated and to sound installation techniques and artists. Discussion about the upcoming workshop including discussion about ideas for the production of and artwork during the workshop. The overall idea for the workshop will be to produce a small sound piece from start to finish. We will go out and make field recordings around Regina, edit, compose and master the recordings and present them in a modestly installed fashion in a presentation space to be announced.

Day 2: Field recording. We will travel to chosen sites around Regina and record sounds and sonic environments for later use in the workshop.

Day 3: Discussion about the recordings made and choices made on how to produce a sound art work. We will also start to edit the recordings made, on 'Pro Tools'.

Day 4: We will finish the editing process and begin the composition process using 'Logic Audio'. We will use the 'Recycle' software to edit and slice the sound. Mixing the sound will be taught in 'Pro Tools'.

Day 5: The final compositions will be mastered in 'Pro Tools.' The final works will be installed into a presentation space and played on the night of the concert by Battery Operated.

BIO: BATTERY OPERATED

Battery Operated is a collaboration of artists that have been producing sound, video and Internet projects since 2000. Their first project Chases Through Non-Place used music in public places as its source and since then they have researched and developed projects around the social uses of functional sound and video, from ŒMuzak, to surveillance cameras. The latest Battery Operated project - S.P.I.R.A.W.L. (Sound Proofed Institute Researching Acoustic Weapons Logistics) is a documentary about the frequency-based landscape and the pioneering use of sound weapons within it. It can be found at www.batteryoperated.net/spirawl. Battery Operated are founders of the Cocosolidciti commissioning organisation. More info can be found at ˆ www.cocosolidciti.com

CONCERT

New Music Concert Series: Battery Operated

Saturday, September 13, 2008, 8:00pm

Nouveau Gallery (2146 Albert Street, Regina)

Nouveau Gallery is a commercial art gallery promoting Saskatchewan and Canadian artists which opened in October 2005. Formerly the Susan Whitney Gallery and housed in a beautifully renovated storefront in Regina, the gallery brushes the edge of both downtown and the historic Cathedral neighborhood.
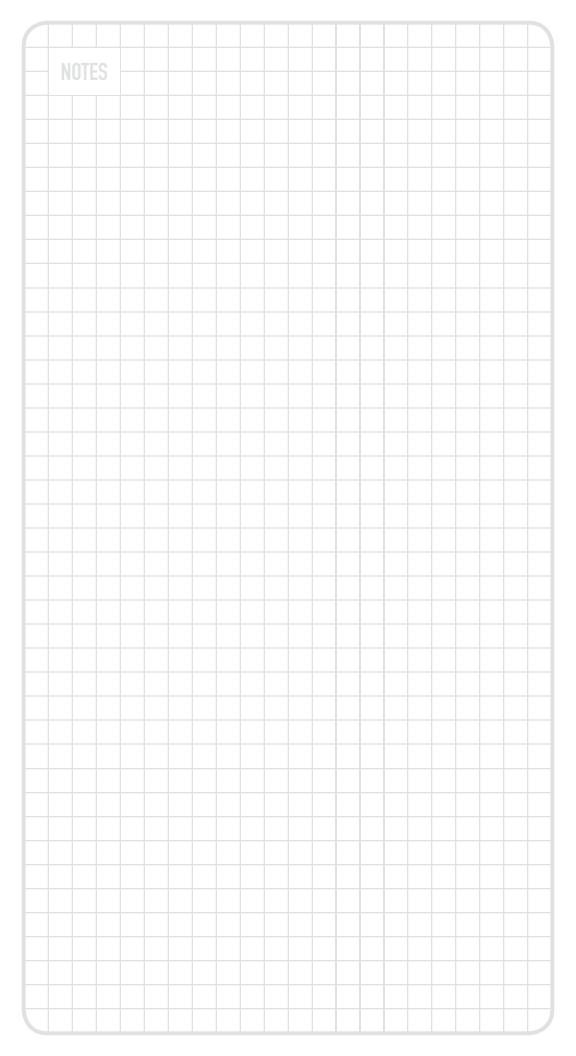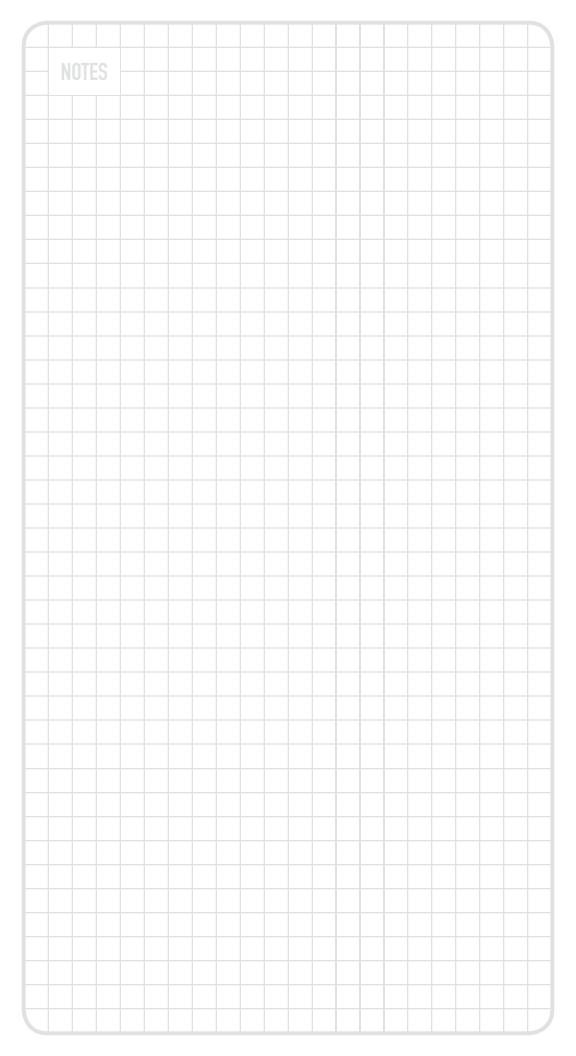
www.nouveaugallery.com

BIOGRAPHIES

KIT work predominantly out of the UK and Canada. As a fluxing collaborative they are concerned with negating a single gendered identifiable authorship. They are constructed of personnel from a diverse range of professions such as artists, architects and programmers which means that the work produced in the name of KIT is theoretically structured and realised from a wide range of perspectives. This system of production belies a mandate, which wishes to create a purposefully diverse history of works that deal with an expansive set of ideas. Thus the 'body of work' produced reflects the input of multiple sources and attempts to defy an identifiable artistic style as such made for public consumption.
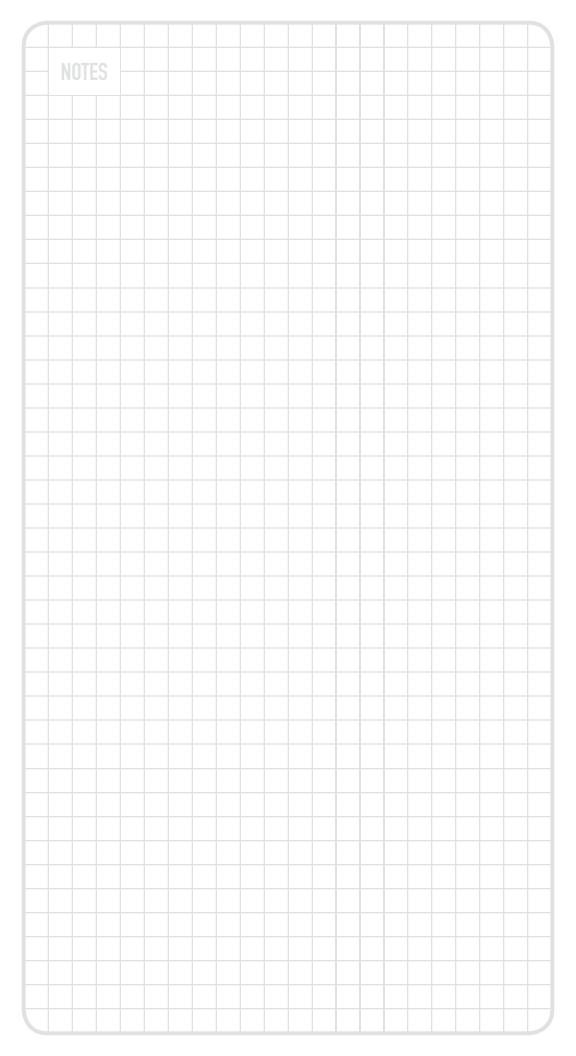
Originally from the province of New Brunswick, **ROBERT SAUCIER** lives and works in Montréal, Canada, where he is presently a professor of sculpture and media art at the University of Québec in Montréal. Saucier has shown his artwork in Canada and internationally in many personal exhibitions as well as numerous group shows. He is an active member of Hexagram, (art and technology research and development centre) in Montréal which has funded part of his recent research in robotics arts. Electronics and mechanics are essential to his work, playing a key role in the concept of his sculptures which are comprised of solar captors, presence detectors, computer-modified sound and microcontrollers controlling various motors and mechanisms. His sculptures demonstrate his interest in the particular relationship that we as a society have with technology, especially with communication media (radio, television, Internet etc.) and it's constant presence in our lives.
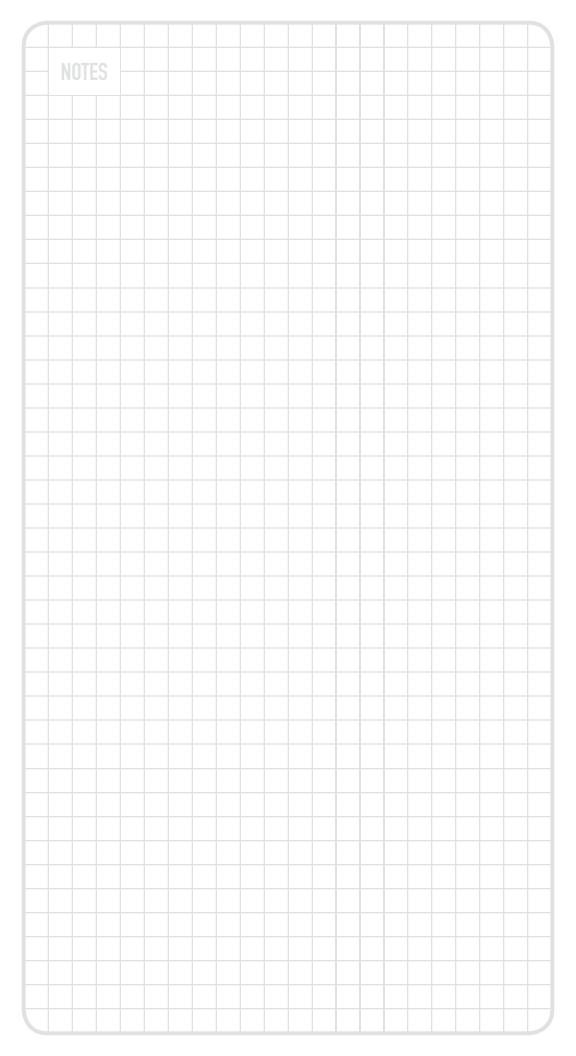
THOMAS COUZINIER is Director of **KOUZ PRODUCTION**, a Paris-based sound studio that was founded as a lab that permits artists to produce sound or new media creations. In addition to their activities as producers, composers and sound designers, Couzinier is constantly developing various independent projects such as his work in **BATTERY OPERATED**, the multimedia collective with which he has released 3 full length albums and directed sound installations. They regularly present their work in Europe as well as North America. Thomas is also a founding member of the Franco-Anglo-Canadian label, COCOSOLIDC1T1, releasing projects that combine electronic sound and visual experimentations.

ODYSSEY is 2 regions or servers in Second Life (SL) dedicated to art and performance. Founded in late 2006 by avatars Pacino Hercules (Dynamis Corporation UK) and Sugar Seville (NYC), Odyssey has grown to be one of the premiere destinations in Second Life for art and performance. As well as being a provider of resources, Odyssey is a community of over 400 artists, curators, arts professionals, performers, writers, and musicians that work in networked environments.

Reviews of shows on Odyssey have appeared internationally in numerous print and online publications including: Artforum (summer 2007 issue - Eva and Franco Mattes) Kunstzeitung Artnewspaper (Gazira Babeli and Second Front winter of 2007), Turbulence.org (Gazira Babeli, winter 2007), KQED San Francisco Gallery Crawl program (20 minute segment on Odyssey, November 2007), Wired Magazine (Alan Sondheim "The Accidental Artist", Wired News - USA By Bruce Sterling August 11, 2008).

Soil Digital Media Suite is a new media centre adjunct to Neutral Ground whose mandate is to provide access to production resources for artists practicing at the intersection of the arts, sciences and technology. Soil's vision both anticipates and responds to the impact technologies are having on communications, politics, economics, and day to day life to be better able to effect positive social change.

The long term objective of the centre is to foster a globally relevant, knowledge-based, interactive space for new media practices in Regina.

MANDATE

Facilitating artistic creation by providing access to technological resources in the context of fine arts practices and discourses,

Supporting projects designed to exhibit, distribute, or perform new media works using art galleries, and other public spaces or digital telecommunications systems,

Providing professional development and access to cultural resources for new media artists in Saskatchewan,

Developing new and knowledgeable audiences for new media practices in Regina by increasing public involvement with and understanding of work using new technologies,

Facilitating research and development of the art form of new media and technology-based artistic practices,

Promoting contact between artists, technicians and specialists,

Fostering exchange between artists in different geographical communities,

Broadening the theoretical, technical and artistic knowledge in the field of media art through multiple lines of programming, research and curation.

CALL FOR SUBMISSIONS

Soil Digital Media Suite is pleased to announce its 4th annual production funding program to support new media production for artists for the purposes of creating new works. The program is organized around self-directed residencies providing lab access to Soil for one year, technical support, a production budget and opportunity to present the work to an audience.

Submissions will be assessed on the artistic merit of the project and the conceptual relevance of the work proposed. Proposals must be for new work not previously presented to an audience and will be selected by a jury comprised of representatives from Soil. Productions should be ready to launch in August 2009. Artists retain all copyrights to their projects. Funding can be used towards an honorarium, equipment, technical specialists, and membership fees ($45.00 annual).

Three $1,500.00 production funds will be awarded to successful applicants. Priority will be given to Saskatchewan-based artists but the call is open to anyone. Please submit a brief (one-page) synopsis and of your project, a C.V. and 1 example of past work by October 30, 2008 5:00 pm. Format and subject matter are open but must be based in the creative use of technologies. Web-based works, audio, virtual animation, SL projects, experimental cinema, physical computing or interactive projects will all be considered.

NEUTRAL GROUND

Canada Council for the Arts / Conseil des Arts du Canada

SASKATCHEWAN ARTS BOARD

Regina CITY OF REGINA

Sask Culture

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CONTACTS

Overview

Thursday, September 4 7:00 pm	**Panel presentations:** Andrew Burrell and KIT Official launch & reception for the series
Friday, September 5 12:00 pm — 5:00 pm	**Workshop:** Touching the Ghost in the Machine: Simple Real World / Computer Interfacing for Artists Instructor: Andrew Burrell
Saturday, September 6 12:00 pm — 5:00 pm	**Workshop:** Touching the Ghost in the Machine: Simple Real World / Computer Interfacing for Artists Instructor: Andrew Burrell
8:00 pm	**Opening Reception:** KIT and Robert Saucier *'Virutorium'* & Andrew Burrell *'uncharted pages from a voyage of the beagle'* Exhibitions continue to October 31, 2008
Monday, September 8 – **Thursday, September 11** 2:00 – 6:00 pm	**Workshop:** Sound Art Workshop
Saturday, September 13 8:00 pm	**Concert:** Battery Operated Nouveau Gallery 2146 Albert Street, Regina