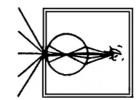


### COMPUTERS AND THE HISTORY OF ART



### FAST FORWARD: Art History, Curation and Practice After Media

CHArt Twenty-Second Annual Conference

The Clore Lecture Theatre, Birkbeck College, Torrington Square, London, WC1 7HX.

Thursday 9 - Friday 10 November 2006

## **ABSTRACTS**

#### **THURSDAY 9 NOVEMBER**

SESSION 1

#### Steps of New Media Art at the Venice Biennale, 1960s to 1990s.

Francesca Franco, Birkbeck College, University of London, UK.

This paper investigates the way new media art was introduced to the Venice Biennale and in particular seeks to tackle questions that arise around the shift in attitude towards new media art.

The Venice Biennale, founded in 1895, is one of the oldest international festivals of contemporary art in the world. The influence of technology in art at the Venice Biennale can be traced through works presented from the late 50s – early 60s, when computers were in the early stages of their development. The four moments analyzed by this paper are the following:

1966, 33rd Venice Biennale, Argentinean artist Julio Le Parc won the Grand Prize for the painting category. This work did not fit exactly into any category and from that time the Biennale jury abolished all categories; In 1970 Herbert Franke curated the exhibition 'Art and Technology' for the 35th Venice Biennale; In 1986 Roy Ascott participated in the Venice Biennale with 'Planetary Network', a new media installation and world-wide telecommunications project in the context of LABORATORIO UBIQUA, the Technology and Informatics section of the 42nd Venice Biennale; In 1990 Jenny Holzer, the first woman artist to represent America with a solo exhibition at the Venice Biennale, received the Leone D'Oro Grand Prize for best pavilion at the 44th Venice Biennale.

Through the analysis of four pivotal moments in the history of the Venice Biennale, this paper reflects upon the successes and crises of new media art in order to address some key questions: when did technology enable this shift? What kind of consequences did these changes introduce? How did the curatorial practice change and what is the legacy of new media work in terms of judging, viewing and curating artworks?

#### Electronic Civil Disobedience: The SWARM case.

Fidele Vlavo, London South Bank University, London, UK.

'As far as power is concerned, the streets are dead capital!' 1

In the early 1990s, Critical Art Ensemble (CAE), an American group of artists and political activists developed the concept of Electronic Civil Disobedience (ECD), a radical form of active resistance designed to transfigure social-political activism. In a series of contentious writings, CAE exposed its account of nomadic power and governance relocation, arguing for the development of a new political opposition in cyberspace.

As a result, US militant artist groups embarked on the coordination of virtual blockades and online sit-ins in an attempt to confront governing bodies in their so-called virtual locations. Since then, recent changes in Internet and digital communications such as national governments' policies and corporation control are affecting the evolution of web-based disruptive movements exposing the latent tensions between ECD theory and practice.

This paper will examine the case of Electronic Disturbance Theatre and its SWARM project, the first known case of electronic civil disobedience and online protest, presented during the 1998 Ars Electronica Festival. For the project, members of EDT created a piece of software designed to disrupt targeted websites (in this case the Mexican and American governments' websites) in support of the Chiapas Zapatista movement. Placing the SWARM case in the context

<sup>&</sup>lt;sup>1</sup> Electronic Civil Disobedience, 1994:11,<a href="http://www.critical-art.net/books/ecd/ecd2.pdf">http://www.critical-art.net/books/ecd/ecd2.pdf</a>

of online activism and current cyberspace politics, the paper will consider the potential discordance between Electronic Civil Disobedience praxis and contemporary art practice.

#### **SESSION 2**

#### User Requirements for a 'Virtual Arts Centre of the Future'.

Katrien Berte and Peter Mechant, Department of Communication Sciences, Ghent University, Belgium.

Today, most museums, arts centres and festivals in Flanders are represented online. A recent study shows however, that in general their presence is far from interactive and that they use only a fraction of the wide range of possibilities offered by current information technology in terms of community building, interactivity, hypertextuality and multimedia.

In the IBBT research project 'Virtual Arts Centre of the Future' (VACF) we use a number of web2.0 applications to create an online cultural environment that is elaborate, interactive and targets the specific interests of its visitors. Are the Flemish art lovers interested in this new concept or do the current sites realise their needs?

In February 2006, an online survey about 'culture, the arts and the Internet' was conducted among visitors to some of Flanders most-visited websites targeting the Flemish Internet user with an interest in culture. This survey resulted in a dataset of 2,635 respondents. They were asked about their cultural behaviour and experiences in contributing to online communities and consuming culture and arts on the Internet. They were probed for their needs and expectations about arts and culture online. A model to determine the adoption rate for the 'Virtual Arts Centre of the Future' was implemented. Preliminary results show that most respondents would like to see trailer-like video fragments and listen to audio fragments before going to a cultural event. They are interested in receiving personalised information based on their interest and their past behaviour. The majority of respondents are less interested in sharing their experiences with others and in expressing themselves by making or sharing their own digital art.

#### The Digital Space of the Teatro Olimpico: A New Environment for Interactive Arts.

Daniela Sirbu, University of Lethbridge, Canada.

A large part of our communication and daily activities is mediated by computer technology. This provides the ground for the emergence of digital forms of human habitats. These are characterized by specific properties and induce new behaviour patterns providing a departure point for emerging art forms. This paper explores how old architecture may be reinvigorated as digital environments in interactive art forms.

While most computer reconstructions of historical architecture focus on emulating real architecture, the present paper is concerned with the properties of digital habitats, that is, their specific dynamic character. The main hypothesis is that features that characterise computer-generated environments enable the building of personal experiences in relation to digital architecture. This may create character and a sense of place providing the basis for a new space conception and new art forms in the digital era.

The 3D computer reconstruction of the existing Teatro Olimpico designed by Renaissance architect Andrea Palladio provides an experimentation platform for this research. The main concern of the study is to understand the Teatro Olimpico in its digital form, how the dynamics of the virtual theatre may provide a space for digital art practice, and how this relates to the intentions of the original Renaissance design. The digital Teatro Olimpico allows experimentation with the multiple virtual spaces envisioned by Palladio in the original design in ways that are relevant for contemporary art practice. The question is whether the Teatro Olimpico and, through it, ancient Roman theatre architecture could revive in the digital era as virtual environments in the practice of interactive arts.

A cinematic investigation of the digital theatre explores how the perception of theatre architecture may be related to the digital context. The Virtual Reality reconstruction of Teatro Olimpico is meant to immerse the visitor in the space of the theatre in order to experiment with properties of the digital space. This interactive immersive reconstruction was developed with Virtools software package and Barco Gemini VR system using the WestGrid Virtual Reality Lab facility at the University of Lethbridge.

#### **SESSION 3**

# New Futures in Net Art: Discovering Emergent Art Historical Technique in Net Art Contextualisation. Charlotte Frost, Birkbeck College, University of London, UK.

In 1997 the artist Vuk Cosic signalled a selection of monographs missing from art history departmental libraries the world over by creating an online catalogue of fantastical publications on Net artists. The irony was not lost on the Net artists, that is, that not only were these works as-yet-unpublished, but there was a strong chance books of their kind never would be. While this (now classic) work of Net art has in general been understood to signify the massive art historical deficit that has burdened the field of Net art from the start, I shall demonstrate in this paper that Net art practice does not simply elude art history, but conversely, adumbrates the development of emergent art historical methodology.

This paper will describe the evolution of the practice and products of the art historian exemplified in approaches to the historicisation of the niche, web-based movement of Net art. It will introduce the field of Net art practice; explain the factors that forced Net artists to become Net art historians; demonstrate the burgeoning body of art contextual tools and techniques ancillary to Net art practice and suggest how they begin to develop the practice and products of the art historian. Net art historical approaches discussed will include: the production of pluralistic accounts of Net art created in Net art promotional platforms; the artistry of the moderation of and intervention into online mailing lists, and the enactment of Net art context though online 'performative' activities. The paper will conclude that these emergent practices of contextualisation themselves require analysis – indeed contextualisation – before their impact upon a wider art historical arena can be fully realised.

#### 'High Archive Fever': The Internet and Art Historical Research in China.

Adele Tan, Courtauld Institute of Art, University of London, UK.

With the recent controversy over Google's concession to the authorities in China, Chinese media, political censorship and access to information has once again been brought to the forefront, culminating in the absurd situation of artists being able to upload content on their weblogs but are unable to view their websites in China. In a globalised age where it has been said that 'access rather than property has become the new form of capital and oppression', the techniques and tactics of art and culture have correspondingly altered to either exploit its potential or mount critical interventions against other forces of control. As such, conventional art historical material that we read and touch is no longer benign and stable but rendered volatile and active again through new media technologies.

This paper aims to draw attention to the new uses of the Internet and how it circumvents the limits of traditional text/book-bound art-historical resources and methodologies, particularly for a country like China where the discipline of art history (I am here referring mostly to modern and contemporary art) is relatively immature, the physical archiving and collection of materials haphazard, and the path to publication fraught with difficulties. I shall be reflecting on my PhD research practice in documenting the history of performance art in China post-1979, using the Internet as a prime resource via important Chinese language portals such as <a href="http://arts.tom.com">http://arts.tom.com</a> which has brought to the surface more first-hand material for this recent art practice in China than any exhaustive library search. That performance research should depend on this Internet archive produces a reflexive and symbiotic relationship as how we understand the workings of the Internet also pushes the parameters of performance. Similar theoretical considerations of dematerialisation in performance art also spill over into the superannuating of historical material into bytes and cyber optics over the shared coordinates of time and space.

With this new 'archaeology of knowledge' and techno-textual diaspora, the Internet archive is felt as alive, constantly updating itself, interactive but at times ephemeral, cheap to store and reproduce but lacking consistency of quality. With China as my locus, I would like to propose new questions about our resources at hand, (i.e. the veracity of material, authorship, audiences/addressees, copyright, etc) and the politically 'sensitive' nature of all critical research and thinking.

#### **Aesthetics and Interactive Art**

Karen Cham, The Open University, UK.

Any discussion of aesthetics and interactivity must first transgress the divide in modern western art history between art and technology. Despite the fact that technical principles have always underpinned fine art production (rules of perspective, proportion and the golden section for example) photography, film, television and video are still marginalised in art historical dialogues. The mechanically reproduced artefact is easily dismissed in a discourse where value is still equated with dubious concepts of authenticity and originality anchored in production techniques.

For example, whilst video art has been part of the art world since the 1960s when artists such as Nam June Paik brought the TV set into the gallery, the aesthetics of video is still neglected in art theory. Not only can video artefacts be mechanically reproduced, but the potential for mass access or worse still, mass appeal, is assumed to negate the exclusivity essential to establishing an aesthetic value.

Digital artefacts manifest these two problems of reproduction and access to an even greater extent. A digital artefact, by conventional standards, is even less authentic and original than a mechanically reproduced one; a true simulation, a mathematical model of the real. Furthermore, not only is the digital artefact accessible by the masses, it is very often interactive, i.e. shaped by audience input; a product of 'the mass' themselves.

These material factors should not inhibit an academic discussion of the aesthetics of interactivity. An aesthetic value is always established by the consensus of an elite. In media studies for example, textual analysis of televisual artefacts clearly demonstrates that whilst television might appear generally accessible and understood by everyone there is quite clearly a relative, yet elaborate, aesthetic code operating within a wider, still elite, cultural context. In such a way it is easily possible to demonstrate various aesthetics of photography, film, television and video.

In the same vein, interactive media artefacts abound in our day-to-day lives. This paper will argue that for academic dialogues to embrace the aesthetics of interactive art in a constructive and meaningful way the intellectual prejudice against reproduction and access must be abandoned. For example, how can one seriously analyze the aesthetic of Edward Ihnatowicz's 'Senster' (1970) without the context of contemporary science fiction when it is a fifteen-foot high hydraulic robot with a triple proboscis of sensors for a 'head'?

Only in this way can the use of wholly appropriate theories from media and cultural studies ensure that the technical skill of commercial producers, the narrative dexterity of on-line gamers and the visual eloquence of the television audience are accounted for in both interactive art production and theoretical discourses on new aesthetics.

**SESSION 4** 

#### PANEL SESSION: Approaches to the Practice of Curating New Media Art.

Sarah Cook, Beryl Graham and Ele Carpenter, CRUMB, University of Sunderland.

CRUMB, at the University of Sunderland (<http://www.crumbweb.org>) is an online resource for curators of new media art, but do those descriptions still apply when curators are also producers, moderators and facilitators, and new media art isn't necessarily new and sometimes isn't even art? The papers presented draw on CRUMB's research as well as extensive first-hand knowledge of curating and examples of exhibitions, festivals and commissions, such as 'The Art Formerly Known As New Media' (exhibition, The Banff Centre, November 2005); 'Node London' (Season of Media Arts, March 2006); 'ISEA Symposium and ZeroOne festival of Art on the Edge' (San Jose, CA, August 2006) and 'RISK' (exhibition, CCA Glasgow, 2005) to determine the state of curating new media art now. Furthermore, these papers suggest ways that the professional development of curatorial practice can be supported when both art forms and methods are in a state of constant emergence and transformation as a result of new media technologies.

#### Is Interaction More of a Challenge than Immateriality? Beryl Graham

This paper addresses the question of the characteristics of the work of art – its connectivity, interactivity, variability and immateriality – from the point of view of the museum curator and contemporary art historian. If new media art (in general, from responsive installations to Net art) is seen as a combination of characteristics and behaviours, then it is only through discovering those that we can ascertain the challenges it presents to the practice of curating. Importantly, for art historians, some characteristics of new media art projects do link to characteristics of other (earlier or older) art forms. For instance, museum curators are not troubled about how to show the immaterial output of the Conceptual art movement, so why is the immateriality of data-driven works such a presumed challenge? Drawing on a number of examples of exhibitions and festivals, and individual works of art, this paper will address the question of whether or not art has gone through a tool-based revolution (as most art histories of technology and museum exhibitions might lead us to believe) or a concept-based revolution brought about in part by the technological possibilities available in the production and distribution of art.

# From Crisis to Bliss: The Cost of Supporting New Media Art Sarah Cook

This paper charts the unspoken 'crises' in the curating of new media art and how they map onto similar crises in art criticism and museum practice in mainstream visual arts. Incorporating the question of the challenges of collecting media art and the lack of a strong critical history of the 'trend' of practice, the paper draws on CRUMB's first-hand experience of hosting a 'crisis centre' at the ISEA and ZeroOne Festival of Art on the Edge in San Jose (August 2006), as well as Sarah Cook's experience of co-curating 'The Art Formerly Known As New Media' (The Banff Centre, September 2005) – an anti-retrospective exhibition commemorating ten years of high level new media art research at Banff.

Sarah will present documentation of the Crisis to Bliss Centre – a place of therapeutic refuge within an international exhibition and symposium context designed to host artist-led workshops for troubled curators. It is anticipated that the Centre will link to and highlight some of the many research projects that artists have undertaken in an attempt to determine the personal and economic toll of working in this ever-changing and emerging field, such as Constant's 'Cuisine Interne' and the projects on consensus and collective working by the UK-based artist group 'The People Speak'. While it takes a playful approach to knowledge sharing, the centre is a site of professional development for curators and addresses some of the recurring challenges of working with new media – from trying to exist in two time frames at once (the avant-garde of art practice and the timelessness of publication and documentation), to technical constraints of sustaining long-run exhibitions of interactive art.

# RISK: Creative Action in Political Culture: Presenting Process-Based Art-Activism in an Exhibition Environment. *Ele Carpenter*

Self-organisation, direct action, collaboration and social networks have long been the characteristics of activism and socially-engaged art practice. They are now the characteristics of much new media art, within the public realm of the web, and interdisciplinary practice. But the spheres of discourse still remain distinct.

The exhibition RISK: Creative Action in Political Culture (CCA Glasgow, March – May 2005) curated by Ele Carpenter, brought together work by artists who endeavour to make creative political change through their practice, working across art and activism, using a range of strategies and technologies. Over 30 artists took part in RISK including: Aisling O'Beirn, The Atlas Group, Doug Aubrey, Ross Birrell, Jota Castro, Ruth Catlow, Clandestine Insurgent Rebel Clown Army, Critical

Art Ensemble, Andrea Crociani, Ghazel, Gregory Green, Jordan and Hewitt, ICOLS, Martin Krenn, Torsten Lauschmann, Maris, Harold Offeh, Josh On, Platform, Jai Redman, Oliver Ressler and David Thorne, Kate Rich, Jackie Salloum, UHC, Yes Men, Vacuum Cleaner, and Variant. More information is at www.riskproject.org.uk

Ele will present documentation of the RISK exhibition in the context of her doctoral research with CRUMB. In particular this paper discusses the relationship between socially-engaged art and new media art activism. Immersion in tactical media tools has enabled some artists and activists to work together for a while – but how does this impact on curatorial practice? The development model of open-source has its roots in self-organisation; creative commons is a realisation of the principle of the freedom of information. Why is it that the visual arts are only beginning to take the socio-political imaginary of self-organisation seriously through the model of open source? What are the implications for CHArt?

#### **FRIDAY 10 NOVEMBER**

SESSION 5

#### Preservation of Net Art in Museums.

Anne Laforet, University of Avignon, France.

Artists appropriated the Internet as soon as it became public in order to experiment with new artistic, social and technical practices that have been gathered under the term Net art. The museums and cultural institutions that are interested by those works have to reconsider the way they commission, exhibit, collect and preserve artworks, just as they have already done with other forms of ephemeral or process-based art.

Within the museum, the balance between documentation and preservation is shifting in favour of documentation, owing to artworks that do not have a fixed or stable form but exist in different states. A rich, diverse and precise documentation is crucial to support preservation strategies that accept artworks as being variable, mutable and not static.

New or updated preservation models need to be explored. After an overview of current models being developed (especially those within museums or national libraries), this paper will focus on the concept of the archaeological museum as a potential model for Net art preservation.

By combining museum and archival approaches, it is possible to keep track of the context of Net-based artworks by taking into account their interrelations within a dynamic environment. Net archiving tools allow close observation of how an art work evolves, although this does not necessarily mean that the captured works function in the same way as the originals. By emphasising the dialogue between Net art works and their environment, the institution would become a living archive, a research space, with fragments of artworks which could be updated and re-activated in multiple ways. Moreover, it could take the form of a partnership of organisations with different scopes, methods and goals, a meta-institution composed of the many actors involved in preserving Internet art.

#### Preserving and Recovering Computer Art: Reconstructing Data or the Artwork.

Nick Lambert, Birkbeck College, University of London, UK.

The development of computer art took place in a burgeoning ecology of software and hardware formats, many short-lived and almost all incompatible. Their evolution and subsequent development, convergence or extinction is broadly comparable to the 'Pre-Cambrian Explosion' in palaeontology. The sheer diversity of obsolete formats poses many questions for the historian of computer art when researching this area's archives with a view to digitising or recovering their contents. To what extent can historic digital artworks be preserved, re-displayed or even recreated for modern audiences with contemporary technology? And how far can the work be separated from its underlying context of data, and the associated hardware, without destroying its most distinctive aspects? The paper considers examples from the CACHe Project, ZKM and other initiatives.

**SESSION 6** 

#### When Presence and Absence Turn into Pattern and Randomness: Can You See Me Now?

Maria Chatzichristodoulou (maria x), Goldsmiths College, University of London, UK.

What is the meaning of embodiment and presence within a postmodern, posthuman, and 'post-media' context? What is at stake when embodiment becomes virtual, distributed and/or hybrid? What happens when presence and absence turn into pattern and randomness?

This paper explores the issues of posthuman presence and virtual embodiment in relation to current emergent, performance and/or performative, artistic practice. Blast Theory's piece 'Can You See Me Now?' is used as a case-study. The focus is on networked performance practices that employ the Internet and other networking technologies as

distribution media but also as spaces - that is, as cybernetic stages that span across physical and virtual spacetimes challenging established notions of presence and absence. Whereas performance is closely associated with the notion of physical, bodily presence, when it comes to (semi-) mediated, networked, and other forms of technologised performance practices 'questions about presence and absence do not yield much leverage ...'<sup>2,</sup> as the corpo-real body ceases to function as a tangible proof of presence. Presence becomes doubt. It becomes impregnated with absence (Derrida), an in-between state, a presence-absence. What happens while we exist in-between presence and absence in performance?

Furthermore, strategies we develop in order to both shape, embody and relate through hybrid spacetimes as present-absent, posthuman creatures are investigated, questioning the meaning of embodiment within a posthuman context. I argue that, within this context, the conceptual dichotomy of presence - absence is not sufficient for the analysis of networked performances and encounters. I further argue in favour of Hayles' proposal of a complementary dialectic based on notions of pattern and randomness. To approach and illustrate these issues I use Blast Theory's installation/performance/gaming piece 'Can You See Me Now?' (2001) (<a href="https://www.canyouseemenow.co.uk">https://www.canyouseemenow.co.uk</a>)

#### **Embodying Judgment: New Media and Art Criticism.**

Daniel Palmer, Monash University, Melbourne Australia.

Art criticism is widely held to be in crisis, yet few who make this claim have paid attention to the issues raised by technological changes in art media. Indeed conventional methods of art criticism are poorly equipped to assess new media art – offering confused criteria for judgement – and an accessible critical discourse around this art is largely absent as a result. This paper explores aesthetic theories of new media with a view to rethinking the place of the medium in contemporary art criticism.

The challenges that new media poses for art history have been much discussed. However, aesthetic debate around new media art has largely concentrated on locating the defining qualities of new media art. As many have observed, this focus risks restating an anachronistic modernist paradigm of medium specificity. On the other hand, to merely note that new media entails a shift from object-centred to reception-centred aesthetics fails to discriminate between new media and other contemporary art of the post-Minimalism period.

This paper takes off from two recent and ambitious efforts to theorise the aesthetics of new media by Mark Hansen and Anna Munster. Both locate 'digitality' in terms of embodiment and duration, even as they attempt to shift the focus away from the medium or technology. Both, in distinct ways, link bodily effect with an ethical dimension.

How do these theories relate to existing models for contemporary art criticism? How do they recast Michael Fried's famous dismissal of Minimalism as 'theatrical' because temporal and embodied? How can we put these ideas into practice? Is it possible to judge works of new media art by the type of embodied experience they invite?

#### SESSION 7

### CHARADE: The Peer-To-Peer Distribution of Media Assets Into the Public at Large.

Simon Pope, Cardiff School of Art and Design, Wales.

A presentation of CHARADE, Simon Pope's distributed, participatory artwork, recently commissioned by the BBC and Arts Council England. This will be an opportunity for critical reflection on the project, including its relationship to broadcast media strategies, interaction with audience and the sharing, ownership and distribution of media assets.

CHARADE itself draws on the final scene of François Truffaut's film adaptation of Ray Bradbury's 'Fahrenheit 451' where figures read to themselves as they walk, deep in concentration, intent on committing to memory key texts from the literary canon. Threatened by a screen-based culture, intent on the destruction of written forms of knowledge, literature takes flight – read, memorised, remembered- walked into the body. CHARADE also inverts a key premise of Fahrenheit 451: rather than providing stable conditions for the storage and retrieval of knowledge, our computer networks become troubled, precarious: the fear - of data-corruption, of system-crash, of network-infiltration - forces data to take flight, out of electronic systems, back towards the body. Through a series of workshops, video-diaries, online communities, media campaign and a large-scale live event, volunteers became guardians of this data, invited to walk, read, remember and recite, becoming a living embodiment of the network's media assets. (see <a href="http://www.charade.org.uk">http://www.charade.org.uk</a>)

A Blueprint of Bacterial Life - Can a Science-Art Fusion Move the Boundaries of Visual and Audio Interpretation? Elaine Shemilt, University of Dundee, Scotland.

Scientists from the Scottish Crop Research Institute have pioneered a method called Genome Diagram, which enables visualisation of billions of gene comparisons simultaneously between over 300 currently sequenced bacterial genomes,

<sup>&</sup>lt;sup>2</sup> Hayles, N. Katherine *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics* Chicago and London: University of Chicago Press, 1999, 27. Hayles specifically refers to the technologies of virtual reality. Nevertheless, I consider that the problems these technologies raise around issues of presence and absence apply to most emergent, hybrid forms of performance that employ networking and/or other digital technologies.

including those of human and animal pathogens. Our project takes this scientifically-challenging work outside the fields of biology and medicine and places it into the context of interdisciplinary art. Drawing from our previous work we reflect the dynamic nature of biological systems that arise from these static genome sequences. We explore such processes using both visual and sound methods.

Our research aims to have a consequential effect upon the future work of both the scientists and artists involved. The role of the artist should not be that of a mere illustrator: our interpretation of the data may have an effect upon the scientific research by enabling the recognition of new information and routes to new analysis. Similarly for the scientists the project aims to influence the direction of the art itself. As the process of abstraction influences the mode of visualisation, the form of visualisation affects the future process of abstraction, and we expect that greater insight of our own processes of deduction, and analysis of the data itself, will flow from this collaboration.

This project investigates how complex data and images used by the Genome Diagram, through interpretation and expression in a range of art forms, can help to develop and evolve the scientific tools themselves. This is achieved by utilising both modern printmaking and 2D/3D computer-generated imagery now combined with installation and sound. We are developing a multimedia installation based on the genetic plasticity and evolution of the bacterial pathogens. The aim is that the artistic interpretation will specifically not be an illustration or analogy of the data, rather an exploration of the influence of the surrounding spaces using both visual and sound feedback.

The unifying thread of our artist/scientist collaboration is that we begin from data of a biological nature, which also imply certain processes. By de-contextualising them, we obtain a complementary viewpoint to the biological interpretation that would ordinarily be enforced on those data and processes. Fine art practice emphasises subjectivity and ambiguity whereas science practice attempts to identify objective truths. Despite the contrast between the two approaches they are unified because both disciplines thrive on lateral thinking and observation.

#### **SESSION 8**

#### No Thanks to the Dictionary: Visualising Language in the Post-Medium Age.

Philip Klobucar, Capilano College, Vancouver, Canada.

Like most fields of academic research and education, criticism within the liberal arts stands at a veritable crossroads owing to the many recent developments in digital communication and network technologies. While accurate and critical assessments about technical advances in this area often suffer from hyperbole and over-enthusiastic marketing rhetoric, it is clear that digital technology has had an intense and, in many cases, transformative effect on how research and writing is conducted in the twenty-first century. Such changes provide both literary and art criticism with an essential mandate to conduct further research into current media technologies in order to better understand and develop new critical methodologies and practices.

The proposed paper articulates several important theoretical relationships between information/knowledge representation technology and literary and art criticism by looking specifically at recent experiments in new media poetics. The study will survey a range of new electronic genres currently appearing in visual culture and literature, for example, hypertext fiction, VRML media, computer generated texts, word art, conceptual blogs, etc., comparing them to previous modernist and avant-garde experiments in art and writing, in order to assess the intellectual and creative possibilities such technologies may offer current practices in cultural criticism.

The methodical integration of abstract concepts with applied practice remains central to all fields of modern analysis, and at a tactical level, this premise continues to link the development of systematic thinking with functional expertise in writing, reproduction and research technology. Yet more theoretically, such a link also demonstrates the consistent basis of modern criticism in the visual presentation of knowledge as both a technological and semantic system. As this paper aims to show, advances in modern reproduction technology have been crucial to the parallel development of 'spatial' models of meaning in all areas of cultural production, as is especially evident in the persistent evolution of lexicographic resources, including dictionaries, information archives/networks, semantic ontologies, search engines and other modes of database interface. The most recent generation of such tools includes the construction of visually-enhanced epistemological networks, glossaries, archive maps, linguistic annotation and graphic models of language use.

That new tools and methods in knowledge representation technology continue to inform and influence intellectual content is hardly surprising, yet a critical understanding of this complex relationship is only now emerging within academic writing. Looking specifically at different models and techniques of 'spatialisation' within cultural production, ranging from Mallarmé's poetry to N. Katherine Hayles' Flash-based digital criticism, my work makes evident how central the 'visual' organisation of information is to cultural meaning in general. This paper will also demonstrate the important origins of specific digital media practices in prior experiments in typography, visual culture and multimedia. As I hope to demonstrate, some of the most interesting developments in digital writing and new media derive from very similar questions concerning language, representation and cultural meaning posed almost a century ago within avant-garde poetics and art.

#### 'You Are Here': Locative Media and the Body As Networked Site.

Alicia Cornwell, Tufts University, Massachusetts, USA.

The increased use of locative media-enabled devices such as mobile phones has recently been of interest to artists working in the emerging field of locative arts. Artists and collectives such as Loca (Location Oriented Critical Arts) are highlighting the ways in which locative media technology allows bodies to be tracked and monitored through largely invisible wireless networks. By sending unsolicited text messages which indicate that the mobile phone user is being observed and also by providing methods that aid users in physically identifying such networks in their surrounding environment, Loca's project draws the user's attention to the tendency of technologically-augmented bodies to become sites of surveillance in the digital terrain.

Mobile phones and other devices do not only allow users to be tracked, they also contain and reveal surprising amounts of information about users' lives. The wealth of information afforded by these devices makes up an individual's digital past, both distant and immediate, that is specifically connected to the user's situated body within the wireless networks they inhabit. Loca, whose project can be linked to both site specific art practices from the 1970s to the 1990s and to the activities of the mid-twentieth century Situationist International movement, makes use of homemade wireless networks and nodes to demonstrate the ease with which outside parties (often large corporations) can monitor and glean personal information from mobile phone users.

Loca are emphasising through their project that the result of the digital and physical overlapping of space is an increasingly complex and often compromising system of information generation and retrieval, reliant upon the physical location and context of bodies in space. As sites that are monitored within a wireless, networked terrain that is increasingly vast, Loca stresses that our bodies have been caught between the layers of the physical and digital divide.