



DIGITAL CONVERGENCES

ACADEMIC CONFERENCE

22nd Sep – 23rd Sep 2014

Bournemouth University



2014

Bournemouth University in collaboration with Arts University Bournemouth is proud to host the first BFX Conference on the theme **Digital Convergences**. This conference intends to present and analyse the convergences that are occurring across, within and beyond the genres of moving image, as a result of digital technologies.

Through an interdisciplinary approach, the BFX conference presents authors who examine various theoretical positionings on the digital and reflect upon its scope in practice-based contexts. In different ways the speakers present a realignment of the discussion as digital technologies straddle different spaces and challenge the conventional institutional barriers between different academic or non-academic fields, whether in the fine arts, film, games, archaeology, education, mathematics, philosophy, medicine, and so on.

The conference seeks to revisit the arguments that position these fields as structurally and intellectually different. In the case of the digital moving images it seeks to challenge the belief that these practices remain on separate trajectories with drawing upon substantially different aesthetic devices. It has identified a number of thematic concerns that emerged across different papers, The Body, Space, Practice and Technology, Theoretical paradigms, Histories and Ontologies. The conference locates aspects of these themes in the work of keynote speakers Prof. Lev Manovich and Prof. Sean Cubitt who have contributed to the discourses in this field with seminal academic literature that has shaped contemporary discussions on the notion of convergences and digital practices in the moving image and beyond.

Ms Paula Callus
BFX Conference Director

Program Panels 2014

PRACTICES & TECHNOLOGIES

CHAIR: PROF. DAVID GARCIA

PROF. CHRIS ROWLAND

3D Visualisation and Aesthetic considered processes: The invisible cultural heritage that lies beneath the sea.

ANARGYROS SARAFPOLOUS

Evolutionary Art, Artificial Critics, Aesthetics, and Hilbert's Entscheidungsproblem.

MICHELLE CANON

Porous Pedagogy and Multimodal Tools: Primary Media Production Practices in East London Primaries

SPACE

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MALCOLM COOK

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YUNSUNG KIM, BONGWAN JUN

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The autonomous pixel

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Outside In: Challenging traditional narrative constructs in digital cinema. Exploring the frame, continuity editing and audience perspective.

PHILIP WILKINSON

Situating Games: Exploring Situated-ness in Digital Game Experiences

PAUL SMITH, VICKY ISLEY

The art of Disease Modelling

THEORETICAL PERSPECTIVES

CHAIR: PROF. PAUL WARD

PROF. PAUL WARD

Animated documentary re-enactment: a magical convergence?

IAN PETER STONE

'Theoretically locatable but not describable': Barthes third meaning and digital Cinema

PAUL TABERHAM

Revisiting Orthodox, Experimental and Developmental animation.

MATTEO RIATTI

Where Art, Film and Videogame meet – visual art forms and their semiotic and structural similarities

THE BODY

CHAIR: DR. REZA YOUSEFZADEH

IAN JOHN GRANT

Vital Remediation: The Physical Liveliness of Digital Puppets

PROF. CAROLINE WILKINSON

Depicting the Dead

MAUREEN KENDALL

Cinematic Language of Rapture

Dr THOMAS WALSH

The Performance of the Effect

CENTRE FOR MOVING IMAGE RESEARCH

CHAIR: PROF. TERRY FLAXTON

The Centre for Moving Image Research at the University of the West of England is dedicated to the task of investigating the role of moving images in today's changing world. CMIR are interested in how the history of the moving image has been rolled back beyond the birth of film, beyond Faraday's experiments, beyond Fourier's invention of discrete cosine and wavelet transforms, back to al-Kwarizimi's invention of the concept of the algorithm in the ninth century. We are interested in how innovations in technology, art and culture affect the production, content, politics and understandings of the value and meaning of moving images to the human species.

PROF. TERRY FLAXTON

The Deep Cognitive Context for the Contemporary Production of Moving Images

PROF. CHRIS MEIGH ANDREWS

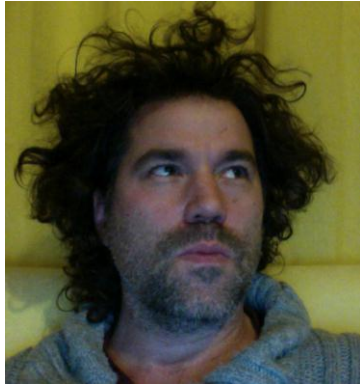
A brief history of contemporary video imaging and how the canon might be questioned re the forgotten cybernetic history

Dr STEVE PRESENCE

Radical considerations: aesthetics politics and culture

Dr SARAH SPARKE

Moving image values: what means something in the moving image world and why



LIAM BIRTLES

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Title: The autonomous pixel

For the last 6 years the arts collective Squidsoup (2014) have been experimenting with large grids of RGB individually addressable led's. During this time they have used their bespoke, screen derived, technology to create interactive, immersive, embodied and volumetric light spaces that have engaged audiences across the world. Taking the Squidsoup works Surface, Scapes and Submergence (Ocean Of Light 2014) as a starting point, the author considers a variety of 'pixel' works by contemporary artists, such as Jim Campbell (2014), Jason Bruges (2014), Future Lab (Spaxels 2014), Memo Aitken (2014) and others and reflects upon the affordances of the pixel. Contrasting an imagined future of a glossy high resolution, absolute and accurate 'virtual reality' with the experiences of working with low-resolution grids of lights, characterized by Squidsoups Ocean of Light works, the author reflects on how the affordances of the pixel might inform our conception embodied and ubiquitous media.



MARK BOND

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**Outside In: Challenging traditional narrative constructs in digital cinema.
Exploring the frame, continuity editing and audience perspective.**

Henry Jenkins describes how convergence thinking is impacting the relationship between media audiences, producers and content. The development of new technology has influenced all areas of film production and introduced changes to working practices, affecting cinematography, editing, distribution and delivery. Hollywood cinema has seamlessly adopted new cross media technology, incorporating the traditionally separate fields of animation and cinematography, with the last three Academy Awards for Cinematography (Gravity 2013, Life of Pi 2012, Hugo 2011) being presented to movies, in part, constructed in postproduction. In his essay, What is Digital Cinema, Manovich sees this as a return to the cinema of the nineteenth century and cites Mitchell's comparison between the digital photographer and the traditional artist / painter, each manipulating images with ease. Yet the narrative framework for digital cinema has remained largely unaffected by this digital revolution. I wish to address this anomaly in a short experimental film. The film will be produced using digital cameras incorporating large sensor, image capture technology, and aim to confront audience expectations. The film will challenge traditional narrative construction by disrupting, temporal and spatial constructs, with the original images edited and projected in alternative presentations. The illusion of moving image will be revealed as a series of still frames, focusing attention on the process of moving image construction and disrupting the 'persistence of vision'. The still frame will be examined in detail, juxtaposing the macro and micro components. The purpose of this radical repositioning is to interrupt the conventional image stream and stimulate an energetic reading and understanding that aims to contribute to a vital narrative form more aligned with this digital revolution. In my presentation I will discuss my findings, reflect on the audience response and consider the possibilities for development.



MICHELLE CANON

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Porous Pedagogy and Multimodal Tools: Media Production Practices in East London Primaries

In an environment where our everyday social interactions are mediated in increasingly sophisticated ways, questions must be asked about the relevance of discipline-driven, individuated models of teaching and learning. Should teachers be perceived as experts with all the prescribed questions and answers? or should primary pedagogy set the agenda and make a cultural and paradigmatic leap effecting flatter more porous, constructivist exchanges with young learners – ones that mirror the flow of transmedia practices outside school? Some Key Stage 2 primary pupils are immersed in new media practices in settings beyond formal schooling. This paper explores the skills and dispositions associated with informal film production that conflate around collaborative, contextualized, connected learning experiences in educational spaces between home and school. I present primary after-school case studies that dissolves traditional boundaries, creating the conditions for learning in which pupils from challenging socio-economic backgrounds begin to take notice of and experiment with their environment, through the crafting of digital assets to make a media event: a short film. The study demonstrates a reconfiguration of traditional student-teacher hierarchies using the converged tools of the tablet: young learners own and publicly display their understanding using participative media, facilitated by the ‘inexpert’ teacher. Where ever you are in debates on the spectrum of digital convergence, discursive capacity needs to be built around school curricula reform. A refreshing aim would be to embed the value of everyday lived experience in a culture of media craftsmanship, creating holistic experiences of co-design and digital curatorship that better prepare young learners for social participation.



MALCOLM COOK

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Pixar's "The Road to Point Reyes" and the long history of landscape in new visual technologies

In 1983 the Lucasfilm Computer Division, soon to become known as Pixar, embarked on a project to demonstrate their new rendering algorithm. They chose as their subject a view of the local vicinity, Marin's Point Reyes, which also lent its name to their renderer: REYES (Renders Everything You Ever Saw). As the division's first film-resolution image "The Road to Point Reyes" marks a critical moment in digital imaging. This 'one-frame movie' demonstrated, at least theoretically, the possibility of creating full length sequences, or even a feature film, composed of images which matched the quality of 35mm film. While technologically this image marked a further step towards digital cinema, its choice of landscape as a subject places it in a historical lineage in which landscapes have repeatedly been used as a proving ground for new visual technologies. In the 1820s and 30s the fixing of views of landscapes was central to the development of photography, with figures such as Niépce, Daguerre, and Fox Talbot all taking views from nature as a central purpose and test for their experiments. Similarly in the 1890s landscapes were among the most celebrated subjects of the earliest moving image presentations, such as Robert Paul and Birt Acres' *Rough Sea at Dover* and the Lumière's *Barque sortant du port/Boat Leaving the Port*. This paper will examine early computer generated landscapes through the framework of this long history of landscape in new visual technologies. This will find strong parallels between these historical moments, particularly a tension between the natural and the manmade, present both in the images themselves and in the technologies that created them. Such a reading will provide fresh insight into the work of Pixar by placing it in a longer tradition of visual culture than normally applied.



PROF. TERRY FLAXTON

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The Deep Cognitive Context for the Contemporary Production of Moving Images

Whilst at the Universities of Bristol and the West of England, in collaboration with BBC R&D, I have been jointly responsible for the production of the first higher dynamic range, higher resolution and higher frame rate experiments to measure which combination of these developing parameters of image capture and display best engage the audience. These parameters have developed through the change from photo-chemical to digital cinematography (via analogue and digital video). They currently include the ability to generate high frame rates, higher resolution and high dynamic range – where the adjective ‘high’ refers to the prior limits of celluloid and currently has no boundaries to what they might become. Importantly no single parameter accounts for changing levels of audience engagement. But simply adjusting what we look at does not tell the whole story. What is essentially happening with moving image developments is the mapping of the capabilities of imaging equipment to the sensory levels of the eye/brain pathway. But what do increases in the quality and speed of the moving images mean to the viewer? How will this affect future patterns of production, consumption and understanding of moving images? Using the investigation into human consciousness described by Emeritus Professor Merlin Donald, Queen's University, Ontario, (with reference to his seminal book *Origins of the Modern Mind* 1991) I will discuss not only cognitive neuroscientific theories of what it is that we currently are – but what we might become. Donald argues that being in the world is an aspect of mind and that human communication developed through three scaffolded phases, built one upon another. But even with this narrative concerning how we might picture ourselves and the constituent parts of our world, the question remains: how might future narratives drive moving image innovations and our consequent understanding of ourselves?

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Vital Remediation: The Physical Liveliness of Digital Puppets

The proposed paper presents an extended view of the domain of digital puppetry and maps the dynamic (re)mediation between analogue and non-analogue (electro-mechanical, digital) forms of kinetic, expressive animation practice. Digital puppetry is inclusive of practical and theoretical orientations drawn from a range of domains, in the current map including: Traditional Puppetry: Design and Performance; Video-games (machinima); Kinetic Art / Media Art; Robotics / Automata; Physics Base Animation; Human Computer Interaction (HCI); Screen Art: Cinematic Animation, VFX and CGI; Sonics; Theoretical Explorations of the Puppet including Object Theory and Manipulation; Simulation; Artificial Life/Symbiotica; Movement Studies; The proposed analytical framework considers the following modalities of animated phenomena:

[a] The Temporal / Dynamic

[b] The Physical (Spatial / Material / Visceral)

[c] The Non-Physical (Virtual / Immaterial)

[d] The Expressive: the emotional / social / perceptual qualities of puppeteerly movement

[e] The Technical or Technicity in general.

For the purpose of the present paper, the author applies the above framework to three examples:

[1] Software: A software study of casual digital puppeteering in 3D content creation environments while rigging 2D and 3D objects

[2] A Game Engine: considering the authors own multitouch animation system 'the Shadow Engine' - a game-like environment which involves the digital restoration of archival Karagöz shadow puppets as acts of performance, heritage and kinetic preservation

[3] Cinematic Animation and Puppet Simulation: Classical acts of puppetry simulation in computer generated cinematic animation Pixar Studio's Toy Story 2 (1999) and Dreamwork's Kung Foo Panda 2 (2011). In defining 'liveliness', the author builds from Arnheim (1974) and Chow (2012), in establishing orders of liveliness across a range of animated phenomena. Puppetry presents a particularly rich ground, historically and culturally diverse, through which to develop an evidential set of (re)mediated objects and performance practices that transform dead or dying media into new configurations. The author has a practical interest in performance animation, particularly the capture of spontaneous puppeteerly acts of movement for the wider purposes of real-time and non-real time animation. The paper attempts to establish how, through the remediation of traditional acts of puppeteerly design and manipulation, a range of contemporary animation practices are made, transformed and expanded in and through their relation to (some ancient) forms of physical animation. One: this increases the object-hood (iconicity) of such virtual phenomena and two: the features of digitisation, automaticity and interaction (particularly perception, tracking of 3D motion and tactility) are themselves expressed, act and re-act in an intensively trans-medial way.



NICK JONES

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Living the grid: The navigation of digital spaces

In this paper I describe digital spatial representation in a selection of contemporary media forms, identifying a consistent tendency towards the creation of three-dimensional, volumetric environments using digital effects technologies. These include CGI and digital 3-D conversion in big-budget filmmaking, first- and third-person computer games, and sporting measurements (such as the Hawk-Eye system used in tennis and cricket). These represented spaces are shown to have in common are not only ideologies of measurement, quantification and rationalisation, but also the assertion that algorithmic data can be thought of as spatial in useful and revealing ways. That is, though these environments are created through data collection, and in doing so evoke something of the God's-eye-view of cartography, they nonetheless interpret this as a navigable space of encounter and subjectivity. These spaces as a result reveal important aspects of how in the twenty-first century we imagine both space and digital technologies, the former saturated by the latter in a process that encourages us to think of all (real) space as mediated and networked, and to think of digital technologies as producing spaces that we recognise and can live within. I will employ the spatial theory of Henri Lefebvre, Michel de Certeau and David Harvey to illustrate these ideas, as well as the media theory of Lev Manovich, Vivian Sobchack and William Brown. The intersection between these two fields offers productive methods for thinking about cinematic space in the digital era.



ALEX JUKES

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A Practical Investigation into Space as Material Within 3-D CGI

This paper represents a study of materiality within the production and presentation of 3-D CGI animation and presents a combined theoretical and a practical investigation into 'space as material'. The work invites a dialogue concerning the function and form of 3-D CGI and its position as a process for animation and as a medium for communication. In previous discourse theorists such as Manovich and Cubitt have presented the concept of 'space' within 3-D CGI as mechanistic, necessary for the construction and presentation of abstract and illusionistic descriptions of space (as visual space) without assuming a central position or being considered as a material. By aspiring to recognize space as material within 3-D CGI animation this paper argues that 'space' provides a tangible and distinct set of values that are essential to our understanding of 3-D CGI and its process. To support this claim the work outlines an investigation of space with reference to Heidegger's conceptual approach to space which includes the forming of mutual relationships between sense and relation and between object and subject. Specifically this paper seeks to address Heidegger's description of space in terms of delimitation and the setting up of *enclosing and excluding* limits in which he claims that space subsists through establishing demarcation and resistant barriers that contain space. The work here examines 3-D CGI as a mechanism for introducing barriers to capture, sculpt and contain space and is concerned with the following questions:

1. How might the conceptualization and presentation of space be deemed as fundamental to the remit of three-dimensional computer generated animation?
2. Through practical application and analysis, how might space be qualified as material within the context of three-dimensional computer generated animation?



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Cinematic Language of Rapture

This paper investigates a cinematic language of Rapture, where the Seen points towards the Unseen. References to subjective experience of Rapture may be named as ecstatic, spiritual, mystical, psychological or archetypal. Heightened moments of love, horror, reverie and rapture often are told within the context of emotional, therapeutic, sexual or religious-mythical narrative. Gestural Language frames these significant moments across interactive and linear media or Art forms - 2D drawing, 3D sculpture, interactive installation, moving images of film, effects, games and animation and within the Commentaria of social media. This paper will explore how cinematic language can refer to an experience of the Rapture by bringing together examples of the gestural sign across Art Forms such as gestural drawing of the human figure in motion and use of cinematic grammar across media platforms communicating moving images. The framing of an arrested Still image can refer to a significant moment of consciousness or the point of crisis at a narrative climax. There is a tension between this almost still arrested image and then a narrative release into a flow of moving images. The significant mystical moment can be represented from different points of view: an interior gaze looking out; a gaze from Self towards Other; correspondences of eye-line and eye movement across and between characters; intense identification with Landscape; and phenomenology of the Everyday.

YUNSUNG KIM, BONGWAN JUN

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The Design Process of Narrative for Location-based Mixed Reality Game Author

In this paper we consider the process of designing narrative in the location-based mixed reality game (LBMRG) for the purpose of tourism using Google glass. The key feature of storytelling in the LBMRG is the narrative space, which is divided by a seam between physical space and virtual space. The blurred boundary in the LBMRG has the characteristic of possible space and problematic space at the same time. So the main issue of designing story in LBMRG is to harmoniously integrate two narrative space and handle the player's mobility to provide coherent and continuous experience to sustain motivation for the game player. If not, the game player would lose his way or give up game play in the urban environments. In this paper, we suggest narrative process for designing LBMRG in consideration of how to select and arrange the event spots; to choose player's trajectory; to elicit the original value and story at that specific places for providing coherent engagement to the LBMRG player.

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A brief history of contemporary video imaging and how the canon might be questioned re the forgotten cybernetic history

My element of the presentation will seek to provide a brief overview of artist's video as a genre, beginning with its emergence as a separate art form under the influence of "high modernism", to its absorption into the wider cultural mix via the phenomenon of the digital revolution and the convergence of moving image media. Along the way, I would like to raise some questions about the need and purpose of such a history: Is video art a distinct and unique art form or should it be seen as a kind of early precursor of media art? Has the dominance of the so-called "Structural Film" (or as some would prefer to identify it- "Structural/Materialist film") prevented a clearer understanding and marginalization of the significance and contribution of the work of several generations of video artists in Europe and North America? In light of the way in which media distinctions have been eradicated and made irrelevant by digital technology and the way in which the history of cinema has been re-evaluated by the inclusion of proto-cinema, is the term "video art" no longer fit for purpose? More broadly, I hope to stimulate a debate about the feasibility of re-evaluating the canon without the customary media-specific distinctions of film and video, expanded cinema, video installation, and interactive media and in order to unite them.

MATTEO RIATTI
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Where Art, Film and Videogame meet – visual art forms and their semiotic and structural similarities

Videogames are undoubtedly a major player in nowadays' popular culture. With the verge of 3D graphics in the nineties, the medium began to remediate preferably film aesthetics. When once videogames quoted famous movies, now they engage interactively. This derives from the similarities of the two technical and dispositif alignments and from the popularity of blockbuster genre conventions. The market for videogames shows corresponding tendencies. Videogame bestsellers like CALL OF DUTY do not rely on elaborate plot structures and rather focus visual 'Roland Emmerich' appeal. However, there is one famous franchise that is considered to be of highly artistic and sophisticated quality: MAX PAYNE. The Finnish studio 'Remedy' created the same-named protagonist in 2001 and told the story of a broken avenger and in self-justice acting New York cop. The revenge-topus was less revolutionary, more so was the intertwined presentation of a videogame that adapted comic-novel aesthetics and self-referential rhetorical devices. In-game music, narration and level-design took on a film-noire-style. Critics have found the game to be a prime example for its comprehensive layout, calling it an interactive movie. The MAX PAYNE franchise eventually expanded transmedially throughout comic-novels and a US film-adaption in 2008. MAX PAYNE denied a strict separation of medial stereotypes and combined forms in an artistic mash up. It will be shown that the semiotic and structural integrity of each visual art form is compatible and transferable to other media formats. The approach will apply the semiotic groundwork of Yuri M. Lotman on secondarily modeling systems (such as arts, literature or the movies), semio-spheres (sealed semantic systems that refer on the same semiotic presuppositions) and by challenging the myth of different media by reappointing Foucault's term of the dispositif. This case study will be a suitable frame to question whether film and art are structurally or intellectually different.

Dr STEVE PRESENCE
UWE/Centre for Moving Image Research

Radical considerations: aesthetics politics and culture

Outline: This paper outlines the history and contemporary context of radical film culture in the UK, and explores the ways in which two projects at the Centre for Moving Image Research (CMIR) are investigating that history and contributing to that culture. The first, the Bristol Radical Film Festival, emerged from my doctoral research and aims to provide a platform for politically and aesthetically radical moving image work. The festival's interpretation of the word 'radical' is a political one, in that the films shown advocate radical social, political and economic change, but it also recognizes the moving image as a rich medium and welcomes work that interrogates political and aesthetic radicalism in new and challenging ways. This distinction between the political and aesthetic radicalism is also a key part of the second project at CMIR that focuses on the radical moving image. The Radical Film Network was founded in 2011 in recognition of the groundswell in radical film culture that has taken place in Britain and elsewhere in recent years. However, despite this resurgence of activity in political film, the historic, complex and contradictory distinction between the political and aesthetic avant-gardes is more pronounced than ever, and one of the tasks facing the RFN is to re-establish this relationship. Building on knowledge of previous incarnations of similar networks, such as the Federation of Workers Film Societies and Kino in the 1920s and 30s or the Independent Filmmakers' Association in the 1970s, the RFN aims provide infrastructural support for radical film culture and to facilitate those involved to communicate, collaborate, and work together towards its development and sustainability in the digital era.



PROF. CHRIS ROWLAND
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3D Visualisation and Aesthetic considered processes: The invisible cultural heritage that lies beneath the sea.

This paper will demonstrate how the application of aesthetic considered processes were used to enhance the 3D visualization of historic and environmentally significant shipwrecks. Using examples including the Costa Concordia and the DeepWater Horizon Oil rig, the paper will explore how the techniques have been also used to reveal the invisible cultural heritage that lies beneath the sea: e.g. Battle of the Atlantic and US Civil War wrecks off the Eastern Seaboard of the USA and the German WWI fleet scuttled at Scapa Flow, Orkney.

Summary of Research: 3D Visualization of Underwater Environments

The underpinning research is centered on the development of novel methods of visualizing multi-beam sonar data of underwater sites such as historic shipwrecks by Rowland at DJCAD, University of Dundee. The 3D Visualization research was initially instigated by Rowland's combined interest in visualization aesthetics and undersea environments which was first evident in the New Media Scotland, Alt-W award for *Submerge* (2001). This work was further developed and applied to artifacts gathered from the *Swan* shipwreck site (2004) in collaboration with Dean and Lawrence. The team formed the research group ADUS to formalize the mutually beneficial nature of the collaboration.

This collaboration provided Rowland with access to important historic shipwreck sites around the UK which led to development of novel methods for the aesthetic visualization of data from underwater shipwreck surveys. Rowland also proposed the advantages of interacting with the data with virtual cameras and digital cinematography to promote better understanding of a shipwreck's structure and condition. The principle outcomes of this research were integrated into a software application: *WreckSight*, which allows the user to interact with the visualization of the shipwreck in 3D. Although the original focus of the research was on improving the visualization of historic or environmentally significant shipwrecks, the outcomes of the work have also been applied to other undersea structures such as Harbours, Oil rigs and downed aircraft.

The research is currently being commercially exploited through the formation of ADUS Ltd, a joint spin out company with University of St Andrews and University of Dundee. The company has recently partnered with DeepOcean, a Dutch company who acquired a 50% interest in ADUS in May 2013. ADUS DeepOcean is funding a research and development project led by Rowland in the 3DVisLab. The research is focused on the development of 3D visualization tools for application in the Offshore Renewables Industry to support decision making in planning, implementation and maintenance of offshore wind farms and sub-sea cable installations.



ARI SARAFPOULOS

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Evolutionary Art, Artificial Critics, Aesthetics, and Hilbert's Entscheidungsproblem.

In this paper we look at systems that make use of a mechanical assignment of aesthetic fitness (or measure) and the automatic generation of artworks. The assignment of a value(s) that measures the aesthetic fitness of images, and image sequences by evolutionary and generative systems has become an important problem. We consider questions concerning the generality of algorithms designed to make aesthetic decisions or judgments, and compare these to Hilbert's *Entscheidungsproblem* [1] in mathematics. Is there an algorithm or mechanical procedure that could answer all problems, or a broad class of well defined problems, of aesthetic nature? Can we construct an algorithm that is the perfect art critic? We present reasoning that suggests that there is no such general algorithm.



PAUL SMITH, VICKY ISLEY

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The art of Disease Modeling

Recent trends in epidemiology have moved towards spatial representations of infection dynamics, considering the ways in which people and vectors move through, inhabit and are influenced by the physical landscape. This, combined with commonplace use of computer simulation in moving image disciplines and transmediation of cartographic resources, presents new potentials for interdisciplinary research; relating the primarily visual concern of the arts with the need for insights into the behavior of complex dynamic systems significant to human health. In the domain of computer graphic art a notion of realism, based primarily on photographic representation, has been the predominant impetus driving innovation in the field. In this context a superficial notion of the proximate accurate image often takes preference over simulations that represent accurate descriptions of natural processes. In epidemiology a need to judge the value of any particular intervention requires that simulations relate meaningfully to real world implementations. Although it may be tempting to conclude that these representations have little in common, a deeper consideration of the motives, methods and practices reveals significant points of parity. In this paper authors present their research from [Silent Signal](#), an Animate Projects collaboration combining a contemporary artistic use of computer simulation with current research in the field of malaria epidemiology. Forming the basis for an argument indicating that the intellectual differences between art and science disciplines are increasingly being bridged by the impact of digital technologies. Central to this discussion is a consideration of the conflict between, accurate high resolution representations indexically linked to the real, and notions of the generalizable, necessary for the generation of meaningful representations.



Dr SARAH SPARKE

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Moving image values: what means something in the moving image world and why

This paper outlines two projects within CMIR which examine the meanings of moving image through an examination of discourses— and here I include but am not restricted to spoken or written language - of two cohorts: ‘digital natives’ (age-related preference research), and the art world (an interdisciplinary exploration of ephemeral art). The aim of the research is to examine current constructs and assumptions surrounding the moving image and ‘the way it is done’, in order to promote reflection and change. These projects build on Barthes’ (1972) concept of (and resentment towards) the confusion of Nature and History, that is, the tendency to assume the ‘nature’ of meanings rather than a recognition that meanings are constructs, and as such are open to challenge and change. Barthes argues that meanings (and associated values) are fluid, they vary with context, they vary over time, geography, across individuals and across populations. A red traffic light doesn’t mean STOP, we just agree that it means that. Similarly, types and styles of moving image are not really ‘better’ or ‘worse’ than one another, these value judgments are social constructions which we can either collude in or challenge. The questions then are What are the dominant interpretations informing the categorizations and value-perceptions of types of moving image? Who upholds and protects those interpretations, and what are the social uses of particular interpretations? And finally, Why should we consider provoking a change? To begin to answer this last question, as both Barthes and Bourdieu (*Distinction* (1984)) point out, interpretations are an embodiment of social structure and its history – how one values something is both the result of and a signal of one’s social position. Until we explicitly examine interpretations, value assumptions, and practices surrounding moving image, developments in the moving image field will be restricted.



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‘Theoretically locatable but not describable’: Barthes third meaning and digital Cinema :

This paper posits Hito Steyerl as an exemplar of a digital third meaning practitioner in film-art, apropos Roland Barthes’ description of third meaning in the essay on Eisenstein stills from *Ivan the terrible* published in *Screen* magazine in 1970. Hito Steyerl makes the claim that ‘the world is imbued with the shrapnel of images. If reality is post-produced, then it means we can change it by post-production, we can intervene into it...’ Barthes’ writing on third or obtuse meaning, reflexive filmmaking maps ‘the passage from language to significance’ and comes at a time of great social upheaval, midway into the high point of the strike waves and student unrest that characterized European political affairs in 1968-1972. It is the contention of this paper that Essayist filmmakers of the time, such as Jean Luc Godard, Alain Resnais et al further developed third meaning techniques, by refracting the historical and political issues of the day through counter-narrative. Given that Barthes describes third meaning discourse as ‘theoretically locatable but not describable’ this paper posits that discourse as a reaction to ideology that is only ever partially formulated, hence while it resists assimilation it never fully emerges as explicit. Nevertheless, its partial articulation as the ‘founding of the filmic’ opens out space as the ‘epitome of the counter-narrative’. If film has an inherent potentiality for counter-narrative, and being minded of Barthes’ quest for an analogical code, this paper considers digital third meanings’ relationship to indexicality and its efficacy as an articulation of political *Kairos*. *Kairos* is here equated with the *significance* in Barthes’ third meaning formulation, and is applied to examples of Hito Steyerl’s work.



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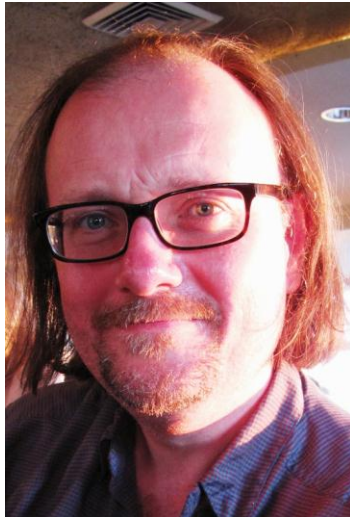
Revisiting Orthodox, Experimental and Developmental animation.

In 1998, Paul Wells published *Understanding Animation*, a seminal text in the field of Animation Studies. In his book, Wells advances three modes of expression in animation production: orthodox and experimental animation (two opposing but related forms) and developmental animation – which sits between these two forms. In essence, Wells suggests that orthodox animation can be defined by the following characteristics: configuration, continuity, narrative, context, unity of style, absence of artist, and dynamics of dialogue. Experimental animation, Wells suggests, can be defined by a series of characteristics that stand in opposition to orthodox animation. These are: abstraction, non-continuity, interpretive form, materiality, multiple styles, presence of the artist, and dynamics of musicality. Developmental animation typically draws from both of these opposing poles, applies three-dimensional animation, and challenges ideological premises set forward by commercial, studio-based animated films. Wells' typology offers a series of valuable and productive distinctions. To date, however, no-one has offered a direct appraisal of his theory. In my proposed paper, I would like to offer such an appraisal in light of more recent developments in animated filmmaking, and also in the context of existing scholarship on experimental film. This isn't done with the intention of attempting to dismantle Wells' contribution to scholarship on animated film. Rather, it represents an effort to pick up on the issues Wells raises, identify which arguments may be contentious, and offer an alternative series of postulations which attempt to build on his original model.

Dr. THOMAS WALSH
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The Performance of the Effect

In her book *Special Effects: Still in Search of Wonder* (2002) Michelle Pierson traces a lineage of special effects performance and connects contemporary effects-laden live-action film to performances of natural magic in the 16th Century. The connection made between a display of 'hidden knowledge' of natural phenomena to contemporary special effects practice is particularly pertinent to the experience of the 2D effects artist working as part of a fully animated feature film. Similarly, Joseph Gilland in his book *Elemental Magic* (2009) describes the 2D effects animator as a mixture of scientist, artist and magician. This paper seeks to examine the practice of 2D special effects animation in the context of feature animation production, and to position the effects animator as a 'performer' of natural phenomena. It will formulate a theoretical framework to explain the relationship between the effects artist and the natural world, with particular reference to phenomenology. It will specifically regard effects work as an eidetic science that can grant a view of how phenomena are *in themselves*, not just what they appear to be to our immediate senses. Drawing on the work of David Abrams and Maurice Merleau-Ponty, this paper will describe how effects work depends on 'meaningful solicitations' from the phenomena it seeks to represent and how it engages animistic beliefs as part of a Husserlian life-world.



PROF. PAUL WARD
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Animated documentary re-enactment: a magical convergence?

The presentation is concerned with the idea of re-enactment in animated documentary. Bill Nichols has argued that *all* re-enactment, including live action re-enactment, has a ‘fantasmatic’ dimension in the sense that the re-enacted events “forfeit [their] indexical bond to the original event”. But how does thinking about re-enactment change when the focus is *animated* re-enactments? The paper argues that the conceptual frames of magic and atavism are helpful in sharpening this focus.

Atavism is commonly taken to mean a reversion to ancestral type or an invoking of a ‘primitive’/pre-cultural set of beliefs, which can be intimately linked to ritual, superstition and sorcery. Animation is arguably built on these same foundations, with the figure of the animator clearly comparable to that of the conjuror – deliberately tricking the audience (and making them love that they are tricked) – or the shaman – activating or willing-to-life something that we know to be inanimate. The understanding of animation as a form of magic is therefore less to do with the simple ‘magic of the movies’, and more to do with the complexity of belief systems, the anthropological power that magic has over us, and the ‘uncanny’ ways that the animated form connects to (and exceeds) the real world. The paper will explore the convergences between animation, magic and belief, focusing particularly on how notions of atavism connect to our experiencing of the re-enacted animated documentary form.



PROF. CAROLINE WILKINSON
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Depicting the Dead

This presentation discusses how 3D haptic technology is used to depict faces of the dead. The paper describes 3D anatomical modeling and the utilization of skeletal models from clinical imaging data and explains how this can be employed to aid recognition and identification in forensic investigations or authentication and depiction in archaeological research.

The presentation will show depictions of Ancient Egyptians, Bog Bodies and famous historical figures, such as Richard III and Mary, Queen of Scots.



PHILIP WILKINSON
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Situating Games: Exploring Situatedness in Digital Game Experiences

Current approaches to understanding digital gaming experiences are scattered across multiple philosophical paradigms, levels of analysis, and degrees of abstraction. Games are deconstructed into narrative, ludic, and aesthetic elements (Raessens, 2011), and game players are probed from neuroscientific, psychological, and sociological positions - their experiences postulated about from cultural, media, and literary perspectives (Mayra, 2008). This paper will review the current dominant theories, concepts, and models concerned with understanding digital game experiences. It is the author's intention to move away from academic demarcation towards interdisciplinary explorations of gaming experiences - therefore, as well as reviewing theoretical positions, conceptual intersections will be explored. Specific focus will be paid to an often overlooked component in understanding gaming experiences - situatedness. Games are rarely played in true isolation, and embodiment within a virtual world (Gazzard, 2009), presence of other player avatars (Weibel, 2008), and immediate social and environmental context all influence player experience (Gajadhar, 2008). Pervasive games make this virtual-physical connection explicit. Broader socio-cultural context is also a factor. Popular games generate online and real-world communities in which experiences are shared, and these communities become a source of shared narrative and practice as players collectively reflect on narrative and ludic elements. Furthermore, with the rise of games in popular culture, players will have generalized expectations of common gameplay principles or tropes. Therefore digital game situatedness will be described in terms of virtual, immediate, and socio-cultural context.

Conference Schedule

2014-09-22

9:00 AM - 10:20 AM

- **Registration Main Reception Bournemouth University**

10:20 AM - 11:00 AM

- **Welcome and Opening Session:** Prof. David Garcia welcomes the attendees and opens the conference in Kimmeridge House, K103

11:00 AM - 12:30 PM

- Chris Rowland, 3D Visualization and Aesthetic considered processes: The invisible cultural heritage that lies beneath the sea.
Building: Kimmeridge House
Room: K103
- Anargyros Sarafopoulos, Evolutionary Art, Artificial Critics, Aesthetics, and Hilbert's Entscheidungsproblem
Building: Kimmeridge House
Room: K103
- Michelle Cannon, Porous Pedagogy and Multimodal Tools: Primary Media Production Practices in East London Primaries
Building: Kimmeridge House
Room: K103

01:30 PM - 03:00 PM

- Alex Jukes, A Practical Investigation into Space as Material Within 3-D CGI
Building: Kimmeridge House
Room: K103
- Nick Jones, Living the grid: The navigation of digital spaces
Building: Kimmeridge House
Room: K103
- Malcolm Cook, Pixar's "The Road to Point Reyes" and the long history of landscape in new visual technologies
Building: Kimmeridge House
Room: K103
- Yunsung Kim, BongGwan Jun, The Design Process of Narrative for Location-based Mixed Reality Game
Building: Kimmeridge House
Room: K103

03:00 PM - 04:30 PM

- Mark Bond, Outside In: Challenging traditional narrative constructs in digital cinema. Exploring the frame, continuity editing and audience perspective.
Building: Kimmeridge House
Room: KG03
- Liam Birtles, The autonomous pixel
Building: Kimmeridge House
Room: KG03
- Vicky Isley, Paul Smith, Art of disease modelling
Building: Kimmeridge House
Room: KG03
- Phillip Wilkinson, Situating Games: Exploring Situatedness in Digital Game Experiences
Building: Kimmeridge House
Room: KG03

05:00 PM - 06:00 PM

- **Prof. Lev Manovich KeyNote Lecture:** Prof. Lev Manovich's KeyNote Lecture at KG03 Lecture Theatre, Kimmeridge House

06:30 PM - 10:00 PM

- **Evening Drinks & Nibbles:** An evening of drinks, food and fun at Arts University Bournemouth, The Enterprise Pavillion

2014-09-23

10:00 AM - 11:30 AM

- Prof. Paul Ward, Animated documentary re-enactment: a magical convergence?
Building: Kimmeridge House
Room: K103
- Ian Peter Stone, 'Theoretically locatable but not describable'- Barthes third meaning and digital cinema
Building: Kimmeridge House
Room: K103
- Paul Taberham, Revisiting Orthodox, Experimental and Developmental animation
Building: Kimmeridge House
Room: K103
- Matteo Riatti, Where Art, Film and Videogame meet – visual art forms and their semiotic and structural similarities
Building: Kimmeridge House
Room: K103

12:00 PM - 01:30 PM

- Caroline Wilkinson, Depicting the Dead
Building: Kimmeridge House
Room: K103
- Maureen Kendal, Cinematics of Rapture
Building: Kimmeridge House
Room: K103
- Ian John Grant, Vital Remediation: The Physical Liveliness of Digital Puppets
Building: Kimmeridge House
Room: K103
- Thomas Walsh, The Performance of the Effect
Building: Kimmeridge House
Room: K103

02:30 PM - 04:00 PM

- **The Centre for Moving Image Research, The University of the West of England:**

The panel will be introduced by Prof. Terry Flaxton from The Centre for Moving Image Research

- Sarah Sparke, Moving Image Values
Building: Kimmeridge House
Room: K103
- Prof. Terry Flaxton, Centre for Moving Image Research
Building: Kimmeridge House
Room: K103
- Steve Presence, Overcoming Differences, Recognizing Similarities, Building Solidarities: the festivals and networks of contemporary committed film culture
Building: Kimmeridge House
Room: K103
- Chris Meigh-Andrews, A (Very) Brief History of Video Art: Before and After Convergence.
Building: Kimmeridge House
Room: K103

04:30 PM - 05:30 PM

- **Prof. Sean Cubitt KeyNote Lecture:**

Prf. Sean Cubitt's Keynote Lecture in KGo3 Lecture Theatre, Kimmerdige House

05:30 PM - 06:15 PM

- **Three Way Conversation:**

The closing conference plenary -

A three way conversation between Prof. Lev Manovich, Prof. Sean Cubitt, and Prof. David Garcia - chaired by Prof. Neal White from Bournemouth University's Media School.

Kimmeridge House, KG03



Thomas Hardy Suite

- 1 Casterbridge Room
 - 2 Coyne Lecture Theatre
- Pooler House**
- 3 askBU at The Base
 - 4 Graduate Employment Service
 - 5 sportBU Sports Centre
 - 6 The Lees Lecture Theatre
 - 7 The Lawrence Lecture Theatre
 - 8 The Stevenson Lecture Theatre
 - 9 The Cobham Lecture Theatre
 - 10 The Barnes Lecture Theatre
 - 11 The Shelley Lecture Theatre

Kimmeridge House

- 12 Marconi Lecture Theatre including new Lecture Theatre build

Dorset House

- 13 The Allsebrook Lecture Theatre
- 14 Open Access Centre 24 hour computer room

Weymouth House

- 15 The Wallace Lecture Theatre

Talbot House

- 16 Student Hall

Amenities Key

- Toilets
- Disabled toilets
- Food & drink
- Bicycle parking
- Bus stop
- Bicycle access
- Students' Union shop
- Reception
- Bank/cash point
- Medical centre
- Nursery
- Disabled car park
- Car park
- Pedestrian access

GETTING TO

Bournemouth University

Fern Barrow
Talbot Campus
Poole
Dorset
BH12 5BB
UK

Transport & Maps

Getting to Bournemouth University

- **Talbot Campus**

This campus is located two miles from Bournemouth Town centre and is home to the majority of our Academic Schools and the Faculty of Science & Technology, the Student Village and many of our student support services.

Arriving by Rail

The nearest station to the University is Bournemouth. The journey by fast train from London takes approximately an 1 hour 50 minutes.

Detailed accessibility guides for [Bournemouth Train Station](#) and [Bournemouth Bus Station](#) are available from DisabledGo.

Getting to the Talbot Campus:

- From Bournemouth rail station you can take a [Yellow Bus](#) which run every 10 minutes to Talbot Campus (see [Talbot Campus map](#))
- You can use the [University buses](#) from Dorchester House, just around the corner from Bournemouth rail station
- A taxi from the station will get you there in less than ten minutes.

For timetabling and fare information please call National Rail Enquiries: +44 (0) 8457 484950 or visit: www.nationalrail.co.uk

Arriving by Road

Full travel directions, postcodes and maps for reaching the University's two campuses by car can be found on our [Bournemouth Maps](#) page.

For further information about parking please visit our [Parking page](#).

Arriving by Coach

Frequent coach services run to Bournemouth from many large cities. Journeys from London take approximately 2 hours 30 minutes. The coach station is situated next to the railway station. For directions to either campus, see the above section about [arriving by rail](#).

Travelling from Bournemouth to London by coach is easy - the [National Express](#) leaves from Talbot Campus and also stops at Bournemouth Pier and the Travel Interchange (Coach Station) on its way to London. There are regular coach connections to Heathrow, Gatwick and Stansted airport.

For timetabling and fare information, please visit the National Express website: www.nationalexpress.com or call: +44 (0) 8717 818178.

Arriving by Bus

Buses serve Talbot Campus. During term-time, the buses run approximately every ten minutes. See our [local buses information](#) for timetabling and fare details.

Arriving by Bike

Talbot campus is easily accessible by bike. For more information please visit our [Cycling page](#).

Arriving by Sea

Poole seaport is approximately 20 minutes from Bournemouth and serves a number of European and Channel Island destinations. There is no direct rail link, but taxis and buses serve the seaport.

Portsmouth seaport is a good alternative to Poole and is approx 1 hour 40 minutes away by train. Both companies below offer a number of destinations in Europe from Portsmouth.

For time tabling and fare information:

- Brittany Ferries please visit: www.brittany-ferries.co.uk
- Condor Ferries please visit: www.condorferries.co.uk.

Arriving by Air

London airports

[London Heathrow](#) is approximately 1 hour 45 minutes, by road from Bournemouth. [Gatwick](#) is 2 hours away. Both airports are served by direct coaches to Bournemouth and rail services from London.

Southampton International Airport

[Southampton International Airport](#) is approximately 35 minutes away by road and serves as a main station on the rail route between Bournemouth and London. Southampton serves a number of UK, European and Channel Island destinations.

Bournemouth Airport

[Bournemouth Airport](#) is approximately 15 minutes away from the town by road and also serves a number of destinations. Although there is no direct rail link, taxis and buses serve the airport.

Buses provide a link between Bournemouth Airport, the Lansdowne Campus, the Town Centre and the Travel Interchange. More timetable and fare information can be found on the [Yellow Buses website](#).

Arriving by Foot

It will take you about approximately 30 minutes to walk from the train station to the Talbot Campus.