

Technoetic Arts: A Journal of Speculative Research  
Volume 10 Numbers 2 & 3

© 2012 Intellect Ltd Miscellaneous. English language. doi: 10.1386/tear.10.2-3.173\_7

---

**JEFFREY SHAW**  
City University of Hong Kong

# New-media art and the renewal of the cinematic imaginary

The history of the cinema is one of technological experiment, spectator/spectacle relations, and production, distribution and presentation mechanisms that yoke the cinema to social, economic and ideological conditions. Above all it is a history of the creative exploration of the variegated expressive capabilities of this remarkable contemporary medium. Despite cinema's heritage of technological and creative diversity, Hollywood has come to define its dominant forms of production and distribution, its technological apparatus and its narrative forms. But this hegemony is being increasingly challenged by the radical new potentialities of the digital media technologies, while the new digital modalities for the production and presentation of cinematic content are setting up highly appropriate platforms for the further evolution of independent, experimental and expanded cinema.

The digital domain is distinguished by a broad range of new interaction modalities. While many traditional forms of expression are also interactive to the extent that they are must be interpreted and reconstructed in the process of apprehension, digital interactivity offers a new direct dimension of user control and involvement in the creative proceedings. These are a means whereby traditional cinema's compulsive spectacle/spectacle relationship can be transformed as the growing spectrum of input/output technologies and algorithmic production techniques are applied in the creation of the digitally expanded cinema. A central research task is the conception and design of new

narrative techniques that allow the interactive and emergent features of that medium to be fulfilling embodied. Going beyond the triteness of branching plot options and multi-level video games, one approach is to develop modular structures of narrative content that permit an indeterminate yet meaningful numbers of permutations. Another approach involves the algorithmic design of content characterizations that permits the automatic generation of narrative scenarios and the creation of virtual spaces inhabited by users who become the agents and protagonists of its narrative development.

The trajectories of interactive art exemplify a complex set of negotiations between body and space – negotiations between the actual domain of the real body of the viewer and the real space she inhabits and the virtual domain of the represented body and represented spaces. For the artist making an interactive installation, the design of an appropriate interface is driven by the imperative to embody an explicit meaning in relation to the conceptual and functional identity of the artwork. As a consequence, the history of interface design in interactive artworks is a paradigmatic casebook of original and effectual solutions to specific and often very sophisticated needs. These needs are defined by precise intentions with respect to the content of the artwork, and by the exact experience that the artist wants to impart to the users. While the operational and commercial advantages of a generic approach to user interface design is obvious, this implies their neutrality as carriers of meaning so that they can be effectively adapted to whatever context they are applied to. Art practice, having different conceptual and economic conditions of manufacture, is able to freely research the creation of idiosyncratic interfaces that can embody the variety of attitudes and experiences these works set out to express. Paradoxically we are moving towards a situation where the physical uniqueness of the interface embodies what is left of art's materialistic traditions – everything else is becoming subsumed in the immersive immateriality of its software codes and visualization artifices. These experiments in interface design point to a future where the manufacture of highly individualized user interfaces may become a cultural industry unto itself.

Contemporary media art practice is formulating many of the central procedures of this emergent domain of the digitally expanded cinema. One such procedure is transcriptive and it covers a broad range of multi-layered narrative experiments that challenge the traditional notion of the central narrative in Hollywood cinema. One of the enablers of these more open narrative structures is the fact that a cinematic installation in a museum or gallery can be given temporal and environmental definitions that are quite different to those that are obligatory in a traditional cinema theatre presentation. This opens the way for multiple screenings, multiple layers of narrative, and in the case of interactive works the creation of navigable multi-branching and emergent narratives. The presence of computing techniques in these works may be more or less explicit, ranging from simply the need to synchronize the playback of multiple video streams, to the offering of an explicit interactive environment where the viewer can manipulate numerous narrative options. This enables recombinatory procedures that release the emergent narrative potentials of an interactively accessible database of audio-visual materials. Whereas purely transcriptive narratives are concerned with the re-assembly of defined sets of narrative paths, recombinatory narratives embrace the idea of an unascertainable complexity of path options, leading to an unforeseeable patterning of narrative conjunctions. Such recombinatory artworks are not uncontrolled systems because there is a meta-narrative authorship in the

definition of materials and in the design of the underlying algorithms that determine their manifold combinatory permutations.

Many contemporary artworks make the construction of navigable and immersive narrative environments their central feature and in so doing create cinematic formalisms that are quite distinct from the types of representation we are used to in the cinema. On the most fundamental level these works challenge the artificial optical properties of the camera lens with its framing and perspectival constraints, and instead attempt to constitute an expanded model of representation that is truer to the processes by which the body's sensory apparatuses apprehend the world. By creating virtual extensions of the image space that the viewer has to explore to discover its narrative subjects, the navigable artwork allows the interactive viewer to assume the role of both cameraperson and editor, operations that in the traditional cinema are prescribed beforehand. Even on the small scale of PDA and computer screens there is a new immersive condition that results from our virtual dislocation into inhabited information spaces such as are manifest on the Internet and in cyber games. The conventional cinematic mode of immersion derives from the darkened enclosure of the movie theatre. From Cinemascope to Omnimax it has striven to conjure a representational equivalence with the real world, but the physical and operational separation of the audience from these big screen spectacles remains a disengaging constraint. Contemporary artists are conducting various experiments with new optical and environmental configurations and drawing on techniques of stereoscopy, virtual reality and interactivity to achieve new levels of physical and imaginative assimilation of the viewer within the image space. And contrary to cinema's mere enlargement of the screen, these augmentations of the image space are sought after as an intensely experiential means of achieving semantic and situational extensions of narrative space.

The euphoric advent of the Internet and of related low- and high-bandwidth intercommunication technologies have already had enormous impact on the cinematic imaginary. All the unique qualities of this new medium, including its economy of individual production, its open distributed modalities of consumption, its ideological freedom and its idiosyncratic formal characteristics, has led to the proliferation of what is clearly now one of the major forces driving new cinematic configurations. The technologies of video games and the Internet point to a cinema of distributed virtual environments that are also social spaces, so that the persons present become protagonists in a set of narrative dislocations. The catchwords in this field of development, such as *multi-user*, *distributed*, *mobile*, *ubiquitous*, *wearable*, *mixed reality*, are the real technological underpinnings of what will be an increasingly broad range of experimental cinematic undertakings. Furthermore, through research in nano-technology and quantum computing science is already articulating the technical and theoretic strategies of completely new systems of image generation and image reception that conjure radical new territories of expression and experience for the future of the cinema.

The film industry is currently undergoing a far-reaching shift towards digital methods of recording, storing, projection and distribution. But the typical results are self-reflexive products where the ideological underpinnings of their commercial stratagems remain unchanged. No matter how fantastic and seductive their digitally enhanced images may seem, they tend to promulgate reactionary paradigms of the cinematic experience and of societal engagement with new media. On the other hand the innovative cinematic

formulations in contemporary media art shows us how a more radical and heterogeneous future for the cinema can be articulated. Harking back to the early days of the cinema, before industry's narrative axioms and production/presentation techniques were instituted as the overriding and exclusive modality of the cinematic experience, we find ourselves again in an era of idiosyncratic individual experiments that are aesthetically revelatory and which evoke a dynamic diversity of potential cinematic futures. An affinity between contemporary cinematic research and pre-cinematic experiments can be seen in the work of many of these artists – it seems that the spectacular differences engendered by new media are actually anchored in and are a seamless extension of long-standing discursive continuities and desires. From its earliest days as a shadow theatre the cinema was an experimental medium and it remains so today as it is being digitally transmuted. Clearly the creative evolutions and transformations of the cinematic imaginary cannot be separated the nature of the technologies that gives it these opportunities. It is therefore completely understandable that throughout the history of the cinema, and especially today, so much effort is dedicated to the creation of new technological resources as a means of enabling new modalities of expression and experience. The cross-disciplinary aptitude of many of today's cinematic artists, enable them to conjoin technological and aesthetic dexterity in an inseparable and interdependent whole.

As the cinema itself was in its earliest days a form of popular attraction, it is now interesting to observe that the so-called *location-based entertainment (LBE)* centres such as museums, expos and leisure parks are acting as test beds for interesting technological extensions of the cinematic experience. Offering for example panoramic and 3D full-dome projection environments, as well as experimental kinesthetic, synaesthetic and simulatory experiences of various kinds, their mass popularity signal the development of new forms of urban social activity centres that resembles the radical impact that was generated by the arrival of the cinema theatre and its ubiquitous social practice of 'going to the movies'. These large-scale high-tech and highly mediated mass social forums are the synergetic counterpart and partner of the parallel smaller scale media developments in the domestic sphere (the 'home cinema' and broadband connectivity) as well as the micro scale of portable media devices (the GPS/PDA/camera/cell phone). In the realm of digital creation, the essential scale-ability of its codes allows the cinematic imaginary to be seamlessly distributed amongst these various technological systems, opening dizzying perspectives of creative interpolation on all levels and in all places. We are witnessing an increasing multiplicity of techniques of representation and inter-communication, and the emergent expressive possibilities that derive from their invention and application, and an experimental dialectic in the individual and social dynamics of these resulting new forms of experience. The social vitality of artistic research in this area provides a platform for the broader discourse concerning the co-evolutionary challenges for humankind living in a machine culture and by assuming this responsibility at the fringe of an increasingly monocratic commercially driven cinema and games industry, new media art is pushing the creative and critical boundaries of the cinematic imaginary.

This article is partly based on previous writings in: Martin Rieser & Andrea Zapp, (eds.) (2002), *New screen media: cinema/art/narrative*, London: British Film Institute, and Jeffrey Shaw & Peter Weibel (eds.) (2003), *Future Cinema: The Cinematic Imaginary After Film*, Cambridge MA: MIT Press.

## **CONTRIBUTOR DETAILS**

Jeffrey Shaw is Chair Professor of Media Art, Dean of the School of Creative Media, Director of the Centre for Applied Computing and Interactive Media (ACIM) and Director of the Applied Laboratory for Interactive Visualization and Embodiment (ALiVE) at the City University of Hong Kong. He is also Co-director of the iCinema Research Centre at the University of New South Wales, Australia ([www.icinema.unsw.edu.au](http://www.icinema.unsw.edu.au)).

Jeffrey Shaw has asserted his right under the Copyright, Designs and Patents Act, 1988, to be identified as the author of this work in the format that was submitted to Intellect Ltd.



# intellect

[www.intellectbooks.com](http://www.intellectbooks.com)

publishers  
of original  
thinking

## Metaverse Creativity

ISSN: 2040-3550 | Online ISSN: 2040-3569  
2 issue per volume | Volume 3, 2013

### Aims and Scope

*Metaverse Creativity* investigates the creative content of user defined online virtual worlds. While an inquiry into the creative output generated in these environments is the primary focus, research of the underlying socio-economic, psychological, legal and technological framework as it relates to creative activity is also a subject of discourse.

### Call for Papers

*Metaverse Creativity* seeks contributions from creative practitioners and researchers of user-defined online virtual worlds who wish to increase the understanding and development of creativity in the metaverse. Topics include (but are not limited to) the following:

- ∞ The creative output
- ∞ The Avatar
- ∞ Education
- ∞ The social and technological infrastructure of the metaverse



### Editors

Elif Ayiter  
Sabanci University  
[ayiter@gmail.com](mailto:ayiter@gmail.com)

Yacov Sharir  
University of Texas at Austin  
[sharir@mail.utexas.edu](mailto:sharir@mail.utexas.edu)

Copyright of Technoetic Arts: A Journal of Speculative Research is the property of Intellect Ltd. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.