

AHRC ICT Methods Network Conference Panel

TALKING CGI

JOHN GRACE MEMORIAL CONFERENCE: THE ART OF BRITISH CGI, THE BROADWAY MEDIA CENTRE,
15 FEBRUARY 2007

Participants

Dave Mousley (Red Vision); Marc Craste (studioaka); Andy McNamara (Condor Digital); Johnny Hardstaff (Ridley Scott Associates).

Chaired by Professor Paul Wells.

Report by Paul Wells

'The Art of British CGI' was the first Conference event specifically dedicated to addressing the history, culture, aesthetics and technologies of computer-generated animation in Britain. It sought to combine a range of 'registers' and approaches in looking at this area of work, combining traditional scholarly analysis; practitioner experience and knowledge of contemporary practice; and anecdotal evidence of changing production processes and modes of exhibition.

The 'Talking CGI' panel was the centrepiece seminar for the day and was made up of four brief presentations offering perspectives on the different uses and effects in computer-generated imagery, and a panel discussion embracing core questions, and offering the opportunity for the audience to raise issues and contribute to debates.

Dave Mousley, Managing Director for leading production company, Red Vision, concentrated on two aspects of the company's work – *Red Legion*, the 'crowd' generation and simulation software for 3D live action drama and reconstruction, and *Ocean Odyssey*, for which the company were asked to create a range of undersea environments.

Massive has become the industry standard software for crowd simulation, and can offer an extraordinary range of 'crowd' dynamics, perspectives and points of view. Inevitably, it is very expensive, and prohibitively so for those companies working predominantly in television visual effects and animation. This necessitates the creation of proprietary software that enables companies to create persuasive effects on much reduced budgets. Mousley demonstrated 'Red Legion', showing how this was done, and how animated characters were created as a crowd with 'uniform' movement dynamics before variations of speed, size, action, imperative and terrain were added to facilitate crowd or group activity which was pertinent to photorealistic settings (i.e. battle scenes, collective labour, large gatherings in communal spaces etc.) or more fantastical or unusual contexts (i.e. thousands of cats occupying an everyday street, or rarely-seen ants in a jungle environment).

The fantastic seascapes, underwater vistas and storm scenes in *Ocean Odyssey* employed a range of particle systems that could enable a high degree of 'control' in the depiction of seemingly chaotic and 'natural' spaces. This echoed aspects of Red Vision's work in its BAFTA Award-winning effects for *Titanic: Birth of a Legend*, which showed the creation and ultimate fate of the *Titanic*, using a variety of approaches to effects and animation to create period authenticity, work taking place at unimaginable scale, and most importantly, the motion of both craft and sea. This kind of work has essentially re-defined traditional documentary and raised questions about representation, photorealism, and definitions of 'animation', that were all engaged with in the question and answer session later.

Andy McNamara, Senior 3D artist and CG Supervisor at Condor Digital, has a particularly apposite set of skills and knowledge in relation to the issues engaged with by the panel, in the sense that he has advanced technical and aesthetic talents that have underpinned research and development activity at IBM and Alias I Wavefront, as well as his most recent work at the BBC, Escape Studios and Condor.

McNamara's work, like others embracing specific and complex briefs in the commercial sector, has been necessarily underpinned by an approach to problem solving coupled with creative improvisation and specific applications of pertinent software. The BBC 2 idents proved particularly problematic because the iconic '2', the channel's brand identity, could in no way be altered or distorted. In one instance, this led to McNamara researching the choreographic principles of Morris Dancing in order to create a routine for a number of '2's in computer animation. The success of the interstitial led to plaudits from Morris Dancers everywhere, even though the 'bells' normally associated with these folk idioms were only present on the soundtrack and not part of the visuals.

Research is a crucial part of the process in all such projects, and another, featuring a robot-style fly required a high degree of work on wing-shapes, aerodynamics and flight patterns, so the creature would be plausibly authentic, especially when shot in close-up. Like the work done by Red Vision, this kind of computer animation can create material which is not possible to attain with conventional cinematography, or without a vast budget and an extended timeframe. This ensures that the viewer can have a level of potential interrogation and insight which emerges from a controlled, simulated and constructed context or environment rather than through what is often the 'happy accident' of recorded 'actuality'. As an educational tool, computer-generated work is, therefore, extremely valuable and enabling. McNamara also revealed the time saving device of creating computer-generated, and not hand-drawn storyboards for the sequence, which acted as templates for the later animation.

Marc Craste is senior animation director at Studio AKA, and made the BAFTA award-winning short, *Jojo in the Stars*, as well as highly-memorable commercials for the National Lottery and Lloyds TSB. Craste's showreel is an exemplar of the long and honourable tradition within the animation field of making 'experimental' films for commercial clients often keen to embrace distinctive visual idioms to identify their products, while seeking to make personal work which best represents a different kind of aesthetic or technical outlook. The work of the Pixar Animation Studio in the United States has essentially defined computer animated features in recent years, gradually replacing Disney's signature 'Classical' styling, with the new aesthetics which have essentially privileged a high gloss colour palette and spectacular movement dynamics through the illusion of seemingly 'gravity-less' 3D space. Craste stressed that he wanted to challenge this dominant aesthetic by 'dirtying up' the 'look' of the piece, and using other kinds of visual sources from German Expressionism, art direction akin to the Universal gothic horror films of the 1930s, and the Surrealist tendencies of the work of Georges Melies, Tod Browning and David Lynch. Craste essentially re-defines the nature of computer-generated imagery through the use of established cinematic iconography, which ironically, points up the possibility at least, that one day the computer might replace film as an origination medium.

Craste's address, related to the presentations by Mousley and McNamara, readily extended the Conference's theme of challenging the seemingly received knowledge of computer-generated imagery and animation as a 'homogenous' entity. Earlier in the day, Professor Paul Wells of the Animation Academy, LUSAD, had suggested that there are arguably three distinctive categories, which define 'computer animation'.

- First, computer-assisted animation, which is the use of the computer in the determination of motion control; the deployment of specific kinds of software in the completion of process tasks normally undertaken 'by hand'; replacing the camera as a recording device etc. This is essentially the use of digital technologies as a media aid.

- Second, computer-facilitated animation, in which the computer is deployed in the revision and re-determination of other already established – principally 2D - material approaches i.e. drawing, painting, collage, scanned photo-montage etc. This would also include the data used from ‘motion capture’ or ‘rotoscoping’ as it operates as an index of performance motion. In this case, digital technologies function as adaptive media.
- Third, computer-modelled animation, which sees the computer as the core context in the construction of ‘worlds’ within a 3D environment, and might readily be called ‘digimation’. This model uses digital technologies as origination media.

Clearly, these aspects may overlap and combine in some projects, and in more developed multi-media works. At present, it is clear that computer-assisted animation is, in effect, a relative orthodoxy, present in most forms of animation production in some respect; computer-facilitated animation, the province of more experimental or progressive work, represented here by Craste and Hardstaff; and computer-modelled animation, largely ‘cartoonal’ in its current dominant forms, unless performing a more generic function, for example, in work undertaken for documentaries or educational purposes, or within the ‘photorealistic’ contexts of live-action feature or television (post) production, here represented by Mousley and McNamara.

Johnny Hardstaff, commercials director, personal film-maker, and graphic iconoclast, problematized these issues further by noting some of the potential contradictions and ethical dilemmas in using computer software and hardware, noting its origination in military contexts, and its ‘co-option’ by corporate culture in facilitating the ‘shock’ and ‘awe’ of commercial products and services. Using deliberate provocateurs like ‘advertising is the artillery of CGI’, and suggesting CGI is *the* corporate language in ‘scripting reality’, Hardstaff opened up the ideological issues embedded in computer animation aesthetics. Hardstaff, though readily admitting to being seduced by the potential of the applications, was concerned that the easy spectacle or photorealist precision afforded by digital technologies would produce a lack of questioning *by* audiences, or challenge *to* audiences. His own work, therefore – often a re-contextualization of established visual idioms – seeks to offer subversive imagery as a model of undermining the corporatization of contemporary visual culture.

Hardstaff’s views acted as a suitable provocateur and challenge for the panel / audience exchange which ensued after the presentations. One of the received views of the computer is that it is ‘just another tool’ for creative practice, and one of the most oft cited metaphors in the animation community, is that the computer is ‘just another pencil’. Craste noted that there is always a ‘distanciation’ from the original work and its final outcome as a moving image piece, and that the processes required in computer animation were no different from some of the procedural requirements in any form of film-making. McNamara suggested though, that the traditional view of the authenticity in literally ‘making a mark’, was already being challenged by the ways in which different models of ‘interactivity’ were being facilitated technically, and that future applications would be characterized by ever-improving interfaces which would contribute to ever greater ease of expression. Mousley added that the work would always be characterized by who is creating the material, and for what context, especially as ‘the audience’ were increasingly cine-literate in their outlook and expectation.

A key area of concern proved to be how computer animation could so easily facilitate ‘photorealist’ representation, and therefore, challenge the apparent ‘integrity’ of documentary or factual programming. The panel responded by suggesting that photorealism had never been an index of ‘reality’, and that all visual representation was in some way authored and illusionist. Hardstaff reiterated the view that even this was informed by proprietary intentionality of the software, and merely embedded a corporate outlook. The panel challenged this idea by suggesting that the artist could subvert and transcend the limits of the technology. Crucially, this very point represented a significant shift in the ways in which the history of computer-generated animation had, and would continue to change, collapsing the traditional ‘schism’ between the stereotypical computer ‘geek’, largely from a science and technical background, and the ‘creative aesthete’, normally from an arts and humanities background.

The audience readily engaged with issues concerning authorship and representation, and recognized that though the tools available through computer applications were enabling, there was still an imperative to tell good stories or have something to say in the work. The Chair noted that it had been significant in recent criticism of seemingly less successful CGI features, that the computer had once more been characterized as 'cold', and the implied instigator of poor quality material. The panel, and the audience response, did much to reiterate the view that it is not the computer that makes art, but artists, and that the work shown by the panellists was vindication of high quality and varied outcomes in the progressive use of computer-generated imagery.