Computer Baroque: **Computer animation 1987–1995** by Richard Wright
http://www.animateprojects.org/writing/essays/r_wright

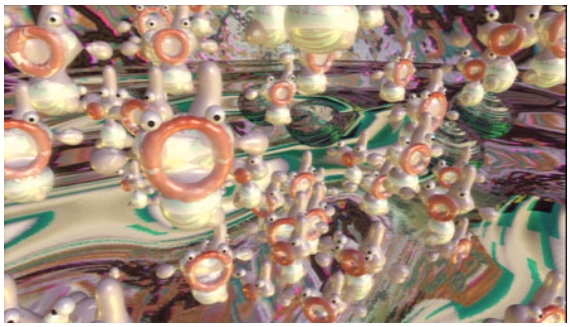
(programme notes for screening at Tate Modern, London on 20th March 2009 and online at www.animateprojects.org from 14th April to 14th July 2009).

‘Artists wanted to push the computer as far as it would go, creating visual transformations that defied previous traditions, blending image and music and text, and applying scientific ideas as new sources of inspiration.’

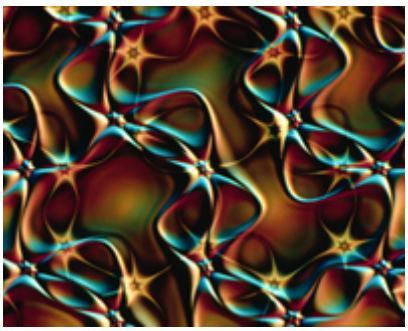
This programme of artists’ computer animation is from a period that I think of as transitional, from the late eighties to the mid nineties. I wanted to rediscover a neglected body of work that contains many of the artistic idioms and techniques we now take for granted but in a much more embryonic and fertile form. Despite the technical limitations that resulted in chunky objects, squeaky clean surfaces and low-res video, these remain inspiring achievements and the first glimpses of some emerging aesthetic trends that would later become restricted to more mundane genre forms (such as the swirly music visualisations of the Windows Media Player). And for that reason I think this can now be seen as the first mature period of computer animation as a distinct artistic form.

Many of the artists represented already believed that the computer would have an enormous impact on the language of film but had been frustrated in their attempts to use it. Then, at the end of the 1980s, there was a marked upsurge in cheaper, easier technologies and greater access to institutional facilities. This produced a slightly intoxicating atmosphere where artists felt they had been let off the leash at last. Artists wanted to push the computer as far as it would go, creating visual transformations that defied previous traditions, blending image and music and text, and applying scientific ideas as new sources of inspiration.

There appeared a Baroque style of unrestrained artifice - a collision of aesthetic traditions and a disquieting sense of vertigo induced by rapid technological advance. There was a dramatic increase in the scale of ambitions and a desire to create ever more extreme effects in order to probe the limits of this domain: to digitise everything and bring it under one regime, to depict a reality with such a blinding precision that it became both outrageously fantastic and irresistibly convincing in equal measure. At the same time, this precision brought with it a kind of horror, as though its machined surfaces might no longer need our human imprint. With its totalising fantasies of control, this was the era of the ‘New World Order’, the first Gulf War, smart bombs and the first stirrings of the virtual catastrophe that became known as the Millennium Bug.



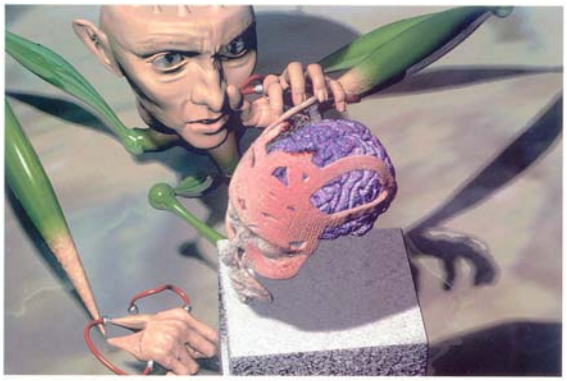
Yochiro Kawaguichi, Eggy (1990)



Karl Sims, Primordial Dance (1991)

At the Tate Modern launch of Computer Baroque, we began the screening with two films (not available for the online exhibition), that marked the beginnings of this period, and illustrated one of its defining characteristics - the intense traffic between art, science and industry occurring at the time. Victory Sausage (1987) is a rarely seen film made by pioneer experimental filmmaker

John Whitney. Whitney wrote that the film signified a personal ‘victory’ for him because he had at last been able to use the computer to achieve a mathematical fusing of music and image that had been his lifetime goal. First seen at the sprawling SIGGRAPH computer graphics conference in Los Angeles, for younger artists it felt as though this giant figure had declared that the computer had finally come of age as an artist's medium. The Channel 4 logo designed by Robinson Lambie-Nairn (1982) was also a landmark, if legends are to be believed, in requiring the contribution of nearly every artist, designer and software engineer in the UK then practicing computer animation (http://www.youtube.com/watch?v=R86_TLuI51w). Despite its apparent simplicity, it retains an elegance and directness that we can appreciate today. Yet when it came to render the final version it was discovered that there was no computer in the UK powerful enough to complete it in time for the station launch. So the producers at System Simulation turned to a US company called Triple I, finally rendering it using the supercomputer facilities of its Motion Picture Group, a group that had been set up by John Witney’s son, John Whitney Jr, in 1974.



Chris Landreth, Data Driven: The Story of Franz K (1993)

There were some important changes during this period that influenced the way artists worked with technology and media. Previously, to gain access to even basic computing power, it had been necessary for artists to work with scientists and other researchers. Now it was becoming easier for artists to write their own software and have more equal collaborations with scientists, and some artists had science or engineering backgrounds themselves (Karl Sims, Yoichiro Kawaguchi and future Oscar winner Chris Landreth). Working closely with scientists encouraged works that drew on scientific ideas, for example, by replacing filmic structure with the principles of evolutionary development (William Latham’s Evolution of Form, 1990). Karl Sims, in particular, was a science major from MIT who was also talented as an animator. He knew how to present the latest computer graphics research simply and directly in a way that brought out what was both scientifically and artistically original about it (Particle Dreams, 1988 and Primordial Dance, 1991). Many of these ‘research’ based works would be presented in the form of yearly episodes at festivals and conferences, as though we were witnessing the successive stages of a converging investigation.

Another big shift was the range of basic hardware and software that was becoming available. Nowadays the only ‘choice’ we have is the largely illusory one between Mac and Windows. In those days there were centralised mainframes used by artists at academic research centres, specialised graphics workstations that might allow downtime access to artists, right down to the little Commodore Amiga - all radically different technologies and their software. Individual artists seemed to gravitate to and absorb one of these particular technologies and appear to identify with it personally. Filmmakers like James Duesing and Ruth Lingford for instance, enthusiastically took to desktop computers like the Amiga and used it with a directness and lucidity that seemed to intensify their animated fantasies (Maxwell’s Demon, 1991 and What She Wants, 1994).

Jason White and Richard Wright, Heliocentrum (1995)

The Butler Brothers, The City is No Longer Safe (1994)

This greater accessibility to computing technology had several points of connection with what was then referred to as the 'democratisation of media'. The advanced electronics of video cameras produced low-cost, high-quality camcorders (sometimes paradoxically referred to as 'low tech' compared to CGI) and led to the rise of the independent media movement. This enabled Paul Garrin, then known for producing the video sequences for Nam June Paik's sculptures, to video the New York City riots of the 1980s and combine them with 'high end' digital video effects to create a classic piece of polemic (Free Society, 1988). And my own film, Heliocentrum (1995),. made with Jason White, combines Despite TV's documentary footage of the London Poll Tax Riots with 17th century Absolutism. More user friendly programming languages allowed artists like John Tonkin and Beriou to write their own software to do poetic physical simulations and complex image warping. This openness of both recording equipment and synthesising equipment are brought together quite explicitly in Tamas Waliczky's The Garden (1992), which he subtitled a '21st Century Amateur Film' (included in the Tate programme and available here at http://www.waliczky.com/pages/Wallada-Bioscop/The-Garden/The-Garden.htm). Not only did he use home video footage of his young son in the family garden, but he also reconstructed the footage using a DIY 'water-drop perspective' system that he programmed himself.

John Tonkin, These Are the Days (1994)

Tamas Waliczky, The Garden (1992-94)

There was an interest in the generative potential of computer software, the ability to use algorithmic systems to automatically produce art (a development of certain tendencies in English Constructivism). The term 'generative art' at this time really meant image synthesis: creating new kinds of visual forms that could not be imagined in any other way and the mercurial kinds of transformations between them. Today, with so many synthetic images available, our attention has turned away from creating them to how to cope with them - how to search for them, display them, own them. And I think something has been given up here.

The most recent works are from the mid nineties, which seems to me a point at which some kind of tide was turning. Toy Story, released in 1995, was the first fully computer generated feature film, and fixed in many peoples minds a certain idea of what computer animation now was. The same period saw the rise of specialised computer animation festivals that started to categorise

and reinforce particular styles and genre forms, such as 3D cartoons and ‘motion graphics’. Animators learnt how to use Flash and got jobs embellishing websites. Electronic artists moved away from cinema and time based art, chasing the technological (and funding) wave into multimedia, the internet and the more spatialising practices of New Media Art. Something has been given up here, too.

I’ve ordered the films broadly according to their artistic intentions and to bring out the ways in which artists’ incorporation of technology changed over the period. At the beginning, there is the closer alignment with its scientific origins and an almost celebratory excitement. This starts to shift to a more critical yet still committed engagement, such as the life of digitised signs and codes analysed by Peter Callas and Simon Biggs. Later works look out to the social and political conditions of their own making, such as in the satire of Shelley Lake and the Butler Brothers. Some of these films exhibit qualities that look familiar to us now, from flashy pop promos or Hollywood sci-fi blockbusters. Some may look like the work of deranged scientists. But we can still detect wider imaginative forces that can tell us something today about how art and technology evolve together, how they drift apart, and the value in revisiting what is left behind.

At the Tate screening, the Computer Baroque programme was complemented by a screening of David Blair's WAX: or the Discovery of Television Amongst the Bees (1991), possibly the first digital feature made independently by an artist (http://www.iath.virginia.edu/wax). It was a big influence on many artists at the time and a film that dramatically ties together many of the themes mentioned above. Its achievement, as Blair put it at the time, is in using computer graphics and digital imaging to ‘process the narrative as well as the image’, or as I would say, in the most serious and sustained attempt to use computer animated transformations to extend the range of ideas that can be narratively constructed. The result is a compelling story inspired by the first gulf war, intelligent missiles, psychic research and beekeeping that contains images that will linger in the mind long after the movie ends. It is now eighteen years since the film was released and Blair’s second feature The Telepathic Motion Picture of “THE LOST TRIBES" http://www.telepathic-movie.org is only just now nearing completion. It will emerge into a world that is very different to the one that greeted WAX. But now could be as good a time as any to begin to reinvent something that used to be called ‘computer animation’.

David Blair, WAX: or the Discovery of Television Amongst the Bees (1991)