Soft Future close your eyes. Now, imagine a world, the world of the future. what do you see?

RICHARD WRIGHT

London Guildhall University, U.K.

ill you see a technological utopia, a city of gleaming metal spires orbiting spacecraft, a world spared from nuclear annihilation and united by a common belief in the benefits of rational progress? Nowadays, probably not. At most your vision is likely to be an end to recession, economic stability for at least a while, a new order of gray-suited bureaucracy. Perhaps you see nothing at all, just a hazy mist of half-forgotten ideals. But when I close my own eyes there is still something there lurking in the background, like a memory chopped up into disparate fragments. It coagulates, forming an surface—it is the surface of a computer screen.

Technology was the collective vision of the future in the West for quite some time. Now, technology in its most virulent form as electronic media still tries to keep our beliefs about the future alive, by recreating them as images. With my mind's eye, I can see pictures projected on the screen inside my head. They are special-effects movies, "Terminator 2," "Robocop," and "The Lawnmower Man," they are computer games, they are documentaries on virtual reality—and they are from the future. Media events seem to have become the repository of our ideas about what the future would be like, but their function is not just to represent those ideas, to symbolize a set of goals that are being actively pursued, but to actually become the future itself. For the construction of sensational scenes of fighting robots, space flight, and mind expansion, use of the most advanced digital imaging technologies is necessary. Each new movie feels compelled to outdo previous efforts in the seamless surety of its effects. Every transformation must be shot full-frame, without any cause for the viewer to claim sleight-of-hand, and it must be utterly convincing, making any suspension of disbelief guite unnecessary. Technologically mediated narratives of 'the future' are used to construct the contemporary perceptions of technology itself. This perpetual and constantly reinvented future is represented today by imagery generated by modern computer technology like mathematical visualizations, scientific graphics, digital effects, and animations of virtual environments full of "images beyond imagination." Technology has become a shadow cast by the future onto the present.

But behind this screen of media technology lies a sense of loss. It is the loss of what Jean-Francois Lyotard called the "grand narratives" of the West, in particular the enlightenment dream of rational progress. None of the utopian predictions of the past seem to have been fulfilled. There is no universal peace based on the impartiality of scientific thinking, no achievement of the leisure society, and the new generation has been described as the first to be economically worse off than their parents were.Science no longer delivers, and media presents just a memory of the future. Instead of trying to build a better tomorrow, we now use the latest media technology to simulate visions of the future in music videos and special effects films much more efficiently than having to change the world itself. This is not a hard future of imposing architectures and hurtling spaceships, but a soft future of media extravaganzas and digital effects, existing synthetically on the screen. The result is that we are living in a requiem for a future that never was, played by a virtual future that always is.

The ideal of continual progress has degenerated into that of constant novelty and distraction. Technology today has to struggle hard to keep up with the expectations that people have of it, always having to surprise them with something new. The imaging technologies needed to produce the effects in science fiction films are often more advanced than the state of the technology they seek to imitate. This is as though it is more important to see what an advance in technology would be like than for it to actually exist. It is not that science has ceased to grow and expand but that the areas in which we expected it to succeed and change our lives for the better seem to have been deflected onto other paths.

The more that new media offers us in terms of creative potential and technical agency, the more that they become their own subject. Consider virtual reality technologies as the ultimate means of giving complete form to the full extent of the human imagination. When we look around us to see the results of their applications, we see interactive games about more technological subject mattergiant battling robots, star fighters, mutant experiments—the creation of a world in image form that has otherwise proven too costly to achieve. Technology enters discourse not as fact, but to provide evidence of its own myth. Its hypothetical repercussions are as misplaced as discussions of the social impact of 'space travel' were in the 1960s as though it were already an everyday event. Now that the promise of human space flight to alien worlds has receded, NASA attempts to keep the magicalive by developing virtual exploration such as with the 'telepresence'system. This remote sensing and control apparatus allows a user based on earth to experience the sights and sounds received by a robot that may be operating millions of miles away in deep space or on other planets. An interactive 'movie' created out of data accumulated by the Viking One has also been used to simulate a flight over the landscape of the planet Mars. This surrogate astronautics can be enjoyed in a consumer version by anyone with a home computer and a laserdisk player as though it is a video game. As well as visible phenomena, synthetic imagery can also be

used to represent other astrophysical events such as magnetic fields, and interstellar combustion as travel scenery. Thus we see the latest technology working hard to prevent the glamour of space science from fading.

Computers are advancing, in order to process more information, to generate more effects. Bereft of any humanitarian ideals, technological determinism is left to pursue increasing functionality and a spiraling extrapolation of its specifications. The goal for the electronic media artist is assumed to be that of increasing quantities of tools for more and more minutely controlled manipulations of the image. The range and diversity of functions for computer-aided art and design work has multiplied to the extent that it outstrips our outmoded notions of creativity as aesthetic inventiveness. The insistence of this goal of unlimited expressive power seems to be an opportunity for the computer to display its features and abilities and invite our admiration, regardless of whether they meet a pre-existing artistic demand. The correct vehicle for this panorama of technical conquests is the show reel, the superlative form of state-of-the-art posturing.

No matter what technical potential a new medium promises, it must connect with a current cultural practice in order to be taken up by a community and exploited. This inevitably results in many of its expressive abilities being constrained or completely ignored because they are not relevant to the needs of a certain group. But a Western industrial society operating under the pressure of continual technical progress introduces a conflict into this situation. As more is always assumed to be better, it is assumed that the more technical features and options that a device provides the more it constitutes an advance on what has gone before. In the field of art and design this becomes a strategy of marketing computer media as providing a range of expressive means far beyond what was possible with 'traditional' media, even though many functions may have no obvious application. It is considered up to the artists' boundless creativity to find interesting things for the new equipment to do. This highlights a fundamental contradiction at work in contemporary Westem thinking. On the one hand there is a fiction based on the rational perfectibility of the material world through technical agency and an increasing of information exchange. This is manifested in the history of art as the modernist project of continual aesthetic innovation and increase in formal devices. But on the other hand are the operation of cultural practices as constructions restricting the use of knowledge and materials to within parameters considered relevant to its concerns, usually defined in historical and sociological terms.

When art is industrialized under the modernist rubric, the equation is biased toward greater expansion of the means of production for its own sake. Artisticcreativity is judged to be an insatiable beast that cares only for the next stylistic advance or fashion through which it can excrete some ready-made'content.' The future of art is required to settle into the form of an unbroken stream of new expressive tools. This tendency is supported by eager computer manufacturers who strain to develop the new media and to meet artistic problems that have not vet arisen. Thus the aesthetics of tomorrow are constantly preempted by the latest technological commodities and brought forward into today. The idea of the future of art as a place in time has been eradicated and replaced by the future as an attitude of mind embodied in a business strategy.

But the cultural reaction to this new futurology has been to undermine it by using it to reconstitute the past. Look at the explosion of references to science fiction periodicals and serials of the fifties and sixties that have occurred in contemporary media and advertising. If modernism has insisted on a logic of progress toward the ultimate explication of form, then postmodernism disrupts this by placing the project into a space outside the one-way march into the future and leaves it circling aimlessly but frantically fabricating new styles and effects. The past of Dan Dare, Robbie the Robot, and Astonishing Tales resurfaces as a memory of a future of arrogant optimism and coercive submission to technological imperialist ideals. The absurd machines of Heath Robinson from the 1920s and 1930s are recreated as computer animations that lament our belief in the value of scientific improvements to domestic life.

In the original film "Terminator," the murderous robot that comes from the future dresses as a leather-clad motorcycle hoodlum. In the sequel "Terminator II," the first robot returns to protect us from the new T-1000 robot that can take on any identity and seems impervious to force. Through T-1000, we experience a future that can take on a variety of threatening forms, as a trusted law enforcement agent or even our own mother. We find we are now encouraged to trust the constancy of the original terminator cyborg, still dressed as the romantic biker anti-hero of the past, coming on like the young Marlon Brando in "The Wild Ones." But we need not unduly fear the liquid steel cyborg of "Terminator II," remembering that James Cameron unfairly chose not to show us that it could just as easily have turned itself into the Swarzenegger cyborg if it had wanted.We must not reject the prospect of a future that is always altering its form by turning back to the predictability of the urban cowboy, an image as artificial as its liquid nemesis.For the appearance of a uncertain future also frees us from the obligation to follow failed solutions, images that we can now cast back into the melting pot.

Living without a future, the electronic image has become not a window into an external tomorrow, but a mental projection. Like Freud's dream image, it is a screen upon which we can interpret the signs of our desires and anxieties. But the computed image is not read like the convenient symbolisms of a single inscribed idea or belief. It is a soft image, impressionable, amorphous, and badly behaved, like the id of rationalism's eqo. It contains the unconscious of technology, in which we find the roots of half-submerged yearnings for new beginnings. Just as digital imaging allows the image in the cinema film to be transformed and recreated into any future world that is currently desired, so the trajectory of modern progress is deflected from its original course into a number of alternative scenarios. The logic of technological determinism is now threatened with its imminent fall from grace as the future is replaced by the image, the soft image. The relentless historical surge of fundamentalisms toward their belief in their own inevitable triumph is met by the blank tolerance of digital media that now stands in the way of their single image of victory.

Digital technology has no form—look at your computers, they are all the same. They have no mechanical parts, they are just boxes of tiny silicon cubes. They are becoming smaller, they are becoming invisible. Soon they will disappear from the real world altogether and will exist only through the images they project. This technology does not act, it evokes. It can implant the images of hidden desires in our brains, there to grow and germinate.

When the human imagination tries to exercise its powers today it can find itself strangely limited by what is possible with current state-of-the-art technology. For our powers to conceive of new ideas and situations seem constricted to produce solutions in terms of technological developments rather than trying to think of a new social strategy or political force to replace the disappointments of the last de-

cade. But this technological colonization of the imagination provides a collision point from which a new stimulus can direct scientific advancement. Deprived of a clear vision of the future to work toward, the researchers at the 'blue sky' Californian science parks wrack their brains to find new challenges for their intellectual might. They must be put to sleep and learn to dream their own dreams until they can live without the comfort of the future. Remember the science fiction writers hired by the U.S. military to brainstorm ideas for new weapons and who came up with the Star Wars system of space-borne laser guns.1 Now that the dissolution of the evil empire has removed the logic of that 1D race for hardware supremacy, what can the science fiction writers offer us in the soft future? Our crystal ball is a video frame store and its pixels are already energizing in response to our thoughts.

Through the digital image society has started to dream again. The dream is a land beyond time—it can fit a whole lifetime of possibilities into the duration of a single night. Its future cannot be charted or planned, it is fuzzy, soft. A world without a future is a world of dreams. When we look into the computer screen we see the dreams of technology unfolding. But now they can be dreams that we can interpret to tell the stories of our own lives.

Close your eyes.

Notes

 In 1980 one of the informal groups advising President Reagan on what became the Strategic Defense Initiative was the Citizens Advisory Council on National Space Policy, agroup run by two science fiction writers. Chairman Jerry Pournelle later stated "...sci-fi writers...turned out to be very key in this process because they could write the documents that were understandable by the President."

An earlier version of this essay was published in the VideoPositive93 catalog, and also in Variant Magazine, May 1993.

Contact

Richard Wright Digital Imaging Group London Guildhall University 41-71 Commercial Road Room 112 London E1 1LA U.K. 071.320.1833 071.320.1830 fax

Permission to copy without fee all or part of this material is granted provided that the copies are not made or distributed for direct commer cial advantage, the ACM copyright notice and the title of the publication and its date appear, and notice is given that copying is by permission of the Association for Computing Machinery To copy otherwise, or to republish, requieres a fee and/or specific permission.