The real virtual living

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1 Abstract

It is the contention of this paper that posthuman creativity is already taking place, rather than solely existing in the domain of a biomechanical cyberpunk dream. Manifesting work in both cyberspace and meatspace, the posthuman in this case is understood to be someone who embraces digital creative technologies (both hardware and software) taking advantage of the artistic opportunities they afford.

The effects of Moore's law over the last two decades has led to a profuse amount of cheap and obsolete computer equipment, both open and closed system. These castaway gadgets have become an abundant raw material, sparking the burgeoning movement of creative hardware hackers.

The Internet has enabled the creative subversion of technology, through the dissemination of new creative tools and techniques. Closed video games consoles are being repurposed into new expressive platforms and tools. Indeed, the retro video gaming movement has grown beyond the digital domain, bringing pixels to oil painting and new flesh to performance art.

The posthuman aesthetic, conceived in science fiction and nurtured online, is now very real and tangible.

2 Introduction

He'd operated on an almost permanent adrenaline high, a byproduct of youth and proficiency, jacked into a custom cyberspace deck that projected his disembodied consciousness into the con sensual hallucination that was the matrix. (Gibson 1984) In this scene from *Neuromancer*, William Gibson presents a typical cyberpunk vision. In this future world people lead dual lives augmented by technology. They achieve this by 'jacking in', in other words, plugging their brain via a network cable directly into a computer system. By doing so they would become part of an alternate reality, free from the physical limitations of the 'real world'.

2.1 The cyberfuture

A consistent vision of a biomechanical future permeates twentieth century science fiction. From the steel hand of professor Rotwang in Fritz Lang's 1914 film *Metropolis,* signifying his role as the link between the human and machine races, to the Gibson inspired neural interfaces of the *Matrix* and *Ghost In The Shell* in the 1990s.

The potency of these images was not lost on the general public who consumed them, particularly those with an interest in art and technology. In his online comic 'The Guy I Almost Was', Patrick S. Farrelly recounts the influence that the Cyberculture press, such as *OMNI* and *Mondo 2000* had on his life as a young teen. These publications, with their mix of science fiction and science fact, placed the prospect of a posthuman existence for all, as a near and very real prospect.

Farrelly's story begins in 1978 where his is pictured drawing his 'custom super van for the year 1990', a space-age bachelor pad on wheels, where his future self was a cyber god. Fast forward onto 1993 and the author finds himself a penniless student, still eagerly waiting for the brave new cyber dawn.

2.2 The cyber reality

Patrick's illusions are crushed after attending 'Cyber Expo 93', where what he thought would turn out to be a meeting of kindred spirits, turned out to be a 'bunch of rich snobs comparing expensive toys'. This grief was further compounded when he met a 'H.M. Ludens', the editor of a 'Future Shock' magazine who tells him that 'There is no Cyberculture'. Ludens explains further by stating that those who heavily promoted the concepts of 'Cyberculture' and 'Posthumanism' did so with the aim of creating lucrative careers for themselves, aiming to become consultants for the corporations who wanted to buy into their new zeitgeist. Disillusioned with the cyberculture movement and the people behind it, Patrick had an epiphany and vowed

to forget about all futurecentric trends, preferring to take control of his own destiny instead of waiting for the future to take care of him.

3 The network augmented human

In 1994 Patrick found employment in coding html in the new web page design industry. By this point the Internet had made the transition beyond underground bulletin board systems, universities and the military, to become a new form of mass media beamed into people's homes worldwide: a transformative force bringing electronic communication and information exchange to a new level of accessibility. There were no visceral flesh to network connectors needed to access this information superhighway, just the familiar screen and keyboard of a home pc. The human race was now computer networked.

3.1 An extension of the hand

As the 1990s moved on, it was clear that the impending new millennium was less and less likely to resemble the cyborg future of the film *Blade Runner*. Thanks to the World Wide Web, electronically networked humans were finally in a reality, without the need for 'jacking in' via gory 'bioport's. This reality was further augmented by the convergence of the Internet with mobile phone technology, enabling media-rich virtual telepresence. The cyborg motif of the robot hand became an appropriate figure of speech in the home of mobile communications giant Nokia.

In the last couple of years, Finnish teenagers have quit referring to their mobile phones as jupinalle 'yuppie teddy bears' and started calling them kannykka or kanny, a Nokia trademark that passed into generic parlance and means an extension of the hand. (Silberman 1999) (Townsend 2000)

Conversely, the Power Glove from Nintendo in 1989 is a prime example of a peripheral directly referencing the cybernetic hand. Intended for use with the 8-bit NES console, the Power Glove featured flex sensors in each of its fingers, as well as ultrasonic sensors to determine its distance from the computer screen. Supported by only two Nintendo games, it failed to reach appeal for the mass market but it still remains an object of retro fetishism and a source of inspiration for research developments in homebrew virtual reality.

3.2 The new flesh

Australian artist Stelarc has taken it upon himself to physically embody the circuit grafting ideals laid down in cyberpunk literature. Working in collaboration with scientists and doctors he has connected up his body to a range of machinery, communicating to these through a nerve to muscle activated software known as Simbod. His works and performances bring to life an unnerving vision of a biomechanical future, presenting a symbiosis of metal and flesh akin to Tsukamoto Shinya's 'Tetsuo The Iron Man'.

If Baudrillard's and Virilio's most extreme hypotheses argue that postmodern technology reduces the body to the condition of the handicapped, Marinetti, Chopin and Stelarc all demonstrate how technological modifications of the body reinforce the impact of installation art and performance art exploring (and manifesting) individual identity. (Zurbrugg 1999)

4 Posthuman creativity

The posthuman is fully comfortable creating with the technology that surrounds them. Electronic machinery, circuits and code are merely an extension of their own physicality and consciousness, malleable into the shapes of their expressions. Analogue synthesis pioneer Bob Moog explains his thoughts on the connection between the artist and the medium in the Hans Fjellestad's 2005 documentary:

I know for a fact that musicians make contact with this board inside the instrument here ... not physical contact ... (Moog 2005)

4.1 New paints, new canvases

The wealth of media available on the Internet, coupled with the availability of cheap computer hardware, affords a near infinite palette for the digital creative:

Everyone has been bombarded with media. We've almost been forced to use it as an art form. It's like anything. If people were handing out paint for free on the streets, I'm sure there would be a lot more painters right now. (Gillis 2007) The 2007 documentary on digital copyright 'Good Copy, Bad Copy', Gregg Gillis a.k.a. DJ Girl Talk speaks about the saturation of media and how instead of been overwhelmed by the mountain of commercial music, artists are taking this readily available product and recycling it into their own compositions. Sven König's copyright infringement application 'sCrAmBIEd?HaCkZ!' takes media sampling and automates the process. The program splits up music videos into fragments and then reassembles these audio pieces live in sync with any inputted audio, such as vocal percussion: a musical tool born of the Internet age, processing the human voice into a reverberation of information fragments.

4.2 Digital throwbacks

The rapid evolution of computing hardware and consumer electronics has left an abundance of digital ephemera. Obsolete video games consoles, music making hardware, electronic toys. These vintage gadgets are not only of nostalgic value but also have great creative possibilities in the hands of the posthuman.

Two interlinked musical subcultures, the circuit bending and chiptune scenes, share this sentiment for the lo-tech gadgetry of the past with a hardware hackers zeal. Circuit bending is the creative short-circuiting of cheap electronic toys and gadgets to create new and unique sounds. Chiptune music, characterised by a 1980s video game style, is commonly composed on vintage gaming consoles such as the original Nintendo Gameboy. Both movements have used the Internet to effectively spread their subcultures worldwide, in turn leading to global gatherings in New York City for the Blip Festival and Bent Festival.

The field of low bit music has carved a unique aesthetic, harking back to the 8bit era but also evoking the vision of the cyberfuture promised to Patrick S. Farrelly's generation. Chunky pixel art with saturated palettes is mixed with imagery of first generation consoles and wire-strewn printed circuit boards. In this visual world the much maligned Power Glove is a mighty gauntlet rather than an obsolete plaything. Pixels bleed off screen onto t-shirts, album artwork, sculptures and paintings. Art reincarnates a past generation of gaming inspiration as a musical subculture of the present.

5 Conclusion

Far from been a fictional character in a romanticised version of the future, the posthuman, as an individual who effortlessly draws upon the digital domain as a creative source, is very much a widespread phenomenon. However, the bond between the digital creatives and their hardware tools is set to take a step closer to the visions of posthuman fiction.

Researchers at the RIKEN Brain Science Institute in Japan have succeeded in displaying images extracted by scanning a test subject's brain directly on a computer monitor. The benefits for artistic pursuit are immediately obvious. The ability to transform thoughts digitally into images marks a remarkable new step in human-machine symbiosis:

The researchers suggest a future version of this technology could be applied in the fields of art and design - particularly if it becomes possible to quickly and accurately access images existing inside an artist's head. (Chunichi 2008)

The disembodied conscience of Gibson's fictional writings may become a literal tool of posthuman creativity after all. Science fiction eventually becomes science fact.

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