

## VORSCHLAG II

### **Tomorrow's People: how 21st century technology is changing the way we think and feel**

by Dave Clements

In *Tomorrow's People*, Greenfield, renowned neuroscientist and director of the Royal Institution, indulges her literary ambitions to create a speculative dystopia owing much to Huxley.

In this updated Brave New World, she imagines a near-future when the likes of genetic modification, nanotechnology and cybernetics conspire to leave us in a 'passive, sensory-laden state'. Our sci-fi imaginings, says Greenfield, tend to present a high-tech world in which we nevertheless remain human, our essential being unchanged. However, the intrusion of these 21st century sciences will alter our lives beyond recognition.

Increasingly, the physical world will itself become an interface of 'tangible bits' where we exchange CVs via the electro-conductive sweat of a handshake, and communicate via the e-broidery of our 'softwear'. Augmented reality (AR) applications will turn us into cyborgs. Chip-embedded spectacles projecting a superimposed image onto the retina will be used to aid engineering design, for example, pinpointing sections for maintenance or manufacture. Perhaps a little further off, allowing parents to peer into an artificial womb and track their child's development.

At home, the little ones will play with their 'smart toys' that mirror their development, as each grapples with its environment; or amuse themselves assembling a kind of sub-atomic nanotech Lego. Meanwhile, their flexi-operative parents will 'plug-in-and-play', their serotonin depleted brains episodically provoked to virtual 'desk rage', as performance stats are relayed to the virtual boss. They will socialise 'remotely', or be promiscuously lost in virtual sex role-play with a designer partner of their choice. All the while, the Hyperhouse, with its 'electronic spine' will teem with smart appliances, activated by bodily sensors adjusting ambience and functionality accordingly.

Beyond the not so private sphere, populations will diverge further as the uneven application of these technologies leads to 'speciation'. In Greenfield's most optimistic scenario, there will be no international development as such, but a wiring up of cottage industries, equipping 'every village with an electronic library'. The spectre of apocalyptic bio- and cyber-terrorism will reign. We will wear air quality monitoring devices, keep the hi-tech equivalent of a gas mask in the bathroom cabinet, and our offices and homes will be equipped with sophisticated air-filtration systems.

It may already be apparent that *Tomorrow's People* is ambivalent about the future. It is also profoundly anti-human in outlook. Post 9/11, Greenfield finds it 'harder to regard the human element as a constant force for good'. But her pessimism seems more deep-rooted. For her, the self is a fragile expressive entity, and 'the firewall of our sense of individuality' in increasing danger of being breached - by the collective, i.e. other people! In the home of the future, you'll need a 'real room' retreat from the interactive noise, but will equally find the offline experience exposing and disorientating. The desire for real time stimulation will draw us to the sporting arenas and their 'seething mass of sweaty humanity', a frightening and distasteful prospect for Greenfield.

Greenfield's view that 'human nature' has changed little since our ancestors got off all fours, bares little scrutiny. If this were the case, these new technologies might indeed be unnerving. However, the shaping of every tool since the carved animal bone has also helped to shape our minds, our environments and our social organisation. Only deaf separatists would claim that cochlear implants erode the identity of its beneficiaries - but surely this example of early cybernetics is just an extension of historical precedent.

Like any good dystopian, Greenfield captures something of our lives today and projects it into the future. We are certainly living increasingly individuated lives, alienated and fearful of each other, but technology is not making us this way. Already, she notes, some of us float in and out of a virtual world, with our hands-free mobiles, oblivious to those around us. But text messaging and virtual-dating, for example, are popular because of their distancing qualities, the antithesis of what communication technologies are ostensibly for. Instead of being understood as a means to mastering our environments, technical advance can take on a threatening mystical quality, and end up mediating our anxieties.

Greenfield is anxious that 'text-based unambiguous knowledge' will give way to associative hypertext. But this would be a consequence of the relativisation of knowledge, a cultural phenomenon, not a technological one. Similarly, Greenfield wonders whether 'science has made us less accountable for our actions'. Simply put, no it hasn't. This very sense of humans being deeply vulnerable, with little agency (a sense to which she seems to subscribe), is doing this all on its own. Consequently, the erosion of the private sphere has been underway for some time, with the intrusion of the state, not IT, being the primary driver.