Design fiction : designers anticipate the future

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DESIGN FICTION

Designers anticipate the future

We often sleepwalk behind technology as it whizzes forward. Design fiction offers an opportunity to be better prepared for what will come. Imaginative experiments in the border area between art and science make the future convincingly tangible.¶

Koert van Mensvoort

Does it sometimes happen to you? You wake up in the morning and realise that so much new technology has arrived on the scene again that you seem to have been lying in a coma for three months? Everybody on this planet is affected by technological changes in his or her life. Medical breakthroughs allow us to live longer, biotechnology brings us raspberries in winter, the social media keep us in permanent contact with our 'friends'. Technology is an enormous source of change in our lives – more than politics, art or religion. Technology keeps giving us new opportunities, but also forces us to reformulate ourselves time and again.¶

More grip
Despite the fact that we are completely surrounded – encircled, some would say – by technology, we have few guidelines to determine how new technology is introduced in our lives. Usually at the moment of its introduction we haven't the faintest idea what the latest innovation will bring us this time. Did you know twenty years ago how internet would change our society? Did you know five years ago how the smartphone would contribute to your digital lifestyle? Do you know today what the consequences are if computers presently become very good at recognising faces, so that everyone in the public space can be automatically identified? Do you know what impact augmented reality and big data will really have on our lives? Let's be honest: we often sleepwalk behind our technology.¶
What can we do to get a better grip on our technological future? More about that later, first a comparison. Suppose I want to become a pilot. I will have to enter the flight simulator before actually flying a jet fighter or an Airbus full of holidaymakers. A simulator offers a secure environment in which I can practise my role as a pilot. I can learn to take off, lose height and land. I can even test extreme situations that I hope never to experience in reality, such as when three of the four engines fail. I can crash without being killed on the spot. The flight simulator helps me to anticipate my role as a pilot. And even once I have qualified as a pilot, there is always still the air traffic control that constantly monitors the airplanes and guides them along the right routes.¶

Science & fiction
And now our society. What do we do as a society to prepare ourselves for our technological future? Wouldn't it be a good idea if, like the pilot in the flight simulator, we could anticipate possible scenarios beforehand? And if we could have a radar, like the air traffic control, to locate and identify incoming technologies to guide them along the right routes?¶
Good news: this is already happening, at least in part. For instance, scientists are making all kinds of climate models to work out what the earth

would look like if the sea level rose by two metres as a result of climate change. Would the dykes stand firm? Would Amsterdam be flooded? What would it cost, and how does that compare with the cost of raising the dykes? Such calculations are not intended to predict the future; they are made to chart possible scenarios so that we can make adjustments where necessary and prepare ourselves for what will come.¶

Besides the scientific calculations, there are the science fiction film makers and writers who are adept at supplying us with visions of the future. Think of *Star Trek, The Matrix, Blade Runner* or the books of Arthur C. Clark, Isaac Asimov or Bruce Sterling. While scientific efforts are mainly directed at a select group of experts, the genre of science fiction reaches a large and broad public. This genre is not necessarily based on facts and rational analyses, however, which some scientists see as reason enough to dismiss it as a whole, but that is a mistake. All new technology, after all, starts with an idea, dream or vision in a human brain, and the imagination is an important engine of innovation. Examples? Think of the invention of the communications satellite by Arthur C. Clark, the deep-sea submarine by Jules Verne in *20,000 Leagues Under the Sea*, or more recently the film *Minority Report* (2002) in which Tom Cruise uses a gesture-based interface that has inspired an entire generation of interaction researchers. Film director Steven Spielberg had the interface in *Minority Report* designed in such detail that, although not yet technologically feasible, it demonstrated tangibly just how flowing and intuitive its operation would be. This brings us to a third category of explorations of the future that is located between the scientists and science fiction visionaries: design fiction.¶

Tangible future

The genre of design fiction is practised by speculative artists, designers and technologists. They design not for the present, but for a possible future. In fact each of them is a kind of inventor of things that are not yet entirely possible. Examples of design fiction are the Bulletproof Skin of Jalila Essaïdi, the Energy Island of FLEX/theINNOVATIONLAB, Human Birdwings by Floris Kaayk, and the Phonebloks by Dave Hakkens.¶

The added value of design fiction as against scientific calculations is that design is by definition material, tangible, and thereby also communicative. Particularly at a time of data overload, in which a gigantic quantity of knowledge is produced that immediately disappears in a sea of information, it is a great advantage if visions of the future can be made convincingly tangible. While scientific explorations are mainly exchanged within a select group of experts, design fiction can not only bring disciplines together around a specific proposal, but also communicate it to a larger public. That is good, because the future affects us all and is too important to be left up to the experts.¶

uct, this can lead to confusion. Moreover, the makers of design fiction by no means always adopt a clear position with regard to the technological feasibility of their plans and their intention of really implementing the design or just telling a good story. Today's design fiction may be tomorrow's design fact, but it may just as easily turn out to be design fantasy.¶

In short, as a genre design fiction is still in its infancy. There is no clear platform and its practitioners have diverse methods and motives. All the same, it has potential. It can bring people and disciplines together around specific, tangible visions of the future in the border area between art and science. Such crossovers may not only bring about innovation, but also help us to avoid dystopias and to get a better grip on our future.¶

Like scientific projections, speculative designs need not always be desirable; they function as creative radar for what may lie in the future, good or bad. Like dystopian science fiction – take George Orwell's *1984* – dystopian design fiction can also offer us benchmarks we want to steer well clear of. Another similarity is that design fiction is sometimes, but by no means always, backed up by technology. Within science fiction a distinction is drawn between hard science fiction, based on extrapolations of existing technology, and soft science fiction in which the imagination takes off. In this connection it should be noted that even the most unrealistic soft science fiction can still have a cultural value because it enables us to reflect on life, the world, and our position in it – but as art, not science.¶

Exploring boundaries

The greatest strength of design fiction is at the same time its weakness: the speculative designs can be so tangible and convincing that some people will think that the design already exists and is for sale. Unlike the genre of science fiction, which remains tidily within the cover of the book or the edge of the cinema screen, design fiction does not have a clear platform. Particularly in a visual culture of blogs and magazines, in which a flashy demo is often more important than a working prod-

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