THE IRISH TIMES

Discovered in a digital universe

If, like me, you are wondering what is happening to the world you may occasionally turn to art for answers, writes **Haydn Shaughnessy**

Water Lily (2001)

Deprived these past two decades of meaningful politics, an increasing number of us turn not to art but to science, especially to populist science writers such as Richard Dawkins, for new insights.

Recently, science and art have begun to converge and their new partnership may turn out to be exactly what we've been searching for - a new way of seeing.

The Festival Della Scienza, in Genoa, which opened at the weekend, is designed in part to showcase this new partnership. The festival is not alone in highlighting the way in which science and art are creating a new digital aesthetic. It is part of a network of such events funded by the EU.

There appears to be no corresponding initiative in Ireland. Nonetheless, our understanding of the particularly profound changes we are experiencing in the early 21st century has here a new point soldier.

One of the highlights of the festival is the first European exhibition of Katinka Matson, an artist working within the digital aesthetic, whose work is attracting attention and praise in the United States.

The "digital aesthetic" is a powerful idea, one that deserves not to be pinned down too early. The fecundity latent in the capacity to transgress physical rules is one reason for suggesting that this aesthetic is more than a gimmick and can indeed provide new perspectives that help us understand the world better.

Change of a dramatic nature, and the arrival of new epochs signalled by events such as 9/11, can often be

described only in retrospect. Human engagement with initially unknowable currents of change takes strange forms that can themselves be confusing.

In the long shadow of the first World War, the philosopher, Ludwig Wittgenstein, wrestled with the boundaries that language places around the imagination. He attempted his own curious linguistic breakout in quasi-formulaic aphorisms that were, in the end, poor proxies for understanding rather than the profound insights he hoped they would be.

Joyce, in Finnegans Wake, joined the same attack on language's invisible restraints, more with a sense of accomplishment than with the frustration that isolated Wittgenstein. But Joyce left us no more enlightened. As with Wittgenstein's work, the message of Finnegans Wake is ultimately that we are not sophisticated enough to understand beyond our linguistic rules.

The Katinka Matson exhibition gives a clue as to where we might look for answers today. Matson's exhibits are visually compelling still-lifes, produced not through the physical application of materials (painting, drawing, printing) or photography. Matson uses a flat-bed scanner to create eerie, detailed images of flowers.

But what is the role of the artist when a machine does the creative work?

The question was asked, of course, of photography at the turn of the 20th century, but the unique perspective of each photographer, the documentary technique, the use of light, lab techniques and many other factors have long since helped to win the argument in favour of the snapper as artist.

A scanner is less artistically malleable or open to environmental influence than the camera. The uniformity it produces might be visually arresting but should give rise to suspicions. Uniformity and art are hardly synonymous. Nonetheless, Kevin Kelly, former editor of digital style bible Wired, declares: "When I saw Matson's images I was blown away. Erase from your mind any notion of pixels or any grainy artefact of previous digitalisation gear. Instead imagine a painter who could, like Vermeer, capture the quality of light that a camera can, but with the colour of paints . . . She is at the forefront of a new wave in photography."

Matson herself argues that the use of uniform light, without a lens to distort images, and the use of Photoshop software, creates 3D-like images of unusual clarity. These features are constant, regardless of the scale of the printing surface. Huge reproductions of startling detail are possible.

The artistic involvement, however, in Matson's

description of her work appears more mundane than it might be, involving familiar attributes such as time and rhythm. In a recent interview she argued that modern technology brings into question our established notions about seeing, vision, and perspective. I would put it differently. Working with computing technology, artists become explorers who discover not just new facets of life but also new perspectives. The digital aesthetic is, above all else, revealing.

Arguably, though, digital artwork has no place in the analogous world we routinely inhabit. Created virtually, it should be able to stray no further than our screens. It exists because it has no physical presence, surely a protean licence for a new aesthetic. At the same time, the digital confronts reality more directly than any representative, humanly constructed, form of art. In the work of, for example, Masaru Emoto, of whom more later, we see everyday substances in an entirely new way, literally beyond vision.

The argument about place and exhibition is not an idle one. Digital art, apart from blurring our sense of reality, tends to have a dynamic element in which images transform in response to our interaction with them. So, for example, the Guggenheim's online exhibits of John Simon and Mark Napier's work are marked by the fact that the digital "sculptures" change depending on visitors' clicks. Meanwhile, the WWW artworks of Lisa Jevbratt are constructed automatically from the millions of uses of the Internet each day. They are a visual representation of activity over time.

But in each case of a digital artist working in a surprising way, the relationship between object and artist, or process and artist, is fundamentally changed. The artist is exploring. Art is becoming discovery and, as such, is better able to challenge our perceptions of the world than are conventional representative media.

Matson's exhibition is being staged at Palazzo Rosso, a museum with an art collection that includes the work of painters such as Van Dyck and Caravaggio. She is one of a new breed of artists who are utilising technology in ways that alter, and perhaps diminish, the artist's role - but to great effect.

Masaru Emoto, like Matson, focuses his technological explorations on nature. Using magnetic resonance imaging, Emoto photographs the crystalline shape of water at a microscopic level. The Japanese scientist is an advocate of a new relationship with the elements and is part of a movement that more or less worships water as our ancestors worshipped the spas and lakes of Europe and the holy wells of Ireland.

Leaving aside their spiritual content, Emoto's photographs are not just visually intriguing. When water

is found at deep levels and has settled over centuries, Emoto shows that its crystalline shape is uniform and symmetrical, sharp and aesthetically pleasing. Photographs of rushing spring water show it to be visually impure. The contrast illustrates that life suffers and rests even at the cellular level.

These changes in perspective, found in disparate projects, add up to an important big picture. They are dimensions of a new world in which the human body and our knowledge of organisms and the living environment are transforming, along with our relationship to technology.

Apart from its increasing grossness, the body is now equipped with new elements, from fake knees to cosmetic implants, Botox to breasts, from pacemakers to microchips, and these will soon to be supplemented by implanted software that expands human capabilities.

The mind and its moral competence are evolving at a frightening rate. In place of human memory, miniature memories of vast efficiency now remember for us. In place of open landscapes children now inhabit their bedrooms and relate to behavioural forms invented for the screen. Like the rest of us they engage with heroic narratives in which the bad man is frequently right.

The social world is being rebuilt as races intermingle and as we debate the prospects of a post-American vision of global order.

Alongside these changes the physical world can now be transformed every 30 years or so as housing estates (collections of what we used to call homes) are dismantled and reassembled with frightening speed.

In this new world the digital aesthetic moves us on, helping us discover new perspectives. Digital art is part of the flood of information and connectivity, though, arguably, it has not yet responded to it adequately.

Yet digital artworks are transformative. The spooky, almost artist-free atmosphere of the new images is perfectly appropriate. They speak to a world where people and their concerns used to be at the centre.