onScreen

Ars Electronica Gallery for Digital Video Art & Design

The enormous possibilities of image generation through the use of ever more highly perfected technologies have been delighting us for years with previously undreamed-of fantasy worlds on film and video. George Lucas and his associates maintain whole armies of digital artists in their studios to transform even the lamest concepts and scripts into brilliant blockbusters. Even with the release of *Final Fantasy* and *Episode III*, the highpoints have not yet been reached, but it is still high time to pose the question: How did this all get started and wasn't everything a lot better way back when?

The answer from *onScreen* is: we don't have the slightest idea, but how about trying to see how the simple means of yesteryear can be combined with the technologies of today?

The emphasis in this third update of *onScreen* is on the use of digitization for the animation of individual images that are recorded either digitally or on conventional film stock and then processed by computer into short digital videos. This very old technique of producing moving pictures is undergoing an interesting renaissance thanks to digital processing. The works of Thomas Maier and Ernst Spiessberger are based on the original cinematic principle. In film's early, experimental phase in the 19th century, due to the absence of the technology necessary to produce a series of images, a movie was initially made by taking one picture after another with a conventional camera and then employing bizarre contraptions to project them sequentially in order to offer audiences what was then the unique visual experience of preserved motion.

In Thomas Maier's case, it's the devices for making exposures that seem particularly bizarre. With the help of dozens of conventional disposable cameras, he creates fascinating graphic worlds reminiscent of high-budget special effects à la *Matrix*. He simultaneously photographs the movements of objects or persons from different angles and thereby lets time stand still for a moment for the viewer while the camera seems to remain in motion.

Ernst Spiessberger's work is a classic animated film in which the contents of a refrigerator are processed into exciting landscapes and miniature adventures. Digitally photographed foodstuffs preserved at low temperature are awakened at the computer to a fantastic life.

The fusion of a washing machine and a desktop monitor constitutes the basis of David Moises' spatial viewing device. A rotating LC display generates spatial images that are perceived by means of the afterimage effect of the human eye. This principle was already being used in 1884 by German inventor Paul Nipkow in his Nipkow disc, a key precursor of television and video technology. The spatial viewing device brings moving two-dimensional images into a rotational motion around their own axis and thereby produces in an amazingly simple way the illusion of a third dimension.

Translated from the German by Mel Greenwald



David Moises Spatial Viewing Device

The principle of the spatial viewing device is the generation of phantom bodies by means of a rotating LC display and by taking advantage of the afterimage effect of the human eye.

Das Prinzip des Raumsichtapparates ist die Generierung von Phantomkörpern mittels rotierendem LC-Display, unter Berücksichtigung des Nachbildeffektes des Auges.

Thomas Maier Timestop 02

A special camera constructed out of parts from used disposable cameras makes it possible to simultaneously take 80 or more pictures from different perspectives. To edit the images, they are scanned into a computer and attached sequentially to make a video. The photographed-filmed scenes make selective use of blurred motion, prolonged exposure and transient phenomena, at times through the use of additional lighting provided by a flash attachment or stroboscope.



Aus Teilen von gebrauchten Wegwerfkameras wurde eine Spezialkamera zur Erstellung von 80 und mehr Fotos aus verschiedener Perspektive gleichzeitig gebaut. Zum Schnitt des Videos werden die Bilder eingescannt und am Computer zu einem Video aneinandergefügt. Die fotografiert-gefilmten Szenen nehmen schwerpunktmäßig Bezug auf Bewegungsunschärfe, Langzeitbelichtungen und flüchtige Phänomene, zum Teil mit zusätzlicher Belichtung durch Blitz und Stroboskop.

Ernst Spiessberger The Everyday Strangeness—Animation in the Refrigerator

In an unusual variation of the classic animated film, rather mundane foodstuffs mutate into animalistic creatures and transform the fridge into a bizarre world of adventure.

Eine ungewöhnliche Variante des klassischen Animationsfilms: Profane Nahrungsmittel mutieren zu animalischen Lebewesen und verwandeln den Kühlschrank in eine bizarre Abenteuerwelt.

