

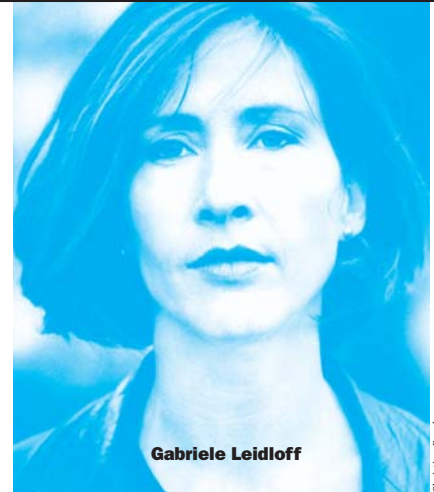
# Innovation through Infringement

## New Insights at the Interface of Art and Science

By Eugen Blume

When Eckart Gillen and myself planned the exhibition “Kunst als Wissenschaft und Wissenschaft als Kunst” (Art as Science and Science as Art), which was accompanied for several days in September 2001 by a colloquium in the foyer of the

State Museums’ Picture Gallery in Berlin, our thesis was clearly expressed in the title by the conjunction “as.” Art as science versus science as art reflects an attempt to take a modifying look at the notion that these two disciplines continually develop along separate lines. It was



Gabriele Leidloff

Christine Feuz

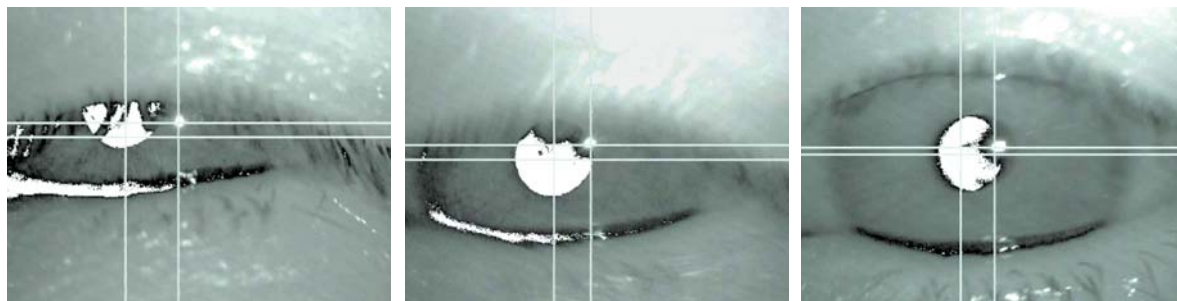
only in the 19th century that the singular separate concept of art was formed. In the previous centuries, despite its obligations to decorate or simply depict, art always preserved its right to operate at least along the borders of science. In the 16th century, at the onset of modernity, it was an accepted thing for a person to be an artist and a scientist at the same time. Parallel to art’s declaration of independence in the 19th century, the Romantics in art reclaimed a new universal unity of science and art. And when Albert Einstein made his trailblazing discoveries in the early 20th century, science began operating in the areas that had traditionally been the domain of the arts.

In recent times artists have been displaying a strong interest in scientific issues. One example of this is the artist Gabriele Leidloff, who lives in Berlin and focuses her investigative work on neuroscientific topics. Her artistic approach is



The artist Gabriele Leidloff brings to light the layers beneath the surface. Above: “X-ray film-strip,” 1997

Art-science: Breaching boundaries for new perception, “Eyetracking,” 2004



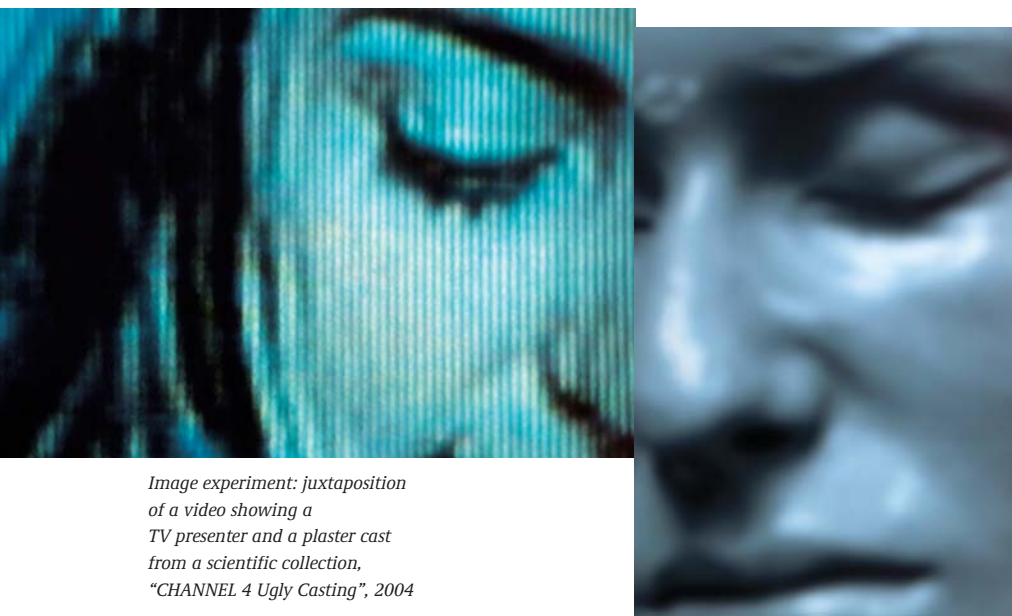


Image experiment: juxtaposition of a video showing a TV presenter and a plaster cast from a scientific collection, "CHANNEL 4 Ugly Casting", 2004

amply reflected in her occupational professional biography, which displays decidedly interdisciplinary aspects. She was, and still is, a sculptor and fine artist, theatre director, actress and a university lecturer on a variety of interrelated disciplines. Her accumulated experiences most certainly forms the productive source of her academic activities in aesthetics and art, which she pursues, not in the sense of preaching art history, but as her scientific strategy as an artist.

One of her most significant projects was initiated in 1997: an international forum between art and neuroscience that is continually updated in the Internet "log-in/locked out", and has actively united a great mix of people, sci-

entists and artists, for several years ([www.locked-in.com](http://www.locked-in.com)).

In medical terms the locked-in syndrome is a rare condition in which all abilities to communicate directly are interrupted in a fully conscious human being who can then only communicate indirectly. Gabriele Leidloff transfers this neurophysiological condition to the digital communication systems that only have the ability to indirectly impart information while completely ignoring the "transmitter" as a whole personality. In addition to this, the project also asks how our perceptive processes function in the brain. A "neuroscientific" archive with the most recent discoveries in brain research is also part of this interdisciplinary

forum that was initiated by art. In recent years brain research has managed to make images of major discoveries in the way the brain functions through digital visualization techniques, which themselves have decidedly aesthetic qualities of their own.

Leidloff and other artists instrumentalize these aesthetic qualities in their own works of art. Gabriele Leidloff created "Ugly Casting 1.2." for the exhibition of the Humboldt University's natural science collection in Berlin's Martin Gropius-Building in the year 2000. It actually includes a number of the artist's works: "Ugly Casting" is based on a scientific method of depiction that the artist has repeatedly used: photographs of X-ray images. At first she experimented with masks from the living and the dead. For instance, her photograph of the X-rayed plaster death mask of Johann Wolfgang von Goethe brought astonishing results. Modern man's highly developed photographic perception transformed the death mask into a photograph of the living poet. Although shadowy and simplified, the human eye imagines the fleshy features of the face. Things which are hidden in the ossified plaster mask suddenly become clearly visible exposing the psycho-geography of the countenance.

"Ugly Casting" functions in a similar way and experiments with a collection of plaster casts taken from the heads of guillotined criminals during the National Socialist era. Documentation of the scientific purpose of this collection has van-

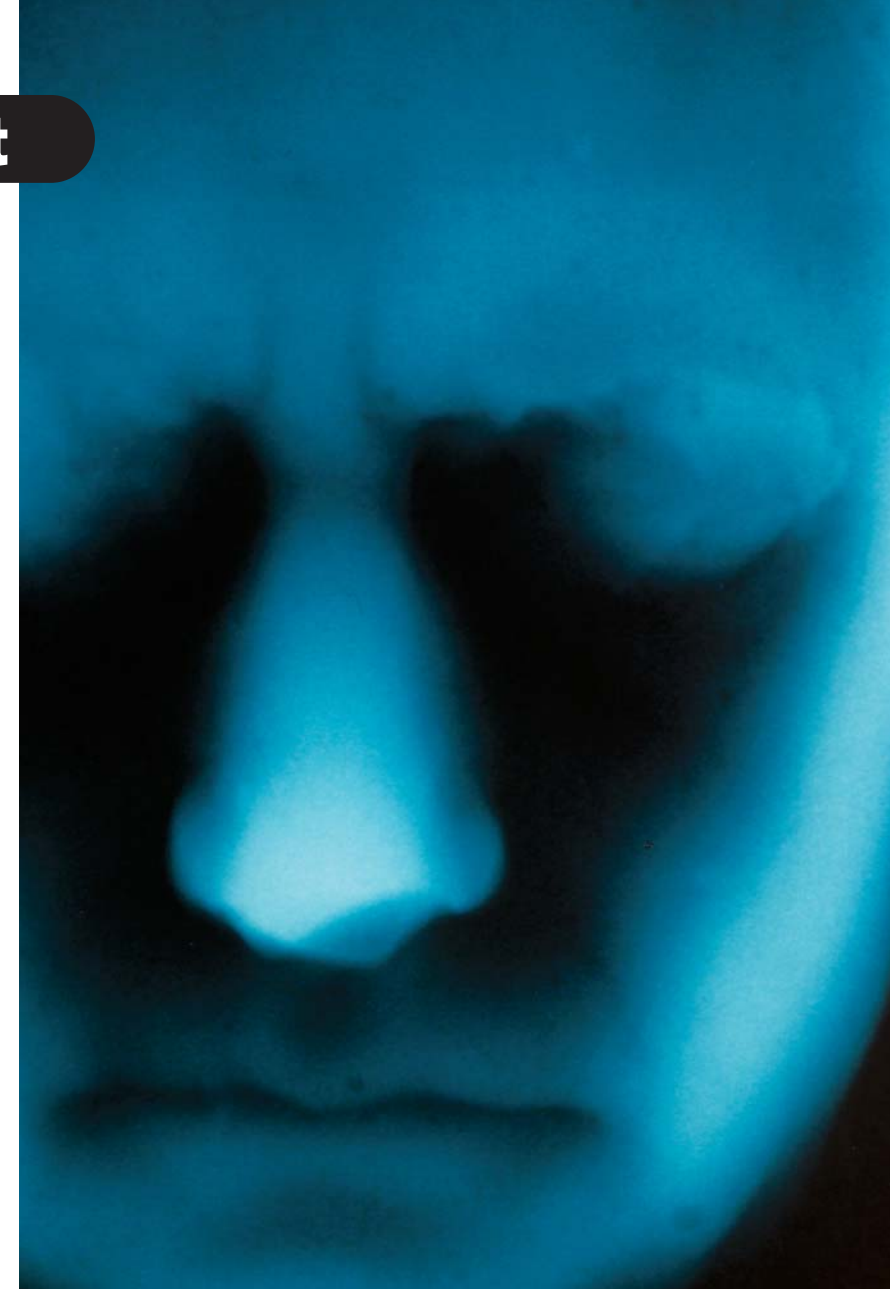
ished. But it was clearly designed to research the alleged physiognomic expressions created by areas of the brain that supposedly influence criminal acts. One of Leidloff's photographic transformations focussed on two heads nestling together in the original storage box and giving the impression of two people tenderly embracing. In an eleven-part photo series and a filmed video loop she intensifies the sensation that the heads are moving. The perceived tenderness stands in stark contrast to the pseudo-scientific purpose of the gruesome material and its inhuman background. The artwork could well be seen as an attempt to heal, yet without denying the contrasting original context, which is in fact drastically emphasized by the images.

Things made visible by science's complex image-producing technologies serve the purpose of making exact, measurable statements that exclude any intuitive elaboration. Gabriele Leidloff homes in on this delineation point and employs scientific techniques to extend the range of vision into the realm of artistic imagination. For centuries art has opened up our perception of the metaphysical side of the visible, the side that science is compelled to exclude from its materialistic view. We find ourselves at the stunning interface of quite differently motivated investigation processes and results. At the same time we gain new insights created solely by artistic strategy breaching the boundaries at this interface of science and art.

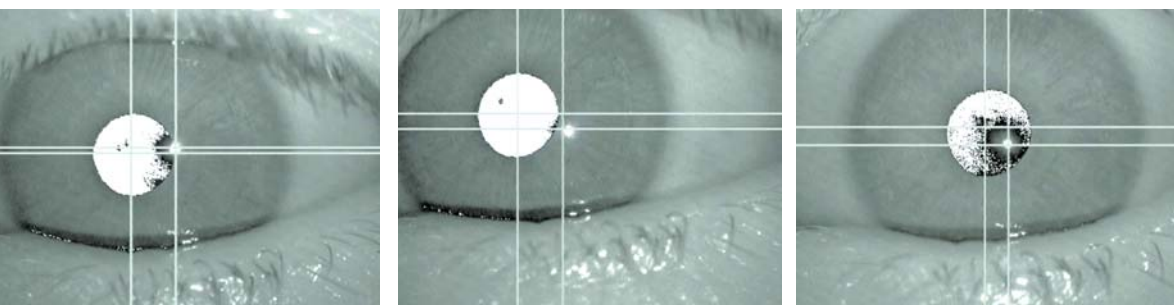
In her works Gabriele Leidloff highlights the power of the inflationary flood of TV images and questions the influence of electronically communicated mass images on our perception, their influence on our cerebral functions and the related psychological structures of our existence. She makes clearly discernible distinctions between the transmission of an event and reality, the manipulatively instrumentalized world of images and true visual perception. She exposes the dangerous suggestion that TV images are the actual communication of a real event. In

this way her modification techniques create enlightening insights into the mass transmission and mass repetition of this widespread everyday illusion.

The use of X-rays in Gabriele Leidloff's work in itself reveals what the artist is trying to make visible: she aims to expose a second level beyond the limits of the surface. She examines this level from two aspects: the essentials of the material and the psychological processes involved. She throws new light not only on the phenomena of mass images, but also on



Inner vision: the eye completes the image created by the X-ray photograph of Goethe's plaster mask to reveal a lifelike portrait of the great writer. "Goethe", 1996



The Goethe Institute in Berlin is showing works by Gabriele Leidloff from August 19th to October 8th. Her Internet forum "log-in/locked out" is open to visitors at [www.locked-in.com](http://www.locked-in.com)

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The art expert is director of the Hamburger Bahnhof, Museum for the Present, in Berlin