NOISE-TO-SIGNAL (1986-1990)

George Legrady Studio in downtown Los Angeles, 1988

Jetgraphix works-on-paper, and the IBM-based Truevision Targa Imaging system
Words/Words – Manila, Hanoi, Beirut (1987)


Collection: Manila, Canada Council Art Bank
Moscow News (1987), Mecca (1987)
The Noise Factor (1987) – Film Still, Pure Noise, Coke & Stocks Noise, Conversation


Collection: *Conversation* in Vernon Collection, Los Angeles Museum County of Art
Value Free, Morality Tales (1987)

Information Theory proposes that much communication is redundant. Data compression as in jpegs eliminate unneeded information to reduce data size. I wrote a function that analyses the image and takes away data in such a way that the fundamental subject matter is still recognizable.
The 1980s Jetgraphix works-on-paper

The release of the Truevision Targa, 32678 color, image capture board for the IBM PC in 1985 made it possible to capture and digitize photographic images at a resolution of 512 x 480 pixels. With this state-of-the-art image processing system, I realized over a four-year period a series of still digital compositions that explored the potential of software processing of the pixel-based image and its relation to noise and signal.

Ideas and themes explored in this series were informed by:

- The **transformation** of the photographic image into a digital pixel-based construct, capable of manipulation through computer code
- **Information Theory**’s various definitions of communication such as entropy and redundancy, and differentiating signal as ordered information from noise as random information
- A **semiotic** exploration of the visual staging of television broadcast news

These resulted in a series of 57 distinct compositions, and approximately 98 actual prints, possibly the first such digital photographic-based works transferred digitally to a prototype inkjet printer, the Fuji Jetgraphix system at a lab near UCLA, that was never introduced to the market.
Explorations of the formal staging of broadcast news. The image on the left has a blurring effect added which creates a depth visual distance in comparison to the image on the right. A Brownian motion-based software that randomly eats away at the image was then applied. Its color on the right was sampled from a rusted surface. The images in the small frames are pixel filtered and scrambled video captures. The frames were created in a 3D software with visual information from a news photograph reflected on it using ray-tracing techniques. A simulation of the real.
Four Noise Frames (1987), Noise (1987)

Two Street Scenes (1989)

These scenes are explorations of applying a custom software I wrote that randomly eats away at the image. If left to function indefinitely, the images becomes like a painted abstraction. Image on the left is a news scene of police cars, image on the right of two women on Sunset Blvd. crossing the street. The bars on the left and right are samples of the original, unprocessed source images.
Poetics of the News: Lost like Tears in the Rain, A Shadow of Its Former Shelf, The Space Between, A Sea of Noise (1987)

Exhibited: National Gallery of Canada (1997)

This work explores the staging of broadcast news in particular, ABC News. It uses phrases from the movie “Blade Runner”, and various quotes from sociological analysis of the impact of streaming news information.
Digital duplication of data has raised concern over issues of copyright. A template consisting of an even patterning of the word “copyright” is processed by software that randomly adds texture to the image to “individualize” it. It is then colored using image sources of gold, bronze and Rust surfaces.
Digital duplication of data has raised concern over issues of copyright, ownership and intellectual property. The background is processed by software that randomly adds texture to the image to "individualize" it so that each is a unique outcome.
Digital duplication of data has raised concern over issues of copyright. The background is processed by software that randomly adds texture to the image to ‘individualize’ it so that each is a unique outcome even though they may at first all look the same.
East & West (1990)

The red background texture has been created by a noise generating algorithm used to bring out details in the Shroud of Turin. The plates were created in Wavefront alias, given a metallic surface so that a ray-tracing function would reflect images taken at a political demonstration in Budapest just prior to the fall of Communism.
Authority of the News (1986)


Collection: Santa Barbara Museum of Art
From Noise to Signal (1987) solo exhibition invitation, USC Atelier, Santa Monica Place

Exhibition installation of jetgraphix works-on-paper including computer system in exhibition gallery as a way to introduce the digital imaging process:

Legrady, a photographer who also works with video and computers, intends to videotape the movements of mall shoppers. He will then transfer those images into his computers (installed at the gallery), freeze the images, then manipulate them electronically. He will exhibit the still photographs at the Atelier in "From Noise to Signal" from Aug. 8-30.

http://articles.latimes.com/1987-07-05/entertainment/ca-2234_1_george-legrady
Exhibition History of Early Jetgraphix Images

- *George Legrady: From Noise to Signal*, USC Atelier, 1987


- *Digital Photography: Captured Images, Volatile Memory, New Montage*, SF Cameraworks, San Francisco, California, 1988 (traveling to Houston Center for Photography, Museum Folkwang, Essen, Museet fur Fotokunst, Odense)

- *Fotografie, Wissenschaft und Neue Medien*, Kunstforum, Dusseldorf 1988

- Honorable mention, Computer Graphics, Ars Electronica, 1989


Resources


- *An Introduction to Information Theory: Symbols, Signals and Noise*, JR Pierce, Dover, 1980


- *Cult of Information*, Theodore Roszak 1986


- *Mode of Information*, Mark Poster 1990

- *Scientific American*, November 1973, “Recognition of Faces”, by Leon Harmon, pp. 70-82, “How can a computer recognize a human face” was at the time explored but left unanswered….

- “*Image, Language, Belief in Synthesis*”, a paper I wrote to analyze digital implications on photographic representation, was presented at the College Art Association on a panel on digital media art in 1989. It was published in “*Critical Issues in Electronic Media*” edited by Simon Penny, SUNY Press, 1995
George Legrady Media Art History

1972-1974 Documentary photography
1976-1984 Conceptual-based photography
1985-1990 Digital photography
1992-now Interactive digital installations
2001-now Data Visualization
2010-now Computational photo-imaging, machine learning, robotic multi-camera systems
2011-now Large-scale lenticular image panels

1981 Computer programming
1985 AT&T Targa System
1992 Multimedia - Quicktime
1994 Internet arrives!
George Legrady Brief Biography

- George Legrady is a media artist working in photography and digital media installations. His works have been exhibited at MOCA, Los Angerles; Centre Pompidou, Paris; 3rd Lyon Biennale; Haus der Kunst, Munich; ZKM, Karlsruhe; Kunstforum, Düsseldorf; Musée de beaux-arts, Brussels; National Gallery of Canada; PS1/MOMA; MOCA Taipei; Chronus Art Center, Shanghai; Kiasma Museum of Contemporary Art, Helsinki; National Gallery Prague; International Book Fair, Bogota; and numerous other places.

- He is a recipient of a Guggenheim Fellowship, Creative Capital Foundation, National Science Foundation, National Endowment of the Arts, Langlois Foundation for Art, Science & Technology, and the Canada Council for the Arts.

- His works are in the collections of the Whitney Museum of American Art, Los Angeles County Museum of Art, the San Francisco Museum of Art, National Gallery of Canada, Santa Barbara Museum of Art, Philbrook Museum of Art, the ZKM (Center for Art & Media Museum), and others.

- He directs the Experimental Visualization Lab in the interdisciplinary arts-engineering Media Arts & Technology doctoral program at the University of California, Santa Barbara.

- Additional information can be found at https://www.gf.org/fellows/all-fellows/george-legrady/; www.georgelegrady.com; https://en.wikipedia.org/wiki/George_Legrady