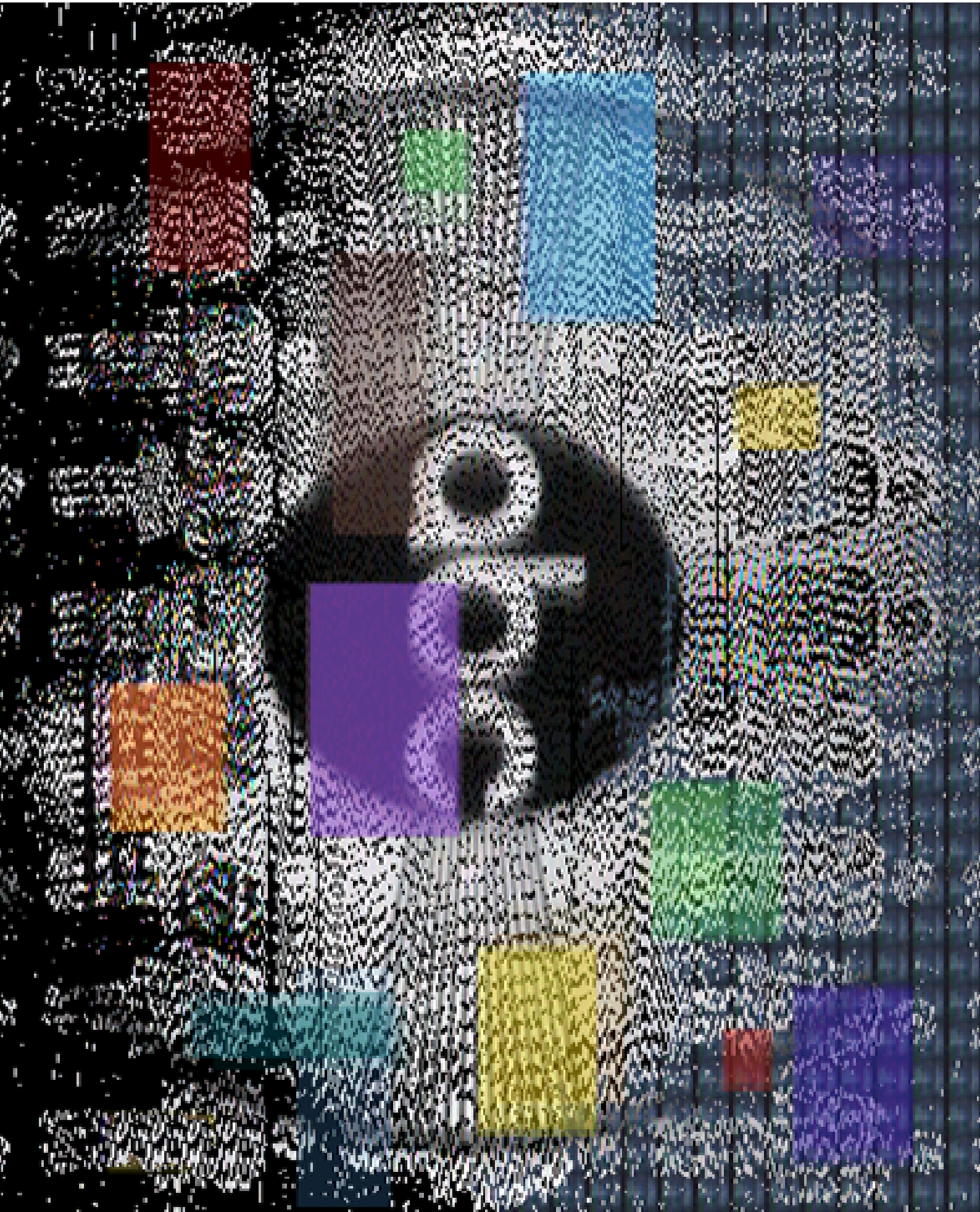
George Legrady **Noise-Signal (1986–1990)**



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Introduction

From December 2024 to February 2025, the RCM Galerie in Paris organized a solo exhibition of George Legrady's work that, for the first time, presented the largest selection of his Noise-Signal series, created between 1986 and 1990. The full series consists of more than 57 digital image compositions, developed using one of the earliest commercial digital image capture systems, the AT&T Truevision Targa16 videographics board. This system made it possible, for the first time, to manipulate high-resolution, full-color photographic imagery captured through video. In addition, the Targa system allowed for the manipulation and creation of images through computer software written in the C programming language.

The Noise-Signal series was developed while Legrady was Assistant Professor of Photography at the University of Southern California in Los Angeles. Supported by funding from USC and IBM's Project Socrates, he established a digital imaging lab in the mid-1980s that enabled the capture of analog video signals and their conversion into pixel-based digital files.

Legrady's background prior to this work was informed by a conceptual and semiotic approach to staged studio photography that explored the intrinsic properties of the photographic image. In the early 1980s, he acquired programming skills on a PDP-11 mainframe in the studio of AI pioneer Harold Cohen. It would take several years before desktop systems were powerful enough to produce pixel-based images resembling photography—preceding the rise of digital cameras, Photoshop, and the internet.

A distinctive feature of the series is its "born-digital" nature. The images were created within an IBM desktop computer using the Targa system, saved as digital files, and output directly to a prototype inkjet printer developed by Fuji Corporation. Fuji's proprietary software scaled the small Targa files into large-format prints, measuring approximately 28 × 25 inches.

Thematically, the series explores the interplay between noise and signal as defined in Claude Shannon's Information Theory. Concepts such as randomness, entropy, and data disruption are used as aesthetic material.

Since the Targa system relied on analog video input for capturing photographic-based imagery, Legrady's work also reflects an engagement with visual semiotics—particularly Roland Barthes' reading of how meaning is anchored in broadcast imagery. Many works sample fragments from television, including news broadcasts, combining facial close-ups, text, and textures, which are algorithmically reassembled and manipulated. Individual works reflect these strategies. *Moscow TV* (1987) repeats fragments of the word "Moscow" captured from a television signal. *Waxing Poetic* (1987) overlays a news anchor with layered "picture-in-picture" frames referencing contemporary media aesthetics. *Raw Data* (1987) incorporates video static as a compositional element. Each image balances structured composition with randomized procedures, creating visuals suspended between control and unpredictability.

Early selections from the series were first shown in Legrady's solo exhibition *From Noise-to-Signal* at the USC Atelier Gallery in Santa Monica (1987). The work was then included in key group exhibitions such as *Photography of Invention: American Pictures of the 1980s*, curated by Joshua P. Smith for the Smithsonian's National Museum of American Art (1987); *Digital Photography: Captured Images, Volatile Memory, New Montage* at SF Cameraworks (1988), curated by Jim Pomeroy; and European exhibitions such as *Fotografie, Wissenschaft und Neue Medien* at Kunstforum Düsseldorf (1988), and *Ars Electronica* (1989), where *News Beirut* received an Honorable Mention in the Computer Graphics category. Since then, works from the series have entered major museum collections, including the Centre Pompidou in Paris, which acquired three pieces in 2024.

This catalog brings together the complete Noise-Signal series for the first time. It documents an early stage in the history of digital image-making, when photographic practice intersected with computation, and when concepts of randomness and signal processing were applied to visual culture. By situating the images in their historical and technical context, the catalog highlights Legrady's role in defining the possibilities of digital photography at a time when the medium was still in formation.

George Legrady Interview with Robert Murphy, director of the RCM galerie, Paris

Robert Murphy__Can you describe the photographic work you did prior to incorporating computers into your artworks?

George Legrady__ Just prior to, and during my transition to computing in the early 1980s, I was creating large-format camera photographs in the studio, producing still-life, staged images. I constructed scenes with found objects or fabricated forms. The intent was not to visually record the world, but to build visual compositions that questioned, in varying ways, the very nature of what a photograph could be. It was a project that explored the cultural and semantic nature of the camera technological image.

Going back to the beginning, I started as a documentary street photographer in the late 1960s. My brother Miklos and I pooled our funds to purchase a Nikon F 35mm camera, which we shared to explore the photographic medium. This was the era coined by the media theorist Marshall McLuhan with his influential idea of "the medium is the message". I was also captivated by Michelangelo Antonioni's film *Blow-Up*, in which a London photographer uncovers a crime by analyzing close-ups of photographs he took in a park. My brother and I were both students at Loyola College, a small liberal arts college in Montreal, where we discovered the Communication Studies program. There we encountered a number of dedicated students exploring photography under the guidance of two artist-photographers, Charles Gagnon and John Max. Each embodied a distinct approach that together exemplified Roland Barthes' combined concepts of the 'studium' (cultural, coded meaning) and 'punctum' (that which affects the viewer at a visceral level). Charles' work was conceptual, formal, and minimalist, while John's was probing, intense, and emotionally charged. I did not receive formal training until graduate school, where I was introduced to the history of photography. At that point, my approach shifted to a more conceptual and formal inquiry, also inspired by the photographer Garry Winogrand's remark "I photograph to find out what something will look like photographed".

RM__What were the cultural and artistic influences that you brought to computation from your practice in photography?

GL__A number of divergent influences converged in the fields of photography and art in the late 1970s and early 1980s. As mentioned, my approach began in documentary photography, and during graduate school I was introduced to a more formal tradition that included pictorialism, a movement that prioritized the aesthetic coherence of the image over representing scenes from the world. This led to an appreciation of photography that explored how vision and images are constructed. For instance, I drew on the work of Rodchenko, László Moholy-Nagy, Germaine Krull, Lee Friedlander, and others.

Through the works of artists such as Doug Huebler, John Baldessari, and Sol LeWitt, I came to see how photography could be instrumentalized to support ideas—used as evidence, incorporated into systems, or deployed in text-and-image strategies. Another notable influence was the application of critical theory to photography, most prominently through Allan Sekula's artworks and writings, which revealed the cultural and political subtexts embedded in photographic images.

Just prior to my move to San Diego in 1981, I attended a number of lectures in Montreal organized by Chantal Pontbriand, editor of *Parachute*, a leading theory-based art journal. Presenters included New York art critics Craig Owens, Douglas Crimp, Benjamin Buchloh, and others, who examined the influence of media—particularly news photography and television—on artists' use of the photographic image. Some of the works discussed involved the appropriation and re-use of pre-existing images from advertising, magazines, and television, in order to blur distinctions between high and low culture. Other topics addressed critiques of representation, examining how media images shape identity, desire, and control.

RM__What did you do in Harold Cohen's studio?

GL__I was introduced to Harold by Jeff Greenberg, his studio assistant, shortly after I arrived in San Diego at the end of August 1981, having resigned from my teaching position at Western University in Canada. After a five-minute conversation, Harold said, "Come by on Monday to pick up the keys to the studio." At that time, access to computers was rare, and Harold had a DEC PDP-11 mainframe computer, which gave me the valuable opportunity to learn computer

programming in the C language on the Berkeley Unix operating system. I had 24-hour access to the studio, and the only people I recall being there regularly were Harold, Jeff, and myself. The studio was located in a round, unused water tower on the UCSD campus. Newton and Helen Harrison had their studio across from Harold's. Others I remember in the watertower included Allan Kaprow, Italo Scanga, Patricia Patterson, Manny Farber, and David and Eleanor Antin.

In addition to learning to code, I was indirectly inspired by Harold's approach of translating and articulating an aesthetic perspective into computer language. Harold's project *AARON* was based on encoding his implicit painting processes into software. He was interested in seeing what the program would produce compared to what he might imagine creating himself. He regarded the software as a collaborator, continuously refining it with new functions in order to arrive at visual results that neither he nor the program could have produced independently.

The PDP-11 in Harold's studio received input through standard keyboard terminals used for writing code, emails, and texts. It did not have a built-in display; instead, it output vector coordinate instructions to a 19-inch Tektronix screen, where a green electron beam plotted the drawings line by line. Harold's program *AARON* employed polar coordinates in its code to generate organic-looking, hand-drawn sketches.

RM__What computer technology was used to create the Noise-Signal series and what were new ways of creating images through digital technology?

GL__Even though I spent a few years in Harold's studio, I created only one work that could be considered artistic. I recently came across the code printout, dated 1982, which included some of Harold's subroutines for delivering data to the Tektronix screen. The visualization modeled the evaporation of perfume molecules as they escaped from a semi-enclosed container and diffused evenly into the surrounding space.

I had to wait until 1985 for an affordable digital imaging system that could produce photographic-looking imagery. This consisted of a Truevision Targa 16 graphics board installed in an IBM AT desktop computer. The technology worked by using an analog video input to capture images from television or a video camera; the Targa then froze a frame and converted it into a pixel-based raster digital image. The transition from analog to digital image manipulation required significant rethinking. In analog photography, creative control was exerted through exposure adjustments and chemical development—for a short time, I even mixed my own developer using Ansel Adams' Zone System—but the process remained fundamentally chemical. Once digitized, the image could be manipulated either with the Targa TIPS software for compositing or through custom C code for image processing for which I had to write the procedures, such as 2D convolutions by which to sharpen, blur, or find edges in an image. With digital technology, images could be altered at multiple scales: from single pixels, to pixel clusters, to the entire image. The possibilities for manipulation expanded exponentially, raising new questions about how far such changes should be integrated into the aesthetic. In the darkroom, working with negatives and prints was an accumulative process; one had to decide when to stop development, and there was no reversing an error if the image was overexposed or overdeveloped. Digital technology, by contrast, offered a remarkable new control: the ability to undo an operation if it did not produce the desired result.

RM__How did you come across concepts about randomness and noise as a topic at the time, and how did you explore them?

GL__Harold often referred to the use of the random function in coding as a way to introduce variation into a process. For example, a command such as "draw a line from point A to B" always produces the same result each time it is executed; it is deterministic. By introducing randomness into the function, however, each run generates lines of different lengths and placements, never identical. This introduces chance, contingency, and unpredictability—adding complexity by simulating organic, natural processes.

In the mid-1980s, the community with whom to share such ideas was very limited. While teaching at USC, I met a senior scientist working in telecommunications who introduced me to Claude Shannon's *Information Theory.* He described how, in signal communication, data would be scrambled at the sending stage and then unscrambled at the receiving end to recover the message.

This led me to write image-processing code that scrambled pixel values—their colors and locations—or performed statistical comparisons of color usage, reconstructing the image with pixels rearranged into randomized, noisy results. I used these for aesthetic purposes, as a way to explore the interplay of order and disorder. Working with noise became a means of probing the full spectrum of information, where "signal" is defined as ordered and noise as random, unstructured, or not yet deciphered. The random function could be applied in many ways and became an important aesthetic device. For instance, I wrote software that introduced texture into images by simulating Brownian motion—the random movement of particles suspended in a fluid. Wherever the software landed in the image, it altered the pixel color, sometimes inverting tones. I designed the program so that once it was activated, I had little control: I would watch as it spread across the image—like fire moving through a landscape or a virus consuming its host—and stopped it at the moment it seemed to achieve the desired effect.

RM__What are the themes of the *Noise-Signal* Series?

GL__The *Noise-Signal* series emerged from aesthetic experiments that integrated computer processes with digitized still images, captured primarily from television news broadcasts, since my sources of photographic imagery at the time came through analog video. My approach was informed by knowledge drawn from the history of photography and conceptual art, as well as from contemporary practices that examined the influence of advertising, cinema, and television. Digital technology raised new questions about authorship, appropriation, copyright, intellectual property, the constructed nature of images, and the scientific frameworks derived from Information Theory. The series was produced years before the advent of scanners, digital cameras, the internet, or Photoshop. Since many of the images I worked with came from television, the visual staging of broadcast news became both a source of material and a subject of critique in the *Noise-Signal* series.

At USC, I encountered additional influences from two researchers in the Annenberg School of Communication. Social scientist Daniel Dayan, a student of Roland Barthes, shared Barthes' interest in semiotics—the analysis of cultural signs—as applied to visual media, exploring how images "speak" to audiences. Michael Noll, now recognized as a pioneer of computer art, was researching the impact of television communication. Earlier, at Bell Labs, he had produced projects that entered artistic contexts and investigated human–machine tactile interaction.

RG__There is an image of Oliver North, at the Iran Contra Congressional hearings in 1987. Can you describe it?

GL__This image titled "Static" was realized in July 1987. It is a digitally captured still image screenshot of Oliver North, a US Marine lieutenant colonel who was involved in the Iran Contragate affair, giving testimony with hands clasped as if in prayer. The only change I made to the image was to paste a band of visual noise horizontally across the image over his lips. In hindsight the meaning may be seem too blunt but at the time it represented the general perception of his testimony. This image, and others from the "Authority of the News" series were included in an exhibition of seven artist photographers curated by Karen Atkinson and Dan Wasil titled "Edict and Episode: Image as Meaning" that challenged our assumptions of the veracity of the photographic image. In the catalog I state: "The emergence of computerized image enhancement systems raises ethical and philosophical questions about notions of belief in the photo-representational media. The images refer to the stylistic presentations of news broadcasting: The ways that roles are defined through an iconography of authority and other connotative components that are largely hidden behind the master narrative."

Static (1987), Fuji Jetgraphix inkjet print, 23 5/8 x 28 5/8 in. (60 x 72.7 cm)

Untitled (1988), Fuji Jetgraphix inkjet print, 23 5/8 x 28 5/8 in. (60 x 72.7 cm)

RM__Another image titled "Untitled" is difficult to decipher. Can you describe it.

GL__ This composite image, created from two different scenes, is difficult to interpret. It was an experiment in the possibilities of emerging digital technologies—specifically, the pixel-by-pixel superimposition of one image over another. The top layer was first processed with custom software I developed to remove all "non-essential" details, reducing it to its most minimal form. This was then overlaid onto a blurred landscape scene, itself technically altered by another custom program. While the result does not fall within the categories I had set for the Noise-Signal series, it embodies the exploratory spirit of my early digital image processing—new both in its technical methods and in its aesthetic potential—as a way to discover the range of possibilities for image creation.

RM__Can you describe the Fuji Jetgraphix prints and their relevance

GL__ With image production carried out digitally on the Truevision system running on the IBM, the results were stored as Targa files. At the time, computer screens did not yet have high enough resolution to present images in exhibition settings. I was fortunate to come across the Jetgraphix Studio at UCLA, established by Mits Kataoka, a professor of Design.

The Jetgraphix printers were prototype machines donated by Fuji. They were distinctive for being large-scale inkjet printers that used roll-fed paper and could receive data directly from floppy disks. Crucially, the system could also read Targa files, allowing a fully digital workflow from my computer to the printer—without the need for an intermediate step, such as photographing the image off a monitor. Because digital images were relatively small (512 × 480 pixels), Fuji also developed software to enlarge them to 28.5 × 25.5 inches, a format suitable for exhibition. The interpolation process used by the software appears primitive today compared with current printing technologies, but it can also be appreciated for its distinctive texture, which marks a specific historical moment in the evolution of digital imaging.

RM__The Noise-Signal series spans from 1986 to 1990. What was significant about that particular period in your practice, and what led you to conclude the series at that time?

GL__ The period from 1986 to 1990 was disruptive in both my personal and professional life. Due to resistance from senior arts faculty, I was unable to continue developing the digital lab at USC and accepted a one-year studio residency at the Cité Internationale des Arts in Paris. From there, I was offered a faculty position in the Conceptual Design/Information Arts area at San Francisco State University, joining Steve Wilson in the School of Fine Arts. There I encountered a community of artists—including Lynn Hershman-Leeson, Christine Tamblyn, Jane Veeder, Paul DeMarinis, and theorist Doug Kahn—who were experimenting with and analyzing the impact of digital media on artistic and cultural practices.

When I arrived at SFSU in the early 1990s, new technologies were emerging that shifted digital practice toward time-based media and multilinear interactivity. *Macromedia Director* became the software of choice for creating multi-linear sequences, allowing viewers to choose among multiple paths in their experience. Around 1992, Apple released *QuickTime*, which expanded multimedia to include time-based video and audio. As these new technologies opened up opportunities for interactivity, cultural narrative, and multilinearity, I moved on from the *Noise-Signal* series to pursue these directions.

RM__Some people consider computer programming and quantification as problematic for aesthetic exploration. Any thoughts on this?

GL__ My father was a classically trained musician, and one of the ways he made a living was through "orchestration"—the process of parsing a musical piece into essential components such as melody, harmony, and tone, and then assigning these to different instruments in the orchestra. I would watch him at his desk, whistling as he wrote musical notation, defining the parts for each instrument. At the end of the week, the orchestra would arrive to perform the score, each musician playing their part and transforming mathematical notation into a musical experience.

I see the authoring of computer code in a similar way. Ideas are described in a mathematical language and then "performed" by the computer. Interestingly, the results are usually not what was intended, producing unexpected outcomes that lead to new realizations, revisions and adjustments in the code. In this sense, the authoring of computer code as an artistic practice becomes a collaborative process between the author and the instrument.

One last point to mention is the unique magic of the executable language: Text written as computer code is parsed by the compiler and then executed into action. This is the most fascinating aspect of writing computer code.

October 6, 2025

Authority of the News (1986)

A series of digital images created using Truevision TARGA image-processing technology. Screen captures of ABC News talking-heads broadcasts from the mid-1980s are processed in various ways to highlight the semiotic staging of television news. Featured figures include Ted Koppel and Peter Jennings, as well as commentator Henry Kissinger.

Exhibited: 'Noise-to-Signal', USC Atelier, Santa Monica Mall (1987); 'Digital Photography: Captured Images/Volatile Memory, New Montage', SF Cameraworks (1988–1992, traveling); 'George Legrady, From Analogue to Digital', National Gallery of Canada, Museum of Contemporary Photography (1997); 'A Brilliant Spectrum', Santa Barbara Museum of Art (2019)

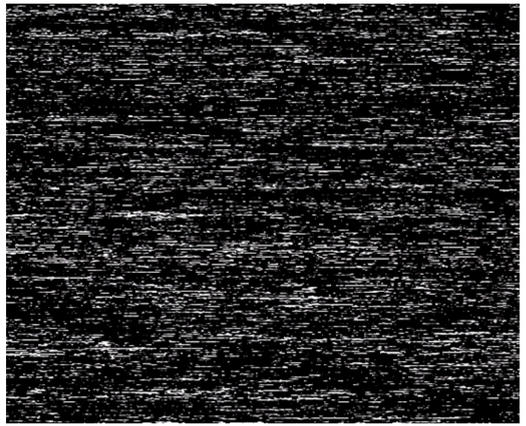
Collection: Santa Barbara Museum of Art

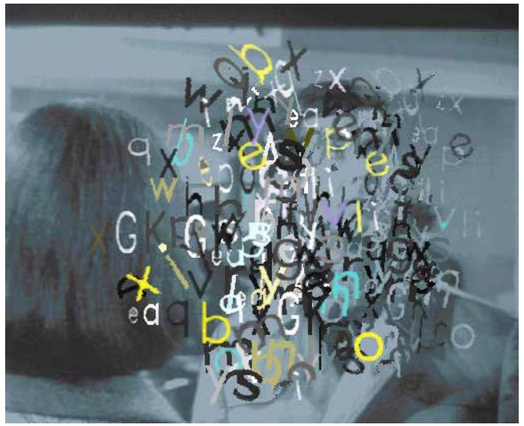
The Noise Factor (1987)

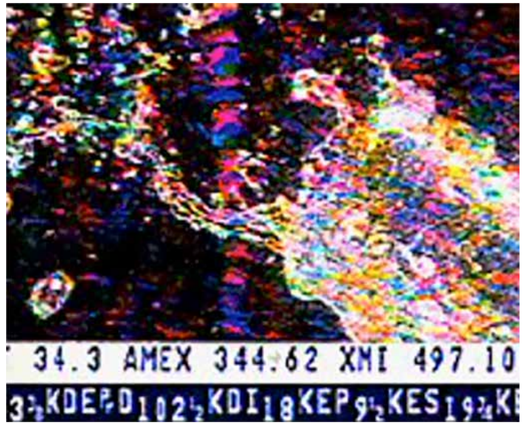
Pure Noise, Conversation, Coke & Stocks Noise, Film Still. Four studies explore the boundaries between noise and signal, from random to ordered information, using captured and digitally processed television scenes, some with added scrambled data.

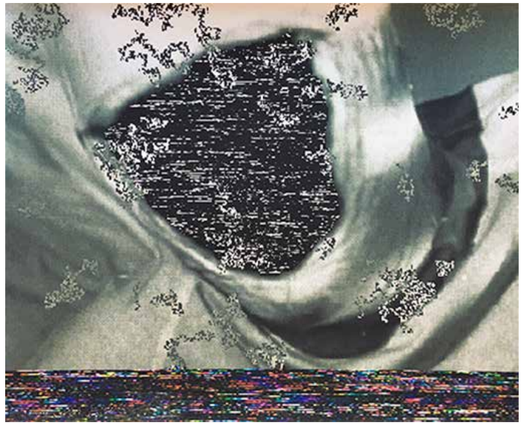
Exhibited: 'Noise-to-Signal', USC Atelier, Santa Monica Mall (1987); 'Digital Photography: Captured Images/Volatile Memory, New Montage', SF Cameraworks (1988–1992, traveling); 'George Legrady, From Analogue to Digital', National Gallery of Canada, Museum of Contemporary Photography (1997); 'Conversation' in 'Digital Witness', Los Angeles County Museum of Art (2024), RCM Galerie, Paris (2025)

Collection: *Conversation,* Los Angeles County Museum of Art (Vernon Collection donation)





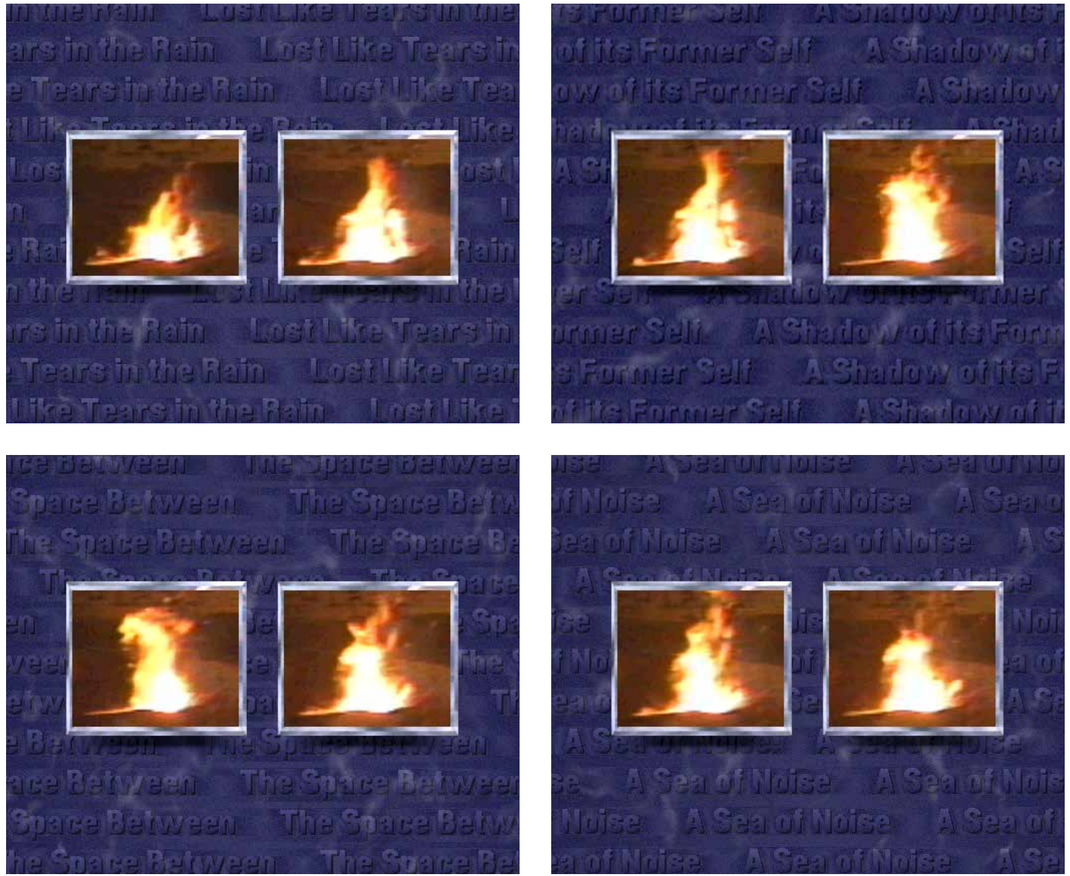




Poetics of the News (1987)

Inspired by the ‘Eternal Flame’ in East European socialist public monuments, a close-up news image of fire burning in an oil barrel warming homeless persons is layered over text patterns reflecting on the transience of televised news. The texts draw from diverse sources including the sci-fi film Blade Runner (‘Lost Like Tears in the Rain’) and other commentary on media ephemerality: ‘A Shadow of Its Former Self’, ‘The Space Between’, ‘A Sea of Noise.’

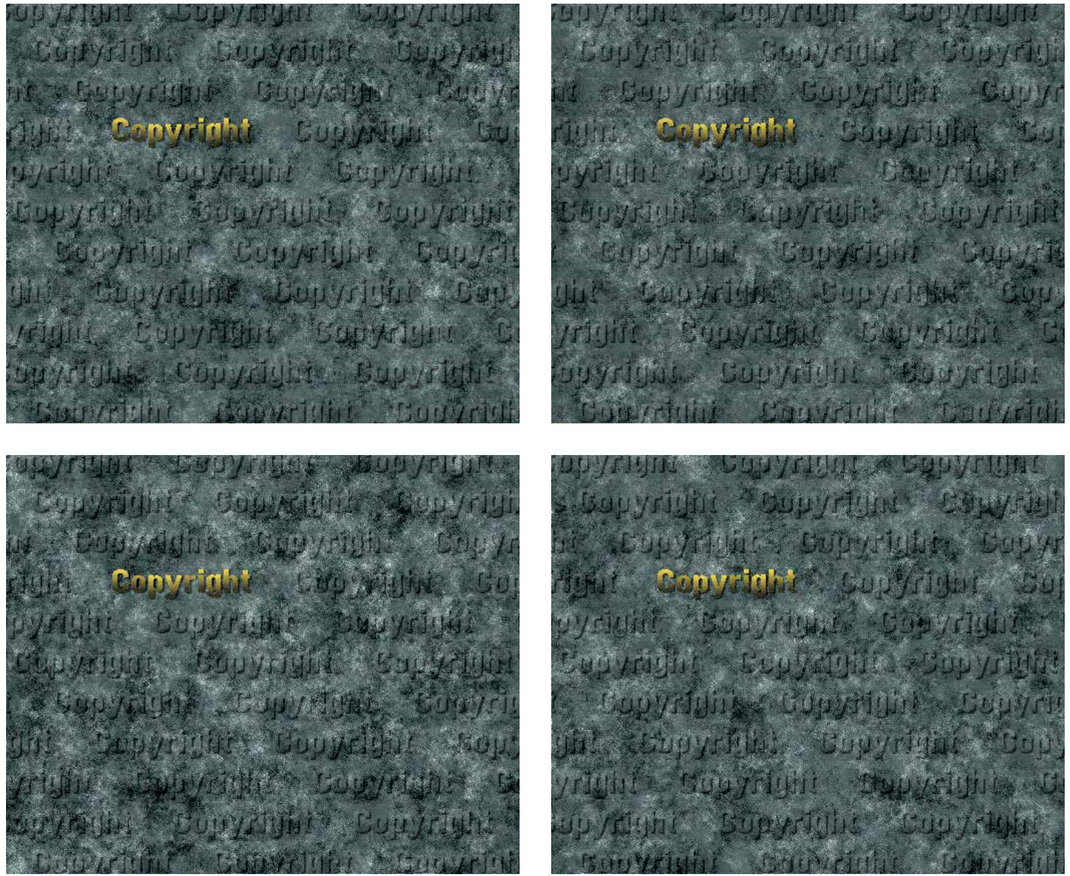
Exhibited: ‘George Legrady, From Analogue to Digital’, National Gallery of Canada, Museum of Contemporary Photography (1997), RCM Galerie, Paris (2025)

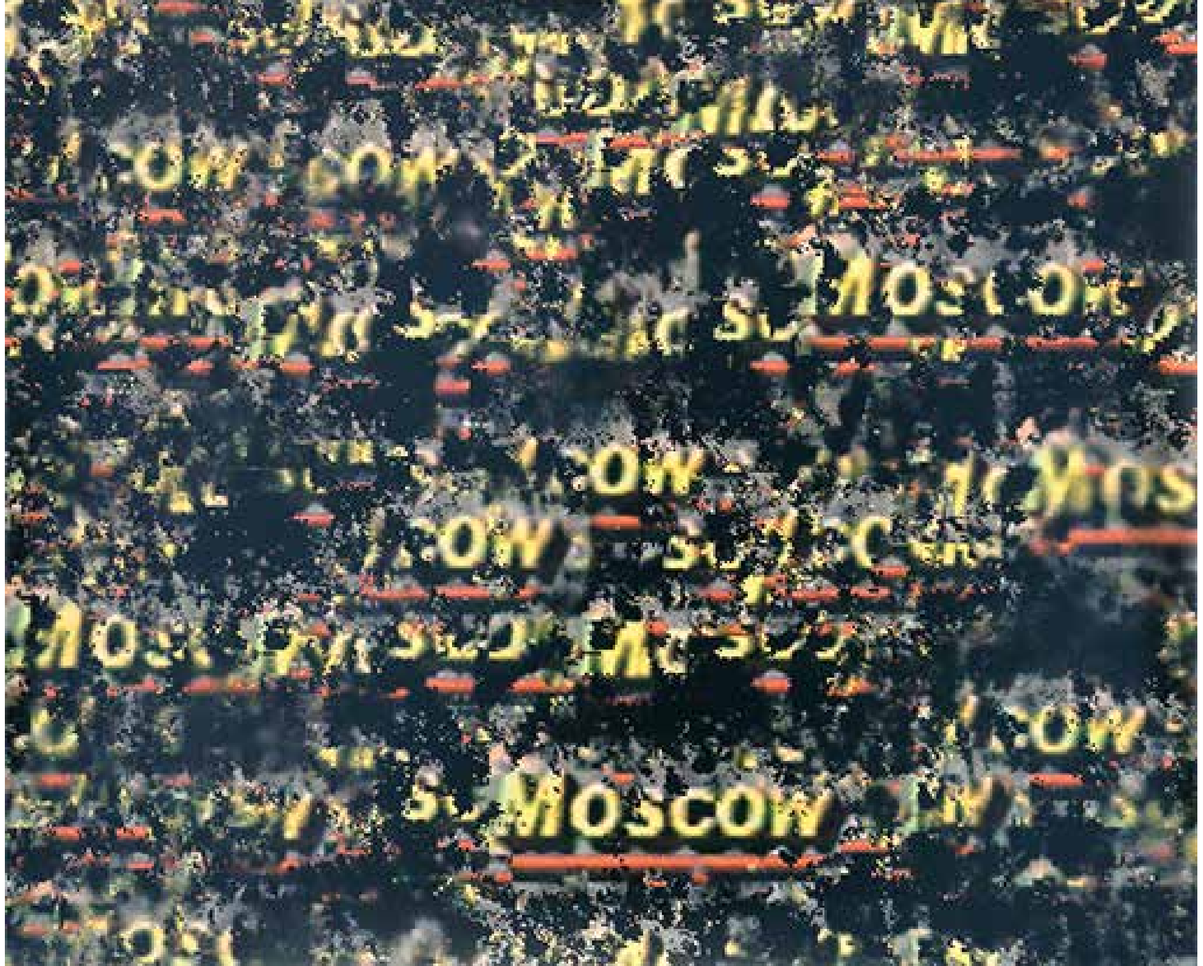


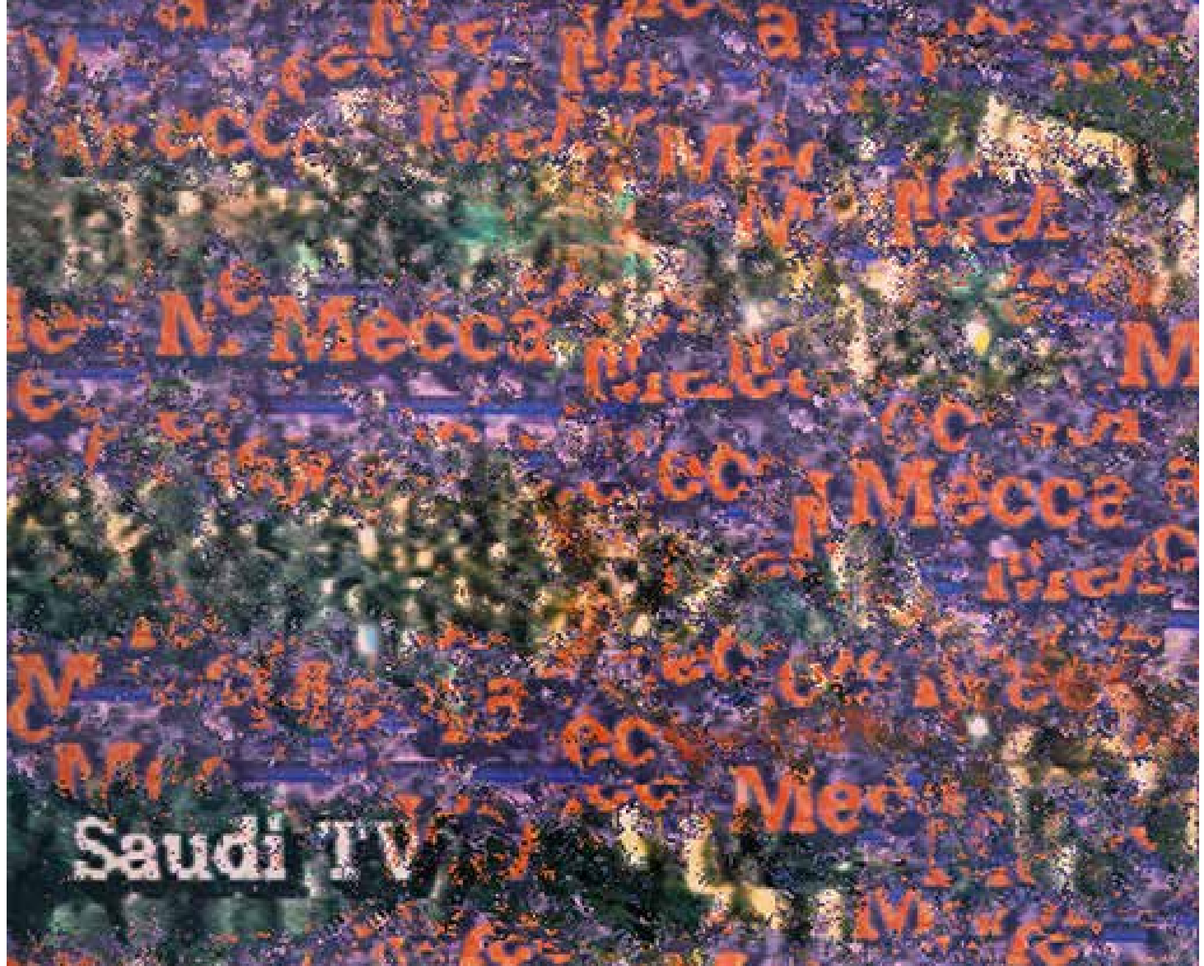
Copyright (1987)

Digital duplication of data has raised concerns about copyright. Four images that initially appear identical reveal subtle differences upon closer inspection. Custom software introduces random background textures, individualizing each image to produce unique outcomes.

Exhibited: ‘Scratching the Surface’, RCM Galerie, Paris (2025)




MOSCOW


Mecca
Saudi TV

Fire in the Ashes / Ashes in the Wind (1988)

Fire in the Ashes, Ashes in the Wind consists of digitally captured news images of the 1988 California fires, then the nation's worst wildfire season since the 1920s. Using image-processing tools, the images were digitally retouched by sampling and blending pixel groups to remove nonessential elements, creating a seamless focus on flames and smoke. These interventions foreground early questions about digital image manipulation and raise issues of veracity—anticipating contemporary concerns about the truth value of digitally altered images.

Exhibited: 'Virtual Memories: New Electronic Photography' curated by Mike Mandel, Friends of Photography, SF (1991)

Collection: Smithsonian American Art Museum, Washington, DC (1989)

Four Frames (1988)

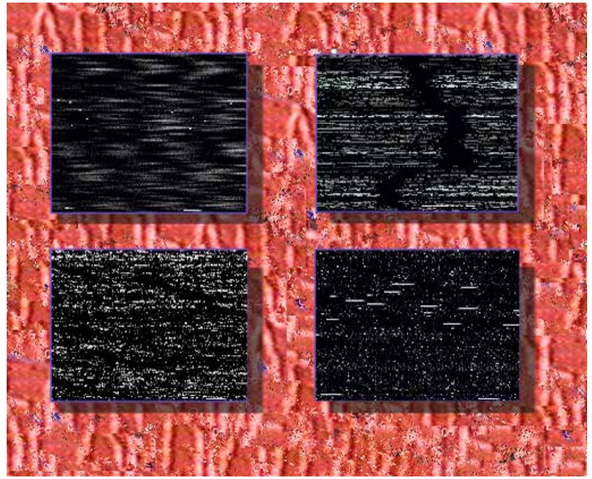
Four various noise patterns float above background red texture consisting of a randomly repeating sample of a news photo.

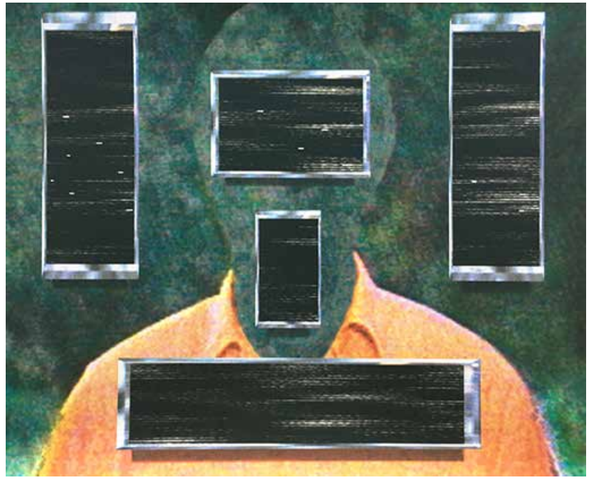
Exhibited: ‘Scratching the Surface’, RCM Galerie, Paris (2025)

Template (1987)

Five noise panels of varying sizes are placed over a news reporter whose facial features have been blended into the background.

Exhibited: ‘Scratching the Surface’, RCM Galerie, Paris (2025)





ABC News (1987)

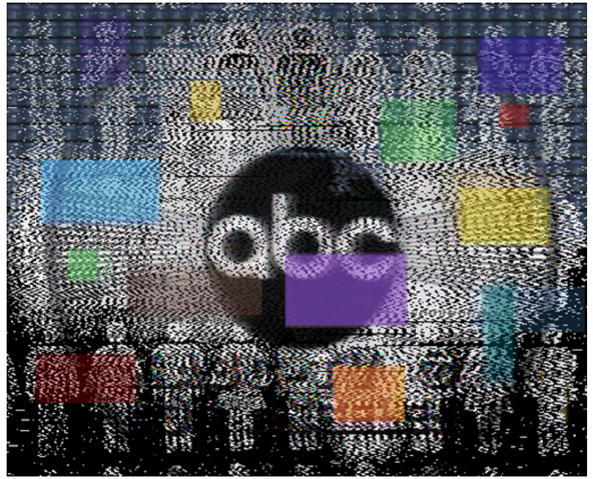
A late-night off-air ABC television test pattern is fused with a weak signal showing a grid of figures explores the suggestive nature of noise as movement distortion.

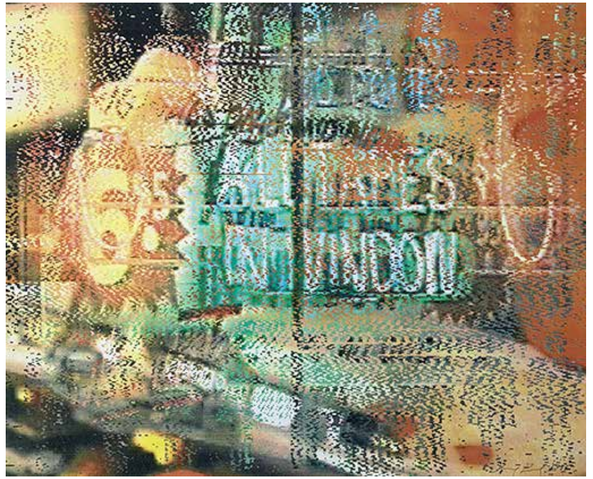
Exhibited: ‘Digital Photography: Captured Images/Volatile Memory, New Montage’, SF Cameraworks (1988–1992, traveling); ‘Scratching the Surface”, RCM Galerie, Paris (2025)

Untitled (1988)

An image of a street scene from a news story is overlaid with a noisy texture.

Exhibited: ‘Scratching the Surface’, RCM Galerie, Paris (2025)



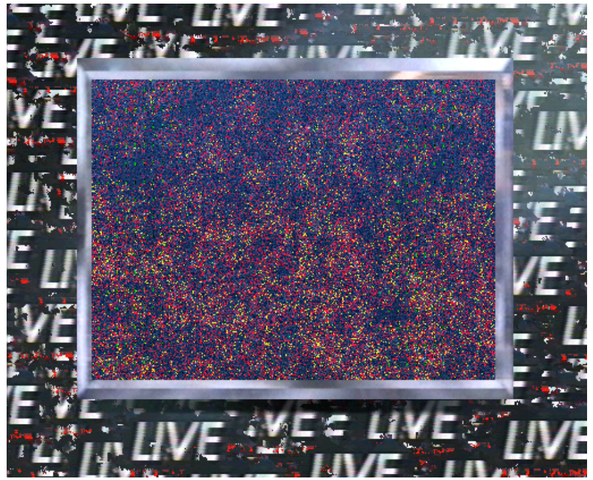


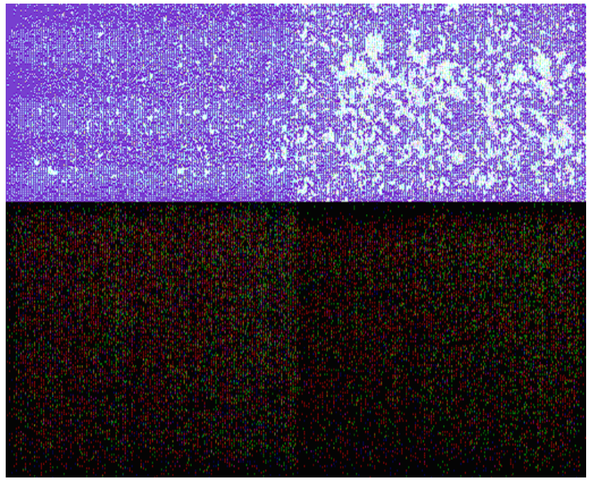
Live Noise (1988)

A randomized background texture consisting of the word “LIVE” is overlaid by a noise-scrambled image.

Blue Noise (1988)

A noise pattern captured from analog video that was re-processed by custom software to finetune visual details.





Coming Up Shortly (1988)

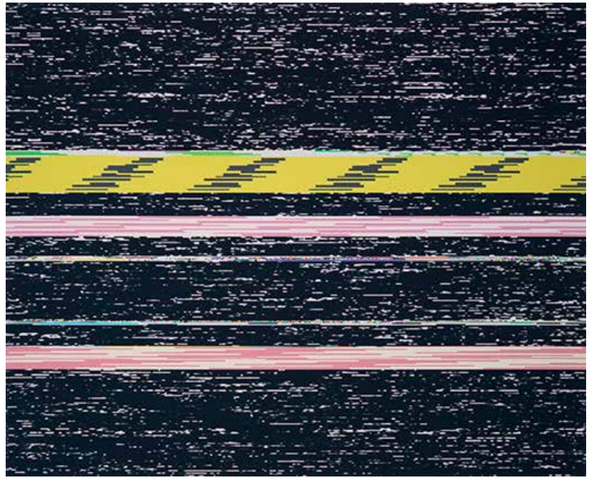
An image that explores and comments on the visual staging of the television news. The background text patterns refers to the promise of new information, whereas the captured news scenes in the small framed windows have been transformed by a “smudge” custom software, rendering the digitized news images into painterly patterns.

Exhibited: ‘Scratching the Surface’, RCM Galerie, Paris (2025)

Raw Data (1987)

Digitized TV noise feed is augmented with slices of other noise textures. The black and white background has been re-processed with custom software using Markov chain pseudo random sequencing.

Collection: Centre Pompidou, Paris (2024)

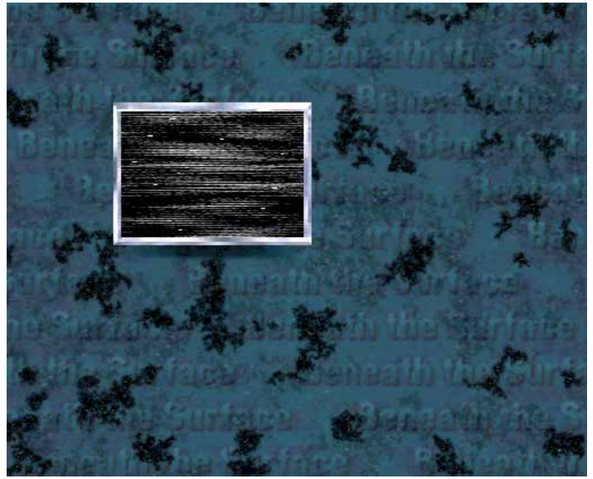


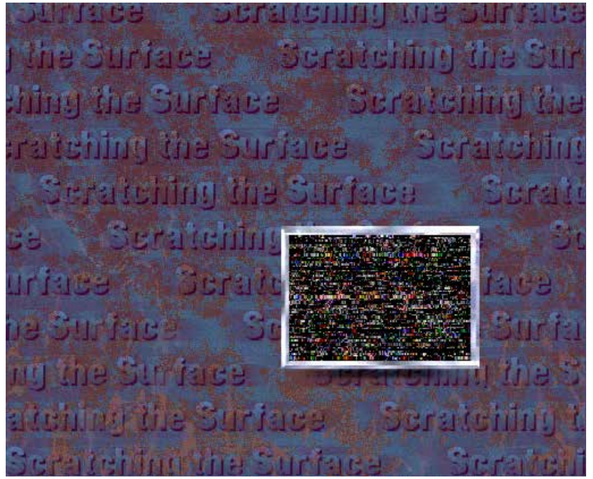
Beneath the Surface (1988)

Scratching the Surface (1988)

A diptych generated through a series of custom software processes explores the visual staging of television news. Background text patterns allude to the promise of deeper, more substantive information. Portions of the image are eroded by custom software based on Brownian noise, disrupting and degrading pixel information. Within a small framed window, a captured news scene is scrambled into abstraction, standing in for the countless news events that receive only fleeting attention within an ever-changing broadcast stream.

Exhibited: 'Scratching the Surface', RCM Galerie, Paris (2025)





Girl / Tiger, 84% Value Free (1988)

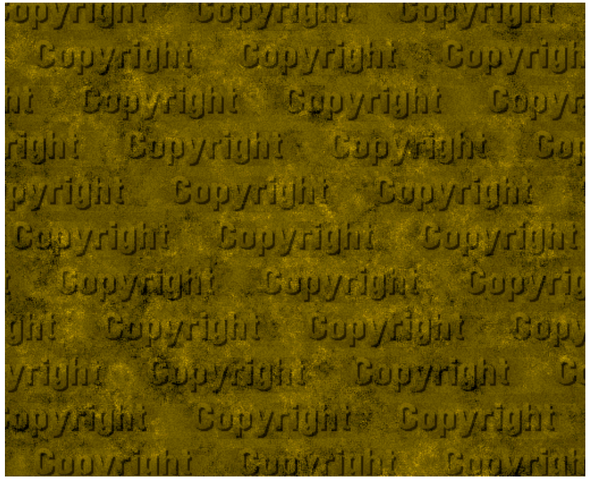
Needle X, 64% Value Free (1988)

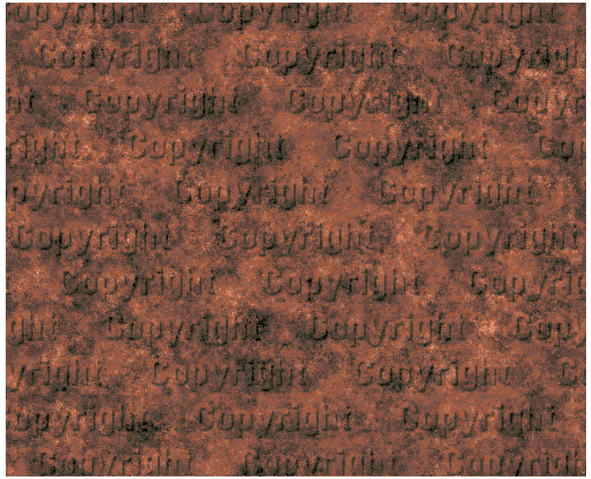
Two stills from television news scenes are transformed using custom software that removes unnecessary pixel data, resulting in abstracted yet still recognizable imagery. In Information Theory, redundancy refers to repeated or “excess” data that enables comprehension. In these works, custom software selectively removes visual redundancy by turning pixels black, exposing how meaning persists despite the reduction of image information.

Exhibited: ‘Digital Photography: Captured Images / Volatile Memory, New Montage’, SF Cameraworks (1988–1992, traveling)

Gold, Bronze, Rust (1988)

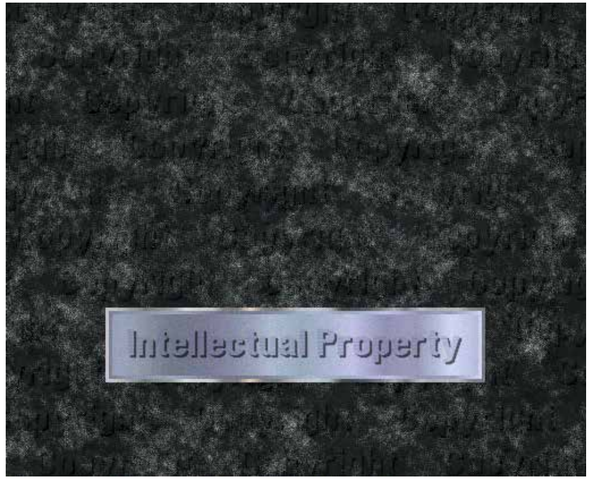
Digital duplication of data has raised concerns about copyright. A template composed of an evenly patterned repetition of the word “copyright” is processed by software that randomly adds texture to individualize the image. The result is then colored by sampling other image sources featuring gold, bronze, and rust-like surface textures.





Copyright, Credit, Intellectual Property (1988)

Digital duplication of data has raised concerns about copyright, ownership, and intellectual property. The background is processed by software that randomly adds texture to individualize the image, producing a unique outcome each time.



Waxing Poetic (1987)

Background news scene of burning rubber tires at an industrial site is overlaid with two commentators whose faces were removed with Targa Truevision software.

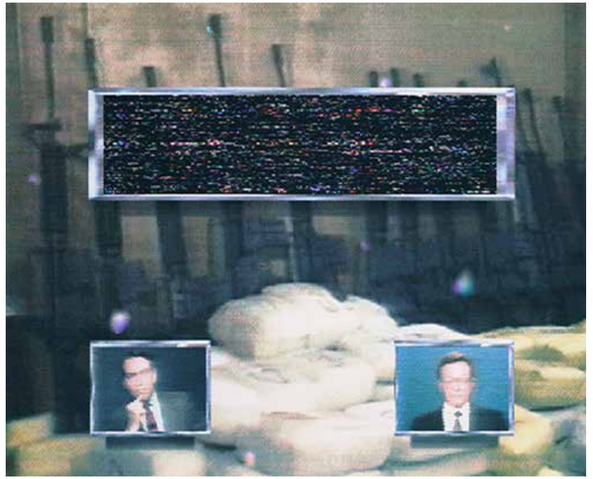
Exhibited: ‘Scratching the Surface’, RCM Galerie, Paris (2025)

Collection: ‘Waxing Poetic’, Centre Pompidou, Paris

TV News Contragate (1987)

A news scene featuring inset windows of television commentators discussing the Iran-Contra political scandal during the Reagan administration, in which proceeds from covert and illegal operations were used to fund arms purchases for Iran and related conflicts. The centrally placed color news image was randomized by custom software, suggesting scrambled information—a fundamental aspect of telecommunications systems used to obscure, encode, or protect sensitive data.

Exhibited: ‘Scratching the Surface’, RCM Galerie, Paris (2025)

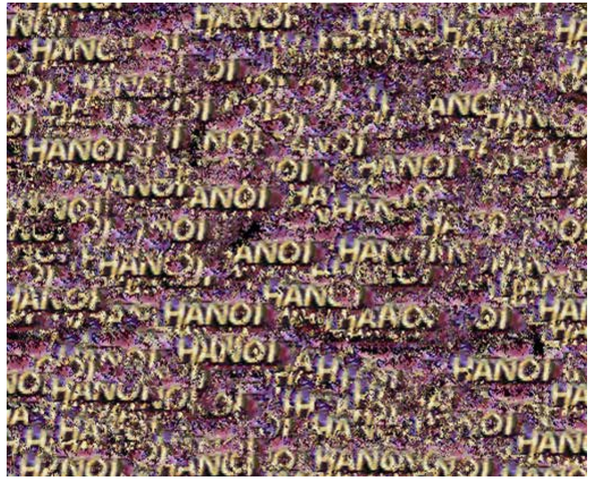


Words/Words – Beirut, Hanoi, Manila (1987)

In the Words/words series, news coverage location labels are isolated from their contextual role and randomly replicated across the entire image surface, to become the dominant visual and semantic element, displacing the photographic content.

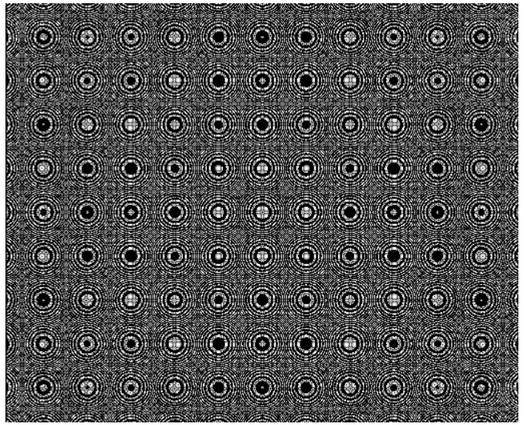
Exhibited: 'Digital Photography: Captured Images/Volatile Memory, New Montage', SF Cameraworks (1988–1992, traveling); 'Photography of Invention: American Pictures of the 1980s', Smithsonian Museum of American Art (1987); 'George Legrady, From Analogue to Digital', National Gallery of Canada, Museum of Contemporary Photography (1997)

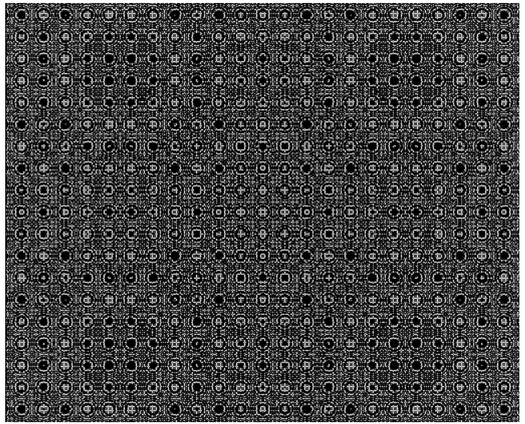
Collection: Canada Council Art Bank

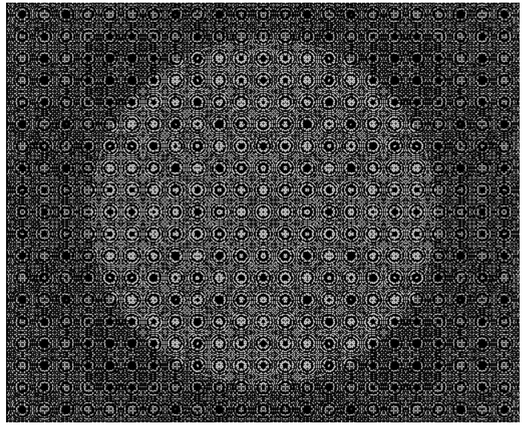


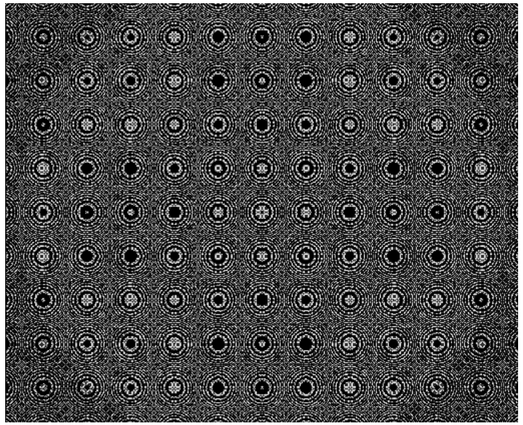
K1, K5, K2, K4, K3, K6 (1986)

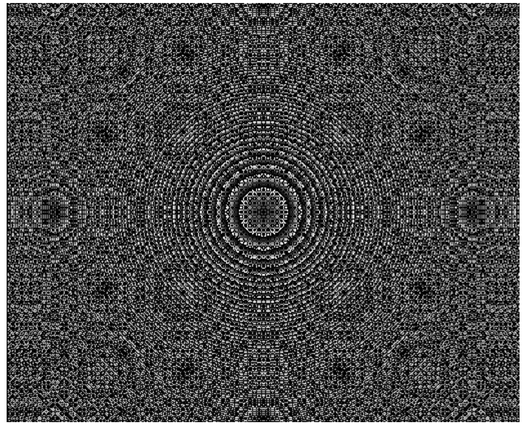
Visual patterns generated by modulating intersecting sine waves, drawing on additive synthesis to produce harmonics analogous to those in audio.

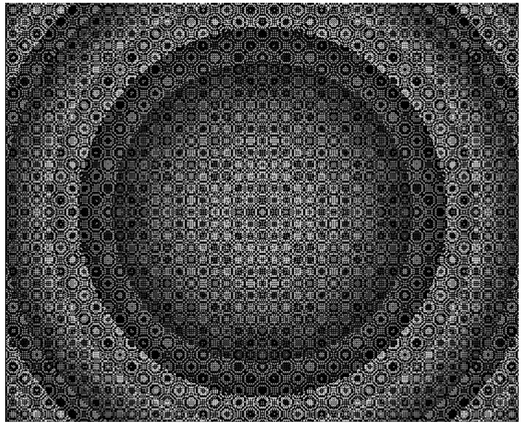












"Toward noon he lay down for a nap . . . On awakening, he thought that he saw an extraordinary mobile creature next to his face, an insect or mollusc which stirred in the shadow of his head. An almost terrifying power of life dwelt within that fragile thing. In less than an instant, and even before his vision could be formulated in thought, Zeno realized that what he was seeing was only his own eye reflected and enlarged by the glass, behind which the grass and sand formed a backing like that of a mirror."[1]

The sixteenth-century alchemist Zeno, catching himself in the act of seeing, was shocked by the unusual sight of his own eye mirrored by a technology: a magnifying glass that he used to examine the plants he collected. Zeno's startling experience parallels the complex relationship of technology and human consciousness – technology as an extension of the human body, as a mirror of the self, as a mediation between nature and culture, as a potential discursive medium or a tool of alienation and control.

All technologies distort. By expanding our abilities to perceive, they simultaneously diminish us. We experience the world through the senses and the act of seeing is one of giving meaning, taking stock of our environment to counterbalance chaos. Technologies that help us to see shape the way we see, and, in the end, determine how we see. These inventions have resulted from choices framed by cultural beliefs to arrive at a particular view of the world, not representing the totality of human experience but a view locked within the limits of a fluctuating history. In the way that we are born into language, we also enter an unfolding, socially defined world of visual continuum. As we consider the impact of digital technology on the production and interpretation of images, questions arise about the belief systems that are in place and their development over time.

I

Images through Western history have functioned to convey beliefs, becoming authoritative records by making permanent the transitory. With the introduction of high-resolution still and motion photographic representation, images have maintained their status as the dominant mode of information exchange where visual documentation is of major importance – as for instance in television news. Contemporary theoretical discourse has dealt extensively with the subjectivity inherent in photographic representation. It is now generally accepted that, even though the photograph represents everything in front of the camera, photography is a symbolic practice where meaning is determined by beliefs and generated through the connotative strategies of subject selection, framing, and vantage point.

The polemic between photography and painting in the 1860s may be a useful reference point regarding the impact of digital processing on the interpretation of images. Photography's mechanical mode of optically recording reflected light onto a light-sensitive surface was initially accepted as a freedom from intervention.[2] One could visually perceive the resulting differences between the literal mechanical recording of the camera in relation to the coded (stylized) painted work of the same scene.[3] As a result, it exposed the inherent subjectivity in painting and forced painting to recognize its function as a distillation of an experience in perceiving instead of a depiction of a subject for itself. Digital technology hinders this type of debate as long as the criterion for verisimilitude is based on appearances since digital processes can simulate existing conventional media to the extent of being visually indistinguishable from them. In the process of converting analog data, such as a continuous-tone image, into digital form, a fundamental transformation takes place. Once the image is stored as numeric data in computer memory, it can be processed in unlimited ways without degradation of information or any trace of change. Given the very high probability that digital filtering of one sort or another could have been used in the transmission process, prior knowledge about an image's history, its source, mode of production and reproduction have become necessary informational components to accurately understand the full meaning of a digital image.

1 Marguerite Yourcenar, The Abyss (New York: Farrar, Straus, and Giroux, 1981), p. 192.

2 "From this day, painting is dead" is what the French painter Paul Delaroche reportedly said in 1839, when confronted with photography for the first time. See Nancy Roth, "Art's New Address," in The Techno/Logical Imagination: Machines in the Garden of Art (Minneapolis: Intermedia Arts Minnesota, 1989), p. 6.

3 Paintings and drawings reproduce only the essential elements determined by the artist. In fact, the drawing process by which an image is created is an act of constituting the significant from the insignificant. Rodin argued that: "It is the artist who is truthful and the camera that lies because a photograph is a mechanical representation frozen in time. The photograph is false because in reality time does not stop. If the artist can succeed in representing the fluidity of motion in a painting, the work is much more original than the scientific [photographic] image in which time is abruptly suspended." Paul Virilio, La machine de vision (Paris: Editions Galilée, 1988), pp. 14–15.

The media through which cultural images are processed and transmitted are influential components of the visual narratives conveyed. The technological tools of production could not exist outside of institutionalized, ideological constructs since their inventions and utility are socially determined. In digital processing, as in any other form of communication, the technological components of hardware and software are structures that shape and impose a form onto the information they process, but these mediating structures are normally understood as transparent or "value free." In an evaluation of the function of narrative in iconography, the historian Irene J. Winter states that "one must divide the message into at least two components: the actual information conveyed, and the extralinguistic or extravisual referent that is part of the subtext. The ideological message is often built into the structure of how the message is conveyed, rather than what the message contains."[4] In the everyday usage of a tool, as with the everyday acceptance of images and language, little thought is given to their particular, ideologically determining, functions. In fact, their success in naturalizing the beliefs of a given community depends on the degree to which they remain unknown as independent forms.[5]

The act of seeing in everyday life is generally taken as a natural event. We trust what we see without much questioning as to why we give importance to certain things and why we sometimes do not recognize visual evidence presented in front of us. According to Umberto Eco, one can usually communicate only about those cultural units that a given signification system has made pertinent.[6] Moreover, competence in reading visual imagery is an acquired skill similar to the process of learning language, a social activity defined by the norms of a particular culture. Norman Bryson maintains that the reality experienced by human beings is always historically produced. That it is "more accurate to say that realism lies in a coincidence between a representation and that which a particular society proposes and assumes as its reality; a reality involving the complex formation of codes of behaviour, law, psychology, social manners, dress, gesture, posture – all those practical norms which govern the stance of human beings toward their particular historical environment."[7]

Photography, Digital Processing and Social Practice

In our image-saturated society, our cultural myths and beliefs are daily reinforced through the numerous photographs we come across – from advertisements, to the news, to family-vacation snapshots. Photography's apparent transparency promotes a viewing experience that arouses pleasure without creating any awareness of its act of ideological constructing.[8] It is easily accepted as a window on the world rather than as a highly selective filter, placed there by a specific hand and mind. The photograph is treated so unproblematically as "real" that its grammar of discussions tends to approximate the grammar of face-to-face encounters:[9] "This is Peter Jennings" is a culturally accepted statement whether one is presenting the person, or pointing at a shape on a television screen.

Photography depends on the physical world as raw referent resource, inasmuch as it requires a subject in front of the camera. Its meaning is culturally defined. Practice and beliefs dictate the image maker's decisions about subject selection, framing, and the moment(s) of exposure. The viewer's understanding and responses are defined in turn by a process involving implicit cultural knowledge that exists nowhere in codified form but remains at a tacit level.[10] As a result, optically recorded visual communication becomes a highly effective rhetorical tool, as it tends to have a persuasive impact. Photographic images imply the potential for verification. There is the general presumption that the image must have been dependent to some extent on a real-world event. Concrete information creates belief.

Optically recorded images such as photographs and video imagery consist of minute, indeterminately arranged components such as the chemically generated grain in film and the variation of light intensities in video. While the digital photograph looks like its conventional counterpart, when examined very closely, it reveals itself to be composed of discrete elements called pixels, which are assigned precise numerical values. Each pixel in the image has a determined Cartesian horizontal and vertical location value and a specific colour-intensity value. It is this relationship of modular units with definite values that makes it totally controllable. Thus, when we speak of the digital photographic image, we are referring to a simulated photographic representation, achieved through any combination of a mechanical lens, a hand-held (electronic) pencil, or a database filtered by mathematical language.

A digital, numeric-based structure is by definition a statistical representation where the degree of accuracy is dependent on the amount of information that can be processed within a given space and time. The greater the memory, the richer the image's degree of resolution. When the volume of statistical data surpasses the threshold of our physiological capabilities to perceive change, the illusion of total simulation is achieved. A digital image does not represent an optical trace such as a photograph but provides a logical model of a visual experience. In other words, it describes not the phenomenon of perception but rather the physical laws that govern it, manifesting a sequence of numbers stored in computer memory. Its structure is one of language: logical procedures or algorithms through which data is orchestrated into visual form. Even though both may look the same on the surface, a digital image may be said to differ from its analog counterpart in terms of a verifiable past and a possible future. Because of its dependence on an a priori, real-world referent subject, a photograph by nature refers to the past – a viewing experience termed by Roland Barthes a sense of the "having-been-there." With the digital image, whose construction could potentially be totally fictive, one can claim at most that the event represented "could possibly be."[11]

The Medium of Mathematical Language

Digital images simulate rather then represent the real. They can be produced from total invention according to mathematical algorithms, making visible, through the use of computers, concepts and physical phenomena that do not exist in material form. For instance, objects and images that are rotated on television broadcasts exist in virtual space – an environment that is totally fictional, defined mathematically, and based on laws of physics. Paul Virilio describes the digital, synthetic image as a tool for seeing the invisible, things you cannot see in any other manner than by calculation.[12] This displacement of the real by simulation shifts the image's status to a total representation of concepts. One first conceptualizes one's intentions, then proceeds to realize the imagined through programming.

Computers, which are symbol-manipulating machines, effect a radical rupture with conventional approaches to image-making. For artists who create through programming, logical language mediates between intention and the resultant artwork by a process similar to the ways composers create through musical notation. The working method is divorced from sensory experience in that the artist's work becomes one of orchestrating symbolic order through code writing rather then through the physical interaction between material (such as paint) and the senses.[13] It forces the artist to conceptually translate events from the real world into complex sequences of rule-based decisions and to previsualize in so precise a manner that even chance needs to be determined and coded. Once these logical sequences and commands are stored in memory, any aesthetic and/or logical errors can be reformulated by simply changing the code, because computers provide the ability to retrace and undo one's steps.

Some Philosophical Questions

The processing of digital information depends not on generational reproduction, which would imply data loss, but on the transference of a sequenced set of numbers by which information can be duplicated ad infinitum. Since each individual element of a digital image is readily accessible, the copying capability has forced a reevaluation of what constitutes ownership and authorship. For instance, is a change of one pixel in a high-resolution digital image a significant alteration to authorship? In this age of information exchange, where a shift

4 Irene J. Winter, "After the Battle Is Over: The Stele of the Vultures and the Beginning of Historical Narrative in the Art of the Ancient Near East," Studies in the History of Art, vol. 16 (Washington: National Gallery of Art, 1985), p. 28.

5 Norman Bryson, "Vision and Painting" (New Haven: Yale University Press, 1983), p. 14.

6 Umberto Eco, "How Culture Conditions the Colours We See," in On Signs (Baltimore: John Hopkins University Press, 1985), p. 163.

7 Bryson, op. cit., p. 13.

8 Linda Hutcheon, "The Politics of Postmodernism "(London: Routledge, 1989), p. 123.

9 Michael Shapiro, "The Political Rhetoric of Photography", delivered at the 82nd Annual Meeting of the American Political Science Association, Washington, D.C., August 28–31, 1986.

10 Bryson, op. cit., p. 14.

11 Edmond Couchot, "La synthèse numérique de l'image," *Traverses*/26 (Paris: Centre Georges-Pompidou, 1983), p. 60.

12 From an interview published in "The Work of Art in the Electronic Age," Block 14 (London), autumn 1988, p. 5. Virilio gives as an example the works of the mathematician Netgrin, whose computer programs pictured Moebius rings turning.

13 Couchot, op. cit., pp. 58–62

in context results in a shift in meaning, the issue would seem to be one of intention and positioning. Sociologists have voiced concerns about the potential misuse of digital technology in the news media pointing out that "those who have access to digital image-processing systems have the capacity to alter, reconstruct, or create imagery reflective of the real world that might be passed off as representing accurate data."[14]

While photographs have from the start been doctored or their meaning changed through standard photographic strategies of vantage point, framing, cropping, and retouching, the digital image betrays no surface evidence of alteration. One must first suspect that the image is less than accurate, then one needs a computer with the right program to detect the changes.

II

The focus of my artistic work in photography during the past fourteen years can be summarized as a series of investigations about the cultural and syntactical conventions by which photographic images are structured to convey meaning. Under the Spreading Chestnut Tree (1984), examines the coding conventions of corporate iconography. In this work, the compositions and body language of group poses in the photographic portraits of the 1980 E.F. Hutton annual report were reconstructed in the tradition of the "nature morte" or still life. The figures were executed to look like wood veneer, a material commonly associated with the corporate body through its use in the architectural and design finishes of corporate boardrooms. These constructions were then photographed by traditional means and printed on metallic gold and silver paper. I began working with computer programming in 1981, realizing at that time that aesthetic decision-making procedures could be formulated in terms of a sequence of logical conditional statements not unlike rules of language. This structured approach has had precedents in the sequential and modular artworks of Sol Lewitt, and the syllogistic propositions of Lawrence Weiner, Doug Huebler, Joseph Kosuth, and others associated with the conceptual art movement.[15] The fact that the construction and manipulation of photographic images could take place visually on the computer screen rather then materially in front of the camera lens has made computer work an effective alternative.

News Beirut, 1987 from the Words & Words Series considers the discursive function of textual labelling in TV news imagery. Frames from the news were digitized and segments that contained text were isolated and used to "paint in" the whole image area in a random fashion. These labelling texts – names of cities where the particular news event took place – function in television broadcasts to contextualize images. They impose a meaning that may not necessarily pertain to the original intent of the image. Barthes calls this a strategy of anchorage: "The caption helps me to choose the correct level of perception . . . , focussing my understanding. The anchorage is ideological. It remote controls the viewer toward a meaning chosen in advance."[16] By erasing and covering the image with fragments of the text, the text becomes the aesthetic experience, still maintaining a connotative load. As in the original, we project onto the new image a preconceived idea of what that text refers to. Our perceptions about the world we live in are reinforced by the conventions of representation that inundate us daily, and television's particular mode of defining reality seems to be a dominant conditioning force within the culture. Television becomes an unlimited, real-time, image bank when it is linked to an image-processing computer. Appropriating images from this data bank is a means to examine and comment on television's highly ritualized syntax.

A conceptual starting point for investigating the potential of image-processing software that I have been producing since 1986 is Claude Shannon's information theory, which has been described as "mathematics turned into philosophy." My approach has been to reverse that sequence, commenting on the semantic discrepancies of information theory, specifically in its definitions of language, signal, and noise. Noise in information theory is defined as random errors within a signal or unstructured information, distinguishable from signal that is ordered information. Whereas engineers have invested much energy in filtering out noise from signals to purify communication, my programming activities aim to achieve the opposite – to incorporate into images an order determined through noise and chance. The program Xerox replaces the "inessential" components of an image with a noise pattern, exemplifying one of information theory's dictates that there is greater than fifty percent redundancy in language in the form of sounds or letters that are not strictly necessary to convey a message. The resultant image looks as if it has been photocopied, with over fifty percent of the pixels reduced to black. The actual percentage of "value-free" information (eighty-five percent black in the work illustrated) is calculated at the end of the process.

In Moral Stories, a program titled Smudge removes image sharpness and photographic depth by a random process of blurring image areas over time. The end result, which resembles water spilled on an ink drawing, looks as if it were hand painted. When the process is prolonged, it results in the annihilation of the image in a total blur. Although information theory has revolutionized our culture by demonstrating that information is a quantifiable entity which can be calculated and controlled, thereby providing the theoretical basis for the development of new technologies and modes of information processing, it has also semantically shortchanged our understanding of the value of things communicated. In the bipolar reduction to either signal or noise, the meaning of things – from moral injunctions to philosophical treatises, from love poems to sales messages and parking tickets – is levelled into signal. So, too, their value. Theodore Roszak comments: "Thanks to the high success of information theory, we live in a time of blinding speed; but what people have to say to one another by way of technology shows no comparable development."[17]

A recent project titled Between East & West (1990), brings together the logistics of software development within a context that is both personal and political. It involves a working dialogue with a scientist from Hungary, where I was born (and which I left in 1956 during a time of crisis). The project began with an exchange of information: I sent my colleague a mathematical equation to be turned into computer code, a program that would produce images.[18]

After generating a series of random numbers, the equation assigns the average of a "neighbourhood" (a cluster of visually adjacent units) of values to each pixel, thereby arriving at a balance between chaos and order. This algorithmic process, derived from image-processing filters, is used to sharpen photographic images. It has particular application in specialized fields where photographic recording provides data documentation, such as the space program, surveillance monitoring, and recently art conservation.[19] Similar digital filters have also been employed to enhance features of the Shroud of Turin, sometimes described as the "first photographic phenomenon in history." For some time, I had been aware that dialogue in various professional fields had been taking place between the West and the East prior to the recent political changes. That scientists and specialists were communicating on a regular basis, sharing their knowledge and exchanging information. This reality seemed to be in sharp contrast with the official political positions of both sides.

My intention in re-enacting this informational exchange has been to make visible the unspoken relationships and to bring attention to the influence of Central European intellectual ideas in Western thought, something that has largely been ignored within the culture at large. I retrieved the program on a visit to Budapest in August 1989 and expanded it in California to implement colour values. These image-enhancement techniques are usually applied by first digitizing images, then filtering them with the algorithmic functions to remove noise and highlight detail. In East & West I used the functions instead to generate abstract noise patterns directly from the computer program without employing a referent photograph in the process. In the center of each textured image was placed a long rectangular panel that looks like a metallic nameplate. Constructed in computer memory through

14 Howard Bossen, "Zone 5, Photojournalism, Ethics, and the Electronic Age," Studies in Visual Communication (University of Pennsylvania) 11:3 (summer 1985).

15 "When an artist uses a conceptual form of art it means that all the planning and decisions are made before and the execution is a perfunctory affair . . . This kind of art is not theoretical or illustrative of theories; it is intuitive, it is involved with all types of mental processes." Sol Lewitt, L'art conceptuel: Une perspective (Paris: Musée d'art moderne de la Ville de Paris, 1989), p. 199.

16 Roland Barthes, "The Rhetoric of the Image." in Image-Music-Text (Glasgow: Fontana Collins, 1977), p. 39.

17 Theodore Roszak, "The Cult of Information" (New York: Pantheon Books, 1986), p. 16.

18 The equation, which I had found in an article titled "From Noise Comes Beauty," by Carl A. Pickover, a scientist at the IBM Thomas J. Watson Research Center in New York, was published in the March 1988 issue of "Computer Graphics World".

19 John F. Asmus, "Digital Image Processing in Art Conservation," BYTE 12:3 (1987), p. 151.

software, it was programmed to have the reflecting properties of chrome, on which images from a video I made in Budapest were "projected" mathematically.[20] The viewer would not be able to decipher what the plates reflected, but because of our general familiarity with the photographic image, the blurred shapes did read as photographic and therefore maintained the authority associated with photographic representation.

The impetus for this work came out of considering the belief structures we bring to the reading of images. Works of art, like other signs, are initially empty but gain their meaning within a historical context, mediated by current social belief systems. In the case of the East & West project, where the only existing element in the image is the pattern created by the filter (minus the photograph), the works become similar to the skeletal remains of a stream of punctuation marks after words have been emptied out of a sentence.

In his description of "bricolage", Claude Lévi-Strauss makes reference to the artist as someone who constructs through craftsmanship a material object, a symbolic structure that is also an object of knowledge.[21] The act of craftsmanship in my work of the last few years has been situated in the programming phase, i.e., the writing of computer code, this being the arena where the relationship of language to image and the impact of technology on cultural vision is dealt with. The weight of this activity remains largely invisible, resulting in images that function as outward manifestations of the locus of the work: the software itself. These images serve as residual physical indices to an event that has taken place.

With computer technology, a new twist is introduced to our acceptance of visual evidence: photographic representation can be fabricated through mathematical processing. Computer imaging can simulate and generate any type of imagery or "reality" one chooses. The ideological factor in the digital photograph is exponentionally increased since the image promotes a form of meaning and value while appearing to merely represent the real.

In my computer-generated works, as in my investigations of photography, the intention is to engage the viewer in considering the discrepancy inherent in an image that looks natural on the surface but is in fact mediated, and is therefore a challenge to conventional notions of belief in visual representation.

Previously published in:
Legrady, George "Image, language and belief in synthesis". *Art Journal,* College Art Association, Vol. 49, no. 3 (Fall 1990). — P. 266-271
Legrady, George. "Images, Language and Belief in Synthesis". In *Critical Issues in Electronic Media*, edited by Simon Penny: SUNY Press, 1995.

20 On September 18, 1988, in Budapest, I videotaped a public demonstration of about 80,000 marchers who were protesting the ecologically unsound Nagymaros/Danube hydroelectric works. The project was engineered by the Soviet Union, which contracted with Austrian firms for its construction on Hungarian and Czechoslovak territories. Because of the participation of the Austrian Green Party, this was the first demonstration to be tolerated by the officials in Socialist Hungary.

21 Claude Lévi-Strauss, "The Savage Mind" (Chicago: University of Chicago, 1966), p. 22.

GEORGE LEGRADY

FROM NOISE TO SIGNAL

JULY 7 - AUGUST 30, 1987

RECEPTION: AUGUST 28, 6-9 PM

USC ATELIER

SANTA MONICA PLACE

Biography

George Legrady, born 1950 in Budapest, raised in Montreal, and living in California since 1981 is a media artist working in photography and digital media installations. He received the Master of Fine Arts from the San Francisco Art Institute.

He is an internationally exhibited, digital media multi-disciplinary artist and scholar with projects realized in photography, interactive digital media installations, data visualization and computationally generated visualizations. He is a pioneer digital media artist, transitioning from fine art photography to computation in the mid-1980s. His contribution to the digital media field is in intersecting cultural content with data processing as a means for new forms of aesthetic representations and socio-cultural narrative experiences

His works have been exhibited at the Museum of Contemporary Art, MOCA, Los Angeles; Centre Pompidou, Paris; 3rd Lyon Biennale; Haus der Kunst, Munich; the ZKM (Center for Art and Media), 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 and numerous other places.

He is a recipient of a John Simon Guggenheim Fellowship, Creative Capital Foundation Emerging Fields, 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 Pompidou Center, Paris, 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 graduate program at the University of California, Santa Barbara.

Exhibitions

Selected Solo Exhibitions

2024
– *George Legrady,* RCM Galerie, Paris, France
– *Image & Fiber Synthesis,* Nan Rae Gallery, Woodbury University, Burbank

2020
– *The Continuity of the Image,* Inda Gallery, Budapest, Hungary

2018
– *The James Bay Cree in 1973,* University of California Art & Architecture Library, Santa Barbara

2015
– *Day & Night,* Edward Cella Art + Architecture, Los Angeles, CA
– *Voice of Sisyphus | Slice,* Chronus Art Center, Shanghai, China

2013
– Swarm Vision, Run Run Shaw Media Centre, Hong Kong

2010
– *Refraction & Slice,* ArtWithoutWalls, 21c Museum, Louisville, Kentucky

2006
– *Algorithmic Visualizations,* Telic Exchange, Los Angeles

2004
– *Algorithmic Visualizations,* Philbrook Museum of Art, Tulsa, Oklahoma

2001
– *Pockets Full of Memories / Souvenirs plein les poches,* Centre Pompidou, Paris, *traveling to Aura: After the Age of Technical Reproduction,* Budapest (2003), Ars Electronica (2003), Museum of Contemporary art, Kiasma, Helsinki (2004), Cornerhouse Gallery, Manchester (2005), Museum of Contemporary art, Taipei (2006)

1999
– *Transitional Spaces,* Rotunde, Siemens Headquarters, Munich

1998
– *George Legrady: from Analogue to Digital,* National Gallery of Canada, Ottawa, and Canadian Museum of Contemporary Photography, Ottawa

1997
– *Tracing,* Kunst und Austellunghalle, Bonn, also Museum of Contemporary Art, Los Angeles (1998)

1984
– *Stock Footage,* La Jolla Museum of Contemporary Art, La Jolla, California

1981
– *Staged Photography,* Projects Studios One (PS1), Long Island City

1976
– *George Legrady / Miklos Legrady, A Space,* Toronto (two person)

Selected Group Exhibitions

2024
– *Digital Witness,* Los Angeles County Museum of Art (Getty Art + Science Collide)
– *Seeing the Unseeable: Data, Design, Art,* Art Center College of Design, Pasadena (Getty Art + Science Collide)

2023
– *En d'infinies variations,* Centre Culturel Canadien, Paris
– *Voice of Sisyphus in Topologies of the Real,* Shenzhen Museum of Contemporary Art, Shenzhen, China

2017
– *Voice of Sisyphus,* in Datumsoria, ZKM (Center for Art & Media), Karlsruhe, Germany

2015
– *We Are Stardust,* in Infosphere, ZKM (Center for Art & Media), Karlsruhe, Germany
– *AutoVision,* in Fotofest Mannheim, Heidelberg, Kunstverein, Germany
– *Imagining Maconde,* International Book Fair, Bogota, Colombia

2012
– *Slice in Emoçao Art.ficial 6.0,* Itau Institute, Sao Paulo, Brazil

2010
– *We Are Stardust,* at CODE Live, Vancouver Olympics, Vancouver BC

1997
– *Deep Storage,* Haus der Kunst Munich, Kunstforum, Berlin, Kunstmuseum, Düsseldorf, PS1, NY

1996
– *The Butterfly Effect,* Mücsarnok Museum of Fine Arts, Budapest

1995
– *Fotografie nach der Fotografie,* Siemens, Munich (traveling)
– *Slippery Traces,* 3rd Lyon Biennale of Contemporary Art, Lyon

1994
– *Les Hypermédias,* Revue Virtuelle, Centre Pompidou, Paris

1993
– *Iterations: The Digital Image,* International Center for Photography, New York

1989
– *The Photography of Invention American Pictures of the 1980s,* National Museum of American Art, Smithsonian Institution, Washington, D.C

1988
– *Digital Photography: Captured Images, Volatile Memory, New Montage,* SF Cameraworks, San Francisco, (traveling to Houston Center for Photography, Museum Folkwang, Essen, Museet for Fotokunst, Odense)
– Fotografie, Wissenschaft und Neue Medien, Kunstforum, Düsseldorf

Selected Public Commissions

2008
– *Data Flow,* Corporate Executive Board, Arlington, VA

2006
– *Kinetic Flow,* Santa Monica / Vermont Station, Red Line Metro, Los Angeles

2003
– *Making Visible the Invisible,* Seattle Central Library, Seattle

Design and layout: Félix Müller, Paris

ISBN: 978-0-00-000000-0

Front cover
ABC News (1987)

Start flap
Pure Noise (1987)

Pages 16–17
Close-up detail of *Coke & Stocks Noise* (1987)
detail of the Fuji inkjet Jetgraphix software interpolation

Page 22

Moscow (1987)

Moscow News was created by segmenting the text from the lower right of a television news frame and using custom software to randomly distribute it across the image space, producing a textured visual field from a single textual fragment.

Collection: Centre Pompidou, Paris

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Mecca (1987)

Mecca was created by segmenting the text from the lower right of a television news frame and using custom software to randomly distribute it across the image space, producing a textured visual field from a single textual fragment.

Exhibited: 'Scratching the Surface', RCM Galerie, Paris (2025)

Pages 30–31
Close-up details of *Untitled* (1988) details of the Fuji inkjet Jetgraphix software interpolation

Pages 40–41

Two Street Scenes (1989)

Two street scenes from late-night Los Angeles television news documenting police and sex-work activity on Sunset Boulevard are transformed using custom software that smudges the images, reducing visual detail in a manner reminiscent of an oil-brush effect. Each image includes a vertical slice of the original still prior to digital transformation. Recorded under low-light nighttime conditions, the left image depicts parked police vehicles with flashing lights, while the right shows two women—possibly sex workers—crossing the street.

Page 52
'Digital Photography: Captured Images, Volatile Memory, New Montage', Installation at the Folkwang Museum, Essen, Germany (1989)

Page 60
'George Legrady: From Noise to Signal'
exhibition invitation USC Atelier, Santa Monica Place

Page 61
Fuji inkjet prints on wall in George Legrady Los Angeles studio, Santa Fe Art Colony, 1988. Black painting above desk by Michael Barton Miller.

End flap
Pure Noise (1987)

Back cover
Untitled (1988)