2000 • Press and Documentation of Activities

Golan Levin

Press clippings, critical reviews, exhibition catalogs, and ephemera. Ordered chronologically.

004 Coleman, B. "Cool Schools". Artbyte, Summer 2000.
005 New Work from MIT. SEGA Joypolis Center, Tokyo, Japan, 7/2000.
007 "Interactive Design Annual #6". Communication Arts. 9/2000.
009 2000 Ars Electronica Festival, Linz, Austria. 9/2000.
**Creative Play.**


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**Summer 2000**

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**eDocent™**

Moving Image is working on the development of a prototype for an Internet-compatible visitor information system utilizing off-the-shelf handheld wireless communications devices. The Museum is collaborating on the project with the pioneering digital design, engineering, and consulting firm Organic, Inc. Founded in 1993, Organic developed the Apache Web server and designed some of the earliest Web sites, with clients such as Yahoo!

The system, called eDocent™, will allow visitors to access text, photos, and other multimedia elements using equipment similar to a Palm Pilot or personal digital assistant. Based on their interests, museumgoers will be able to call up information about objects on display in the Museum’s galleries as well as related artifacts in the collection not currently on view.

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**SHORT ENDS**

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**New Directions in Digital Play**

A special collection of interactive digital artworks from the Aesthetics and Computation Group of the Massachusetts Institute of Technology’s Media Laboratory has been added to Expanded Entertainment, an exhibition in the William Fox Gallery that explores the past, present, and future of video games and digital play. The new works, which include the titles Egg Machine, Honey, and Focuss (pictured), stand at the intersection of art, entertainment, and technology, providing a rich environment for creative experimentation using sound and images. Their programming and visual simplicity hark back to the first video games, also created at MIT.

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**Rory Kennedy and Barbara Kopple Take Part in Museum Workshops**

Filmmakers Rory Kennedy and Barbara Kopple visited Moving Image this spring to participate in the Museum’s new documentary film studies program with the High School of Art and Design. The program combines lectures on the documentary form with screenings and discussions with filmmakers working in the genre. This May, Ms. Kennedy showed American Hollow, a portrait of an extended Appalachian family and their life in rural Kentucky. And in April, Ms. Kopple presented her 1995 Academy Award-winning documentary Fallen Champ: The Untold Story of Mike Tyson and My Generation, her upcoming film about the 1989, 1994, and 1999 Woodstock festivals. After the screenings, the students, each of whom will make a film over the course of the semester, had question-and-answer sessions with the directors, and were able to ask about working in the field, cultural challenges of documentary filmmaking, and the filmmaker’s personal feelings about their subjects.
GRAMMYS BANNER

Who said that banner ads have to be dull? Ogilvy's banner for the Grammy Awards Web site is a whimsical pairing of appealing graphics and effective sound. Each of four pairs of luscious lips has a unique voice; together they form a barbershop quartet—or an homage to Bobby McFerrin.

**CATEGORY:** Web Site
**CLIENT/COMPANY:** IBM, Armonk, NY.
**DESIGN:** OgilvyInteractive, New York: Jan Leth, executive creative director; Audrey Fleischer, creative director; David Levy, copywriter; Juan Gallardo, Warren Kemp, art directors; Jude Raymond Fish, Angie Ahn, producers. Heavy Industry, production company. David Carson, director.
**HARDWARE/SOFTWARE:** Apple Macintosh; Enliven, Macromedia Flash, Macromedia Director, Adobe Photoshop, Adobe Illustrator, digital video.
**URL:** 199.229.12.135/awards2000/ibm_grammy.html

I-DRIVE

The user-friendly interface created for i-drive, an Internet-based file-storage system, mitigates the anxiety of remote storage. No smoke and mirrors here: Its soothing blue-and-orange color scheme and retro design elements impart a sense of reliability and legitimacy.

**CATEGORY:** Web Site
**CLIENT/COMPANY:** i-drive, San Francisco: Jeff Bonforte, CEO; Tim Craycroft, CTO; Patrick Fenton, Willy Schwenkfeles; Theresa Wong, designers; Howard Newman, John Kane, engineers.
**DESIGN:** iato, Palo Alto, CA: Nacho Germade, Sonya Mead, Interaction designers.
**HARDWARE/SOFTWARE:** Proprietary software by CS Engineering Resources, Adobe Photoshop, Adobe Illustrator, Macromedia Fireworks.
**URL:** www.i-drive.com
the competing programs appearances that match their functional assembly-level computer instructions. The colored bars represent different opcodes; the yellow lines depict directional jumps; and the ring itself encloses a set of memory elements the program can read and write to. The programs compete, and those that are the best predictors breed better predictors. The breeding model in mind was not sexual, but bacterial; I was inspired by the way in which bacteria directly exchange bits of code from one to the other.

3 GOLAN LEVIN “Warbo”
“Warbo” is one of a series of “visual instruments”—environments that enable users to simultaneously create and perform abstract sound and animation in real time. The cursor of a Wacom pen, when played over the surface of the spots [shown in picture], produces tones and chords from a home-brewed wave-shaping synthesizer. My “Audiovisual Environment Suite,” a work utilizing “Warbo,” represents my vision of a performance medium that merges paint programs with musical instruments. Each artwork in the suite is the result of my attempts to design an interface that is both supple and easy to learn, yet also yields inexhaustibly variable and personally expressive audiovisual performances.

4 CASEY REAS “Plane Modulator”
Based on the work of Eadweard Muybridge, Harold “Doc” Edgerton, and other pioneers in time/space image-manipulation, the “Plane Modulator” is a system for analyzing changing forms in time. Using various controls, the user is able to modify the size, orientation, transparency, and phase of multiple aspects of a composition.

5 BENJAMIN FRY “Valence”
I'm interested in building systems that create compelling visual constructions from large bodies of information. I'm employing behavioral methods and distributed systems that treat individual pieces of information as elements in an environment, producing a representation based on their interactions. This image is a visualization of the contents of The Innocents Abroad, by Mark Twain. The program reads the book in a linear fashion, inserting each word into a 3-D space. The more frequently occurring words make their way toward the outside (so that they can be more easily seen), subsequently pushing less commonly used words to the center. Each time two words appear next to each other in the text, they experience a force of attraction that moves them closer together in the visual model. The piece provides a qualitative feel for the perturbations in the data, in this case the words in a novel by Mark Twain.

6 JARED SCHIFFMAN “Growgram”
I'm interested in making the act of programming more accessible to visual artists. Recently, I've done experimental sketches for a programming environment that manifests the invisible aspects of computation, such as the flow of the computational process and the manipulation of memory.
“Growgram” is a sketch for a 3-D system in which the user would draw paths representing the various avenues that the program may follow. The rings represent individual lines of code and the diverging branches represent conditional statements. The system enables the user to take a first-person view of the process by riding inside each branch, as if it were a roller coaster.
New Work from MIT. SEGA Joypolis Center, Tokyo, Japan, 7/2000.

Sega Joypolis

ACG Exhibit / July 2000

The Sega Joypolis Center, in Tokyo Bay, is a three-story indoor park which merges high-tech computer graphics and vestibular trauma. Attendees enjoy engaging VR simulations and roller-coaster rides, often at the same time.

Sega invited our group to install some of our new interactive applications here. Our work is in the "Future Train"...

Eight works were installed in pairs: Yellowtail and Aurora, by Golan Levin; Foccus and Floo, also by Golan Levin; Egg Machine and Plane Modulator, by Casey Reas; and Honey and Sewn, by Jared Schifferman.
The Introspection Machine is an interactive environment for visual feedback. The machine consists of six modules, each of which has a flexible, manipulable “eye-stalk.” At the end of each eye-stalk is a large rubber suction-cup, which permits it to adhere to any of the six displays in the installation. The machine’s modules transform the video input from their manipulable eyestalks into supplie and organic dynamic displays. By redirecting these eyestalks, users can explore an unbounded space of continuous light, complex forms and surprising relationships.

The Introspection Machine’s reconfigurable eye-stalks comprise the principal interface by which participants can interact with the installation. These playful stalks, which pipe pure light and information from computer to computer, make it possible for the video output from one reactive display to be used as the input for another. An Introspection Machine module may even be piped back to itself, creating a tight loop of visual recursion. As visual material from each display is reinterpreted by the others, pools of light are created that shift and mutate based on the connection, configuration and movement of the stalks’ suction-cups.

As a display system for fluid colors and forms, the Introspection Machine can be thought of as an interactive light fountain, in which participants liberate the “water” welled into each monitor, by physical conduits of video information. As a complex feedback system, on the other hand, the Introspection Machine has analogies to a wholly visual brain, whose cybernetic intelligence is derived from the principle of feedback itself.
Interactive Design Annual 6: **Self-Promotion**

**Audiovisual Environments**

**Overview:** This project represents Golan Levin's vision of a performance medium that merges paint programs and musical instruments. The series of five experiments were work toward his M.F.A. in Aesthetics and Computation at the MIT Media Laboratory. He developed these interactive artworks for environments that allow people to use gestural markmaking to create animated abstract imagery in real-time. Composed with custom software, they run on an SGI workstation with a mouse or Wacom tablet. Each piece was an attempt to design an interface that is flexible, easy to learn and that will also yield inexhaustibly variable and personally expressive audiovisual performances.

Golan Levin, creative director/interface designer/programmer/graphic designer/ animator/music composer/sound editor

Aesthetics and Computation Group, MIT Media Lab, project design and development/client
"This powerful exploration of gesturally-influenced animation and audio expands the concept of interactivity."

—Robert Abbott

"The best glimpse of the future."

—Barbara Kuhr

Creator's Comments: "For a long time I avoided learning how to program computers. Computer science was so poorly taught when I was an undergraduate that I really lost interest. I had so many ideas for software, but I continually had to convince software engineers to help me build them. All too often, they'd help for a while and then leave me stranded with something that I couldn't finish by myself. I got pretty frustrated trying to cajole and bribe the engineers; they generally had very little incentive other than charity or pity, and I began to feel pretty stupid. Finally I just bought the programming books and dug in. That was three years ago.

"Now all of my work is developed in the C++ programming language. Sometimes I first make sketches in Java; since my final versions usually require specially-configured computers, the Java applets on my Web page allow people to get an idea of what the work is like. Regardless of one's favorite computer language choice, I now think it's extremely important that a computer artist be able to program in some way. Programming puts people in touch with what software is really made of; it (not Photoshop files or raytraced animations) is the true computer medium.

Many art schools teach classes in 'digital art,' which all too often means 'how to use image manipulation software.' Such classes claim to explore the possibilities of a new medium, but really they are only exploring what someone else believes the possibilities to be. Individual artists need to begin determining their own possibilities instead of leaving it up to the companies that make software.

"My recent work has focused on the design of environments which allow people to create and play with abstract image and sound in ways which are direct, engaging, gestural and communicative. The expressive and evocative capacities of abstract form are important complements to those afforded by other visual media such as text and information graphics. The interactive works pictured here are screen snaps captured in real-time from a set of 'visual instruments'—my own hypotheses about what might be the analogy of musical instruments in the visual domain. Some of these software pieces make sound, others don't; what they all share is that they make possible the real-time performance and creation of animated form and color.

"The vision of a performance medium which unifies sound and image has a history several centuries long. Many 20th-century pioneers, such as Wassily Kandinsky, Thomas Wilfred, László Moholy-Nagy and the abstract filmmaker Oskar Fischinger, designed noteworthy audiovisual art machines. I hope to bring to this history a provocative new set of questions and answers about the power, beauty, sophistication and personality that it is possible for an audiovisual instrument to have. My goals for these pieces were to create a meta-artwork whose interface was supple and easy to learn, but which also yielded varied, personally expressive performances in both the visual and aural domains. In my struggle to produce several examples of such works, I brought two things to bear on the problem space of audiovisual instruments: new technologies, such as computational simulation and signal processing and a new aesthetic, which views the artwork as a collaboration between user and software designer. This work represents a vision for creative activity on the computer, in which uniquely ephemeral dynamic media blossom from the expressive gestural 'voice' of an individual human user."

—Golan Levin
Active Score Music

The idea of a synaesthetic bonding of sound and image is a recurring motif in artistic work; the possibilities currently afforded by computer technology make available fascinating tools with which to implement that idea. Masaki Fujihata and Golan Levin—independent of one another—have confronted this problem and come up with ingenious solutions including Scribble and Small Fish.

Ars Electronica has invited the two artists to premier their installations and software modules as digital media instruments in a concert performance. Scribble combines elements of graphical and music software in a dynamic and highly expressive way, and enables this artist/musician quartet to perform orchestrated as well as freely improvised music.

Small Fish is primarily an interactive picture that produces music. In this concert performance, it is used as a digital instrument.

Golan Levin
Scribble

The Audiovisual Environment Suite (AVES) is a set of five interactive artworks that allow people to create and perform abstract animation and sound in real time. Each system is an experimental attempt to design an interface that is supple and easy to learn, yet can also yield interesting, infinitely variable and personally expressive performances in both the visual and aural domains. Ideally, these systems permit their interactants to engage in a flow state of pure experience.

The AVES systems are built around the metaphor of an inexhaustible and dynamic audiovisual “substance,” which is freely deposited and controlled by the user’s gestures. Each artwork situates this substance in a context whose free-form structure inherits from the visual language of abstract painting and animation. The use of low-level synthesis techniques permits the sound and image to be tightly linked, commensurately malleable, and deeply plastic.

Each of the instruments presents a different variety of audiovisual substance. The Aurora system, for example, permits the user to create and manipulate a shimmering, nebulous cloud of color and sound. This glowing formlessness rapidly evolves, dissolves and disperses as it follows and responds to the user’s movements. The Floo system, by contrast, disperses and deflects soft-edged tendrils in response to the user’s movements; sound granules sonify the
growing tendrils with chorused drones. The entire suite of instruments is used in /Scribble/, a color-music composition developed in collaboration with Scott Gibbons, Ben Lapidus, and Greg Shakar. In this performance, a quartet of artist-musicians brings forth sounds and visuals which are at times carefully scored, and at other times loosely improvised.

The AVES systems inhabit a domain at the juncture of art, design, and the engineering of tools and instruments. As artworks, they extend an established twentieth century tradition in which artworks are themselves generative systems for other media. As a set of tools, the AVES work represents a vision for creative endeavor on the computer, in which uniquely ephemeral dynamic media blossom from a close collaboration between a system's user and designer.

This work was made possible through the generous support of John Maeda and the Aesthetics and Computation Group at the MIT Media Laboratory.

Performers/Composers: Scott Gibson, Benjamin Lapidus, Gregory Shakar
Golan Levin

Scribble


Ermöglicht wurde diese Arbeit durch die großzügige Unterstützung von John Maeda und der Aesthetics and Computation Group am MIT Media Laboratory.

Performers: Scott Gibbons, Benjamin Lapidus, Gregory Shakar
Typing can be thought of as a percussive spatial action—a play of tiny thoughts scattered onto a tightly organized grid. Typing is also a kind of speech, spoken through the fingers with flashing rhythms and continuous gestures. Dakadaka is an interactive java applet that explores these two ideas by combining positional typographic systems with an abstract dynamic display.

Alphabetic and pictographic writing systems commonly create meaning by permuting a large set of dissimilar symbols. There are, however, alternatives that achieve the same result by instead using a set of similar symbols which are differentiated not by their form but by their position in space. Some of these positional typographic systems use permutations of space to create graphemes (letters); others create lexemes (words) by varying the spatial patterns of similar elements. We were inspired by such systems in the design of Dakadaka, because of their natural application to the gridded keyboard space, and because of their ambiguous situation between writing and pure abstraction.

By removing the symbolic language (letterforms) from the act of composing words, only the raw physical action of typing remains. The temporal qualities of this physical action are analogous to those of speech itself. But the ordinary written word cannot convey these patterns in time. By connecting the physical act of typing to a dynamic display instead of a static one, Dakadaka reflects these fleeting performances back to us, reminding us of their gestural and continuous quality.

One can understand Dakadaka as a prototype for an ambient display which could augment one's ordinary typing as an auxiliary, transparent layer in an attempt to infuse typography with the fleeting dynamics of speech. Alternatively, Dakadaka is an experience in its own right, re-framing the act of typing at a computer keyboard as a visual exploration.
Tippen kann man sich auch als perkussive räumliche Tätigkeit vorstellen – winzige Gedanken auf ein streng organisiertes Raster ausgestreut. Tippen ist auch eine Form der Sprache, gesprochen mit den Fingern in blitzschnellen Rhythmen und kontinuierlichen Gesten. Dakadaka ist ein interaktives Java-Applet, das diese beiden Konzepte durch die Kombination eines typografischen Positionssystems mit einem abstrakten dynamischen Display auslotet.


Dakadaka kann als Prototyp eines Umgebungsdisplays verstanden werden, das das gewöhnliche Tippen zur transparenten Hilfsebene erhebt und so Typografie mit der flüchtigen Dynamik der Sprache versehen möchte. Dakadaka ist aber auch eine Erfahrung für sich, die den Akt des Tippens auf einer Computertastatur als visuelle Entdeckungsreise neu definiert.
Prix Ars Electronica—Cyberarts 2000

.net

Golden Nica
Neal Stephenson

Distinctions
Sharon Denning—The Exquisite Corpse
TeleZone Team—TeleZone

Honorary Mentions
Ichiro Aikawa—@2000
Natalie Bookchin—Intruder
Tom Corby / Gavin Bailey—Reconnoitre
exonemo (Kensuke Sembo / Yae Aikawa)—Discoder
agent.NASDAQ aka Reinhold Grether—Towyar
Jie Geng—Silk Road
Ursula Hentschläger / Zelko Wiener—Zeitgenossen Binary Art Site
Stefan Huber / Ralph Ammer / Birte Steffan—Sinnzeug
Patrick Lichty—Grasping at Bits
Peter Mühlfriedel / Gundula Markefksy—Electrica
Kazushi Mukaiyama—Network Communicate Kaleidoscope
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Interactive Art

Golden Nica
Rafael Lozano-Hemmer—Vectorial Elevation, Relational Architecture #4

Distinctions
The Institute for Applied Autonomy—GraffitiWriter
Golan Levin—Audiovisual Environnement Suite

Honorary Mentions
Julien Alma / Laurent Hart—Borderland
Michael Bielicky / Bernd Lintermann—Zimmer mit Aussicht
Jim Campbell—Experiments in Touching Color
Rania Ho—Free Range Appliances in a Light Dill Sauce
Istvan Kantor—Intercourse—The File Cabinet Project
Orit Kruglanski—As Much As You Love Me
Jason E. Lewis / Alex Weyers—The Active Text Project
Douglas Edric Stanley—Asymptote
Naoko Tosa / Sony-Kihara Research Center—Unconscious Flow
Tomoko Ueyama—Watashi-chan
Andrea Zapp / Paul Sermon—A Body of Water

Special Award
Hiroaki Kitano / The RoboCup Federation—RoboCup

Computer Animation / Visual Effects

Golden Nica / Computer Animation
Jakub Pistecky—Maly Milos

Distinctions / Computer Animation
John Lasseter / Lee Unkrich / Ash Brannon / Pixar Studios—Toy Story 2
Yasuo Ohba—Zen

Honorary Mentions / Computer Animation
Denis Bivou—Musca Domestica
Jean-François Bourrel / Jérome Calvet—Paf, le moustique
Paul Debevec—Fiat Lux
David Gaine—Fishing
Cécile Gonard—Plume
Jean Hemez / Sébastien Rey—Au Loup
Dariusz Krzeczek—Unterwerk
Guy Lampron—Sentinelles
Charlotte Manning—Low Rider Crab
Juliette Marchand—Les dépossédés
Timm Osterhold / Max Zimmermann—use a doodle on the noodle
Makoto Sugawara—Loop

Golden Nica / Visual Effects
Christian Volckman—Maaz

Distinctions / Visual Effects
Pierre Buffin / BUF—Fight Club
Markus Degen—Disembodies

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TRA IMMAGINARIO E BIOTEK

A LINZ VA IN SCENA IL SESSO DEL FUTURO

Piero Gilardi

Dal 2 al 7 settembre 2000 si è tenuto Next Sex in the Age of its Procreative Superfluosity, edizione 2000 del festival Ars Electronica di Linz (http://www.aec.at/nexsex). Piero Gilardi ne propone qui una panoramica condotta per opere e temi.

Le cellule parlano e ascoltano
Nella Lobby della Brucknerhaus, Joe Davis mi fa sentire il suono delle cellule con il suo Audio Microscope. Sul fondo scuro del monitor baluginano delle forme fioi di colore rosso, con un frangere di cascate; sono cellule di batteri acquatici che s’incrociano freneticamente nel topos dell’invisibile all’occhio umano e che, oltre a rumoreggire, sanno anche ascoltare: basta una musica dolce ad acquietarle. Scienziato e artista, Davis vuole farci dire che siamo come loro? Oggi posiamo anche immaginarci come piccole figure singolari che vagano nell’oceano della complessità.

Bambole viventi
In Guatemal si usa affidare le proprie preoccupazioni a delle bambole di stoffa. In Tissue Culture and Art (ficial) Wombs, Oron Catts, Iona Zurr e Guy Ben-Ary ne fanno di piccoliissime, con un involucro di poliestere in cui insettano embrioni di tessuto organico. Deposte in un utero artificiale che le nutre, le bamboline diventano “semivee”: ma con tutta la loro innocenza, riusciranno davvero, come dicono gli autori, a alleviare la nostra paura per le incognite della nuova era biogenetica?

Un battito d’ala
Non uno, ma molti battiti d’ala si sentono entrando nella serra per farfalle di Marta de Menezes. Questi esseri che si posano man mano sul nostro corpo, volando con un’ala geneticamente modificata e l’altra no, instillano qualche preoccupazione sulla dichiarata utilità della biogenetica per l’incremento della biodiversità. Ma forse l’autrice ne iche creano ostacoli e ne complicano le traiettorie, è possibile modulare la musica, con un effetto sinestetico semplice e avvincente. In questo lavoro interattivo si sente la mano di Masaki Fujihata che, con Kiyoshi Furukawa e Wolfgang Münch, propone questo “gioco” con divertito spirito zen. Quei pesci siano noi: il nostro agire non strascica più da un sogno promettemo ma dal fluido interagire nei meandri delle differenze soggettive.

Utensile artificiale
Durante il simposio il ricercatore giapponese Nobuya Unno proietta le immagini del suo laboratorio, Extraterrestrial Fetishization. Tra computer e monitor, sotto una tenda sterile, si vede un agnello immerso in un liquido ambrato; i tubini rossi che escono dal suo corpo non ne turbano l’angoscia dolcezza di cuoio dormente. Una donna, tra il pubblico, alza la mano e chiude: “Quest’oggetto, non si potrebbe farlo più comodo?” Questa mi sembra la chiave per comprendere perché degli artisti hanno trasferito i loro atelier nei laboratori di biogenetica: le biotecnologie possono essere sostenute a patto che vengano orientate a interventi parziali connessi ai flussi complessi della natura, che vive dentro e fuori di noi.

Next Sex o New Sex?
Eduardo Kac, Joe Davis, Marta de Menezes, Oron Catts si sono immersi nel vissuto collettivo di ambiti valenza tra la biogenetica. Il loro lavoro artistico è, per ora, sgranato in metare realtà, anche a dispetto della retorica per-scientifica che impiegano nelle presentazioni espositive e nei loro siti on line. La loro è però la strada cruciale da battere per districare i problemi etici, politici ed esistenziali della cosiddetta biotecnologia. Concorrono infatti a dare risposte umanamente condivisibili a domande come: le biotecnologie produrranno mutazioni improntate con controllabili all’interno dei nostri stessi e l’ecosfera? In base a quali parametri si stabiliscono quali sono i miglioramenti da selezionare geneticamente? Rimodellare il nostro mondo e la nostra vita è certamente una pulsione attiva e costante, ma ai poteri sociali che hanno preso la scerza-toria della manipolazione delle basi biologiche della vita, quest’arte mi sembra opponga la coscienza attiva della natura simbolica e relazionale di ogni nostro artefice.