

+ EXHIBITION PUBLICATION

+ CURATOR: GAIL RUBINI

+ CURATOR: KEITH ROBERSON

# design

CREATE

DESIGN

PERFORM

SUCCEED

IMAGINE

DEVELOP

**:critical**

reflections



# designXcritical reflections

+ CURATOR: GAIL RUBINI

+ CURATOR: KEITH ROBERSON

CREATE

DESIGN

PERFORM

SUCCEED

IMAGINE

+ ANNE BUSH

+ BILL SEAMAN

+ CHRIS SCHMITT

+ CONRAD GLEBER

+ DAVID CARSON

+ EDUARDO ROBLES

+ EMIGRE

+ FRANK GILLETTE

+ GARTH PAINE

+ IAN GWILT

+ MARGOT JACOBS

+ MICHAEL OLIVERI

+ SCOTT GROENIGER

+ AMY FRANCESCHINI

+ FLORIDA STATE UNIVERSITY MUSEUM OF FINE ARTS

+ SCHOOL OF VISUAL ARTS AND DANCE

+ 10.11.2002 - 11.24.2002

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GAIL RUBINI

## Design gives us a fundamental means of understanding and commenting on our culture.

After teaching and practicing design for several years I felt it was important to discuss the contemporary role of the individual designer. As an artist, I think the best method is an exhibition and publication and the result is Design X: Critical Reflections, focusing on the influence of design in our culture by examining the role of the individual artist/designer in contemporary society.

The exhibition and publication contribute to the growing importance of the interaction between content and experience. The exhibition and publication present concurrent activities that delve into the evolving conceptual framework that makes up our notion of design especially design that affects our everyday lives and experiences.

## Design is the transparent tool used to deliver a great deal of content in an understandable way.

Design replaces neither the eye nor the hand. Instead, Design pushes the boundaries of our culture by bringing up the bright and dull spots, making life easier and harder, appealing to our senses and lifting our spirits. Designers strive for beautiful works of art that use effective typography, unusual color combinations that stretch the limits of the mass production process, and imagery that exhibits their personal voice to get their messages across. Design goes beyond technology and fashion to the visual aspects of information delivery that are critical to effective communication and experience.

### arrangers vs. makers

This generation of designers absorbs influences while simultaneously pursuing a personal design identity. The commercial justification of design is that it provides the consumer with information for making informed choices. But, designers are an integral part of our lives, and design dominates the visual ephemera that pervades our public space, so it should be no surprise that today there is a call for designers to take responsibility for their designs.

The background of the entire page is a photograph of a desert landscape at sunset. In the foreground, the silhouettes of several palm trees are visible against the bright, orange-hued sky. In the middle ground, there are rolling hills or low mountains. The sky transitions from a deep blue at the top to a bright orange near the horizon.

## Design pushes the boundaries of our culture.

Design both questions and informs. And it does this working to speak to someone else —you. What is interesting for the designer is the challenge of the project and the inspiration to make choices and the drive to take a chosen path. Everyone has an opinion about design; good, bad, understandable, readable. Does it “work” to make you buy things, make you want things.

Design today is “testy.” Designers are constantly striving for a personal design identity within the confines of the projects given to them. Expressionism in design pushes and pulls our culture to new understandings. Any idea about design that ignores the necessary role of personal expression and intelligence in production is missing the core understanding of how designers express themselves. Cultural esthetics denote the consumer's rather than the designer's standpoint, and so the designer confronts our culture with every design. The craftsmanship in design is often found in caring deeply for the subject matter rather than a dependence on the hand and eye coordination of traditional art making. Our culture is not bound by traditions or defined by corporate marketing, it is the boiling pot of creativity, innovation, diversity and the freedom to see and choose. Designers are artists because their results have used qualities of personal expression to control the production process.

**It is time to recognize  
the new voice of design.**

### Informed intuition.

“The artist's work proceeds not from a finished imaginative experience to which the work of art corresponds, but from passionate excitement about the subject matter.”  
—Samuel Alexander

Every experience, slight or important, forms the beginnings of intuitive activity. There is no expression without excitement and turmoil and intuition is the activity that churns the way materials are used. What seems spontaneous and intuitive is really an absorption in the subject matter that is fresh. The artist/designer is transforming ideas into relationships that evoke a new emotional response. Some of these designs reflect the common threads of our culture and are widely enjoyed as such; others, aid in the creation of new threads in our culture.



**KEITH ROBERSON**

**Like photography,** graphic design has had a difficult time being accepted into the fold of fine art. The Dada and Fluxus movements of the mid-1900s used graphic design techniques and elements as foundations for their concepts. The cut-up magazine collage, and techniques of the ad draftsman could be seen in contemporary galleries throughout the world.

Today, the fine art world has begun to accept graphic design as a legitimate medium. Actually, it has no other choice. Graphic Design pervades practically every part of our reality and culture, especially in the contemporary urban environment, where it is sometimes difficult to find even a scant few inches not touched by a designer. It is impossible for the art historian to ignore the fact that our contemporary culture relies on graphic design as its primary language of communication. As such, graphic design has truly become the "art" in the old adage, "art is life."

Since the mid-1900s, the Fluxus mantra "art is life" and its inverse has been an integral foundation of postmodernism across all media. This famous quote is often attributed to Emile Zola, yet his actual quotation includes a crucial distinction; "Art is life seen through a temperament."





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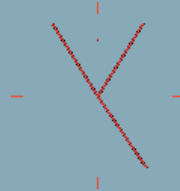
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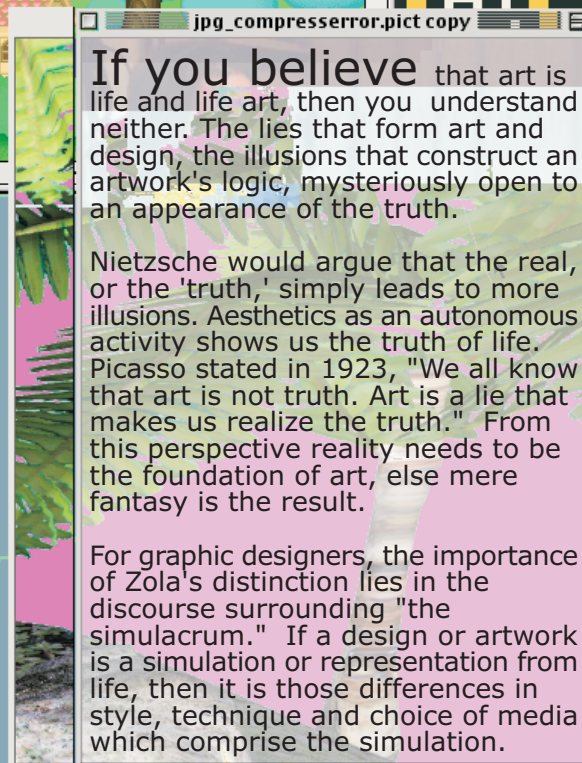
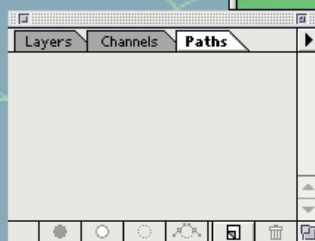
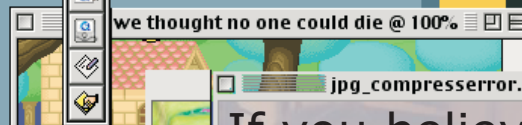
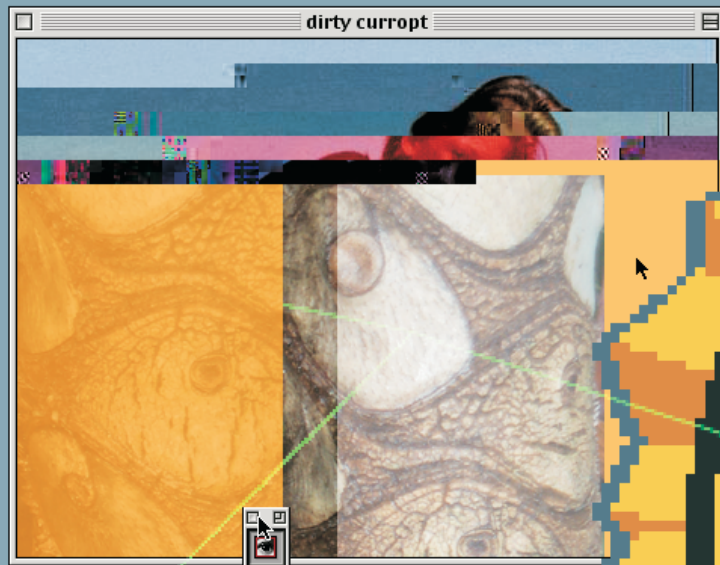


PUNKTZAHL

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If you believe that art is life and life art, then you understand neither. The lies that form art and design, the illusions that construct an artwork's logic, mysteriously open to an appearance of the truth.

Nietzsche would argue that the real, or the 'truth,' simply leads to more illusions. Aesthetics as an autonomous activity shows us the truth of life. Picasso stated in 1923, "We all know that art is not truth. Art is a lie that makes us realize the truth." From this perspective reality needs to be the foundation of art, else mere fantasy is the result.

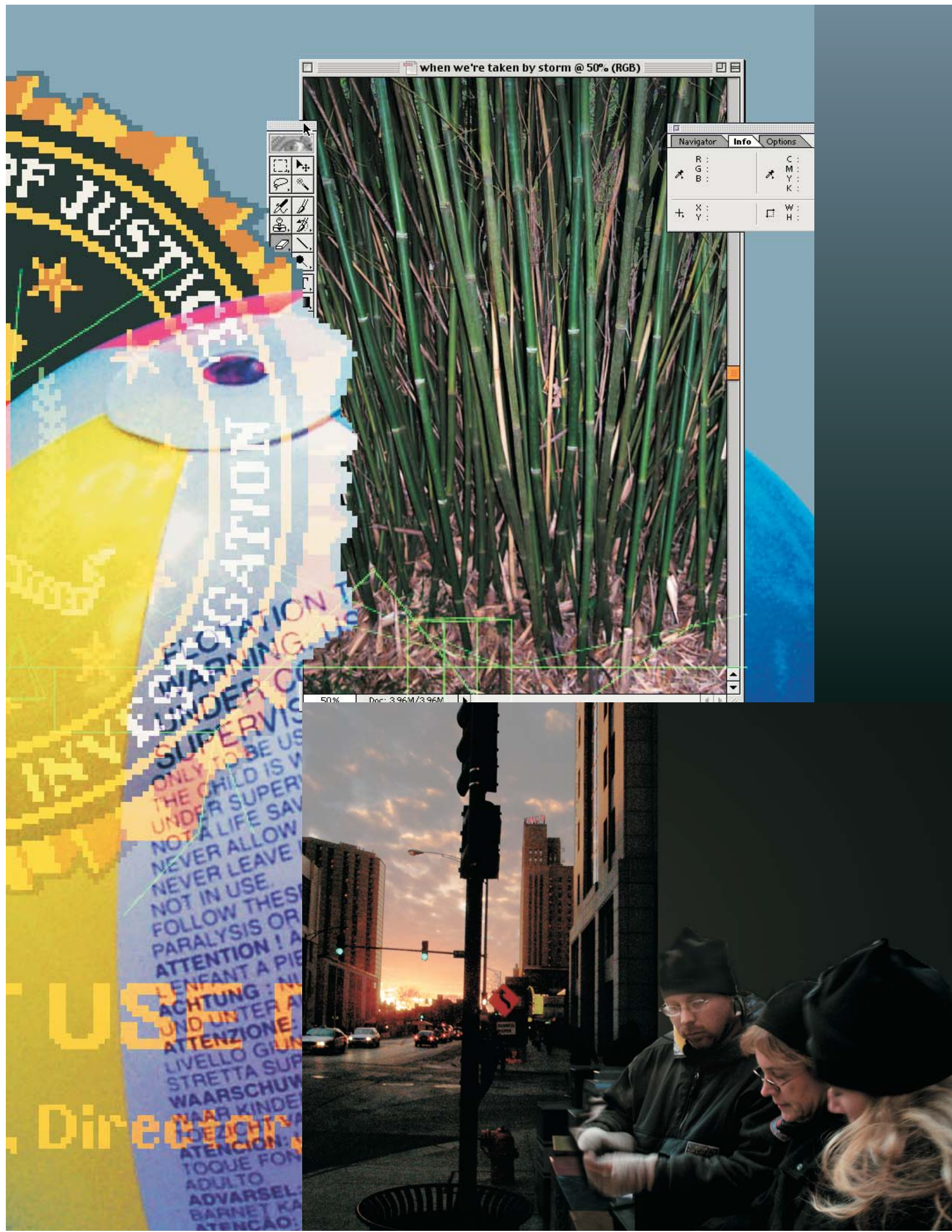
For graphic designers, the importance of Zola's distinction lies in the discourse surrounding "the simulacrum." If a design or artwork is a simulation or representation from life, then it is those differences in style, technique and choice of media which comprise the simulation.




"WINNERS DON'T

William S. Sessions







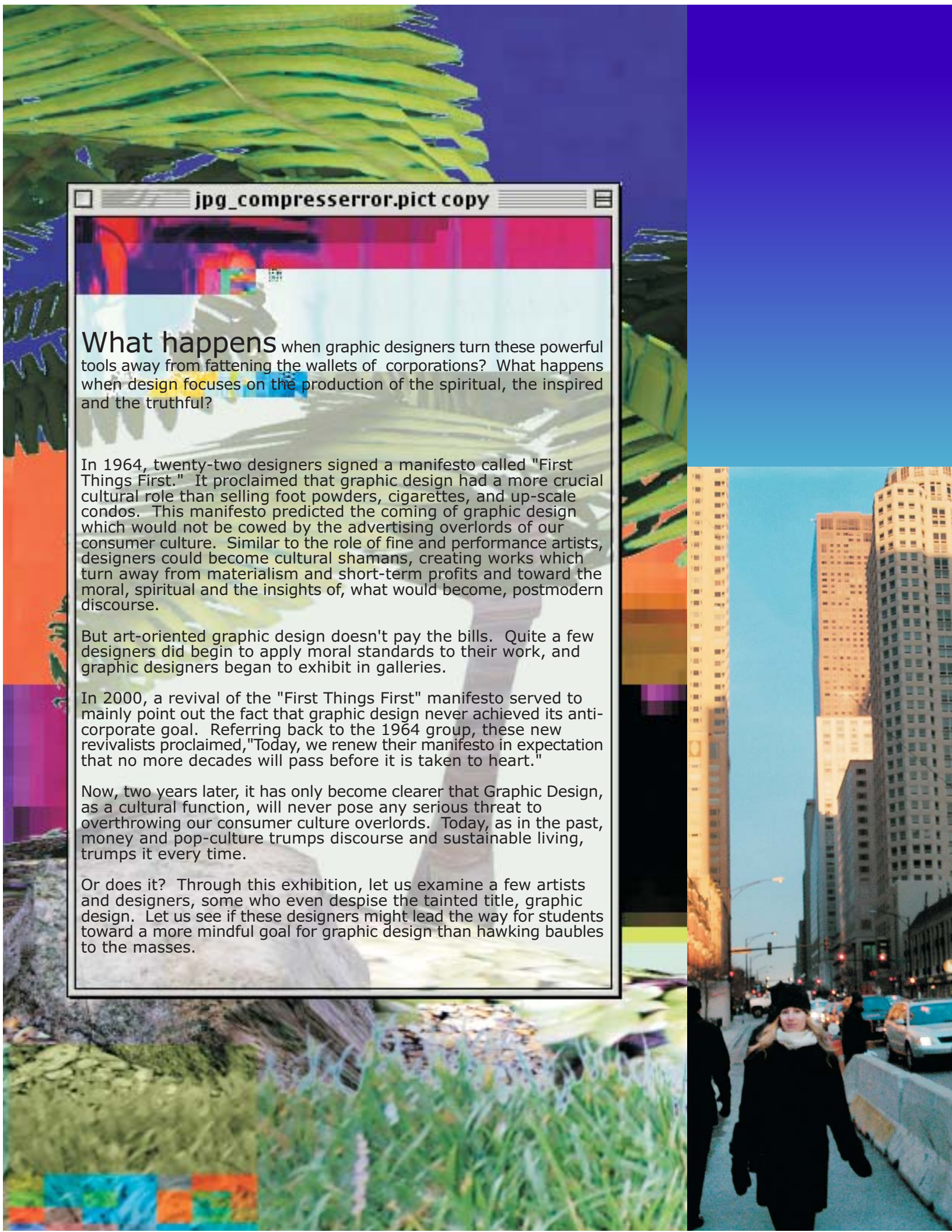


**The methods and** visual language of the graphic designer constitute the simulacrum which they construct.

The foundation of design is that it can change life, or at least cultural consciousness. It can create need: "I need a pop-tart," or "I only wear Hanes boxers." The Advertising Industry has invested billions of dollars honing these propaganda skills to make their ads affect more and more reality.

These billions of research dollars have proved at least one thing: The simulacrum of a design can break through the separation between art and life. It has proved, again and again, that it can sell Lincoln Navigators to single guys, and super-sized value meals to the morbidly obese.





jpg\_compressor.error.pict copy

**What happens** when graphic designers turn these powerful tools away from fattening the wallets of corporations? What happens when design focuses on the production of the spiritual, the inspired and the truthful?

In 1964, twenty-two designers signed a manifesto called "First Things First." It proclaimed that graphic design had a more crucial cultural role than selling foot powders, cigarettes, and up-scale condos. This manifesto predicted the coming of graphic design which would not be cowed by the advertising overlords of our consumer culture. Similar to the role of fine and performance artists, designers could become cultural shamans, creating works which turn away from materialism and short-term profits and toward the moral, spiritual and the insights of, what would become, postmodern discourse.

But art-oriented graphic design doesn't pay the bills. Quite a few designers did begin to apply moral standards to their work, and graphic designers began to exhibit in galleries.

In 2000, a revival of the "First Things First" manifesto served to mainly point out the fact that graphic design never achieved its anti-corporate goal. Referring back to the 1964 group, these new revivalists proclaimed, "Today, we renew their manifesto in expectation that no more decades will pass before it is taken to heart."

Now, two years later, it has only become clearer that Graphic Design, as a cultural function, will never pose any serious threat to overthrowing our consumer culture overlords. Today, as in the past, money and pop-culture trumps discourse and sustainable living, trumps it every time.

Or does it? Through this exhibition, let us examine a few artists and designers, some who even despise the tainted title, graphic design. Let us see if these designers might lead the way for students toward a more mindful goal for graphic design than hawking baubles to the masses.







LIBRARY

ANNE BUSH



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THE VARIOUS MEANINGS GIVEN TO THE TERM FOR A LIBRARY CLEARLY SHOW ONE OF THE MAJOR TENSIONS THAT INHABITED THE LITERATE OF THE EARLY MODERN AGE AND CAUSED THEM ANXIETY. A UNIVERSAL LIBRARY (OR AT LEAST UNIVERSAL IN ONE ORDER OF KNOWLEDGE) COULD NOT BE OTHER THAN FICTIVE, REDUCED TO THE DIMENSIONS OF A CATALOGUE, A NOMENCLATURE, A SURVEY. CONVERSELY, ANY LIBRARY THAT IS ACTUALLY INSTALLED IN A SPECIFIC PLACE AND THAT IS MADE UP OF REAL WORKS AVAILABLE FOR CONSULTATION AND READING, NO MATTER HOW RICH IT MIGHT BE, GIVES ONLY A TRUNCATED IMAGE OF ALL ACCUMULABLE KNOWLEDGE. ROGER CHARTIER



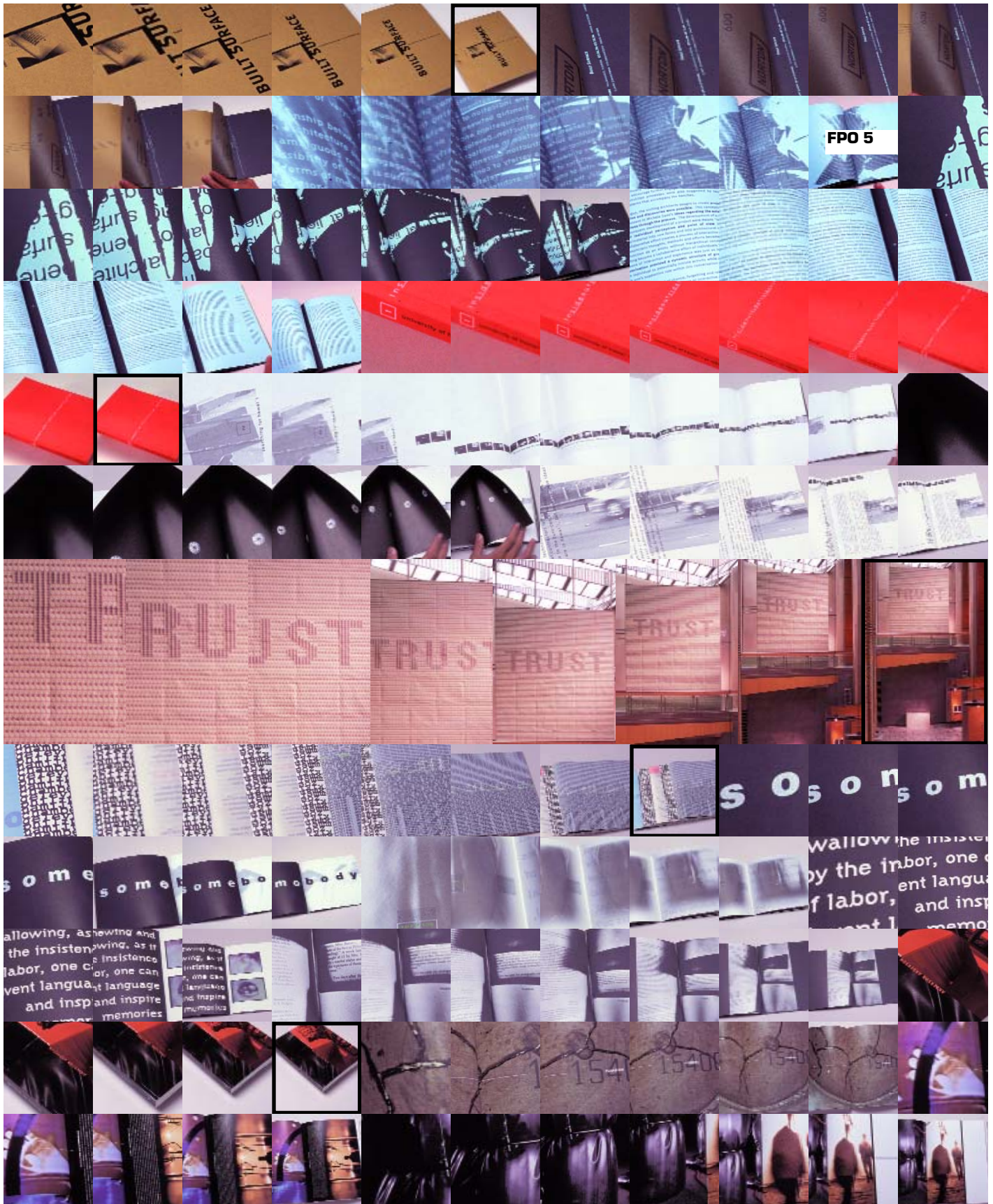
□ **BUILT SURFACE:** catalogue. Florida A&M School of Architecture, 1998. The book documents a series of improvisational architectural workshops at Florida A&M School of Architecture. In keeping with the theme of the workshops, the realization of theory through practice, the book juxtaposes two essays (one pragmatic and one theoretical). One essay begins at the front of the book. The other essay begins at the back. Both essays meet in the center of the book. Typographically, using bold and light type, the book reinforces the intersection of practice and theory by infecting each essay with the voice of the other. In addition, the initial pages of each essay begin with only the built scaffolding of the text (the punctuation of the introductory page). Each essay also begins with a sandpaper fly sheet where there is a quote by John Ashbery. The quote explains how surfaces are at once primary and secondary...both surface and core (an idea that is reiterated by replacing the traditional book introduction with an 'interface' that is in the center of the book). The sandpaper was chosen as a fly sheet because it is a substrate that is both a surface and a vehicle for removing surfaces.

□ **INSIDEOUT:** catalogue. University of Hawai'i, School of Architecture, 1998. Gesturing to Deleuze's writing on the fold, this catalogue of student work juxtaposes two narratives—one being the work itself and the other the contexts in which the work was produced. In so doing, the book functions as both an exhibition of the work and as a commentary on the connections between the academy and the profession, east and west, implication and explication. The entire book is constructed using French folds which allows both a conventional reading and a consideration of the subtext of that reading—the moments where architectural production and its context intersect.

□ **TRUST:** installation and catalogue. Installed this year at The Contemporary Museum at First Hawaiian Bank in downtown Honolulu, TRUST is a 15 x 25 foot bill-board made entirely of \$1 bills. The piece was physically accessible from a catwalk that extends in front at the mezzanine level, so that bank customers could walk up to the work and (potentially) take some of the money. This accessibility along with the absence of a protective covering, worked to invoke the multiple meanings of the word trust. The material of the work and the juxtaposition also underscore both the provocative relationship between museums and banks and the fact that art and money only have exchange value. Accompanying the bill-board were small cards that visitors could take with them. These cards were a commentary on the lack of state money going into education. Installed in an election year, the cards and the bill-board challenge viewers and bank patrons to consider how their money is being spent and why.

□ **SUM OF THE PARTS:** catalogue. University of Hawai'i, Department of Art, 1995. This book documented work by artists who dealt with autobiography through artistic interpretations of human body parts. The catalogue is intentionally small (in contradiction to the larger and often horizontal scope of many catalogues) so that it could be held comfortably in the human hand. In an effort to speak to both the show's emphasis on sectioning and to the five human senses, the book was designed in five unbound signatures. These divisions purposely separated the essays (or textual reading of the exhibition) from the images (or iconic reading of the exhibition) to reinforce differences in human perception. Finally, the pages used for the essays were printed on transparent paper in an effort to emphasize the contextuality of all meaning, the ways in which the whole is always greater than the sum of the parts.

□ **ARCHITECTURE AND CONSTRUCTION:** catalogue. Princeton Architectural Press, 2001. This book documents the work of Mark and Peter Anderson. Divided into three sections, earthwork, framing, and plumbing, the book uses the CSI index (a blueprint index used by architects and construction workers) to reference various ideas within each project and within the text. The numbers of this index are juxtaposed within the narrative, creating two possible readings of the text and the architecture.





CATALOGUE

MANAGING READERS - WILLIAM W.E. SLIGHTS  
PAUSE AND EFFECT - M.B. PARKES  
MYTHOLOGIES - ROLAND BARTHES  
THE POETICS OF SPACE - GASTON BACHELARD  
ILLUMINATIONS - WALTER BENJAMIN  
THE ACT OF READING - WOLFGANG ISE  
THE IMPLIED READER - WOLFGANG ISE  
PRACTICE OF EVERYDAY LIFE - MICHEL DE CERTEAU  
THE NATURE OF THE BOOK - ADRIAN JOHNS  
ORGANIZING KNOWLEDGE IN LIBRARIES - C.D. NEEDHAM  
ALEXANDRIAN LIBRARY - EDWARD PARSONS  
THE COMING OF THE BOOK - LUCIEN FÉVRE AND HENRI-JEAN MARTIN  
THE STORY OF LIBRARIES - FRED LERNER  
LIBRARIES IN THE WESTERN WORLD - MICHAEL H. HARRIS  
THE LIBRARY OF ALEXANDRIA - ROY MACLEOD (ED.)  
SPACE BETWEEN WORDS - PAUL SAENGER  
THE PRINTING PRESS AS AN AGENT OF CHANGE - ELIZABETH EISENSTEIN  
THE VANISHED LIBRARY - LUCIANO CANFORA  
THE BOOK ENCOMPASSED - PETER DAVIDSON  
LIBRARIES THROUGH THE AGES - FRED LERNER  
INVENTORY - MICHAEL BUTOR  
DAHL'S HISTORY OF THE BOOK - BILL KATZ  
THE VISIBLE WORD - JOHANNA DRUCKER  
THE BOOK OF THE BOOK - JEROME ROTHENBERG AND STEVEN CLAY  
THE MARGINS OF THE TEXT - D.C. GREETHAM  
BIBLIOGRAPHY AND THE SOCIOLOGY OF TEXTS - D.F. MCKENZIE  
THE ORDER OF THINGS - MICHEL FOUCAULT  
LIBRARIES IN THE ANCIENT WORLD - LIONEL CASSON  
THE FOOTNOTE - ANTHONY GRAFTON  
IMAGES ON THE EDGE - MICHAEL CAMILLE  
BUT I DIGRESS - JOHN LENNARD  
MARGINALIA - H.J. JACKSON  
YOU HAVE A POINT THERE - ERIC PARTRIDGE  
ON PHOTOGRAPHY - SUSAN SONTAG  
READING BOOKS - MICHELE MOYLAN AND LANE STILES (EDS.)  
THE HISTORY OF BOOKS AS A FIELD OF STUDY - G. THOMAS TANSSELLE  
THE ORDER OF BOOKS - ROGER CHARTIER  
A POTENCE OF LIFE: BOOKS IN SOCIETY - NICOLAS BARKER (ED.)  
A SHORT HISTORY OF THE PRINTED WORD - WARREN CHAPPELL  
THE HAND-PRODUCED BOOK - DAVID DIRINGER  
A HANDY BOOK ABOUT BOOKS - JOHN POWERS  
GREAT BOOKS AND GREAT COLLECTORS - ALAN G. THOMAS  
GREAT LIBRARIES - ANTHONY HOBSON  
ANCIENT LIBRARIES - JAMES W. THOMPSON  
PTOLEMAIC ALEXANDRIA - P.M. FRASER  
MARKING THE TEXT - JOE BRAY, MIRIAM HANDLEY, ANNE C. HENRY (EDS.)  
THE ARABIC BOOK - JOHANNES PEDERSON  
ON READING - ANDRÉ KERTÉSZ  
THE SMITHSONIAN BOOK OF BOOKS - MICHAEL OLMERT  
ANCIENT LITERACY - WILLIAM V. HARRIS  
THE WOMAN READER - KATE FLINT  
THE COMMON READER - VIRGINIA WOOLF  
THE PSYCHOLOGY AND PEDAGOGY OF READING - E.B. HUEY  
A HISTORY OF WRITING - ALBERTINE GAUR  
THE ENGLISH COMMON READER - R.D. ATLUCK  
ANNOTATION AND ITS TEXTS - S.A. BARNEY  
ECCENTRIC SPACES - ROBERT HARBISON  
LABYRINTHS - JORGE LUIS BORGES  
IF ON A WINTER'S NIGHT A TRAVELLER - ITALO CALVINO  
FROM MEMORY TO WRITTEN RECORD - M.T. CLANCHY  
FORMS AND MEANINGS - ROGER CHARTIER  
THE CULTURE OF PRINT - ROGER CHARTIER  
THE ORDER OF THINGS - MICHEL FOUCAULT  
THE ARCHEOLOGY OF KNOWLEDGE - MICHEL FOUCAULT

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BILL SEAMAN

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**Emergent Constructions:***Re-embodied Intelligence Within Recombinant Poetic Networks*

Computer-mediated networks present an artistic medium that heightens the potential for an intermingling of the knowledge of the viewer with the "re-embodied intelligence" of an author or authors. We will consider "networks" in an all inclusive manner, from the scale of a network of poetic elements housed within a single computer, to that of the distributed housing of the World Wide Web [Internet emphasis Seaman]. Such computer-mediated environments can potentially facilitate new forms of inter-authorship. These environments enable the user to engage with the "artefacts" of the consciousness of the author. Central to this interaction is an emergent experience that is unique for each subsequent participant. Given that computers can house "recombinant" digital elements of image, sound, and text, how can the artist become an "author" of responsive, self regulating systems which enable "intelligent" emergent poetic responses to viewer interactivity via the encoding, mapping and modelling of operative poetic elements? How can such an environment enhance or trigger particular "states" of consciousness in the viewer? To what extent can we "re-frame" aspects of the consciousness of the artist, via specific modes of "translation" of operative poetic processes and poetic elements of image, sound, and text, within functional computer-mediated networks?

I am interested in interactive art works that exhibit "intelligent" responsiveness to viewer input. In *Thinking Machines, The Search for Artificial Intelligence* by Igor Aleksander and Piers Burnett, the authors state:

"Rather than becoming embroiled in the controversies which surround the nature of human intelligence, the practitioners of artificial intelligence have generally chosen to define their goals in empirical or operational terms rather than theoretical ones. An intelligent machine, they suggest, is able to do things which, if done by people, would be judged to require intelligence. On this basis, a definition of intelligence becomes unnecessary: The researcher simply choses a task that seems to require intelligence (playing chess say or recognising visual images) and tries to build a machine that can accomplish it." (Aleksander, p.13)

My research explores computer-mediated, re-embodied "intelligence" in the context of a new form of poetic construction and navigation which I call "Recombinant Poetics." Artworks

which explore "Recombinant Poetics" are characterised by the interaction of a viewer with a system of meaning which carries compressed potential meaning constructed of language, image and sound elements, within an engendered technological environment. The term "Recombinant Poetics" was created by the author in 1995. (1) Emergent recombinant content is created and explored through poetic construction mechanisms. These mechanisms enable the viewer to access poetic elements which have been loaded into the system and carry fields of potential meaning.

Re-embodied intelligence can be defined as the translation of media elements and/or processes into a symbolic language that enables those elements and processes to become part of an operative computer-mediated system. The ability to "translate" the aesthetic conceptions of an author into a form which is potentially operative within a technological environment, is fundamental to the creation of interactive artworks. In a related sense we can consider a novel, the condensed translation of thought into text. This can be viewed as a re-embodiment of the focused perceptions of the author, presented via the technology of a book. In terms of contemporary forms of authorship, this "translation" process can now be examined as related to interactive media.

The definition of "embody" follows:

1. to give bodily form to; to incarnate; to make corporeal; to invest with matter; as to embody the soul or spirit; a form embodied.
2. to give definite, tangible, or visible form to; to make concrete; as his speech embodied democratic ideals.
3. to collect and include (material) in a book, system, statue, etc.
4. to make (something) part of an organized whole; incorporate; as our ideas are embodied in the committee's report.

Synonyms- methodize, systematize, codify, incorporate, aggregate, integrate, compact, introduce, enlist, combine, comprehend.

Each of the different spokes of this definition are explored in terms of my art practice, as they are applied to the term "re-embodied intelligence." The notion of "giving bodily form to" and "incarnating" is explored in my work in that I include my digitised voice. This presents a paradoxical examination of presence/absence as related to the sonic artefacts of the body via the presentation of emotive spoken language. Poetic language, image, and sound elements are given "definite," "tangible" form within the operative networks which characterise my work; they form a "collection" of variables within a "system;" like a "statue" the work embodies aesthetic, representational



elements; and each work is presented as a particular "organisation" of media material.

Central to a technological history relevant to Recombinant Poetics, is the notion of viewer association triggered via "conceptual machines." A "conceptual machine" can be defined as a machine engendered by language and in some cases via images. Such language can be in the form of a description, a recipe, a poetic text (as in Duchamp's Green Box, Fluxus Boxes and operative poetic works by Raymond Queneau), a working virtual model, as well as in the form of language "translated" onto a punched card (as in the Jacquard Loom and Analytical Engine); via an algorithm or through the operative properties of computer code as linked to a graphical user interface and/or expressive external device (robot, videodisc, etc.).

In recent works I have modelled the artist processes of writing a sentence in *The Exquisite Mechanism of Shivers*; of writing a short poem (3) in *Passage Sets / One Pulls Pivots at the Tip Of the Tongue*; and of constructing a virtual "installation" or worlds (4) in my work *The World Generator / the Engine of Desire*. Each of these working processes would be considered "intelligent" based on the definition presented above. I have "translated" models of these activities, incorporating chosen/constructed recombinant elements, so that they can be explored within operative computer-mediated interactive art works. The generation of emergent compositions is enabled via the interaction of a user. It must be noted that re-embodied intelligence seeks to answer problems on an individual level of artistic production as opposed to the "universal" attempts of artificial intelligence.

In seeking the origins of the concepts which have come to enable this art practice, we can make a "genetic" analogy to the principles which enabled the functioning of the Jacquard Loom. One can trace the genealogy of the computer from the initial patterns of weaves facilitated by this particular loom, to the fabric of contemporary communication; images and texts comprised of pixels. Recombinant Poetic works are embodied within systems which propagate the inter-authorship of the programmer and artist, via symbolic logic. The result of this endeavour is finally manifested on the outermost level of the system of representation, as recombinant configurations of light and sound. Modular visual and textual elements which are operative within this technological system, have a punning function in relation to that system; outwardly they communicate to the viewer artistic content, while inwardly they perform as the functional connection to encoded symbolic logic.

A computer language is a notation for the unambiguous description of computer programmes. Such languages are synthetic in their vocabulary; punctuation, grammar, syntax and semantics are precisely defined in the context of a particular operating system. They suffer from an inability to cope with autonomous expression - an essential attribute of an organic language. The poetics of computers lies in the genius of individual programmers to express the beauty of their thought

using such an inexorable medium. (Hamilton, 1997, p.309)

One can see the seeds of re-embodied intelligence within the Jacquard Loom, which has been described as exhibiting "the selective powers of the human brain and the dexterity of living fingers." (BLUM, p. 41) The person who encodes the punch card re-embodies an aesthetic conception into a language which the analogue machine can read. In the book, *The Loom Has A Brain*, the author states:

"This intricate process actually starts when an artist draws a sketch. When finished, it must look like the pattern that will appear in the cloth...it is transferred by a draftsman to a ruled sheet similar to those used by engineers to show curves and graphs. Each tiny block or square sheet represents a tiny section of the fabric to be woven.... With the design blocked out on the ruled sheet directly in front of him, the card-cutter works his way through the bewildering network of lines, paths of color—a perfect maze of passages and tracks, punching holes in the oblong cards. Each of these holes controls eight threads in a weave arrangement over the passing shuttle. Each has a meaning as to weave effects and color selection, and these all have to be translated so that the loom understands them." (BLUM, p.44)

This description shows one early relevant example of the translation of aesthetic practice to a machine-mediated process. We can extrapolate this idea in terms of contemporary computer-art practice making a direct analogy to the punch cards functioning as "conceptual machines" within the analogue mechanism of the loom, to the software/hardware paradigm in computers, where the code functions as a vehicle of the translated aesthetic conceptions of the artist. The computer enables not only the production of an image, but of entire artistic processes—the writing of a poem; the construction of a virtual world, the navigation of a poetic environment etc. Recombinant Poetic works may explore different levels of scale moving from the metaphorically atomistic to the molecular, to an assemblage of compound media elements all variously functioning as basic modules within differing works. A very interesting process can be enabled within such computer-mediated environments. Once a chosen "intelligent" process has been translated, the machine can perform "intelligent" functions in the manner of the author, producing unique new works of art. Thus the machine functions as an extension of the author's sensibility, presenting an environment for another mode of inter-authorship, via viewer interaction.

We can look at the computer code in Recombinant Poetic works in terms of a series of layers, on a number of levels. We start at the bottom, with assembly language. We then have various other logical layers which now enable the construction of an upper or outer layer of code that floats on the surface of the system, presented via images, sound, and text. A graphical user interface can potentially function in a non-hierarchical and non-linear manner in relation to the presentation of artistic content... Such code may also embody paradox, nonsense, play





etc., any quality of aesthetic phenomena. I am examining computers as being expressive vehicles, housing and enabling the exploration of operative poetic elements via this series of interdependent levels of responsive "code" authoring. In terms of the connectivity of computers and the potentials of distributed interactivity, such processes may function on various levels from the local to the international. The network of poetic elements can be housed on a single computer, or be distributed via numerous machines which are networked.

In terms of viewer interactivity with computer-mediated artworks, we are moving in the direction of computers functioning as "sensing" and "responding" devices. Such systems were envisioned by the founders of AI. Alan Turing speaks of "input" and "output" organs in his Turing's ACE Report of 1946 (Turing, 1986), suggesting notions of sensing in the discussion of an Automatic Computing Engine. Turing also projected the possibility of computers playing chess in that particular paper (an intelligent, rule based, combinational process). Much later the focus on "translated" sensing was re-investigated in terms of art practice by people like Myron Krueger. Many artists are now investigating this approach to computing. One must remember that even the "mouse" and "keyboard" can function as low level "sensing" devices in terms of viewer response. This is central to the functioning of the World Wide Web.

I am interested in the construction of devices which explore fleeting responsive housings for operative recombinant poetic elements, constructed via the encoding and embodiment of the perceptions of the contemporary "media" author. The goal is to have the computer function as a mediated extension of focused perception both in terms of "sensing" and "responding." The output of the system is not known in advance by the author but is a product of the interaction of the viewer with particular "recombinant" elements loaded in the system, as well as through construction and navigation processes which have also been translated and encoded, enabling inter-authorship.

Such a system metaphorically functions as a kind of synthetic organism which both "senses" and "responds." I am interested in how the machine embodies and extends thought and intellectual exchange, via particular operative processes as related to elements of image, sound and text. Attempting to make elaborate "translations" may illuminate certain operative qualities and characteristics of that which is being examined, translated, encoded, entered, and made operative within a computer-mediated system just as research related to artificial intelligence has helped to illuminate the workings of human intelligence.

Computer-mediated environments facilitate "States" of authorship. In terms of the computer, there is an intermingling of the system of authorship with the system or technology which houses that system of authorship. In computer-mediated interactive artwork, a viewer can intermingle with the operative elements of the system and interact with them via authored feedback mechanisms. This gives the viewer a chance to enter into a conceptual dialogue (if you will) with the "artefacts of thought" which the initial author has encoded in the system.

These media artefacts enable the exploration of particular states of consciousness which are triggered within the experiential environment.

The qualities of inter-authorship take on different potential levels in relation to the "loading" of the system by the initial author. There is a delicate balance to be addressed in computer-mediated authorship, related to that which the initial author imbues in the system, in terms of content, and that which the user contributes in terms of their input. Perry Hoberman states "In interactive art, we can find two seemingly opposite tendencies in the approaches to interaction: on the one hand a sharing (or even an abdication) of responsibility (or intentionality) on the part of the author; and on the other, a remarkable extension of the author's domain, an unprecedented attempt to control his/her audience and their response on every level." (Leopoldseider, 1996)

In tracing the genealogy of ideas related to Recombinant Poetics, the "notes" of Ada Lovelace prove seminal. Her work with Charles Babbage's Analytical Engine in the 1800s explored the manifestation of symbolic logic via the encoding of punched cards, a direct outgrowth from the Jacquard Loom. The punched cards of the Analytical Engine function as a "translation" and encoding of symbolic language, and can function as a conceptual machine within a "physical" one. This is again analogous to the hardware/software paradigm. One can speculate on the relationship of symbolic thought in the history of poetry to that of computing, where Lovelace functions as a fascinating pivotal force, seeing the potential of "translated" symbolic language to be explored within the Analytical Engine, in relation to universal patterns and operations. "We may say most aptly that the Analytical Engine weaves algebraical patterns just as the Jacquard-loom weaves flowers and leaves." (BABBAGE, 1961 p.245)

The mother of Ada Lovelace, in reaction to Lord Byron's bohemian sexual and intellectual behaviour, pushed her toward mathematics, away from the realm of poetics for which her father is noted. One can imagine, in regard to such a gene pool, that it was the intersection of poetics and mathematical logic which enabled the intuition in Ada Lovelace that eventually led to what came to be called computer programming. In the year 1842, this was a very strange and imaginative understanding of the potential of language. In her Notes by The Translator written to clarify the Work Sketch of the Analytical Engine Invented by Charles Babbage by L. F. Menabrea, Ada Augusta, Countess of Lovelace, made some very enlightened remarks.

"The Analytical Engine is an embodying of the science of operations, constructed with particular reference to abstract number as the subject of those operations... Again, it [The Analytical Engine, emphasis the author] might act upon other things beside number were objects found whose mutual fundamental relations could be expressed by those of the abstract science of operations, and which should be also susceptible of adaptations to the action of the operating notation and mechanism of the engine. Supposing for instance, that the fundamental relations of pitched sounds in the science of

harmony and of musical composition were susceptible of such expressions and adaptations, the engine might compose elaborate and scientific pieces of music of any degree of complexity or extent... It may be desirable to explain, that by the word operation, we mean any process which alters the relation of two or more things, be this relation of what kind it may. This is the most general definition and would include all subjects in the universe." ([Lovelace as found in] Babbage, 1961, p.249)

In this note we see a number of foci related to the salient characteristics of both Recombinant Poetics and re-embodied intelligence; that of the ability to perform multiple operations upon chosen abstract entities as well as the potential of those entities to be aesthetic in nature, i.e. that the machine might act upon and compose and perform "music." Also relevant to Recombinant Poetics is the pun. Lovelace chose the word "Translator" in her title, which in this instance could refer to her being the literal language translator of text by L. F. Menabrea, a "translator" of thought into readable code as in the analytical engine, and the translator of Babbage's ideas about the Analytical Engine into an understandable as well as extended form.

From the perspective of the present, also relevant to these areas of research is the potential of the computer to enable "generative" music (as coined by Brian Eno) also referred to as "Recombinant" music as coined by Seaman. This music is based on sonic variables and parameters entered into the system, as well as operative processes which act upon those variables producing various sonic output. Such a system is activated and experienced via the interaction of the user. Recombinant Poetic works also explore notions of re-embodied intelligence via sonic relations, relevant to a number of my past works. (See notes 2,3,4.)

Ada continues:

"In abstract mathematics, of course operations alter those particular relations which are involved in the considerations of number and space, and the results of operations are those particular results which correspond to the nature of the subjects of operation, but the science of operations, as derived from mathematics more especially, is a science of itself, and has its own abstract truth and value; just as logic has its own peculiar truth and value, independently of the subjects to which we may apply its reasonings and processes. Those who are accustomed to some of the more modern views of the above subject, will know that a few fundamental relations being true, certain other combinations of relations must of necessity follow; combinations unlimited in variety and extent if the deductions from the primary relations be carried on far enough." ([Lovelace as found in] Babbage, 1961, p.249)

These ideas are central to the functioning of Recombinant Poetic works. This enlightened note was published in 1842 almost 100 years before Turing would pick up on its potential ramifications.

(1)"Recombinant" can be defined as follows, "Any new cell, individual, or molecule that is produced in the laboratory by recombinant DNA technology or that arises naturally as a result of recombination." (Parker) Recombinant DNA technology can be defined as follows, "In genetic engineering, a laboratory technique used to join deoxyribonucleic acid from different sources to produce an individual with a novel gene combination. Also known as gene splicing." (Parker) Subsequent research has shown a related metaphorical use of the word "recombinant" by Mitchell in his discussion of "recombinant architecture" (Mitchell 1995). Other artists and researchers have used the term 'recombinant' in a metaphorical manner including Arthur and Louise Kroeker (KROKER,1994) and Diana Gromala who is working on a book called Recombinant Devices: Ideologies of Virtual Design. The notion of modular, recombinational systems can be witnessed in my work as early as 1981.

(2) *The Exquisite Mechanism of Shivers* © 1991 Seaman

(3) *Passage Sets / One Pulls Pivots At The Tip Of The Tongue* © 1995 Seaman

(4) *The World Generator / The Engine of Desire* © 1996/97 Seaman

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## Messages

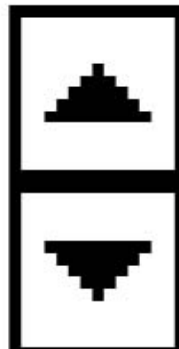
that were once halted due to geography or culture boundaries are now, at a moment—a flicker—on a computer screen. The files come off the Internet and into our hard drive in the form of an email message or onto the viewport of a browser window.

This change in how fast information flows revolutionizes the culture. It reacts and forms reactions to the speed and reach at our disposal. And this revolution also dictates changes in how successful designers must approach online communication.

## New Media Niche

They might not have set out to create a revolution in news distribution, but sites like MetaFilter and DayPop illustrate that online designing and developing facilitates fills a gap unfilled by traditional media. Today and tomorrow's generations aren't afraid of computers. They aren't afraid to bend them to their will and, quite frankly, these people are looking for information. Not at 6 p.m., 11 p.m. or in the next fifteen minutes, but now.

These Web designers leveraged the technologies not available in print or television to give power to their users. Their designs are allowing their audiences to interact to form connections and share their perspectives. While the new media designer has a different set of tools at her disposal, they are still not the messengers in this new medium, but merely



Online,  
activity  
of exchanging ideas is  
sped up.



**The distribution of messages from the selling of propaganda to the giving away of disinformation takes place at a blindingly fast pace thanks to the state of technology.**

DESIGNING  
IF IT IS  
INSTANT  
NO

the facilitator of messages.

Very fast messages.

### Minute-by-minute or click of the mouse.

Remember when Cable News Network launched? When Ted Turner's baby a massive daily flop and never be heard from again. Fast forward to today channels dedicated to churning the recent events all day, everyday. This vision of a news-only channel, America's and the world's appetite for your control. You can access the news with a click of the mouse. Not just but you can cross the national borders at your desk. Instead of receiving a country you are living in, you can check out another nation's.



In the spring of 2001, when an American military spy plane landed in China China's military aircraft, you could actually read the daily coverage of the the Chinese point of view by reading the English version of the People's [http://english.peopledaily.com.cn/200104/03/eng20010403\\_66746.html](http://english.peopledaily.com.cn/200104/03/eng20010403_66746.html) No Dan Rather on CBS or General Electric's Tom Brokaw on NBC or Walt Disney's Peter Jennings on ABC.

You can even ditch any concept you have about what makes up traditional news by watching a news anchor get nothing between themselves and news. By watch- anchor to see the news and watch them "release" themselves from the bondage of shame by dropping their news outfits while they give the skinny for less than <http://www.nakednews.com/>).

Yes, the Web is filled with this sort of material, but ideally you can still go after a news source with the point of view that you find palatable. There are a numerous news that you can tolerate. But the antithesis of being feed news items picked by a news editor is to go onto the internet with an open mind about technology and

### Independent Publishing

The practice of keeping a journal is not a new one. However, individuals who publish their journals online have a new name for this practice and a far greater reach. and developers log their thoughts about their work, joys, sorrows and, of course, current events. Even non-designers and non-developers can purchase Web space software, the "hard part" of setting up Web space to run your blog is freely available to anyone with a computer access and the time to answer a few questions in an

After the dot-boom-bust from the 90s economic growth, Lori McLeese found herself without a job in San Francisco. She finally found a job of interest to her teaching friend of hers set up a blog to record her adventures. Faster than postal or snail mail, Lori has blog

South Korea for her friends, family and any one who happens to stumble across the Web site. (See <http://lori100.blogspot.com>) Her accounts give a perspective for

Her blog is powered by a company called Pyra (See <http://www.pyra.com>). Pyra originated the term "blog" and publishes software to update users' Web pages. Since handful of popular clones and numerous independent programs that facilitate the same basic content management setup.

Through these various applications you have a phenomenon of thousands of people longing their thoughts on the events in their lives that nat- the audience for cable and national broadcasters. Not all of these "bloggers" will react to the news stories and post their own spin on the story. However, if a decent both appearing on traditional national news media and not—then this is an amazing phenomena for news information.

Information in a New Media

These bloggers are interpreting the events in their view and sending them back on into the public court of opinion thanks to comment-based system, a common feature now of the popular blogging software. A person who blogs now can have their own views, file a discussion on their blog and it can and in turn be a news item in itself when audience members write about the comment thread in their blog. And all this feedback can be as immediate as a breaking news story, which is onlyed one way.

# TELECAST

was born in 1980, CNN was predicted only to perform and America has been graced with a handful of cable competition is flattering praise for Turner's radical immediate coverage grew. Online, the news is under news from your favorite television station's Web site, nationalistic point of view of world events from the

after playing mid-air bumper cars with a couple of emergency landing turned diplomatic brouhaha from Daily. (See longer do you need to be stuck watching Wacom's ing a site called Naked News, you choose a news ten dollars a month (See

publications out there that cater to some angle of the its benefits, not just its well-known shortcomings.

Through a practice called "blogging," Web designers that automates their blogging practices. Through online form.

English to students in South Korea. Before she left, a those about "Korea, boys and what comes to mind."

they built the first application, there have been a

ter. These are people who, by the way, are the part of percentage does blog current news events – those

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sion. This massive group has taken it upon themselves to post on a regular basis news stories, interesting Web sites or other trivial items of the day that they find by surveying the Internet. What this means to someone who is not a member is the ability to review tidbits from hundreds of "reporters" from all walks of life. Chances are you will read about a story or a point of view you would never get through traditional news organizations.

Another filtering service relies on a similar concept of many persons filtering the news events, but takes a slightly different approach. The approach is from a site called DayPop, a current events search engine by Daniel Chan. Chan designed a free web-based service that scans web sites that are updated every day. Some of these sites are indeed sites run by news organization, but the interesting part is that most of the sites that are cataloged are blogs. People who are commenting about breaking items on a routine basis are the ones reviewed.

DayPop's backend scans these sites that are updated daily and scans the links and news stories the news media and bloggers are talking about. In a Top 40 style, they deliver daily the popular links and news stories that are in a virtual water cooler of conversation. You get to see what news stories and sites are moving people to write about and, more importantly, you get to see news stories that you might not get exposed to through traditional media coverage. And if they are covered in traditional media, chances are you may see it faster at DayPop (See <http://www.daypop.com/news/> and <http://www.daypop.com/top.htm>)



### Designing Instant Gratification

You could say it happened by a lack of discipline to expect gratification with answers on demand. No more waiting through a commercial break. Today's culture has grown up or, at least grown used to the idea, that with computers, we expect things to happen when we press a button. With a keystroke things happen like nuking corn kernels to make popcorn in a microwave, move a television setting to watch a different channel or delete a piece of junk email from our computers. So should our designs anticipate an audience wanting their desires satisfied now. And so should new designers learn the new rules of new media design:

- She will need the knowledge of how to handle the immediacy of the medium, the one-to-one connection people experience when they interact with online material.
- Either today or soon, competition is a click away to some other uniform resource locator. Keep what you are designing interesting not to you, but to your audience expecting your client's content.
- Honesty and service over time breeds loyalty and earns loyalty and credibility.

People who make web sites shoehorn practices from other media into this new media. On the other hand, great designers serve to move the message to the best of whatever medium they work in.

People who make web sites shoehorn practices from other media into this new media. On the other hand, great designers serve to move the message to the best of whatever medium they work in.



## The Law of Diminishing Astonishment

What are the essential qualities of design that should be taught?

Design reifies acts of meaning into structures that fulfill a purpose. The purpose of any design is fueled by desire, identified and distilled from a shared common understanding, intersubjectivity. The development of design proceeds as an interaction between agency and purpose, how and why, technology and intent. As students develop a design practice for themselves they need to recognize the role each contributes to the process of design.

The purpose, the why or the intent of design is informed by intersubjectivity. It is socially mediated action that results in meaningful design. It relies on an intuitive sense of knowing the mind of others. It places the context of design into social interaction.

Just as important is to recognize that how to design cannot reach an ideal endpoint. Technology solves problems. It is full of irony. At first, the ability to structure meaning in a new way is seductive and novel. Widespread use creates familiarity and eventually the techniques, born out of use, fail to satisfy the enthusiasm for the practice—it's the Law of Diminishing Astonishment.

Design may be born of desire but it begs the designer to wonder what kind of world is desired. On what ideals does desire rest to push design? The focus of this writing is the education of designers. In particular the changing scope of what students of design must learn. Most design education is training and follows an apprenticeship or situated problem-solving program. If design includes society's needs and concerns as an ideal end point to development then how something is done is only part of what a student must mediate to practice design. Society, placed in the role of client, enables design to measure the degree of alignment that values and practices have with the environment. It enables the critical evaluation, reflection and display of how well culture is in-sync and balanced with nature.

What are the essential means of design today?

Designing today in this environment of "constant change," forces even the most seasoned professionals to wonder at the direction of their practice and the relevance of their values. And though evocative notions of change seem to pervade all design commerce it is easy to dismiss the environment as not there when trying to meet client demands and deadlines. But as Frank Gillette admonishes "Avoid it at your peril."

Looking for the essence of what it means to design brings several aspects to mind. The issues, arranged on one axis by the scale of relevance to history and on another axis by the level of recursive impact within the culture, range from the insignificant to the impenetrable. Traditionally the designer has given order to the results of human generative systems that spew mountains of data. Active design structures data into information that facilitates interaction, helping a group to know together. Order and form are adapted to express ideas and mediate change, some of it whimsical, some essential and some profound.

But regardless of present accomplishments, there is a general consensus that design has reached a point where facilitation as an end has become a means to destabilize assumptions and the status quo. Communication systems and paradigms have yet to conclude a mega-level shift in information means. Consequently, it is difficult to assume with any confidence that the role of the designer will remain unchanged. Instead, design may be growing new perspectives of its role in society but not necessarily abandoning its former responsibilities.

Design is intuitive. It exists without designers. Exclusive to humans, it is a social practice driven by motives to keep cultures learning—a large-scale, abstract definition that defines the context of a student-centered environment for learning design.

New lines are being drawn that push the limits of design's responsibility. New affordances will not constrain the dependence that society has on design; instead, society will extend its reliance to include clarifying complex issues, drawing attention to broader issues of social concern and expanding the ability to embrace ambiguity in changing values.

This is entirely an optimistic platform, no doubt.







## All is intuition.

There's nothing more, nothing less. The intuitive's the real. When all is taken in, when all is considered, the moment of experience, as with the moment of creation, is the intuitive... beyond reason, beyond consciousness, the moment of sensing.

To understand what lies behind that intuition is perhaps impossible - because everything lies behind it. And the quest to understand; that is also within intuition.

If this sounds a rejection of the rational... that is how it is. How irrational. Reject or embrace the idea, question or ignore it, but this will not remove the reality of now, the disappearance of the past, the hope for the future.

And despite holding to our reality, we still like to meet, talk, love, fight... and look, together. We might be wrong, but we always are... here.

"Consciousness is the Unique Reality," wrote Nishida Kitaro in Japan earlier this century. A philosopher, he had come to reject the supremacy of believing in the rational, and to see the case for valuing intuition as an essential element in explaining our being. He combined an appreciation of Western thought with training as a Zen monk. The resulting collage of thought led him to conclude that judgement depends on our understanding of the "intuitive whole."

The approach to design is based upon a similar notion of the inescapable role of intuition. Intuition drives our sense of the world, our interpretation of our realities. On the conundrum of intuition, the impossibility of penetrating it, analyzing it, we construct all manner of impressive rationales for how things are. But underneath lie the doubt and our simple grip on the unknowable nature of this consciousness.

This publication is to look at, nothing else. This is ink on paper. Can you see the molecules? If we say no, because they don't exist, does this become an attack on knowledge? Whose knowledge?

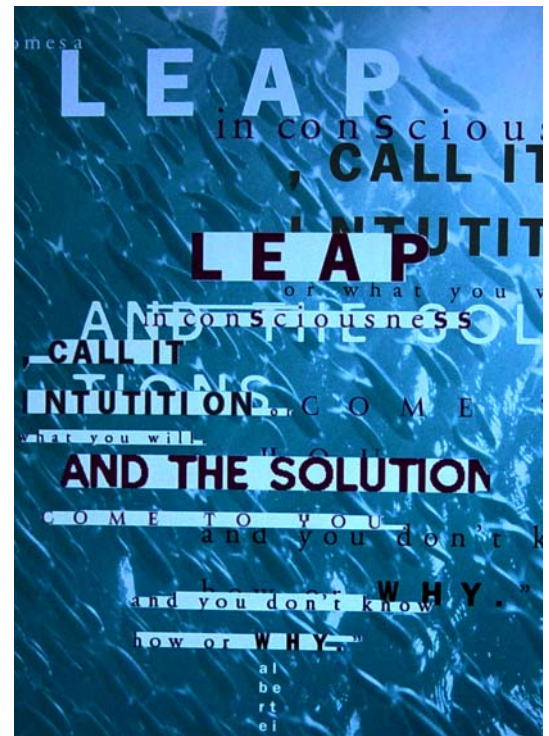
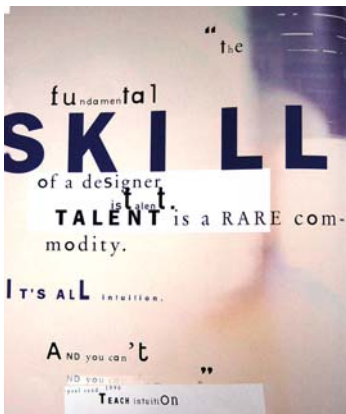
It is not enough to have memories. Not enough to have Knowledge. We cannot always accept the given, recycle it, follow the rules unquestioningly. A computer can, perhaps, but not we exfoliating lumps of hardware with neural networks so much less predictable than files and folders. There is something else. Something else going on that we have to incorporate in our visions, in our remaking and additions to the world, in our design.

Call it what you will, and strive for understanding as deep and wide as you can, but still the unknown is there, intruding on the senses, our senses or order.

This touches on what we affectionately or dismissively label as our second sight, our sixth sense... despite it being, by definition, without definition.

Perhaps you feel we could have put this idea better, but we could never make it clearer than it is. We can only intimate that fact that the unknown is not here, and yet always here (a notion familiar to religion). Never visible, but imposing a hidden agenda.

This is not a matter of belief, of faith, of religion. It is a topic for argument, improvement and



**It is not enough to have memories. Not enough to have Knowledge.**

rejection. As an idea, the unknown is infuriating, but we have to confront it sooner or later.

Please tell us about your sense of the unknown, the unknow-able. Where did you recognize it: In your first love, your first death? That curious taste in the strange spirit once drunk in a foreign land?

Personal insights are impervious to testing... and yet the instinctive, and its manifestation as intuition in our thought, lies at the heart of our behavior. We cannot avoid intimating our individual responses in creative works: part of the task in design is to have a degree of self-awareness of this input. This is perhaps what marks out the approach and the influence of the designer of these pages.

None of this work repudiates reason, but it attempts to embrace the significance of irrationalism in our lives. By definition, the resulting collage of the personal and the shared experience, all put hereby into the public space, is never explicit or finite. Multiple readings are invited. There is no end to meaning, and there are many beginnings.

Time for more of that strange spirit.  
(Incidentally, belief or rejection of these pages is equally valid.  
Enjoy in your own way. Season to taste.)

**Design** becomes a word for describing the nature of human artifacts, a noun and a verb for the process and presence of human creativity. It differs from art and from craft, but overlaps both, as it does other activities, other labels we might care to apply.

Like anything else, design can be whatever you want it to be. The only limitation is when you come to share that vision with somebody else... then you have to find some common ground. Thus a coffeepot can be a teapot, if you both agree, or a message set in Zapf dingbats can be meaningful, rather than meaningless. This is the relativist universe we seem to live in, in which a gun can be a weapon of attack, a factor that helps maintain peace, or a piece of sports equipment.

Seen from one perspective, the only one you have, your self-expression is all you have to work with in communication. Perhaps we should accept that if anything is good, then it is good to be as expressive as possible, rather than search for the lowest common denominators of communication, determined by others working to different agendas.

**Design is what you want it to be...**

Intuition is an undervalued yet perplexing business skill. What is it? One of my students explained it thus, "It's knowledge that you have, but you don't know how you have it."

Intuition lives in uncertainty. It is intangible and carries no obvious scientific method. Competitiveness is about being able to see what others do not, and to capitalize on it.

And intuition is where creativity starts; it fuels the interest that attracts us to a potentially valuable possibility.

A ND you can 't

ND you can  
- paul rand. 1996

TEACH intuition



## EDUARDO ROBLES

### 425 Madison Avenue



This prismacolor pencil rendering is of a building remodeling and addition proposal in Manhattan, New York. The large drawing was used in a promotional brochure, and done while I was working at Buttrick, White and Burtis, Architects in New York.

### Paul Revere St. Front-yard



This garden design was treated as a three-dimensional graphic for a house in Houston, Texas. The client wanted a circular driveway and lots of colorful vegetation. The driveway was not paved, except for the arrival pad at the entrance. The vegetation was selected by size and color in order to create volumes that would slightly change throughout the seasons.

One circular space was designed to be covered by a colorful mosaic of broken tiles. This space became a secluded secret garden within the front yard of the house. A second circular space was converted into a fish pond bisected by an industrial metal trellis that hid it from the nearby driveway.



### Baguette Holder

This bread holder was designed of recycled materials. The woods selected represent a structural understanding of their function because of their placement. The spacing of the supports provides the option of cutting the bread without removing it from the holder.



### Blue table/orange athlete

This side table is constructed of recycled materials. The woods are oak, common plywood, and birch veneer plywood. The blue paint is car paint; the orange paint is industrial international orange paint.

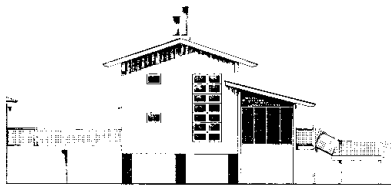


### Main Street, Market Square Historic District Poster

This poster was put together for the Main Street, Market Square Historic District of Houston, Texas as an instrument of awareness for the then threatened Historic District. The work was done while I was working at Jeffrey Ochsner Architects in Houston, Texas.

Everbuilding was carefully researched, drawn in ink, and mounted on a large size format panel. Once finished, the drawing was photographed and reduced to poster size, color was added, and printed.



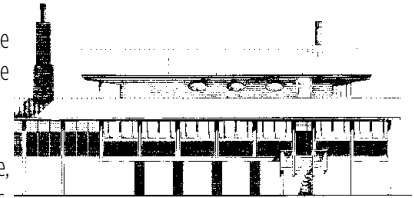


Little Cypress Creek House

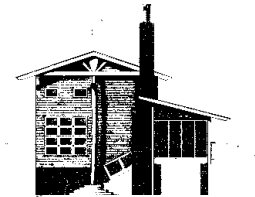
This house is located about twenty minutes northwest of the Memorial area of Houston, Texas. It is a weekend house for a couple with grown children, who are collectors of many different and eclectic objects.

The couple first examined and considered Cajun architecture. They desired a wooden house with large porches open to nature, fireplaces, and fans. Because of being on the flood plane, the house had to be elevated, creating a feeling of a tree house.

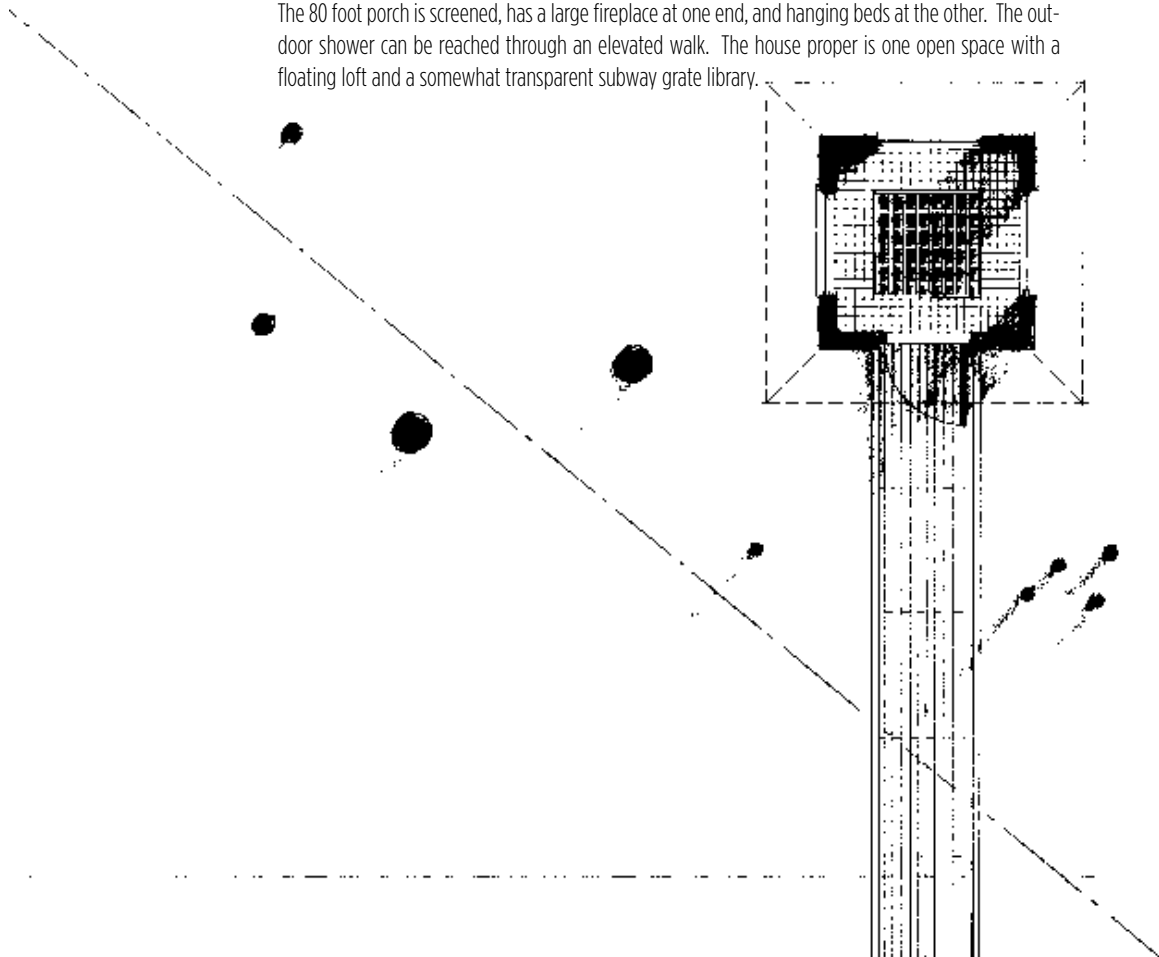
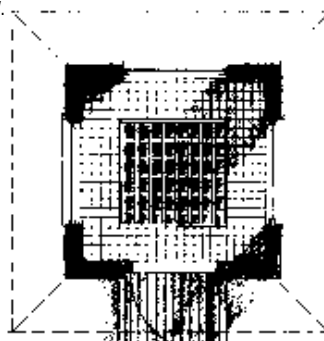
The site is located at the end of a typical subdivision for Houston's elite. In order to get to the house, one must enter through the subdivision's gate, drive all the way to the back, go beyond the stables, next to a large drain ditch. There, a non-descript gate marks the entrance to the ten plus acres of the site. The site sits comfortably south of the stables and riding area, west of the large drain ditch, north of Little Cypress Creek, and east of a 100 acre natural preserve. South of the creek, another 100 acre preserve exists. The heavily wooded site does not allow for the house to be seen from the outside.



A few yards beyond the gate is a carport accommodating four cars. The owners intend to leave all vehicles here and walk or take a golf cart to the house that is about 400 feet from there. The house has been sited between a large pond and the Little Cypress Creek, approximately 60 feet from the pond 200 feet from the creek. The pond was created in the 1920s by a local farmer, then it was abandoned until the late '90s. Trees grew around the elongated pond naturally, and it became hidden in the middle of a thick forest. For almost 80 years nature slowly reclaimed the area. The creek to the south runs deep in the ground, light brown in color as the local clay.



The house has been organized in three parts: a large porch, an open volume, a small out-door shower. The 80 foot porch is screened, has a large fireplace at one end, and hanging beds at the other. The out-door shower can be reached through an elevated walk. The house proper is one open space with a floating loft and a somewhat transparent subway grate library.





**ZUZANA LICKO  
RUDY VANDERLANS  
THE EMIGRE SPIRIT**

*a piece of*  
**Critical Conditions :**

Neither Licko nor VanderLans set out to transform the face of modern design. "In the last fifty years or so, making a reputation for yourself was basically a process of winning competitions, getting your work published, and going around pontificating to the world about how great you are."

What drove the establishment crazy was that Rudy and Zuzana totally short-circuited this apprenticeship and became famous simply by designing for this international group of admirers."

For over a decade of Emigré's typeface design and magazine publishing, Zuzana Licko and Rudy VanderLans have withstood virulent attacks from an entrenched design establishment as well as from their contemporaries.

Throughout it all, they continued to pursue their unique visions and, consequently, have been a prime force in revolutionizing the industry and cultivating a spirit of exploration.

Work began with the newly invented Macintosh computer and a bitmap font tool. Licko began creating fonts for the magazine. VanderLans concentrated on work that was being neglected by other design publications, either because it didn't adhere to traditional canons or it was still in its formative stages.

The text and typography were hardly indecipherable to its intended audience.

Infact, Emigre was much more inviting and involving for its readers, who had a high degree of visual sophistication.

"People read best what they read most" has become a credo for Licko and VanderLans and has been adopted as a rallying cry by designers eager to challenge

preconceptions of type design and magazine layout designs and font styles.

Type once considered ugly has become assimilated throughout mainstream print and electronic media.

The Emigre sensibility has achieved commercial acceptance by popularizers like David Carson. No longer viewed as radical or unique, the work of Licko and VanderLans regularly garners accolades from many notables in the field. As a self-published, self-supporting venture, the self-proclaimed "magazine that ignores boundaries" has been free to engage in highly experimental research and development.



**DESIGN IS  
A GOOD IDEA**

[www.emigre.com](http://www.emigre.com)





## PEOPLE ARE DESIGNERS TOO

*If designers fail to discuss aspects other than style, theory, and rhetoric, it shouldn't surprise us when clients fail to understand the value we can bring to their business and customers. After all, most designers have clients who sell things. When we don't articulate and measure the effectiveness of what we do, how can we expect anyone else to understand or value it?*



## Design, Purpose & Ecology

*The curious adapting of means to ends, throughout all nature, resembles exactly, though it much exceeds, the productions of human contrivance; of human design, thought, wisdom and intelligence.*  
—David Hume

*Prologue:* Chicken Little was right, *right on the money*. The sky is not literally falling, but Earth's atmosphere is now a sinkhole brimming with toxic flatulence. Marine environs of all shapes, sizes and descriptions soak up accumulating load upon load of reeking swill. On terra firma, cauterized landscapes splatter across receding views of horizons.

As the gyre widens, *Cultures* of every cast cling to a disparate range of vestigial certainties or, lacking such, wade into an embrace of novel, perforated, prophylactic maneuvers to avoid a *reality* which brooks no quarter while evading any compliment. Hard-line and irrevocable, such *reality* simply prevails over all comers. Meanwhile, the key hard-core feature of *this reality* is and remains implacably interchangeable with Earth's ecology. Avoid it at your peril.

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Cutting to the chase, we appear to be on a teetering threshold of designing machines to produce *designing* machines. All *real* varieties considered, such technologies would detach the function and attribute of human-centered emotion in the role of design, and re-couple it with a speculation toasted over its own rationale in service to means, mechanisms and assemblies well beyond our touch.

This tempting surrender to an out-of-reach controlling apparatus inter-linked with and entwined within ecological corruption, in its wide drift and echo, is the crucial strategic problem in design.

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## FRANK GILLETTE

Desire generates design. The no small feat of logistics aside, desire for an end by any possible means is thus the core issue in play. What exactly are these desires? Control emerges first to mind. While *control*, *efficiency*, and *stability* are the triad of forces (or principles) which propel the urge to make a distinct and particular something, however, an anecdotal but robust corpus of evidence suggests complexifying overlays of motive to this triad. Marketing success, maximum profit, celebrity, and general self-aggrandizement have become and are now present and salient features in the intentional mix of designing anything from a banal or infectious consumer product, to a video installation, to an orbiting space-station.

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Arching above all of this, consider the stupefying intricacy of earth-ecology's role, while this role in any final assessment of the value of a specific design, for virtually anything (from a Styrofoam cup to oil-tankers), is increasingly limpid and acute. Meanwhile, the earth's fate is, *io ipso*, also within the reach and clinging grasp of egregious designs attempting to outwit while displacing nature's limits.

Nothing encompassed within these unmovable limits is beyond the cast and kin of *ecological demand* and its *budget of flexibility*. Nothing within the domain of design is exempt from its harsh, unforgiving, permanent reality. Hence, any criteria whatever evaluating the status of any given design is perforce engaged with an accommodation to *ecological demand*, and this is bound to be as it should be. Within this glacial light, the task of designers, of each and every type, is to embrace their existential responsibility for re-enchanting the natural world. Of making significant objects or infrastructures that reflect, manifest and enhance the natural equipoise resident in the received order of processes and things.

With a deep bow to Gregory Bateson, the notion of ecology's *budget of flexibility* is both central and critical in the present argument with its case. Very simply stated, *laws* and *verdicts* dictated by the natural realm operate within parameters queer to typical human judgment--specifically, the judgment of typical designers.

*Ecological demand* (anonymously coined in the late 1960's) is closely related to and is supported by Wittgenstein's: "*The World is all that is the case...*". With a wee stretch, it also has not a few of its seminal roots in Leibniz's "*Monadology*."



The gist of *ecological demand* is essentially this: any artifact humans design and implement has a maddening, dilapidating, and finally, toxic effect upon the webs of inter-relation which guide, steer, and manifest nature's order unless of course they are a virtual structural-fit reflecting that order.

The *budget of flexibility* is just that. To a point it can soak up and even neutralize distorting misinformation and its gathering putrescence. But at an uncertain exhausted juncture its budget is spent, it's running a deficit, and then stark rigidity sets in. At which point the ecosystem, local or universal, is driven crazy, and things unravel to the level where even designing humans take belated notice...All ecosystems absorb only so much deviance and no more, they have firm, unforgiving limits. And, for our *universal* ecosystem this brink is undoubtedly upon us.

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The great monk, Thomas Berry, stated it bluntly: "The extraordinary rate at which we are destroying the planet makes clear the unsustainability and undesirability of our culture...We must respond adequately to this problem; it is the most significant humankind has ever faced."


Any amelioration of this Earth shaking condition of anthropocentrism run amok with predatory existence sits squarely in the laps of present and future designers. Designers, engineers, and implementers of every specialty will be (or will fail to be) the foundation of realignment with the natural, non-human world. The perpetual stream of details waiting to be harmonized with ecological reality may very well be mind-boggling, but they are hardly avoidable. To paraphrase Dr. Johnson, *nothing so wonderfully concentrates the mind as the prospect of being hanged*.

The tenacious intensity of purpose required for accomplishing this death-defying task is undeniably awesome. However, it is and will *forever* continue to be the cruel if not unforgiving case. Idling in a well-appointed wing meanwhile, retro-forces nonetheless proceed apace. Use of things and processes for exclusive self-serving purpose appear to be governing the actual implementer's rules, clouding most else out.

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A mercurial contronym if ever there was one, the word and subsequent profligate notion of *design* harbors a wide spray of inference, *chronic* to *predictable* to *acute*. The chronic is obvious. In-your-face ubiquitous renditions of repetitions of copies of vague stereotypes occupy every nick and haunt in civic space, cyberspace included. Indulging their feint, parry and joust gambit to seriously vulgar extremes. For example, the drum-roll of corporate logos peeling off in civic, personal, and cyber space. Entertain this specter: the *mise-en-scène* of a chosen design of a logo is expected to be selectively located everywhere! Glance in any direction in any urban-scape and behold an iconic swoosh or a pair of yellow arches or a vibrating neon umbrella. Priapic corporate icons are seared into public domains like a florid brand seared on the neck of a steer.





*Predictable design* is not nearly as obvious. It is instead a stealthy penetration into substructures governing the realms of instinctual and unintentional response. Take the design of a car's alarm system as exemplary. Intended as an obstruction to theft it is more often enough an unexpected wake-up call for interrupted dreamers. Another example: the collateral effects of telemarketing's designs far outweigh the effects on any intended target, interrupting moods while generating dismay and hostility toward the source of an unwanted call. Another example: Aquaculture, shrimp and salmon farms especially, once touted as a solution to food shortages, has destroyed and displaced indispensable ecosystems. The mangrove estuaries of South East Asia (re: Thailand) have been ravaged into near oblivion. Singular effects of eco-alteration become multiple and plangent, over and again.

Ravage and then "efficiently" eliminate a swampy mangrove enclave and you will very well be reverberating consequences into a virtual infinity of negative, destructive influence, to state the very least. The specific, in this case, is generalized to the quick. Simply put: destroy the mangrove and its environs and you take out as well the adjacent local ecology which drives once removed adjacent local ecologies mad, on and on *ad nauseum*.

In a plunge, *Acute* design is stretched out on a spectrum. At one end is physical, concretized infrastructure: sewerage systems, highways and railways, power grids, urban planning, air routes, et al. At the other end resides visual information systems...maps, data-flow charts, geographic models, statistically based predictive models (re: future climate shifts), demographic and economic displays, et al.

In point of fact these two extremities of *acute* design's spectrum are mutually dependent. An inter-flow of well-lubricated streaming data sloshes back and forth, back again. Model making is pragmatically informed by what's already on the ground, what's in place, what's apparently real. And when repositioned, this actual ground absorbs every such model. Practically impervious to any changes suggested by such models, *in-the-metal* certainty proceeds, longing for a gaze backwards. Such models are thus disruptive, at a disadvantage. Inertia, entropy, decay are inherent on the ground. While designers...

*"Confusion and clutter are failures of design, not attributes of information. And so the point is to find design strategies that reveal detail and complexity—rather than to fault the data for an excess of complication."*

*"Many information displays report on the world's workaday reality of three-space and time. Painting four-variable narrations of space-time onto flatland combines two familiar designs, the map and the time series. Our strategy for understanding these narrative graphics is to hold constant the underlying information and then to watch how various designs and designers cope with the common data."*

Edward Tufte

*"Seek simplicity and distrust it."*

A. N. Whitehead

Designers coping with the common data? The thin edge of a wedge is this: Whose common data? What version of flatland?

Which returns us back to the chase, the design, engineering and implementation of designing machines. And in the not too distant future, designing machines designing *designing machines*. A likely prospect embraced by technotopians everywhere as inevitable and desirable. Nonetheless, there is necessary and sufficient evidence, coherent conjecture, and nascent theories to assume the designers of and for Technotopia are either deluded, rhapsodized by, in abject submission to, or collaborating with a future-tense vision out of whack with those ways our natural world actually works.

A yoke of necessity directs both motives and tactics driving such a world-view. Where ignorance and arrogance are a near perfect reinforcing match. *Remake the world in the metaphorical mold of our current technology and trust it, because it is necessary and inevitable*. Such is the polemic of erstwhile cheerleaders for a grave new order. Computers now being designed to not merely calculate but to "think" (eventually possessing "self-consciousness") suffice as the vanguard's reach for this daunting future. There are also parallel phenomena like genetic engineering, the design, creation, and implementation of dreaded Cyborgs, as well as sweeping techno-manipulation of eco-systems. All of which provide nurture with safe harbor for any expected emergence of this daunting future.

So where's the problem? Its crux is just this. In sum, all of the above developments dovetail into a brutal calculus of relations. Each of which operates outside the ecological context—local, universal, and intimate. Meanwhile, a backdrop of unsustainable short-term gain in position, and its profit, prevails, trumping all other vital considerations. The combination of these two anthropocentric dynamics, short-term gain with technotopian schemes, inevitably merges into a gurgling witch's brew of self-serving motive and blind-sided intent.

It scarcely matters to this entrenched position that its effluvia, its toxic byproducts, its ham-fisted intrusions into the delicacy of natural webs transforms the natural world into a state of hyperventilating rage.

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*“Physical reality seems to reduce in proportion as man’s symbolic activity advances. Instead of dealing with the things themselves man is in a sense constantly conversing with himself. He has so enveloped himself in linguistic forms, in artistic images, in mythical symbols...that he cannot see or know anything except by the interposition of this artificial medium.”*

Ernst Cassirer

So, through this vale of tears the habitues of design emerge. From flatland and time-flow charts, to computer screens to 3-D models, the world is to be remade, once and over again. This time, however, the stakes are now a difference *making the difference*.

The severe to calamitous conditions which circumscribe any *acute* infra-structural make-over compel designers to vastly widen their scope. To include in their *measure of merit*, their criteria, the probable to certain effects of unintended consequences is now the unremitting central issue. The encompassing arc from intention to manifest results will henceforth necessarily include the unaccustomed position of accommodating the unforgiving dictates issuing from sovereign nature, or will fail to. And, such failures will perforce accelerate a downward spiral culminating in ecological disintegration.

In the end manifest results will be calibrated with ecological demand in such ways as to rejuvenate an approximate harmony between designing human desire and an unforgiving hard-core reality. If not, Earth will surely snap back with an ascending crescendo of multiple, unpredictable, relentless, chaotic ways and means.

New York, August, 2002



## GESTATION

### Interactivity

Interactivity has become a major consideration in the development of a contemporary art practice that engages with the proliferation of computer-based technologies.

Computer based technologies have created a revolution in the fields of animation and image generation as well as sound art and music composition.

However, what do we mean by interactivity?

**Interaction is a widely abused term in computer-mediated art.**

The Oxford English Dictionary describes interaction as follows:  
inter-, pref., between, among, mutually, reciprocally. interact v.i., act reciprocally or on each other  
interaction n., blend with each other

The Collins English Dictionary contains the following definitions:  
interact vb., to act on or in close relation with each other  
interaction n., 1. A mutual or reciprocal action or influence 2. Physics, The transfer of energy between elementary particles, between a particle and a field or between fields. interactive adj., 1. Allowing or relating to continuous two-way transfer of information between a user and the central point of a communication system, such as a computer or television. 2. (of two or more persons, forces etc.) acting upon or in close relation with each other; interacting.

The prefix of the word interaction is inter-. Inter- is described as something between, among, mutual, reciprocal. This definition implies that the two parties act upon each other; that the parties exchange something; they act upon each other in a way that is reciprocal. The Collins definition of interaction outlines an action that involves reciprocal influence. In the field of physics, it leads us to understand that an exchange of energy takes place.

How then do these definitions translate into the area of new media arts? Does an exchange of energy occur when one is viewing a CD-ROM? An exchange of infor-

mation certainly occurs, but an exchange of energy, probably not. The user requests a piece of information, and the computer, through the programming of the CD-ROM, delivers that information to a screen in such a way that the user can comprehend it.

One could argue that a transfer of energy takes place when someone is playing a game with a computer that requires a racing car driving wheel and gear changer to be used (many of these can be seen in amusement parks). In this case the user is directly transferring energy through the interface by turning the steering wheel, changing gears and possibly operating the accelerator and brake pedals. This energy is transferred to the interface. The variation in condition of the interface is transferred as data to the computer program. The computer then draws a scenario to the screen, to which the user responds. There is clearly a causal loop here (a causal loop being a scenario in which all parties require the other for their survival, and where the interaction of all parties maintains a balanced system). However, does the racetrack alter because of the behaviour of the driver? Is there actually a reciprocal transfer taking place? No. The user is simply attempting to maintain a state that is acceptable to the criteria of the game, i.e. keep the car moving forward and on the track.

If interactivity is predicated on the ability of both parties to change in a way that reflects the developing relationship or discourse between them, then we have to accept that multimedia systems that do not evolve their behaviour in relation to accumulated patterns of input are not interactive; they are simply responsive.

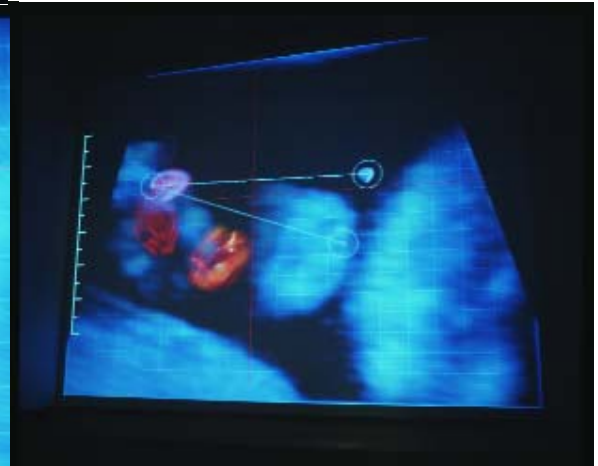
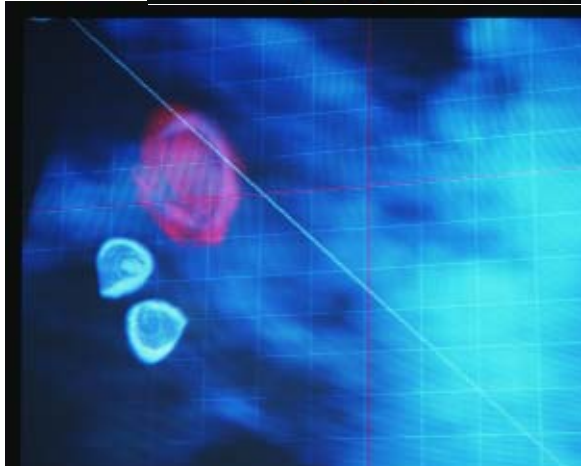
In order for the system to represent an interaction, it must be capable of changing, of evolving. The process of evolution ensures continually unexpected outcomes. The outcomes are based upon the nature of a response-response relationship where the responses alter in a manner that reflects the cumulative experience of inter-relationship.

For this to be upheld, each exchange must be personal. It must reflect the unique qualities of each particular dialogue.

We experience this kind of interaction every day. A discussion between two individuals illustrates interactivity that is:

Unique and personal to those individuals,

Unique to that moment of interaction, varying in accordance with the unfolding of the interaction, but is



Maintained within a common understood paradigm (both parties speak the same language).

Within such an interaction the starting point is known by one of the parties engaged in interaction, but the journey they undertake during their discourse, and the point they end up at are unknown. This process of interaction is extremely dynamic with each of the parties constantly monitoring responses of the other and using their interpretation of the other party's input to make alterations to their own response strategy, picking up points of personal interest, expanding points of common interest, and negating points of contention.

If this kind of interaction were applied to the design of interactive instruments, they would need to adopt a structure that recreates the system dynamically in response to interactive input.

The very structure of the system would become dynamic, and would morph as a result of the interaction.

### System Design

Interactive music research has largely focused on the study and creation of systems that perform tasks appropriate to the creation of tonal music, where pitch is paramount, harmony is integral, and the beat is a persistent basis for rhythmic definition. There are some exceptions here, such as the Theremin and the Ondes Martenot, but even these instruments are most recognised for their application in tonal music settings.

The imposition of musical characteristics on interactive music systems only makes sense when designing a system as an accompaniment or improvisatory application where the other elements of the ensemble are adhering to tonal performance practice.

Robert Rowe, in *Interactive Music Systems* (1994) discusses the interpretation of low-level musical signals into structured high-level representations. He comments that interactive systems

"interpret the input by evaluating human musical understanding" (pg.3) ... in their interpretation of musical input, interactive systems implement some collection of concepts, often related to the structure musicians commonly assumed. Each interactive system also includes methods for constructing the responses, to be generated when particular input constructs are found. As methods of interpretation approach the successful representation of human musical concepts, and as response algorithms move towards an emulation of human performance practice, programmes come increasingly close to making sense of and accomplishing an instruction such as *broaden the end of the phase.*" (Rowe's italics)

Rowe outlines three stages of an interactive music system

1. Sensing, which includes pitch and rhythmic pattern detectors
2. Processing, which includes the scheduling of tasks that create musical events in response to the sensed inputs
3. Response, where the constructed audible response is delivered back to the interactive agent.



In a situation where the system is designed to accompany or improvise with a musician the construction of the responses within an agreed musical aesthetic makes sense. However

when the interactive system is exhibited in a public space, as an interactive artwork the system creator(s) cannot expect those engaging with the system to have knowledge of musical paradigms. Furthermore, when the input to the interactive system is a human gesture, it is questionable whether a musically constructed response is appropriate.

The appropriateness of response is a central issue in the design of interactive systems. The mapping of sensed input data to processing algorithms is the most complex and subjective aspect of system design.

Why for instance, would one wish to convert the movement of an arm to a musical chord, which in turn embeds itself within a tonal structure? What role or relevance does a sense of tonality have to the experience of interaction within such an environment? Equally one has to contemplate the role of rhythm, melody, and the other equally ingrained aspects of musical composition, musical forms and structure.



When presenting an interactive installation within a public space, the artist cannot assume an existing level of musical skill or interactive aptitude.

In order to address these issues, the interactive input must closely represent natural activities undertaken using the body. Video sensing allows continuous tracking of human movement. It provides a continuous stream of data that represents a qualitative indication of the movement taking place. The qualities of the movement can be defined as follows;

- Direction of movement
- Speed of movement
- Size of a moving object
- Proximity of movement to other moving objects
- Inertia
- Consistency of movement

Whilst direction and speed of movement may be applied to existing musical parameters, they make much more sense when equated to the characteristics of naturally occurring sounds.

### Dynamic Morphology

It is for these reasons that I have chosen to explore dynamic morphology as the principal concept of both sound generation and sensing systems. Dynamic morphology suggests a continuous generation of sound events (audible or silent). The contemplation of existing musical paradigms suggests the creation and collection of individual events. Events equate to single points of action and only become part of a continuum of movement when contextualised within known musical forms.

When considering interactive installations that use sound as their principal medium, Dynamic morphology needs to be directed at the sound production process and the relationship between the person(s) interacting, and the system response. For the outcome of the installation to respond dynamically, there must be dynamic variation in timbre.

Trevor Wishart discusses the difference between fixed timbral objects (most acoustic instruments) and sound objects with what he calls, a "Dynamic Morphology."

A dynamic morphology relates to a sound object represented in a "three-dimen-



sional pitch-duration-timbre space" (pg.94). This indicates that a sound alters in a continuous fashion through the characteristics of pitch, timbre and time simultaneously and continuously. A naturally occurring sound has just such a morphology, fashioned by the many facets of its initial sounding source, and the architectural and acoustic space it inhabits. The very nature of this morphology is "an essential characteristic of recognition for certain consonant sounds in speech discourse." (Rodet, Potard and Barriere, 1984).

"In general, sound objects with a dynamic morphology can only be comprehended in their totality and the qualities of the process of change will predominate in our perception over the nature of individual properties." (Wishart, pg.94)

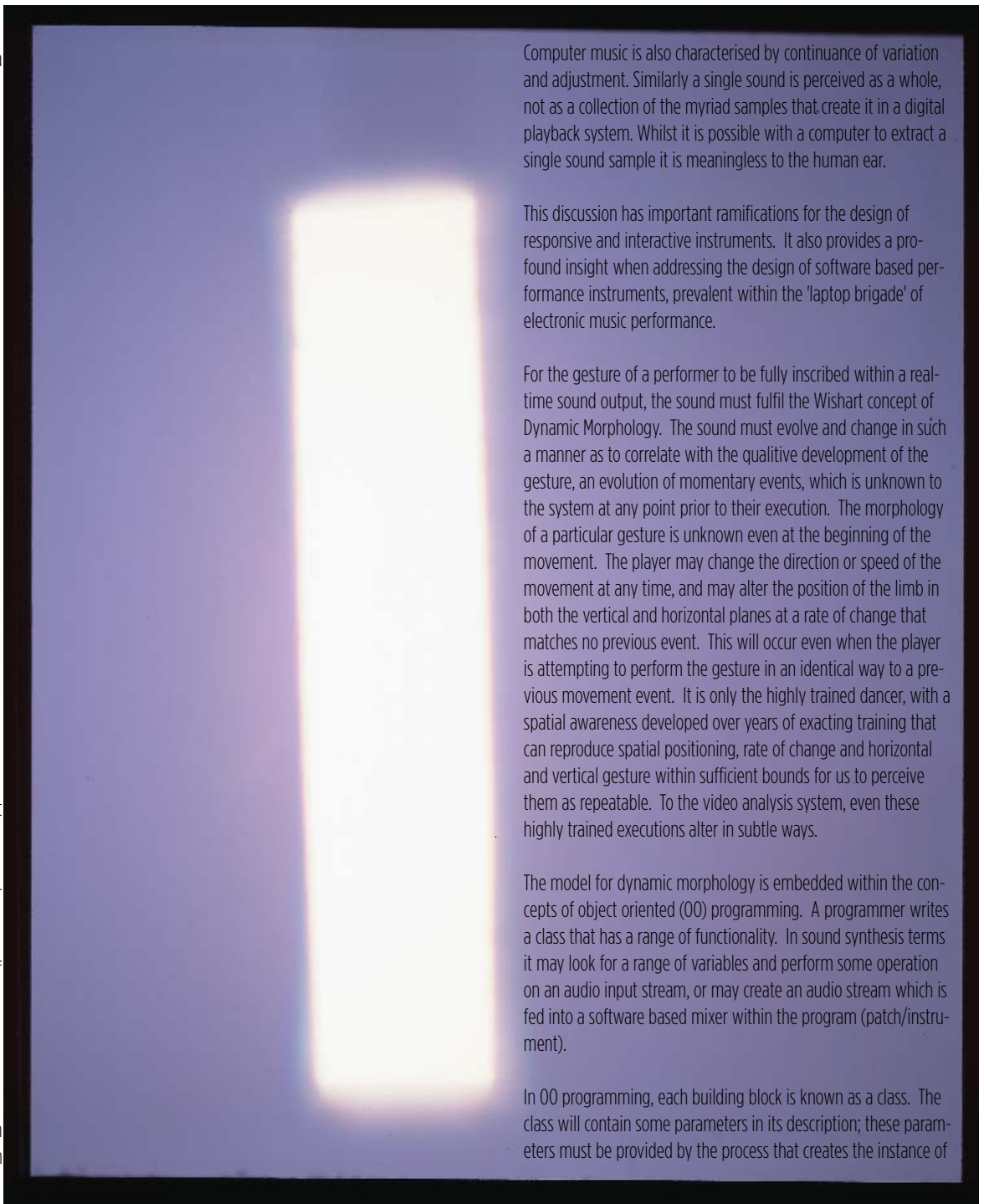
Wishart defines two primary areas of Morphology

1. Gesture, which is "the articulation of the continuum by the agent which instigates the event"
2. The classification of Morphology used "in relation to perceived natural phenomena" (Wishart, pg.102).

The morphology is only apparent if the sound-object is perceivable as a whole. Wishart comments "we may expect, however, that the category of gesture is in some ways more restricted than that of natural phenomena structures ... It is in other respects more extensive than the category of natural phenomena - higher organisms are capable

of very subtle articulations of the continuum, which we should only expect to find by chance in the structures of a natural phenomena. The interface of these two types of description may be seen in the relationship between vocal and instrumental music. A musical instrument is a device used to stabilise, through its resonance structures, the pitch and timbral dimensions of a sound-event. The morphological structure of the sound-event is thus dominated by the characteristics of the natural phenomena of resonance." (pg. 102)

A human movement is characterised by a smooth continuum. Each movement being made up of many infinitesimally small variations and adjustments. The overall movement is called a gesture, and the nature of the way in which that gesture can be enacted is described as the weight of the gesture. It is not possible to extricate from the gesture individual moments of movement and adjustment that make up the overall gesture. In this sense, human movement reflects Wishart's statement that "sound objects with a dynamic morphology can only be comprehended in their totality."



Computer music is also characterised by continuance of variation and adjustment. Similarly a single sound is perceived as a whole, not as a collection of the myriad samples that create it in a digital playback system. Whilst it is possible with a computer to extract a single sound sample it is meaningless to the human ear.

This discussion has important ramifications for the design of responsive and interactive instruments. It also provides a profound insight when addressing the design of software based performance instruments, prevalent within the 'laptop brigade' of electronic music performance.

For the gesture of a performer to be fully inscribed within a real-time sound output, the sound must fulfil the Wishart concept of Dynamic Morphology. The sound must evolve and change in such a manner as to correlate with the qualitative development of the gesture, an evolution of momentary events, which is unknown to the system at any point prior to their execution. The morphology of a particular gesture is unknown even at the beginning of the movement. The player may change the direction or speed of the movement at any time, and may alter the position of the limb in both the vertical and horizontal planes at a rate of change that matches no previous event. This will occur even when the player is attempting to perform the gesture in an identical way to a previous movement event. It is only the highly trained dancer, with a spatial awareness developed over years of exacting training that can reproduce spatial positioning, rate of change and horizontal and vertical gesture within sufficient bounds for us to perceive them as repeatable. To the video analysis system, even these highly trained executions alter in subtle ways.

The model for dynamic morphology is embedded within the concepts of object oriented (OO) programming. A programmer writes a class that has a range of functionality. In sound synthesis terms it may look for a range of variables and perform some operation on an audio input stream, or may create an audio stream which is fed into a software based mixer within the program (patch/instrument).

In OO programming, each building block is known as a class. The class will contain some parameters in its description; these parameters must be provided by the process that creates the instance of

the class (each instance of a class is called an object) in order for the class to become extant. For instance the parameters may be the frequency of the oscillator, or the variable that will be mapped to frequency, or the mixer/bus input into which the audio output will be fed. The functionality of the class is the domain of the code written within it. A class is essentially a blueprint for an object. Once extant it becomes an object that performs a function (functions), as described in the class design, until it is no longer required. At this stage the object may be disposed of, and a garbage collection mechanism removes the object from the computer's memory, thereby providing memory allocation for new object creation.

The beauty of the OO approach is that units of functionality can be dynamically created and disposed of in such a way as to fulfil the

momentary requirements of the global program.

An analogy may be an orchestra whereby instruments are created when required and disposed of when no longer required. To some extent that is the case with a symphony orchestra. A composer will orchestrate a work to use particular instruments to create desired timbral qualities at points throughout the work. However, the capacity of the orchestra is essentially fixed. If four flutes are required, as Mahler does on occasions, then the flutes are seated in the orchestra at the beginning of the work and remain until the end. What would happen if a work were being orchestrated in accordance with a responsive/interactive schema? Such a situation may require 20 flutes at one point, and no violins!!! A software infrastructure can allow for such occurrences within the limits of the processing power of the host CPU, and the limitations of the software design.

In this approach a dynamic morphology would extend beyond the scope of filtering, or otherwise variable synthesised output from one or even a collection of algorithms (which no matter how the algorithm is designed will have a finite range of aesthetic and timbral variation) to a dynamically forming orchestration. In such a dynamic orchestration, a new sound object would be created when the morphological scope of the current algorithm reaches its limits. The new algorithm may exist only as long as it is required, and may be augmented by other dynamically created instruments, before being disposed of until the interactive input requires it again. Furthermore, if this instrument were a flute, the type of flute is defined at the point of creation, the class of the instrument is defined but the individual occurrence (the object) is defined by the process that creates it, so the object could be a piccolo, alto flute, bass flute, wooden flute, etc., as the moment requires and in accordance with the scope of the parameter variables of the class.

Most musical programming languages, although they may implement object-oriented approaches to programming, do not allow for the dynamic creation and disposal of synthesis processes. The synthesis process must be connected to the base synth (the foundation synthesis engine and audio output structure) at the time the program is instantiated. A new synthesis process cannot be added after this point.

My responsive environment installation MAP2 explores this approach. The music programming language Supercollider was used to create an eight-channel instrument.

MAP2 is a three dimensional space which can be entered and encountered, played and played with. It is a virtual musical instrument using the movement of those within it to compose music in realtime. There is no pre-recorded sound material in MAP2. All sound is generated in realtime in response to the speed, direction, position and quality of movement of those within the installation.

People enter MAP2 to compose music and sound by using their bodies to solicit responses from the custom developed computer software, generating a rich, enveloping and continually evolving sonic environment in real time.

MAP2 uses video sensing to map the movement and behaviour patterns of people within the installation. The synthesis approach uses a number of algorithms collected into an orchestra. The instrumentation is augmented each time the sensed activity increases above a certain threshold. The horizontal space is broken into quarters, each independently sensed, allowing four "players" to use the installation at once. Multiple synthesis algorithms are available within each of the four horizontal zones; each zone being an independent instrument. The output of those algorithms is controlled by the position and dynamic threshold of gesture within the instruments zone. Each of the four zones has slight variations in the synthesis algorithms providing a diversity of timbre. The variation is achieved using filter bands that change their makeup based on the sensed activity.

Each zone is allocated a pair of loudspeakers. Eight loudspeakers surround the installation. The zone >> loudspeaker relationship means the sound follows the individual through the installation space.

In MAP2, the video sensing was developed to sense the space in 3D, using 2 synchronised video cameras. This approach allowed height information, and vertical position to be applied to an additional sound algorithm.

The approach taken in MAP2 is conditioned by a limitation in processing power of the host CPU (a Macintosh G4). It is further limited by the programming approach of musical OO packages. Although Supercollider cannot create lexically separate synthesis processes out of the box, it is possible to dynamically create multiple synthesis processes inside a Tspawn node ( Tspawn.ar(newEventFunc, numChannels, maxRepeats, trig, mul, add) Instances of Spawn spawn new events at timed intervals and mix them to output channels. When it is time for a new event, the newEventFunc function is called with the Spawn instance as an argument. The function should return a graph of unit generators. This graph will be installed into a new Synth instance and evaluated until it reaches the end. Therefore it is important that the sound does have an end.)

This approach is still inherently limited. For instance, it is not possible to add a band to a filter in realtime. One must create an entirely new filter object and then dispose of the previous object, which creates a disruption in the audio signal. Lexically separate synthesis processes are required for true dynamic morphology of synthesis processes.

So, while some individual instruments can be created and disposed of dynamically, then mixing infrastructure (routing, filters, etc.) must be created at the point of instantiation of the program, and so all the algorithms run at once, from the time the piece is turned on. They may be audible or not as the input demands, but the processes are all constantly running. Clearly this is not an efficient use of resources, and is not a good way to encourage dynamic morphology beyond the initial capabilities of the instruments.

Drawing on the previous orchestral analogy, the above situation would equate to the orchestra playing a wind quintet, but requiring all the other members of the orchestra to remain on stage, and worse, to require the entire orchestra to attend all the quintet rehearsals and sit silently in their chairs during the rehearsals and performances.

The predominant paradigm of music composition is assumed. The composer/programmer must create the resources expected to be needed for the entire composition. These resources are created at the beginning of the work. They contain a set group of instruments, with an inherently limited morphological scope. This is a limitation that has no place in interactive electronic music performance.

## Interactive Systems

Interactive Systems can be briefly broken down in four primary approaches:

Virtual-reality, which requires the participant to wear sophisticated head mounted technologies and CD-ROM based multimedia. Both these approaches allow the user to navigate pre-defined pathways, consisting of pre-constructed visual and audible content. Artists such as Christa Sommerer, Brenda Laurel, Myron Krueger and others champion VR, whilst the CD-ROM is of course prevalent in both artistic and commercial applications.

Both of these forms utilise pre-made content, which is delivered to the user upon demand. The audio/visual material cannot be altered by the user and thereby, does not reflect the nuance or idiosyncrasies of the way in which each individual interacts with the system.



Responsive and Interactive Environments, and Realtime Electronic Performance Systems make up the final two categories. Most Interactive Environment installations still use pre-made content. The participant collages the source material depending on their input.

Realtime Electronic Performance systems need to be flexible. Whilst limited by the compositional constraints of a particular work, they must respond dynamically to the performers' input. Notable practitioners in realtime electronics are Sensorband, Curtis Bahn, Donald Buchla, Axel Mulder, Tod Winkler, David Rokeby and Leonello Tarabella. An important distinction must be made between hyper instruments, which take on interface approaches of existing instruments and new approaches to performance practice and instrument design.

My own responsive environments fall into the second category. They present innovative interfaces, and new approaches to performance practice. These characteristics are shared with the most interesting live electronic performance systems.

The computer has opened up a whole new genre where primary composition material can be drawn from any source, and once digitised, becomes a fluid and viscous medium.

### Gestation

Interactivity has become a major consideration in the development of a contemporary art practice that engages with the proliferation of computer-based technologies.

Computer based technologies have created a revolution in the fields of animation and image generation as well as sound art and music composition.

My interest lies in placing the exploration of the potential of these technologies within an organic and human framework. Gestation focuses on creating an immersive environment that responds to the movement and behaviour patterns detected within it. The body becomes the controller. The organic process of human exploration, cognition and response, becomes the central influence in defining the output of the interactive process.

"In the environment, the participant is confronted with a completely new kind of experience. He is stripped of his informed expectations and forced to deal with the moment in its own terms. He is actively involved, discovering that his limbs have been given new meaning and that he can express himself in new ways. He does not simply admire the work of the artist; he shares in its creation."

Myron W Krueger *Responsive Environments* 1977

Gestation is an interactive responsive environment. It contains two integrated spaces. One gallery contains a surround sound field, generated in real time using video sensing equipment (visible to visitors only as a small security video camera in the middle of the roof) that maps the behaviour and movement patterns of the visitors on to real-time audio algorithms



providing a tight gestural relationship with their movement and behaviour patterns. No pre-recorded material is being used in the generation of the sounds, they are all generated algorithmically in realtime, creating evolving streams of sound.

In the second gallery, a large projected image represents the development of new human life in response to the activity in the first gallery. The image background represents a sea of life forming cells. Additional layers are formed by the development of new foetuses. Each foetus starts to grow at the point at which particularly dynamic activity is sensed in the first gallery.

The aesthetic of the sound environment is a carefully tended intimately textured sound. It is intended to create a viscous, fluid environment for the "making of life." The qualities of this sound change in relation to the direction, speed of movement and number of people within the space. In addition to the underscore sound, more contained points of interest are tied to the creation of each new foetus, and are associated with the position within the gallery space at which that activity is sensed. The growth sounds express the qualities of life forming: the binding of cells, the development of human form, and the growth of the foetus.

Over the last five years I have collected ultra-sound videos from friends and acquaintances who have had children. The videos are all of their first-born children and form the basis of the moving images. The cells begin growth at a point in the two-dimensional grid associated with the sensed movement in Gallery Two, and grow at a rate associated with the dynamic of that activity. Varying rates of growth are associated with thresholds of activity.

Participants in the sound gallery cannot see the visual element without leaving the gallery space. They can make life, but not observe it at the same time.



The two galleries are detached to illustrate the hidden outcomes of our activities. This approach also allows the visitors to be more deeply engaged in the details of the sound environment, in the hope that they will more consciously engage with the fluidity and variability of the sounds.

### Technical Specification

The imagery has been developed from source videos of Ultra-Sound examinations of pregnant women, which I have collected over the last few years. These moving foetus images are digitised and then converted to animations, which are placed within a varying background that suggests the Ultra-Sound aesthetic. The imagery was constructed using Macromedia Director. The position, and growth patterns of the foetuses is controlled using MIDI communication from the sound and video sensing computer.

The video sensing of activity within the sounding gallery is achieved using the Very Nervous System (VNS) and a single video camera in the roof of the gallery. The VNS is a self-contained digital signal processor that is controlled from a Macintosh computer over a SCSI connection. Software to analyse the VNS data was written by Garth Paine in Cycling74's MAX environment. The output of this software (an integer array: one number per defined region, of which there are 256) is sent as MIDI information to a Symbolic Sound, Cpybara/Kyma sound synthesis system, which is a high-end audio DSP/synthesis device. The sound from the Cpybara is then dispersed into the gallery in four channels.

Garth Paine has used the VNS sensing system since 1996. He has developed a number of innovative approaches to the use of this video sensing equipment. Previous examples of his use of this system, combined with realtime sound synthesis can be seen in his installation pieces MAP1 and MAP2.

For more information see <http://www.activatedspace.com.au>

Cycling74 Max Software <http://www.cycling74.com>

Cpybara/Kyma system <http://www.symbolicsound.com>

### Credits:

Garth Paine – Concept, Direction, Sound Design, sound and interactive systems programming

Kat Mew – Video Digitisation, Animation

Clint Hannaford – Ling programming

Special thanks to all those who gave me their first images of your first-born. I greatly appreciate it. You know who you are J.





» MEMORIES FROM THE INTERFACE

» *Officer: Have you been drinking?*  
*Driver: No, sir.*

*Officer: You're sure you haven't been drinking?*  
*Driver: Well, I had a glass of wine with dinner.*

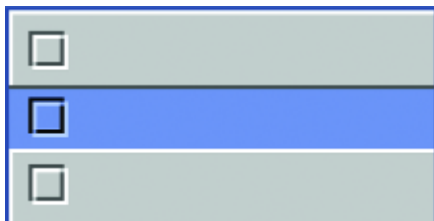
» An interface, like a memory, is imprecise and incomplete. Built to retain and revive data, it really only conjures an *impression* of what existed a day, an hour, a minute before. We continually reshape the interface, like we reshape our memories, to accommodate the little fibs we tell ourselves: that we would like to be more organized, more productive, more efficient. The fibs get us into trouble, of course, because they don't hold up under scrutiny; they just blur the memory, complicate the interface.

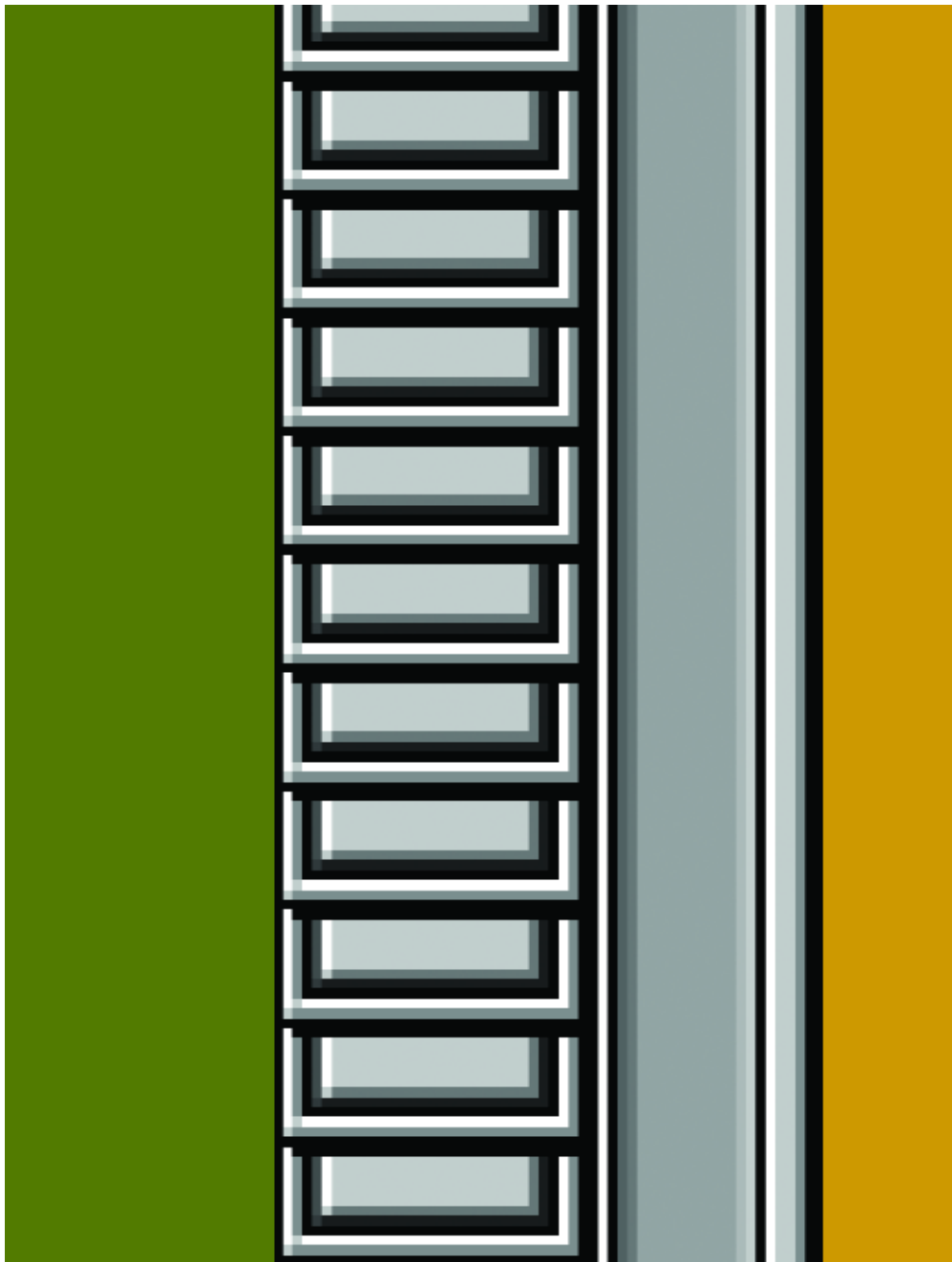
» *Officer: Have you been stumbling around the interface?*  
*Ian Gwilt: No, sir.*

*Officer: You're sure you haven't been stumbling around the interface?*  
*Ian Gwilt: Well, I had a glass of wine with dinner.*

» Though the interface makes an impression on us, we can never really *remember* it. Take a pencil some time and try drawing one from memory. Or, try recalling the first five options at the top of a commonly used computer application. Ian Gwilt's new digital renderings, aptly and collectively titled *Memories from the Interface*, fuse the interface to its own analogy. On the surface these images seem only to measure the collective hours we spend with scroll bars and pop-up menus. Look more closely though, and you'll find they navigate the terrain we visit when we are not organized, or productive or efficient; that is to say, they describe the places we reside most of our lives. Take a minute with them and you'll find yourself asking: "I've been here before, *Haven't I?*"

» *Mark Nelson, New York, June 2002*



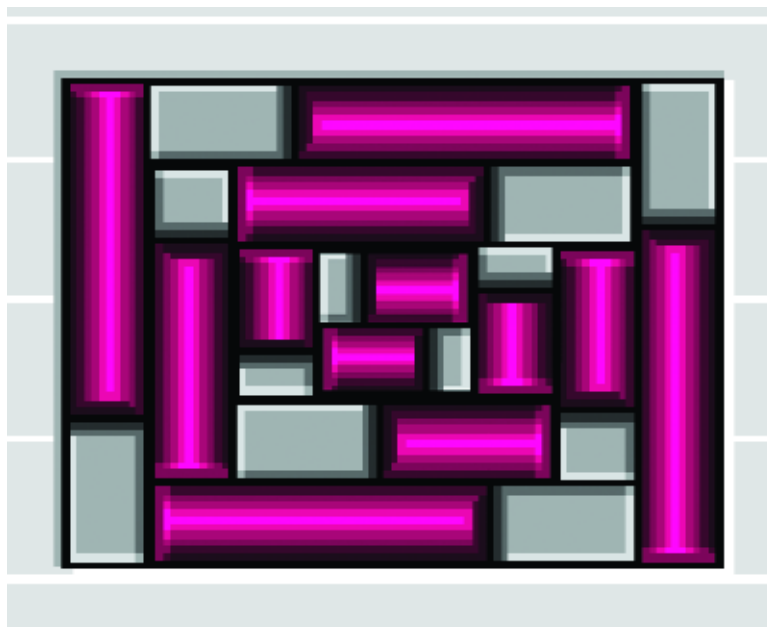


Ian Gwilt • *Stutter* • Lambda print, 36" x 48" [2002]

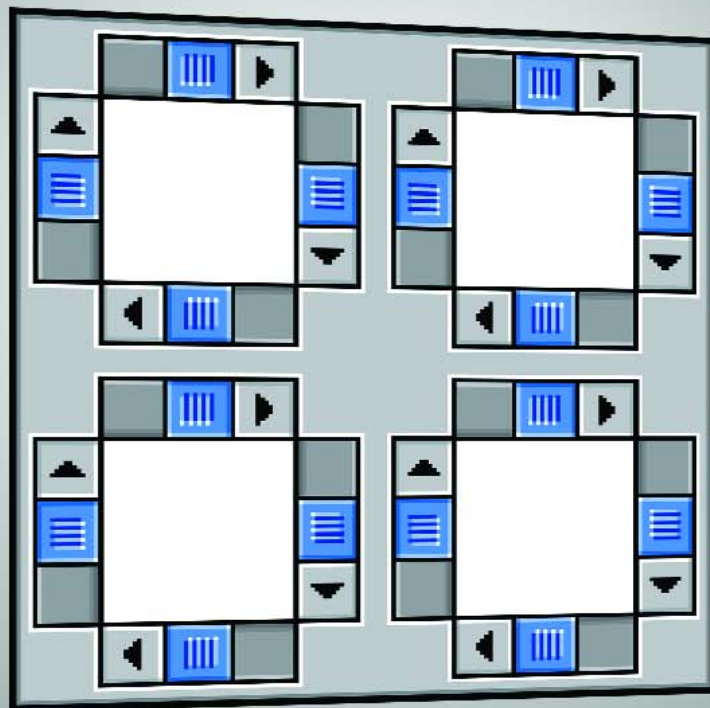




Ian Gwilt · [browsing\\_for\\_a\\_mate \(0.2\)](#) · Lambda print, 48" x 36" [2001]

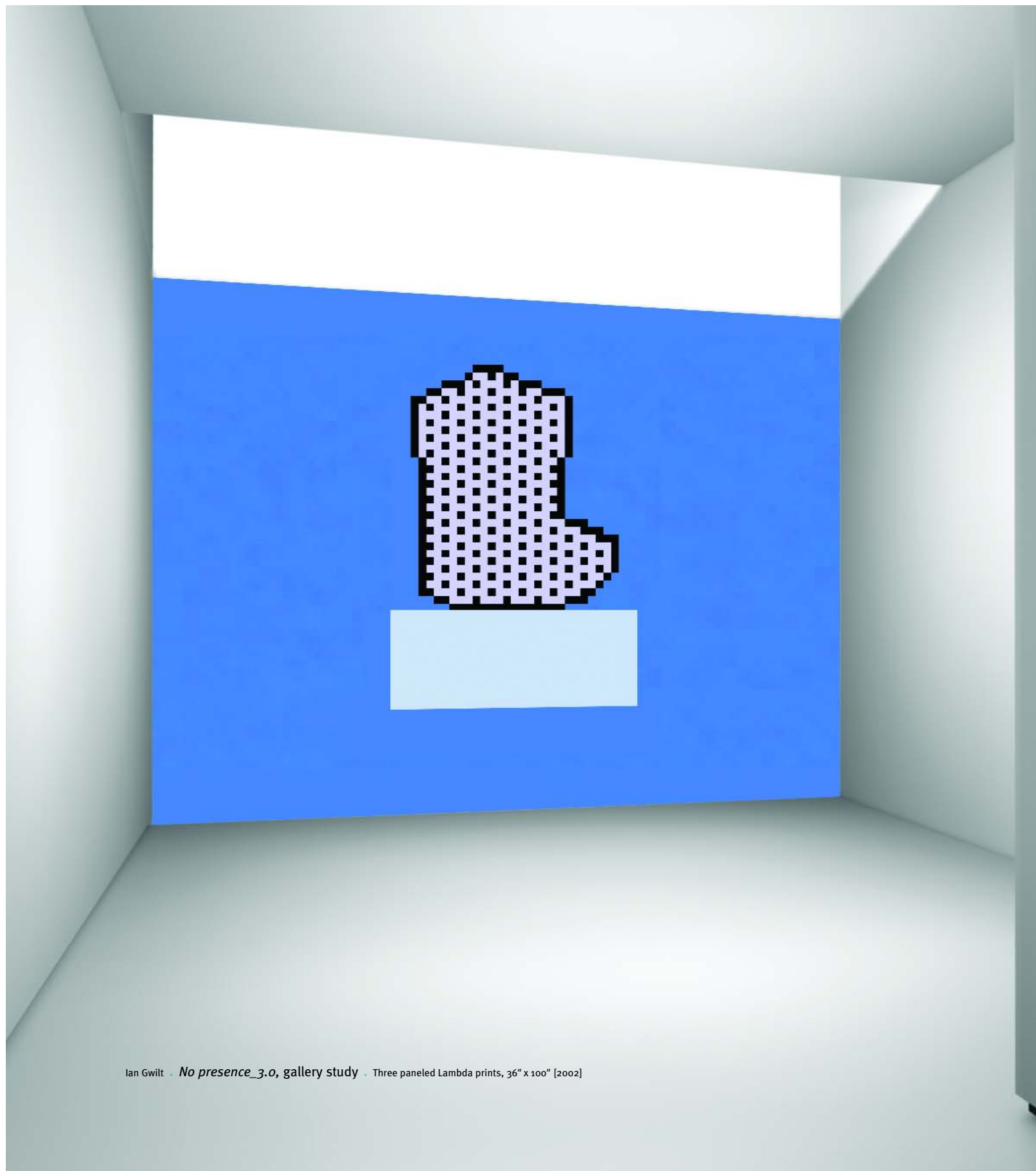


Ian Gwilt · [downloadchaos](#) · Lambda print, 48" x 36" [2001]

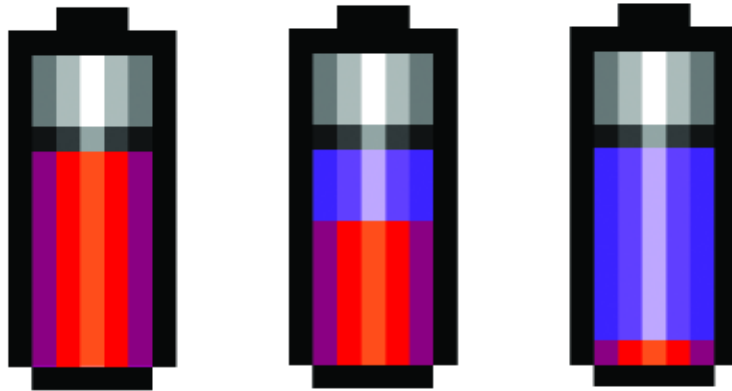


Ian Gwilt · *Scrolling Heaven\_x4*, gallery study · Four paneled Lambda prints, 36" x 36" [2002]





Ian Gwilt · *No presence\_3.0*, gallery study · Three paneled Lambda prints, 36" x 100" [2002]



Ian Gwilt • *That sinking feeling* • Lambda print, 68" x 36" [2002]

**IAN GWILT** »»» is a Digital Artist and a Senior Lecturer in Computer Graphic Design at the University of Waikato, New Zealand. With an MA in Multimedia, jointly conferred from the University of Balears, Spain and the Royal College of Art, London, Gwilt has lectured at Manchester Metropolitan University and was director of the multidisciplinary design company Gwilt Green Associates in the UK for ten years. As a digital Artist and a part of *Stardog Interactive* he has shown interactive art installations, digital prints and paintings at a number of international new media events and galleries. He was a member of the Siggraph Art Gallery sub-committee in New Orleans in 2000 and a judge for the art-site submissions for Siggraph *Nspace* Gallery 2001 in LA.

#### SELECTED AWARDS, INTERACTIVE ART INSTALLATIONS AND DIGITAL PAINTINGS »»»

Established *The Stardog Moon* multimedia installation arts initiative [1995-2000] » Winner of the Adobe 'Innovative Interface' design award – *Circuit Show*, Royal College of Art [LONDON, UK, OCTOBER 1995] » Selected for *Milia 96*, New Talent Multimedia Exhibition [CANNES, FRANCE, FEBRUARY 1996] » Presenter at *SAGA Limited Editions* Art Exhibition [PARIS, FRANCE, FEBRUARY 1996] » Exhibition at the opening of *Art House* Multimedia Centre [DUBLIN, IRELAND, JUNE 1996] » Short listed for *ICC Biennale* New Media Exhibition [TOKYO, JAPAN, FEBRUARY 1997] » Participant in 'globalbody,' the opening event of ZKM Digital Museum [GERMANY, OCTOBER 1997] » Selected for *Siggraph 98*, Touchware Gallery [ORLANDO FLORIDA, U.S.A., AUGUST 1998] » Selected for *Dream Centenary* Computer Graphic Gran Prix 99 [IZU, JAPAN, FEBRUARY 1997 (PUBLICATION)] » Selected for *Transmediale 2000* [BERLIN, GERMANY, FEBRUARY 2000] » Selected for 'Pacific Arts' Exhibition [AUCKLAND, NEW ZEALAND, JUNE 2000] » *ArCade III* – Digital Prints, Glasgow School of Art [GLASGOW, SCOTLAND, FEBRUARY 2000 (TOURING UK, 2001)] » Selected for Siggraph 2001 *Nspace* Gallery [LOS ANGELES, U.S.A., AUGUST 2001] » Group exhibition at Bitforms Gallery inaugural exhibition [NEW YORK CITY, NEW YORK, U.S.A., NOVEMBER 2001] » *Intersculpt* (rapid prototyping sculpture), Adams Gallery [WELLINGTON, NEW ZEALAND, JANUARY 2002] » *International Rapid Prototyping Exhibition*, Rourke Museum [MOORHEAD, MINNESOTA, U.S.A., APRIL 2002]

**URLS** »»» [www.newmedialab.co.nz/digitalprints/](http://www.newmedialab.co.nz/digitalprints/) » [www.arthouse.ie/exhibitions/stardog](http://www.arthouse.ie/exhibitions/stardog)

**MARK NELSON** »»» is a principal of Cabry Nelson Design ([www.cabrynelsondesign.com](http://www.cabrynelsondesign.com)) and the Design Director at Anthony McCall Associates, a New York studio specializing in work for museums and art galleries.



MARGOT JACOBS

## —Interactive Experiences in Public Spaces

### Public Spaces and Interactivity

What is "public art"? Where can it be seen? What are the opportunities for the creation of interactive experiences for the general public? With the advent of the Internet and new media technologies, the digital art form continues to expand, moving away from the screen and into the physical realm. Interactivity has been introduced into the physical space and consequently into public settings. New media artists are exploring interactive media systems and artwork in museums, visitor centers, interpretative centers, parks, and other public places.

In the works listed below, public spaces become a natural setting for the exploration of human interaction, investigating and exposing social behavior and communicative codes through interactive installations and objects.

### Building an Interactive Experience: A Brief introduction to Physical Computing

Behind interactive artworks lies the technology that makes it possible. 'Physical computing' is a term used to describe media that is both electronic and physical, providing a palette for physical interaction design and digital artwork with computational media. With physical computing, artists go beyond the limitations of the mouse, keyboard and monitor interface of today's computers, and start instead at the untapped expressive capabilities of the human body.

The platform for physical computing is a microprocessor or micro-controller, generally a single-chip computer the size of a postage stamp, programmed using BASIC, Visual BASIC, or ASSEMBLY. Microprocessors range in difficulty from the BASIC Stamp (BS) to BX-24's and PIC chips. Once programmed, microprocessors are able to control switches, which includes both inputs and outputs. Inputs can include buttons, sliders, levers, light sensors, touch and pressure sensors, microphones, cameras and even ultrasound. The output is limitless and can include video, lighting, sound, heat, or movement with motors. Micro-controllers are also able to communicate serially to other devices such as computers, printers, and midi control boxes.

### Examples of Expressing with Technology in a Public Setting

#### Shadowwalk

*Margot Jacobs, Henry Lam and Nathaniel Stern*



Built as an installation for a children's museum, *shadowwalk* is intentionally a playful piece, and an obvious re-presentation of physical self. The piece evokes a magical feeling of nostalgia that reminds us of fairy tales like Peter Pan. It brings up ideas about shadowed selves, doubles, and a self that casts multiple semi-permanent shadows or none at all.

*Shadowwalk* uses the digitized shadows of passersby to create temporary, 2-dimensional, sculptures on the floor. The shadows of viewers are digitally transferred onto the floor in front of them, making stark, real-time, pure black and white images. Guests can take "snapshots" of these shadows while creatively posing, dancing or walking by to simply "see what happens." Experienced or ambitious users may even interact with their shadows to create one person plays.

## Front

*Ralph Borland, Jessica Findley, and Margot Jacobs*



## Breathe

*Jessica Findley and Margot Jacobs*



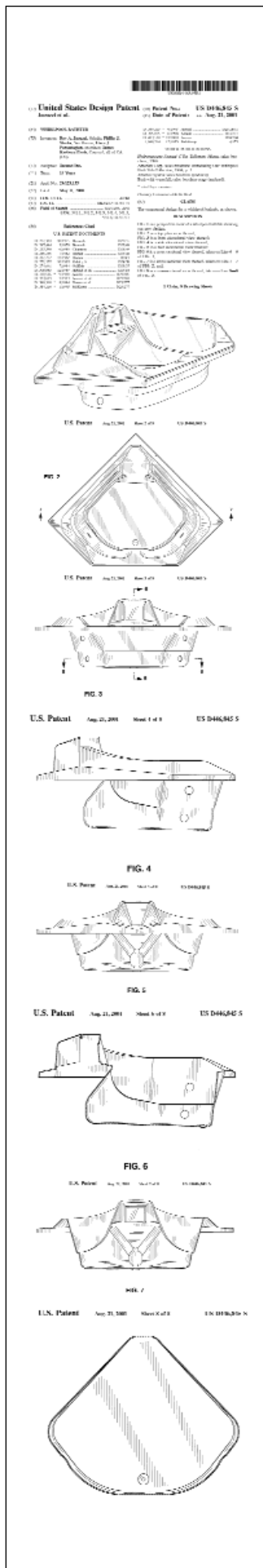
This work included the design and prototyping of an interactive sculpture that embodies a set of changing data in a public space. An environment was created that allowed people the opportunity to focus their breathing in relation to themselves and another person as well as how one's rhythms can inherently affect another person's.

In an enclosed space made of white fabric, a person lies down and sees two sets (a red set and a white set) of ten strings suspended above their body. The fluctuation of their breath is recorded and translated visually into rhythmic movement of one set of strings. The record of this fluctuation continues in the space after the person has left. When the next person enters they see the artifact of the last person's breath as their breath is recorded onto the second set of strings. This installation is cyclical process where the interaction of the each user inherently affects the experience of the following person.

In front, two humans don ceremonial conflict-suits that inflate in response to their shouts and growls. The victim and the aggressor experience a distortion of body that affects both themselves and the other simultaneously. A dialogue is established. Internal conflicts become external via body transmutation. Both aggressive and defensive inflation systems work to distort and manipulate the body of the wearer; armpit sacs push the arms up away from the body; neck sacs push the head up and obscure vision. The suits are not just an expression of the wearer's actions, but also action upon them, so the suits read as both a ceremonial expression of conflict, and as a physical manifestation of the consequences of rage, aggression, and submission.

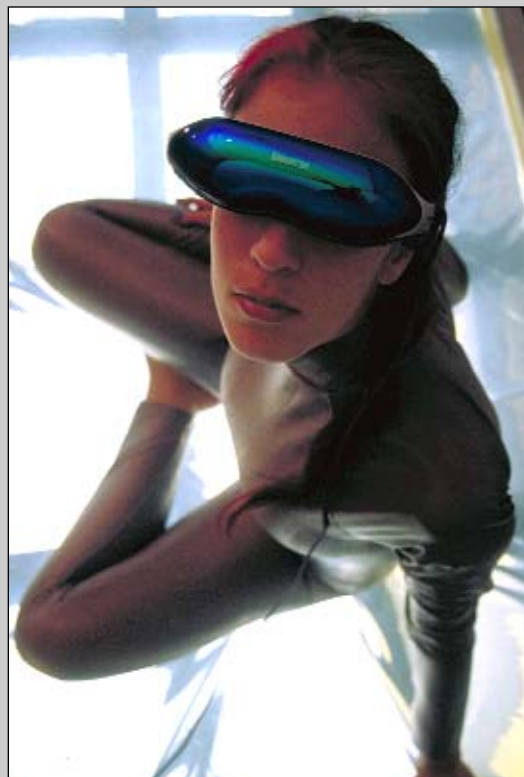
When the suits have been publicly exhibited, they have elicited a very active response from wearers. They create a space in which people perform playful aggression and domination/submission actions. The suits make emotion, intent, and response visible through the more overt, corporeal mechanisms that some creatures have retained, and the human body has largely lost. They draw attention and make analogies to what physical expression humans have left: shouting, gesturing, cowering and blushing.

It is possible to create engaging pieces in the public context. It is within the public setting that artists can involve people in the creative process and provide opportunities for questioning the nature of public vs. private and the basis of human relationships. Understanding the elements of physical computing and applying it to art and design allows for the creation of interactive devices and environments to elicit and facilitate emotional responses and communication between people.



Secure and comfortably distracted within a poetically synthetic contained contradiction.

Our sense of reality is fragile. Therefore every individual's primary desire is to acquire a sense of spiritual, physical and mental security from our unremitting mortality. However, security is an illusion; mortality is a fact. We simulate security with the creation of distractions. Our selfish urgency for distraction drives the production of externalized manifestations of our imagination. These



Text, Images and Art on this page and the following five pages: Michael Oliveri

Patent Image: Roy Jacuzzi



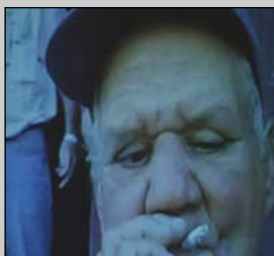
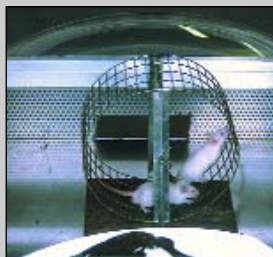
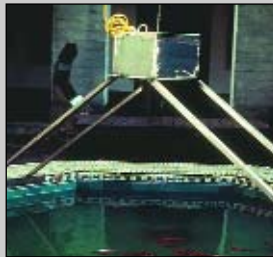
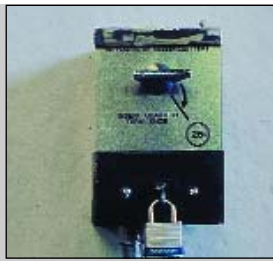
manifestations are always already challenging our ability to acclimatize to evolving forms of distraction. To create the definitive form of distraction would eternally free us from consciousness.

Roy Jacuzzi's new Whirlpool is one of the finest forms of distraction. This is a first class Jacuzzi and deluxe entertainment system in one. The Jacuzzi ensemble is produced as a limited edition and priced for the elite. This Whirlpool has a constant flow of warm water simulating the womb which insures one's physical security while the spiritual and mental security is evaded through a programmable dvd/plasma screen distraction device.

Genetic adaptations are the result of internalized creativity. Internalized creativity produces new forms of evolution. Evolution is the cure for mortality.









*CONTAINED CONTRADICTION*



*INNOVATE AS A LAST RESORT*

- charles and ray eames





*COMFORTABLY DISTRACTED*





*POETICALLY SYNTHETIC*



A photograph of a suburban neighborhood. In the foreground, there is a grassy field with some tall grass and small plants. Behind the field, several white houses with grey roofs are visible. The houses are arranged in a row, with some trees and bushes in between. The sky is a deep blue with large, white, fluffy clouds. The overall scene is bright and sunny.

SCOTT GROENIGER

Shallcross Way, Raleigh North Carolina. July 2002  
inkjet print mounted on aluminum







Previous Page: ***Nervous Landscape: Images of Anonymity.***

An ongoing photographic project examining the landscape of designed communities, suburban housing, and the nuances that define domestic living in a contemporary American lifestyle.

Above: ***Highway Velocity (truckroute) 2002.***

***Ink, paper, acrylic, wood.***

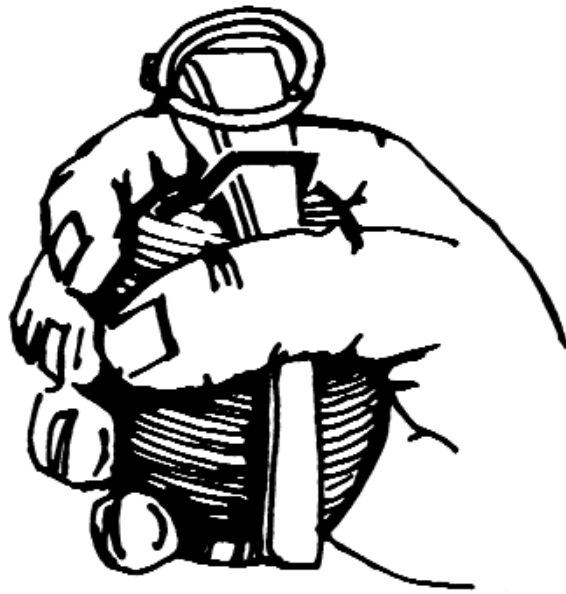
The freeway metaphor in contemporary culture is a condition that means constant flow. An entire consumer culture on cruise control in the phat SUV; maintaining constant velocity 24-7. At highway speed, differences and subtleties disappear in favor of immediacy and clarity, details fade into the blur. This image series deals with the essence of flow in the details emerging from within the blur which become isolated moments in the landscape found along the way.



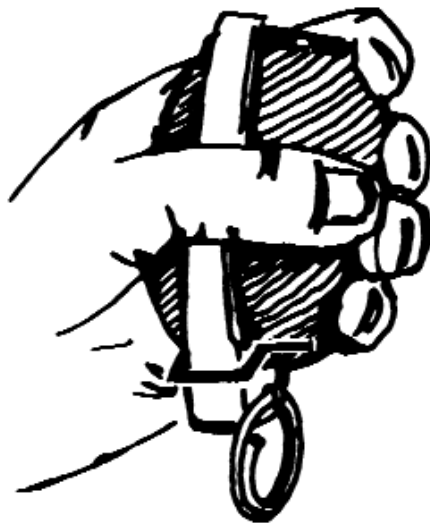


Next Page: ***Common Tasks (disassembled, reproduced)***

This piece is meant as an overview of the basic instructional language of warfare training, appropriated directly from the ubiquitous Soldier's Manual of Common Tasks, a U.S. military education text detailing the basic functions of a modern warrior. The abstract symbols and icons appear in the form of gas masks, disembodied hands holding grenades, diagrams suggesting the most efficient methods of operating a machine gun, and technical drawings illuminating the proper techniques of caring for the victims of chemical warfare. By stripping these images out of the context of an educational text, I am questioning the effectiveness of visual communication, examining the elements of user programming, and suggesting the futility of war as a method for global political and social stability.



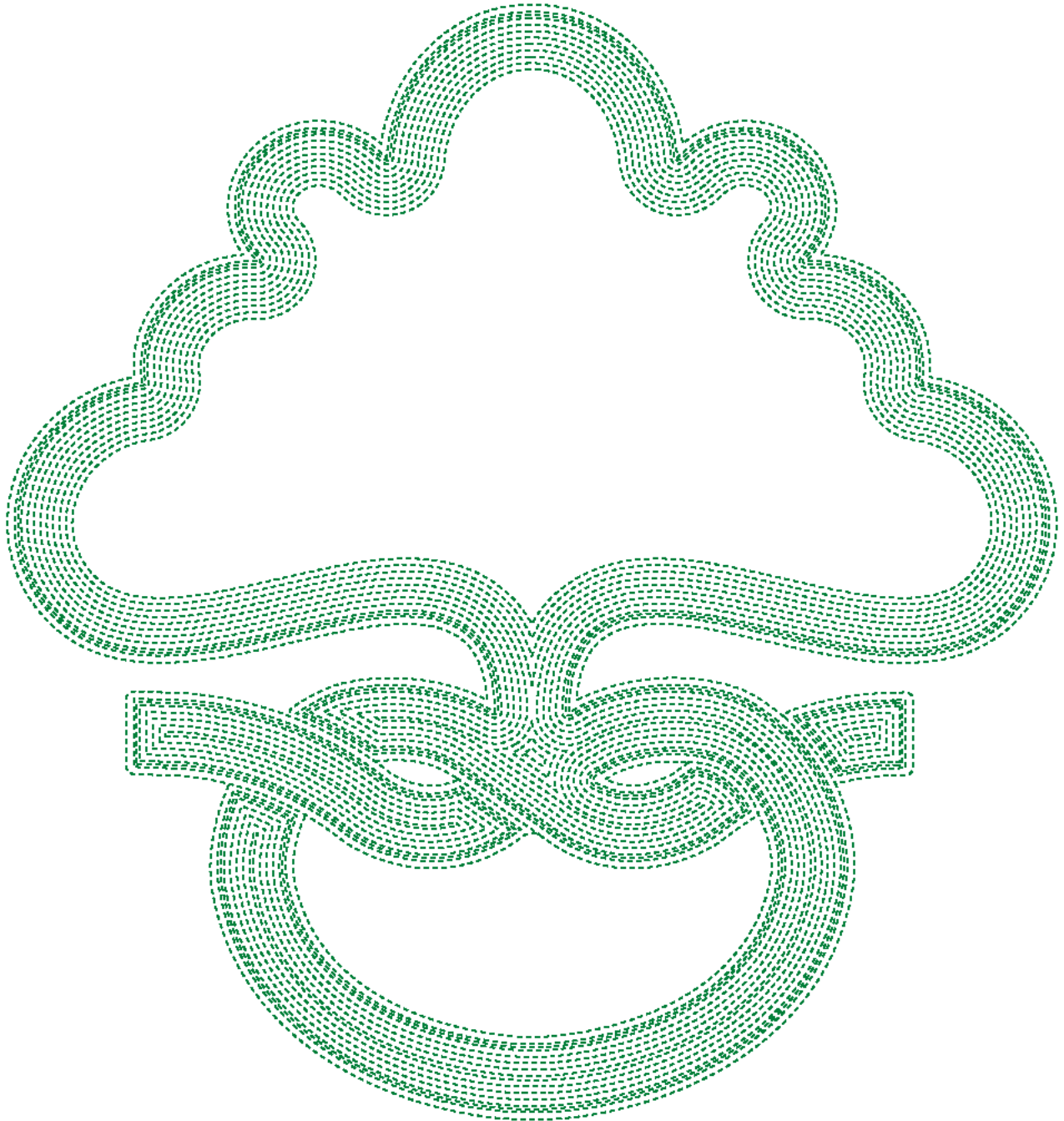
**PROPER GRIP OF THE GRENADE  
(RIGHT-HAND THROWER)**



**PROPER GRIP OF THE GRENADE  
(LEFT-HAND THROWER)**



AMY FRANCESCHINI



## Possible Worlds

All of our works are what we call possible worlds - that is, a space articulated by meaning. Worlds have a site or location in space. They have a form and a shape; they serve a function. In short, they serve as a stage for a complex set of behaviors.

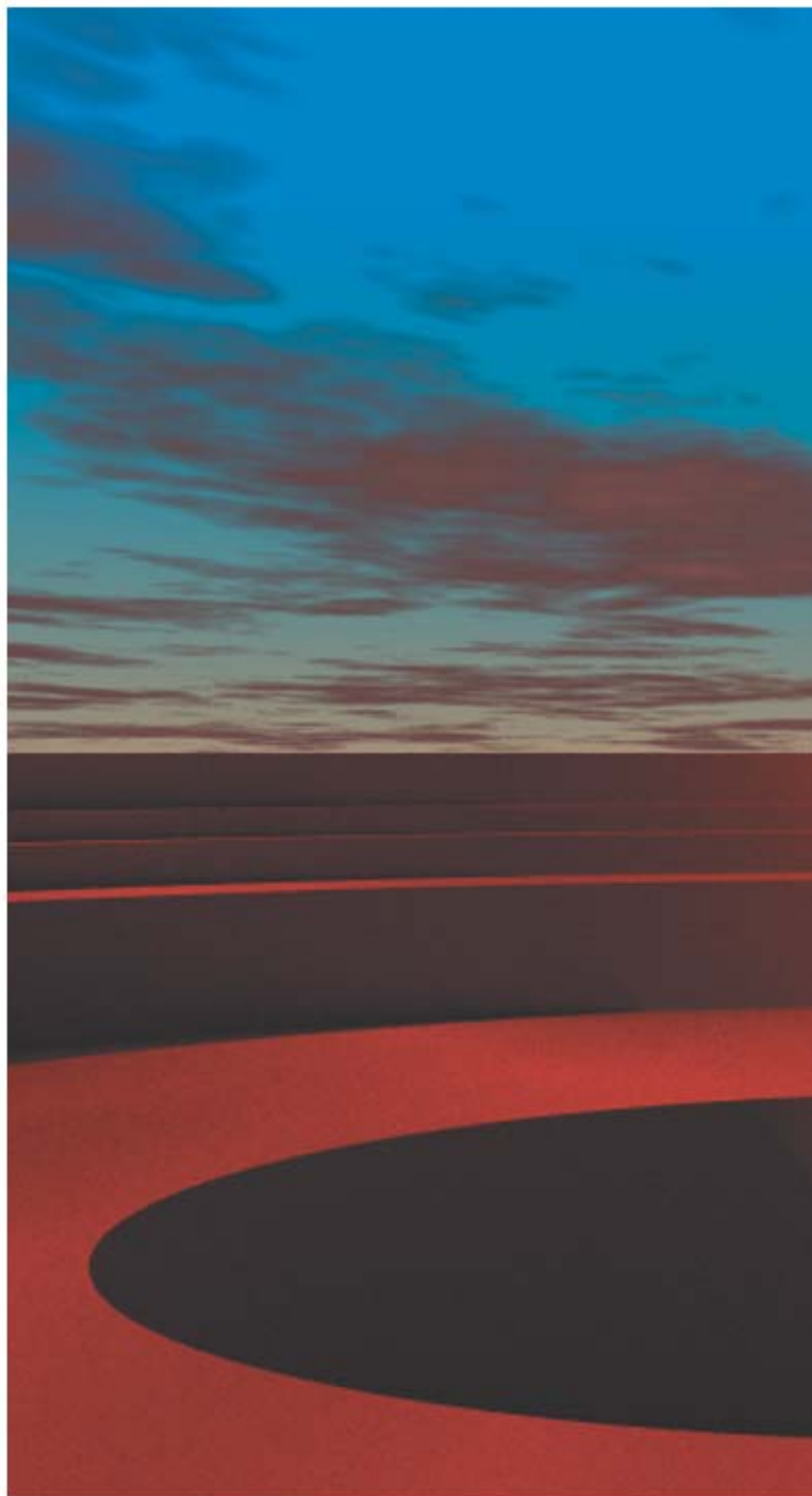
These places are otherworldly, but not fantasy worlds. Michael Benedikt, an architectural theorist once described the work as having...

"A dream logic not far from reality but far enough to settle upon its own faults an air of normalcy. And this is the key: out and out fantasy is easy, the stuff of adolescence. Rationality shattered is not half so compelling as rationality curved around, sutured."

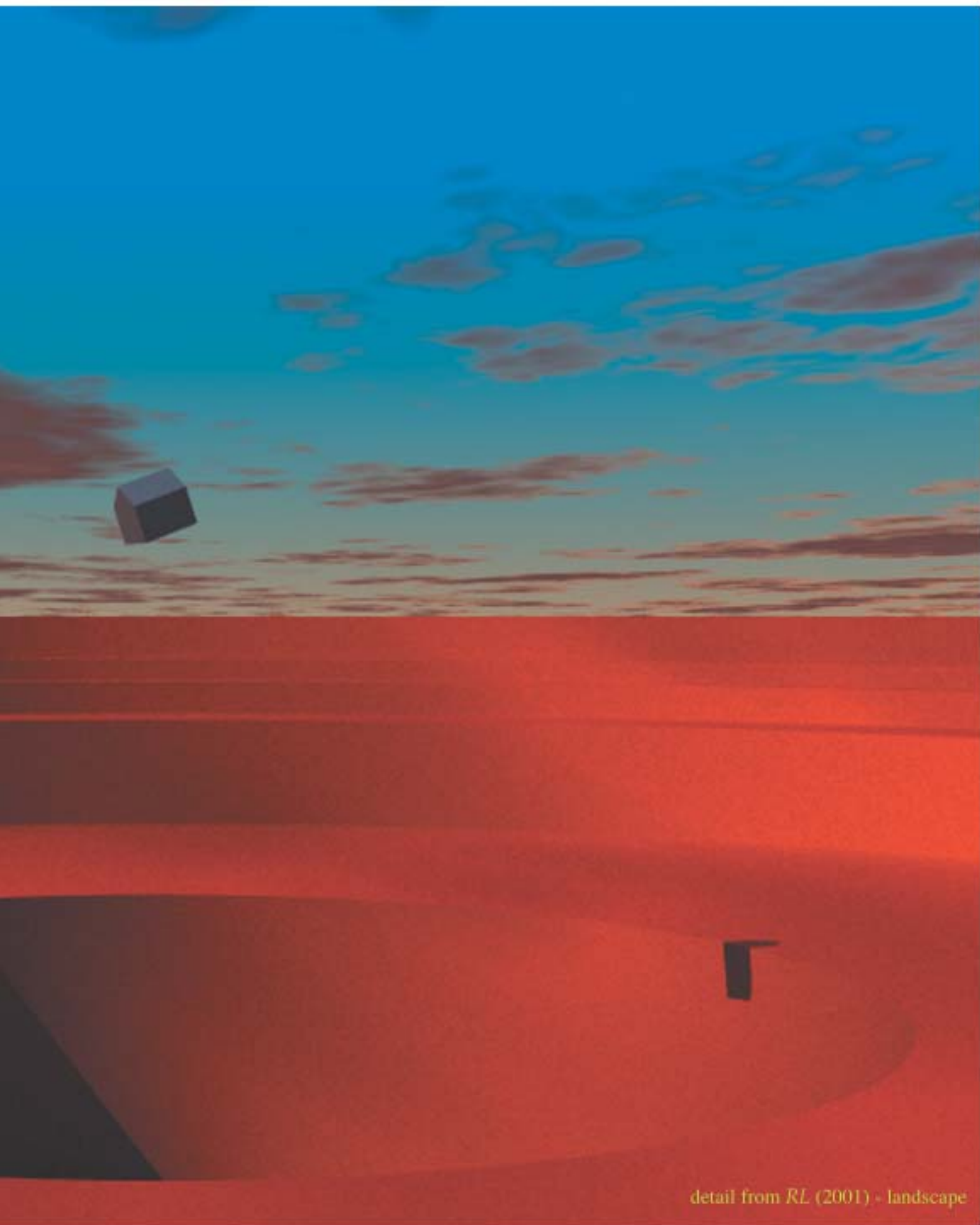
Typically, when one thinks of theoretical worlds, one imagines the creation of an ideal or Utopia.

In *RL*, (*Real Life*), 2001, we present real life as a kind of anti-Utopia in which the characters' cultivated, self-deluding beliefs them have led them to a state of stasis and failure.

*RL* deals with the schism between what we envision and what we see,







detail from *RL* (2001) - landscape

# RL (2001))

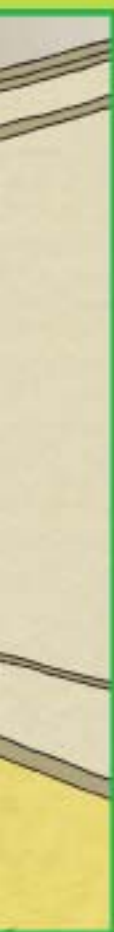


detail from RL (2001)



installation view RL (2001)





) - them

between how we imagine ourselves and what we become, between human intimacy and carefully cultivated salaciousness, between grandiose public displays of power and the humdrum, quotidian normalcy of real life.

The installation presents a pair of animated characters, who live in a tiny, abject world. We are voyeurs into the lives of these characters who behave as people do when they are alone and unwatched. They sit, they chit chat, they drink, they smoke, they pick their noses.

Their conversations are filled with the mundane banalities and arguments that occur between couples who have too little to say --all of which reveal the small details that make up the fabric of everyday life.

As viewers spend time with the characters, their movements trigger sensors placed throughout the room. The viewers' behavior, then, is fed into a computer and processed so the characters respond to the stimuli in their environment. Thus the animated spectacle is composed on the fly, different for each viewer -- the timing and pacing is obliquely controlled by the audience. This notion of oblique interactivity is critical to us. It is the oblique and unconscious behaviors that make the interaction more immersive.

In real life we all live in small worlds, real worlds, with boredom, warts, problems and chaos yet we yet we dream of the other ones, better ones - worlds that are so much better that they wouldn't allow people like ourselves to inhabit them

- *Janine Cirincione and Michael Ferraro*



# *The Bloviator* (2002)



detail: *the reaction*

"It is no longer necessary to say yes to life. No one is there to listen; no one is interested in you, no one is interested in your words." Does one laugh or cry at hearing these words? Is it true that "The universe is finite: a process of decreation...?" In this new millennium we are obsessed with ourselves and with the myriad reflections of ourselves (just look at the plentiful size of the "shelf -help," sections in our bookstores). We are everywhere and everywhere are we, thanks to what Cirincione + Ferraro so astutely observe is our culture's magnificent obsession with technology.

"The Bloviator" is a rant on society's rant with technology. Technology has become a bloated, omnipresence that we indulge in without question. Cirincione + Ferraro carefully

depict both the humor and the vapidness of this blind faith by extracting icons and elements from science fiction and current entertainment (the game Quake). They then isolate their "specimens" in quasi-science lab cum multi-media art installation. The work is aesthetically clean and "beautiful," and as such as is another sly comment on the art world's often blind embrace of technology as artistic medium.

"The Bloviator" continues the artists' meditations on the complex interfaces between humans, technology and meaning. In previous works, the viewer was invited to navigate through computer-generated environments and asked to decipher a puzzle. For example, "The Dead Souls," (1996/99) explored how we construct social identities through an allegorical game in which a viewer's responses determined the course of the experience.

"R/L" (2001) revealed the schism between how we see our selves and what we really are. The viewer was less a participant, but drawn into the experience not by actual play but by relating to aspects of the fictional construct. "The Bloviator" keeps the viewer outside the experience; there is no play, no narrative to construct. Rather the viewer confronts a collage of familiar clichés, suspended for examination, offering up a turgid text as key to the underlying meaning. Cirincione + Ferraro delicately balance the insidious nature of our dependence on technology, while using that same technology to create powerful meaning and artistic experience...thus the revealing the ultimate irony of technology's necessary place in our lives.

*By Sarah Rogers  
independant curator*





installation view *The Bloviator* (2002)



detail : the brain



detail: the bloviator



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IN MEMORY OF JEHANNE TEILHET-FISK AND THE WONDERFUL CONVERSATIONS.

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