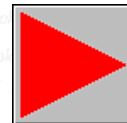# *The Future of the Book of the Future*

University of Alaska Anchorage
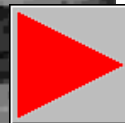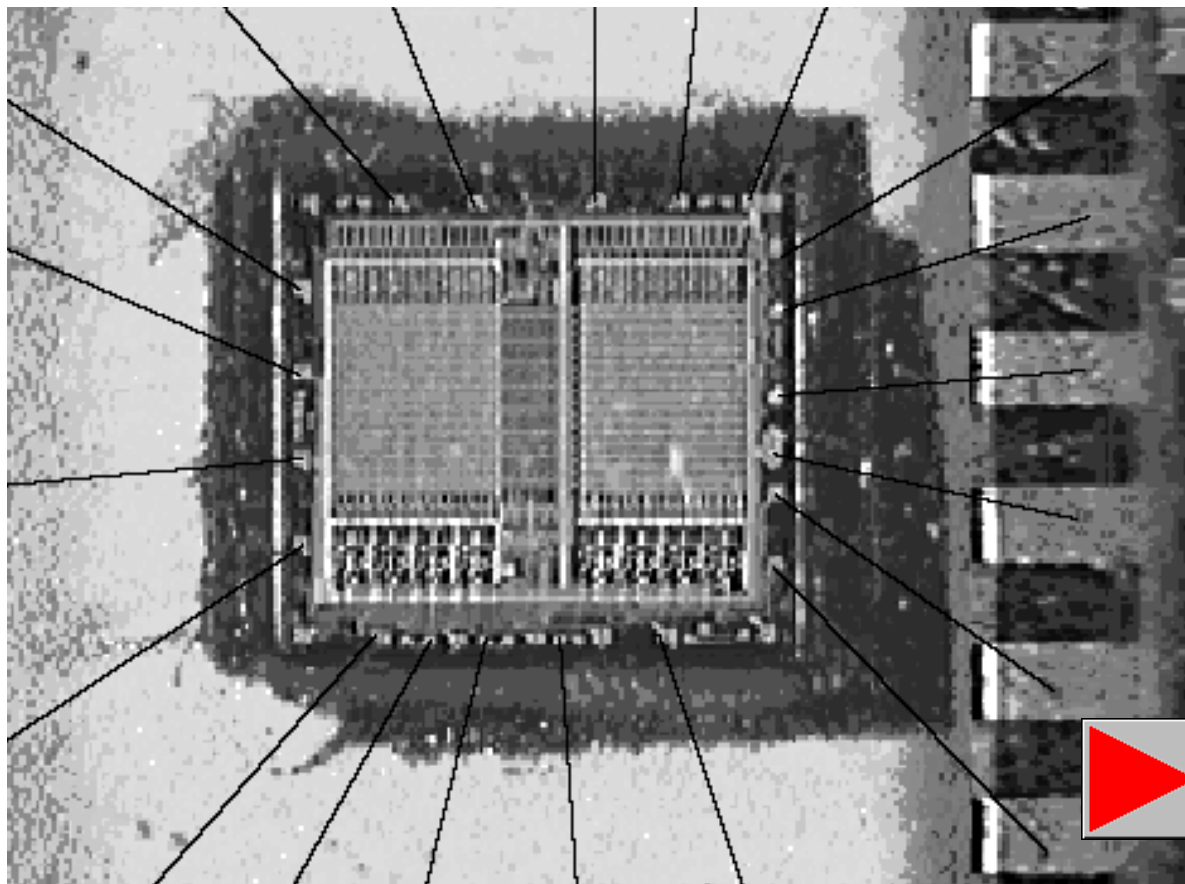
October 5 – November 9, 1994

Thoughts, images, and artworks on the form of the book of the future presented in a series of "work in progress" exhibitions and publications until the year 2000.

Outside of a dog, a book is man's best friend. Inside of a dog, it's too dark to read.

Groucho Marx

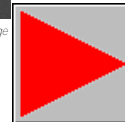# Project Support and Acknowledgements

The Future of the Book of the Future exhibition was a project conceived at Florida State University by Conrad Gleber and Gail Rubini. The Department of Art's University Gallery was contacted to participate in the exhibition and to select Alaskan artists who had an interest in the future of the book as it has been known in a traditional sense and what it might mean in the context of computer technology. This was an intriguing challenge and the exhibition proved to be successful both in terms of the public's response and the University community. The selection of artists from Alaska along with the marvelous works that were exhibited such as Li Chiao-Ping's dance presentation and Paul Windsor's installation and Douglas Rosenberg's video presentation, were indicative of a wide-ranging set of interests and responses to issues surrounding the book of the future. The Art Departments of both institutions are to be commended for producing an exhibition that is of topical importance in a global context–a world that is increasingly being hooked up to an electronic infobahn that is dependent on computer technology and information systems.

Wayne C. Miller, Dean
College of Arts and Sciences
University of Alaska Anchorage

Paul Windsor *Archeology of Knowledge*

Contributors

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The Rich & Last Frontier

CONRAD GLEBER

Alaska and its frontier are being homogenized by the ready-made trappings of contemporary life. The history of the natives and the pioneers of the region is full of unique toughness. In many ways it is just what you would expect but it is a past that is being blanketed by the dynamic, full-charged, American way.

The Alaskan native community follows the same model (except that they were inhabitants not immigrants) as ethnic populations in New York or Chicago. They are proud, very personal in their communications and somewhat invisible. String figures, stories told in the sand, dances and totems—all were used as mnemonic devices to teach ethics and retell the history of the life in Alaska. These player/audience interactions carried the ideas and images of communal life. Watching and listening brought a person into a community and to a cooperative level in the society.

Today these methods are relegated to demonstrations and reminiscences. The elder members are called on to record the techniques for the sake of anthropologists. Meanwhile the typical teenage native Alaskan has the look of an urban inner-city kid—revealing the intense influence of MTV and just plain tv. As for the major scourge, alcoholism, it is the "smallpox" of contemporary native life in Alaska. The oral and aural traditions of the pre-literate life are only remembered and recalled.

The book came late to Alaskan life—the book to document, to teach, to record language and to exchange ideas. Publishing was an import, not a native task. A metaphor for the future of the book in Alaska is found in the relationship between aviation and the railroad in Alaska. In the 19th century, the railroad defined the 48 contiguous states; in Alaska, the railroad is landlocked. Alaskans count on airplanes to shrink time and space just enough to keep Alaska in one piece and a piece of the "outside." And like aviation it will be the future information infrastructure that will shape the population of Alaska and keep it current and relevant in the next century.

It is difficult to say exactly why we worked so hard to have this exhibition in Alaska. Some of our illusions were built up by the classic Alaskan attractions—big untouchable land barely peopled. We knew better than to expect the expected. and became intrigued by the potential for discovering the incongruities—the things that don't add up. It meant that we would learn by doing and need lots of help from artists in Anchorage. We are very grateful to the people who helped us. The facilities they gave us, were first rate. The university provided us with the time and materials to mount a well-received and complicated exhibition and dance performance. Now we are looking forward to the opening of the next exhibition which will be in Tokyo at Keio University during the fall of 1995.

Beyond the Information "Superhighway"

CHRISTOPHER J. DEDE

Terming the National Information Infrastructure an "information superhighway" is similar to describing the airplane as "the next generation of canals." Analogies that look backward focus on how technology can automate but neglect opportunities for transforming. New media empower new messages: The National Information Infrastructure (NII) is a vehicle for virtual communities, a conduit for knowledge utilities, and a synthetic environment with new frontiers to explore and experience. During the next decade, these emerging capabilities will leverage more change in higher education than has occurred over the past two centuries.

Think of the information technologies as similar to a biological ecology, with each type of device a different species. First came the telegraph, then the telephone, the radio, the television, videotape player, videodisc player...Now this ecology is incredibly crowded; every few months a new species appears, such as the Personal Digital Assistant. From their individual niches, a bewildering variety of species cooperate, compete, and become extinct, just as in nature's ecological systems.
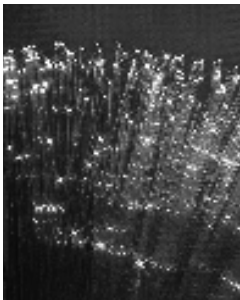
High-performance computing and wide-area, broad-bandwidth networking are the newest technological advances; these empower the NII to become a ubiquitous, enormous channel for data. But this latest set of breakthroughs is different from prior evolutions, because the century-old trend towards a crowded ecology of devices is dramatically reversing. Different species are fusing together; the radio, television, telephone, copier, fax, scanner, printer, and computer will eventually co-exist in a single box. In two decades, the ecology of information technologies will have only a few super-species remaining ("teleputers"? "compuvisions"?) that synthesize the capabilities of all devices.

Beyond ease of use from a consumer's perspective, this fusion has enormous implications for the information technology vendors. Merging technologies mean merging markets. All the telephone companies, computer corporations, radio stations, television broadcasters, cable narrowcasters, publishers, on-line databases, newspapers, and libraries are realizing that the services they provide are fusing. Tens of thousands of current organizations will ally, acquire, and expire into just three or four partnerships that will be the core information providers for our society.

What does all this mean for higher education? Isaac Asimov once remarked that the important thing to forecast is not the automobile, but the parking problem; not the television, but the soap opera. The evolution of information technology is restructuring American business: eliminating jobs, recasting traditional roles, creating both expanded markets and new competitors by transcending barriers of distance and time. Similarly, the educational implications of the NII go beyond enabling the transportation of data anywhere, on-demand to empowering new delivery systems for learning.

Ubiquitous access to sophisticated information undermines the campus-based, classroom-centered structure
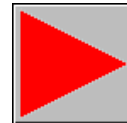
of academic learning environments. For example, advances in technology make possible virtual communities that can complement face-to-face relationships among students and faculty. An increasing number of learners are part-time students who commute to campus. They do not enjoy driving long distances to search for a parking space, then trudging to a classroom to meet at a time selected by the instructor. Presented with the alternative of technology-mediated

New information and entertaiment services are not waiting on fiber [optic cable] to the home; they are waiting on imagination.

Nicholas Negroponte

interaction, such as telephone registration or video-based classes, many appreciate the convenience but miss the loss of opportunities for spontaneous, face-to-face socializing. In the NII, broad-band networking coupled with collaborative tools will empower "telepresence," shared social environments without physical proximity. Because corporate employees find telecommuting both better and worse than routinely traveling to a collective working environment, most select some mixture of interpersonal and technology-mediated communication. As higher education incorporates opportunities for telepresence in remote areas, access to libraries, computer labs, on-line advising, and video-based classes, the convenience of just-in-time, anyplace service will shift academic interactions increasingly—but not completely—into virtual communities and classrooms with electronic walls.

As the NII matures, education outside the classroom may supplement video-based instruction with immersion in synthetic, virtual environments made possible by distributed simulation, a training technique developed by the U.S. military. The vignette below, which illustrates this possibility, takes place in a student's home about 10:30 in the evening:

Vignette: Navigating Through Cyberspace. Roger was unobtrusively sidling across the bridge of the starship *Enterprise* when the Captain spotted him out of the corner of his eye. "Take the helm, Ensign Pulver," growled Captain Jean-Luc Picard, "and pilot a course through the corona of that star at lightspeed 0.999. We have astrophysical samples to collect. You'll have to guard against strange relativistic effects at that speed, but our shields cannot stand the radiation flux we would experience traveling less quickly."

As Picard glared at him from the screen of his home ITV (interactive television set), Roger drummed on his Cyberspace Console with his fingers and cursed quietly to himself. He had intended to sneak onto the ecology deck of the starship and put in a little work on his biology class project in controlling closed-system pollution levels—but no such luck. Worse yet, Roger suspected that the Vulcan communications officer watching him while she translated a message in French was in fact the "avatar" (computer-graphics representation of a person) of a woman he admired who sat three rows behind him in his language class. Of course, he could be wrong; she might be someone teleporting into this simulation from who knows where or could even be a "knowbot" (a machine-based simulated personality used to simplify the job of the faculty Mage directing an instructional simulation).

Buying a little time by summoning up the flight log, Roger glanced curiously around the Bridge to see what new artifacts his fellow students had added since yesterday to this MUSE (Multi-User-Shared Environment, a current type of on-line interaction in which participants mutually evolve a shared synthetic

Agfa Chromapress

environment by continuously modifying its contents). In one corner, an intriguing creature was sitting in a transparent box, breathing a bluish-green atmosphere—maybe this was the long-awaited alien the anthropology and biology majors were creating as a mutual project. The 3–D goggles from his Nintendo set intensified the illusion that the lizard-like countenance was staring right at him.

"Impulse Engines to full speed, Mister," barked Captain Picard! "This Mage seemed rather grumpy for a regular faculty member," thought Roger, "maybe he's a visiting fireman from the new Net-the-Experts program." On his console, Roger rapidly selected equations that he hoped would yield the appropriate relativistic corrections for successfully navigating through the star's corona.

Automatically, a cognitive audit trail of his actions began streaming to his factual-knowledge assessment file for physics. Each time he requested help from the computer-based coach, the performance score displayed on his Console dropped. "Why," said Roger sadly to himself, "couldn't I have lived in the days when students got to take multiple-choice tests...?"

Every form has a specific mode of expression.

Paul Rand

This type of instruction is more interpersonal and interactive than the traditional lecture/discussion approach. Such a shift toward shared collaboration mirrors the evolution of crucial workplace skills, as well as satisfying many of the social needs students bring to higher education.

Through such teleapprenticeship approaches, a widely distributed group of students can engage in simulated, real-time experiences (e.g. virtual hospitals, factories). Their ability to apply abstract knowledge is enhanced by situating education in mentored, virtual contexts similar to the environments in which skills will be used. Moreover, knowledge taught just-in-time to resolve a problem is mastered more readily than when taught just-in-case as part of covering material. Thus, interdisciplinary, learning-by-doing experiences in artificial environments made possible by the NII will likely supplement discipline-centered, campus-based teaching-by-telling.

Where will colleges and universities find the resources to implement these alternative models of learning? An analogy can be drawn to the early 1980s—competition among cable TV vendors to receive exclusive franchises from communities. Those educators smart enough to participate in the bargaining process received substantial resources—buildings wired for free, dedicated channels, sophisticated production equipment—because the vendors knew public service applications would help determine who won. In the same manner, during today's war in the information services industry, colleges and universities that have innovative alternatives to "talking heads" distance education can find vendors happy to share the costs in exchange for help with the regulators, legislators, and judges who are determining which coalitions will manage the NII.

As with business. the evolution of technology creates new markets and expanded competitors for colleges and universities. As one illustration, prestigious universities may develop nationwide offerings of standard courses (e.g. PSYC 101) taught by telegenic, internationally recognized authorities. In such a strategy, high production-value presentations would be coupled with frequent, interactive teleconferences, mentoring via electronic mail; and occasional face-to-face meetings of locally enrolled students led by a practitioner without a doctorate. This approach would not interest learners who desire a residential college experience, but could be very attractive to students at commuter campuses.

With sufficient economies of scale, this delivery method would have lower costs than our present system of similar standard courses duplicated at every institution. While many faculty would disparage this type of instruction, state legislatures could easily see such a model as an attractive way to cut their expenditures for higher education—applicable to every course for which a substantial textbook market exists. In this scenario, higher education would be reshaped as profoundly as American business has been altered by technologies enabling the global marketplace.

In summary, the NII is a meta-medium that synthesizes together all prior media into a fusion greater than the sum of its parts. At present, most faculty and administrators are coping with its first impact: shifting from foraging for data to filtering a plethora of incoming information. The emerging literacy we all must master necessitates diving into a sea of information, harvesting patterns of knowledge as fish extract oxygen via their gills. In the great shakeout coming for higher education over the next decade, the survivors will be those institutions that develop "gills for the mind" by comprehending how this new medium empowers new messages, missions, and competitors.

KTVA Detail of *TimeLine #1* & SCRI *Thunderstorm*

The Information Future: **Out of Control** (and it's a good thing, too)

J A M E S   G L E I C K

Here I am, early one winter evening, on the telephone with an elderly man in his home somewhere in Manhattan. I don't know his name; he doesn't know mine. I am frantically begging him to leave his handset off the hook. My Chinese is even worse than his English—it's hopeless.

I have opened a new outpost in the electronic landscape, a company called the Pipeline, offering everyday access to the Internet, the blooming nework of computer networks—a.k.a. Information Superhighway. Our customers are arriving home from work, switching off the news, turning their backs on spouses, turning on their home computers and dialing—trying to dial—into our gateway.

Like America Online, Prodigy and a host of other services large and small, we have banks of telephone lines feeding into a network of computers. Our network, in turn, is attached to the global Internet by a series of high-speed digital circuits. Our telephone lines are arranged in standard fashion, so that as each becomes busy, a new caller is automatically bounced to the next free line.

For reasons that will never be completely explained, however, a line at the very beginning of our sequence has suddenly begun bouncing to a random residential number elsewhere. The rest of our telephone bank has effectively been cut off. Our victim, meanwhile, has been answering his phone resolutely, minute after minute, greeted each time by a sound that human ears were never meant to hear, the squeal of a modem. If he would at least leave his phone off the hook, our Pipeline customers would be bounced back into our sequence. But why should he? He, too, has paid for his telephone service. The Nynex repair number, 611, is, as always, a black hole.

I have seen the future, and it's still in the future.

SPINNING WHEELS, AND THEIR SKID MARKS

The computer, television and telephone empires have seen the future, too, of course. Never in the annals of business have so many great enterprises raced their engines so violently in the cause of so seductive a vision....Videos beamed over telephone wires....Telephone calls digitized and pack-etized over television cable… Data and interactivity everywhere. If you want to study the third base-man while other viewers are watching the batter, you can—at least in the laboratories. Want to read the newspaper seconds after it's transmitted to your pocket computer? Or surf 500 channels? Replay that sex scene? Talk back to Connie Chung? Easy. Come and get it! At least that's the idea.

Information providers and information provider wannabes are equally frenzied. If you're a major newspaper or news service, or if you're a giant entertainment conglomerate, you are pouring money into pilot projects and on-line trials. In the confusion, everyone is an information provider. It seems that every author, game developer, cartoonist, porn star and greeting-card designer in America has already been signed up for the thing called multimedia. That's usually a fancy synonym for CD-ROM, laser disks that can enliven your computer with the multiple media of words, sounds, pictures and snippets of video.

Archaeology of Knowledge
Paul Windsor
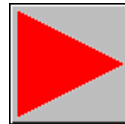
Of course, the vast majority of computer owners don't even have CD-ROM drives. If they don't act quickly, they will miss out on the Too Many Typefaces CD-ROM, the Fractal Ecstasy CD-ROM, the C.I.A. World Tour CD-ROM, the San Diego Zoo's Animals CD-ROM, the Learn to Play Guitar…Meanwhile, the word in financial circles is that a business card containing the word interactive will pass the bearer through any door in corporate America.

At the center of this froth is a conviction that there is nothing less at stake than the entire future of the world's information, communication and entertainment infrastructure. If one could find just the right strategic alliance, just the right corporate merger, just the right software vendor to help that video-music-text-art combination soar through the … airwaves? Phone lines? Television cable?

We are moving from single source learners to multiple source learners.

Gail Rubini

Unfortunately, the present has a way of staying with us, and these great companies are already littering the business landscape with the debris of their shifting strategies. The merger of two of the largest, Tele-Communications Inc. and the Bell Atlantic Corporation—reported, analyzed and financed on the scale of a new Sino-Soviet alliance—materialized and dematerialized in a blizzard of press clippings. Time Warner Cable has announced that its field trial of interactive entertainment and home shopping, meant to begin this sprint in 4,000 Florida homes, will be put off until the end of the year, at best. A regulatory change here, a software-development problem there—and the future recedes once again.

### IF ONLY THE INFOBAHN HAD SALT SPREADERS

The Information Superhighway has reached buzz-word status so fast that no one even needs to utter all eight syllables any more. The latest coinages are Infobahn and, most succinctly, "It's show time on the Infobahn," people keep reminding us. The I-way has on-ramps, potholes, traffic jams. "There are speed limits on the Information Superhighway" is a cliché pronounced almost as often, and as assuredly, as its opposite, "There are no speed limits on the Information Superhighway."

In fact, there are speed limits. If your computer uses a 14,400-baud modem, you are among the elite, but you will still find yourself drumming on the table as you wait for today's satellite photo, and online video is out of the question—too much data to squeeze through too narrow a channel. No one has done more to give American business the official I-way go-ahead than Vice President Gore, who understands the cultural and economic power of universal connectivity. But there was no video, no audio, no multimedia in his celebrated electronic town meeting. There was only Gore, happy technologist and, luckily, touch typist, mouthing words from his computer keyboard to an audience of hundreds. The speed limit was measured in words per minute.

For large institutions like universities and data processing companies, with huge quantities of information to send back and forth daily, the notion of an Information Superhighway isn't a terrible metaphor. There is an infrastructure that needs to be expanded and maintained: high-capacity electronic paths across the country and around the globe. There are routing problems and traffic problems. There really are tolls and bridges, on ramps (sort of) and potholes (unquestionably).
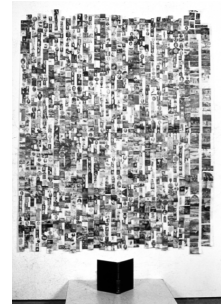
Text/Image
George Blakely

For most of us, however, the metaphor is misleading. We don't have continent-size data tie-ups awaiting the construction of a giant cross-country conduit. We have ancient copper telephone lines that we wish could support our fax machines, modems and voice conversations. The choke point is in the few blocks between our homes or offices and the telephone company's switch. The miracle is that so many people and small businesses are managing to find their own ways into the electronic world, "that electronic world which more and more supplants the dull world of heavy elements and three dimensions," as John Updike put it recently.

It grows not by design but accretion. It resembles not a broad, linear highway but a protoplasmic organism, or colony of organisms. New bits are constantly floating along and joining up with the mass. When my company adds a customer—especially one who stays on line for hours at a time sending out E-mail and commentary, or placing information on line for others to stumble upon—the Internet has grown by another degree.

THE INTERNET (UN)DEFINED

Somewhere out there, people are taking the trouble to put the professional sports schedules on line, free, to be consulted by any surfer of cyberspace who suddenly feels the urge to know where the Indians are playing on May 4.

A pair of architecture buffs have started assembling a "multimedia resource" dedicated to the "dissemination of architectural knowledge"—drawings by Palladio, Kandinsky paintings, musings on "lunar architecture"—and of course links into everyone else's equally new, experimental and personal sources of architectural information.

Debbie (the Leaper) Brown, working for a computer company in Rochester, took the trouble to post a complete episode guide for one of her all-time favorite television shows, "Miami Vice."

Bill Sherman, at the National Center for Supercomputing Applications, who is evidently more of a Muppets fan, put on line a compilation called a "Mupp-ography."

Students at Carnegie-Melon University have wired in an M&M dispenser and soda machine, so that a hungry or thirsty Internaut in Paris or Taiwan can get a real-time display in a typically raw style.

This is the Storehouse of Human Knowledge, Department of Grass Roots. Nothing is too trivial to find a permanent place: certainly not this week's Nielsen ratings, and certainly not the Twin Peaks Allusions (16 contributors from the United States, Britain and Sweden), the Twin Peaks Pilot— "every second of it," Twin Peaks Symbolism or Twin Peaks Timelines.

It's surely in the same spirit that the Government of the United States has begun tossing on line its own miscellany of useful information. The new Internet site of the Senate itemizes Available Documents Distributed by Members; forget that so far it's an on-line Senate of four (Patrick J. Leahy, Edward M. Kennedy, Charles S. Orb and Ted Stevens). The White House posts every public document. Of course, history is a continuum, and the Federalist Papers are available next door (cyberspatially speaking).

The hardest fact to grasp about the Internet and the I-way is this: It isn't a thing; it isn't an entity; it isn't an

Last Supper
Robert Peters
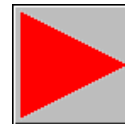
organization. No one owns it; no one runs it. It is simply Everyone's Computers, Connected. It is the network of all networks—the combination of all the irate arid small university, government and corporate networks. It extends to individual P.C.s at the end of the line, like shacks at the ends of dirt roads not far from the turnoff to U.S. Route 1.

The Internet has taken shape with little planning. It received only the most accidental assistance from top Government policy makers ("Information Superhighway" was no more a Bush Administration watchword than was "Supermarket Checkout Scanner"). Nor did the telecommunications companies help much; the fiber that carries the megabits of data may be theirs, but they themselves remain conspicuously absent from the business of getting companies and individuals onto the Internet. The most universal and indispensable network on the planet somehow burgeoned without so much as a board of directors, never mind a mergers-and-acquisitions department.

There is a paradoxical lesson here for strategists. In economic terms, the great corporations are acting like socialist planners, while old-fashioned free-market capitalism blooms at their feet. We live in an era when giant communications empires own the cables and airwaves, and giant information empires own everything else. It's a time when Simon & Schuster and Warner and Paramount and CBS Records and Time magazine and Sony and hundreds of magazines, cable-television stations and rap music companies are, if not yet one big company, then roughly three.

Eric Young

Yet here's the Internet, a world controlled by no one, like a vast television station without programmers or a newspaper without editors—or rather, with millions of programmers and editors. It's a frontier, befitting its origins: unruly, impolite and anarchic. But also democratic.

My own obsession with the Internet began with sheer wonder at the junkyard plenitude of information, tempered by horror at the difficulty of finding anything. Most people who have found a way to dial into the Internet have been confronted by one of the world's strangest linguistic phenomena, the operating system known as UNIX. They have also had to know the computer address for each item on this giant library shelf. Want an hourly status report on the activity of the aurora borealis? Just enter the command: *finger aurora@xi.uleth.ca.*

This seems unnecessary. The point of companies like the Pipeline has been to create an environment using simple graphical software that organizes at least some of the wilderness. We try to cut paths into the jungle, even if the underbrush does have a way of growing back. Certainly graphical interfaces are the future, and they are bringing a new population into the electronic world. Is that a good thing? The original inhabitants don't always think so. Part of the Internet's culture, and not the most attractive part, has been a form of elitism that has encouraged the obscurity. It has been like a town that leaves its streets unmarked on the principle that people who don't already know don't belong.

Maryanne Boreen
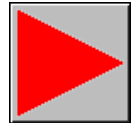
HELLO? ANYBODY HOME?

I have visited the advanced telecommunication research laboratories and seen what technology brings—I.S.D.N., for example, Integrated Service Digital Network, which promises to turn ordinary phone lines into high bandwidth carriers of picture and videos. Lately, though, on behalf of the Pipeline I've also visited the local telephone company and seen what technology can't bring. I've tried to order this very service. I have a 14 page, four-color brochure! "Nynex I.S.D.N. Primary Service . . . for More Efficient Voice, Data, Image and Video…." The Pipeline's I.S.D.N. order has been floating about for months. Our sales representative says he wrote it up three times, and each time the system bounced it back. I have a phone number for an I.S.D.N. specialist inside Nynex, but he doesn't seem to have voice mail.

Luckily, our customers understand the environment we're working with. "Sorry, my response to Dave's post on Indian beach food got eaten up by a second-level demon somewhere in the Giant Tunnel of the Fourth Moon of Nynex," writes a New York financier in one of our on-line forums. We make do.

At the Pipeline, we've discussed plausible advanced-technology scenarios for bringing the necessary volume of telephone circuits into our office: Nynex has plenty of fiber and packet networks, Enterprise Service, Infopath and Advanced Customer Networks. We don't want hundreds of separate telephone numbers (a scarce commodity) and we don't want dial tone (our customers call us). But we get them whether we want them or not. Somehow, when we file out of conference rooms, the solution is always the same: a wall of individual, old-fashioned telephone lines.

Robert Peters

The Pipeline is not alone. The large, private on-line services, too, rely on more or less the same graying telephone technology. Those services may have a limited future anyway. Either they will open their gates to the Internet and become subsumed by it, or they will remain lakes isolated from the ocean. Meanwhile, despite ourselves, we have become revenue producers for the telephone companies. One customer calling from Cape Cod racked up a $544 phone bill in her first month, while paying the Pipeline a total of $35.

Maybe this is the era of small mammals scurrying about at the feet of the dinosaurs. Our own reason for being, our graphical software package, was the half-year's work of a lone, over stressed programmer. The established software companies, from Microsoft down, leak monthly rumors of their own on-line software in progress but have not yet produced any. We haven't tried to propel our users headlong into the 21st century. They can't receive video on demand. But they can order flowers from a cyberflorist, and they can have their E-mail forwarded to their pagers. They can't surf the famous 500 channels, but they are trying out a Parisian's interactive guide to his city's Metro, or browsing last week's S.E.C. filings through a free experimental project, or joining the arguments in the alt.tv.melrose-place discussion group, or logging into the Library of Congress, or trying to download this morning's infrared satellite map—and discovering that the weather archives are overloaded.

There are billions of dollars in search of the future, but it's the present that ordinary users have to cope with. We're amateurs, avowedly, and here on the I-way, it is Amateur Hour.
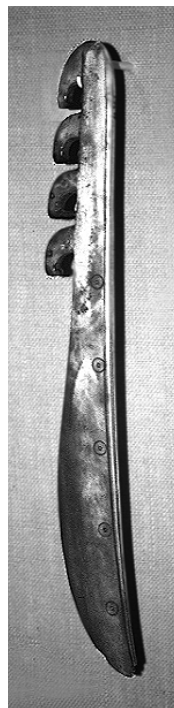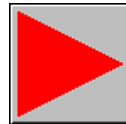
Story Knife
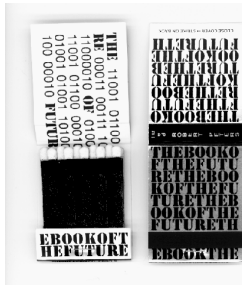
When someone tells our story in the next hundred years, I wonder what will be left.

Marie Laws, Tlingit (IANA, 1994)

17

from the collections of the Anchorage Museum of History and Art

Memory Tables

ELIZABETH INGRAHAM

In Memory Tables, compartments of sand, paper and stones fill a plexiglas cabinet. Layers of text on transparent moveable rulers are manipulated by the viewer; lines from T.S. Eliot concerning memory, experience and regret can be interleaved and recombined with my own words and with commentary as the viewer organizes, filters, edits and rearranges memory. The actual experience remains inaccessible and impenetrable: layers of paper, covered with writing, bleached, dried and coated with dust, are encased in plastic and buried under a hundred pounds of sediment; ancient stones, with their own information, are indecipherable and sealed from our touch.

The sculpture began with a passage from T.S. Elliot's *Four Quartets*:

> It seems, as one becomes older,
> That the past has another pattern, and ceases to be a mere sequence–
> Or even development: the latter a partial fallacy
> Encouraged by superficial notions of evolution...
>
> ☞
>
> We had the experience but missed the meaning,
> And approach to the meaning restores the experience
> In a different form, beyond any meaning
> We can assign to happiness.

I had often remembered this passage. Looking up these lines again, I realized I had forgotten another passage from the same poem:

> So here I am, in the middle way, having had twenty years–
> Twenty years largely wasted, the years of *l'entre deux guerres*–
> Trying to learn to use words, and every attempt
> Is a wholly new start, and a different kind of failure
> Because one has only learnt to get the better of words
> For the thing one no longer has to say, or the way in which
> One is no longer disposed to say it.

Re-reading this poem, it became a commentary on my own life *l'entre deux guerres*, the twenty years between the wars in Vietnam and the Persian Gulf. I collected other lines from Eliot that spoke about the search for order, pattern, meaning, and then I wrote about my own past, and my words seemed to form a counterpoint to his. But reading the words I'd written, I was conscious of how abstracted and smoothed they were. Even when I tried to list facts from my life—I campaigned for McCarthy, I danced at the Fillmore, I dropped out of Wellesley—I felt how inadequate those statements were to describe my past—that the reality of my experiences was deeply hidden, almost totally obscured, virtually lost.
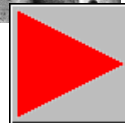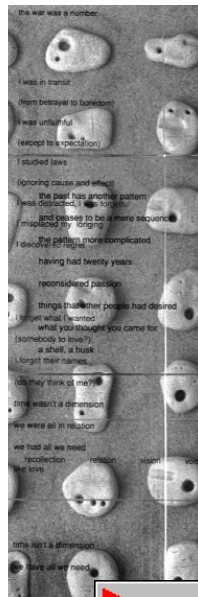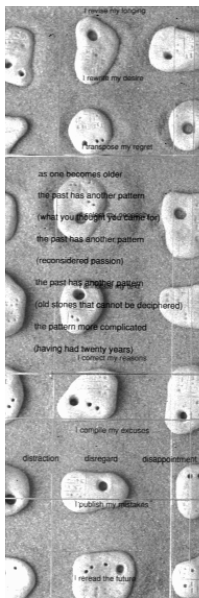
I began to see experience as buried in time, revived by memory, and subjected to reflection as we attempt to discern pattern or meaning in our lives through examination, organization, separation and recombination. Yet any mere cataloguing of experiences seems impossibly empty, removed, remote. There is an impenetrable density to our experience, like sediment, like stone.

We edit our experience. Overlay it with commentary and regret. Observe it from a distance. We can't evaluate it while we're in it, and we can't really see it when it's past. What we're left with is not the experience, and not the memory, but the reality of editing and reorganization.

Memory isn't direct. It isn't tactile, or visceral. It's dry, desiccated, dead, and almost useless to retrieve experience, which remains edited. Compartmentalized. Organized. Sealed.

Thus my past is all laid out—completely transparent—yet totally inaccessible.
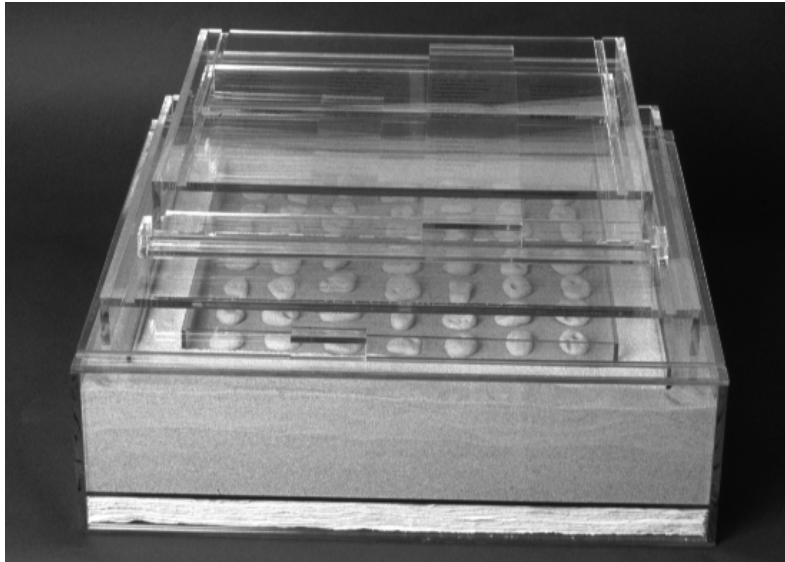
Memory Tables Elizabeth Ingraham

Savonarola Strains: Notes on a Romance with Flames

JEANNE E. ILGEN & C.E. LICKA

In the early 1960s, Michel Butor, in discussing the problems associated with "The Book as Object," pointed out that the book was just one approach capable of preserving language. In this seminal essay, he noted the various techniques for directly "freezing" information and thoughts that were not conditioned by the process of writing such as records tapes or film. The implication is transparent in this case–books were no longer indispensable in cultural preservation and could be replaced by other forms of recording. For Butor, books and writing surpassed direct recording in their capacity to simultaneously "expose to our eyes what our ears can grasp only sequentially" (Michel Butor, *Inventory*, pp. 37-38). The evolution of the book was characterized by this simultaneous two-fold sensory interaction and can be traced to its progression "from table to tablet, from scroll to superimposed signatures." (*Ibid*)

At the time Butor wrote his essay, he hadn't considered the computer and what its impact might be on the role of the book in society, or how it would influence our sensory responses–let alone what the implications would be for the book of the future. As we turn the corner of this century, the possibilities for imagining the "book" of the future appear to be infinite. Like the enclosing of a parenthetical expression, Paul Valery's comment early in our century, is just as applicable to our own circumstances at the end of the second millennium: "we must expect great innovations to transform the entire technique of the arts, thereby affecting artistic invention itself and perhaps even bringing about an amazing change in our very notion of art" (Paul Valery, *Aesthetics, The Conquest of Ubiquity.*)

Savonarola Strains is an exercise in futility, a romance with flames and textual preservation. The transparent recto and verso cases incorporate culture tubes that are sequentially numbered. Each tube is numbered and contains a rolled and burned page from a text. Behind the cases are two black fire extinguishers–guardians of the texts, apotropaic shadows hovering silently in the wings of progress. As an inventory of cultural ephemerality with its taxonomically derived order, these remnants of cultural trace are a postscript to all of the "Fahrenheit 451s" and "bonfire of vanities" we have perpetuated.

Implicit to this work is another facet that is retrievalist in nature–a homage to the now defunct art of mnemonics or "mnemotechnics" and numbering systems. These systems have provided us with cultural and structural relationships from the past–armatures on which to hang our ideas. From the classical era through the seventeenth century, the art of memory was meant to allow one to "memorize through a technique of impressing 'places' and 'images' on memory" (Francis Yates, *The Art of Memory,* p. xi.). Mnemotechnics can be traced to Latin authors concerned with rhetorical strategies such as Simonides, Cicero and Quintilian. Prior to printing, paper for notetaking, or surfaces to type one's thoughts on, a trained memory was invaluable. Memory has in the past been marked and positioned in time and space by using notational systems. In a sense, the notion of computer memory with its digital base is an extension of earlier abstract and concrete numerical sequences such as tally sticks, medieval reckoning tables, the Japanese *sorobon,* Peruvian *quipus,* and Napier's counting rods. (See Karl Menninger, *Number Words and Number Symbols: A Cultural History of Numbers.*) These numerical sequences, like artificial memory systems, were systems for ordering and the retrieval of information.

A classical example of artificial memory which can be improved by developing techniques, is an anonymous author's text called *Ad Herennium* (86-82 B.C.) that was dedicated to Cicero:
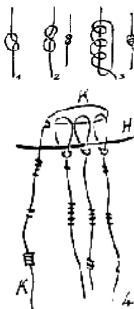
Various knots in a Peruvian quipu
Menninger, Fig. 88, p. 254
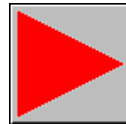
…artificial memory is established from places and images,… the stock definition to be forever repeated down the ages. A *locus* is a place easily grasped by the memory, such as a house, an intercolumnar space, a corner, an arch, or the like. Images are forms, marks or simulacra…of what we wish to remember. For instance, if we wish to recall the genus of a horse, of a lion, or an eagle, we must place their images on definite *loci*.

The art of memory is like an inner writing. Those who know the letters of the alphabet can write down what is dictated to them and read out what they have written. Likewise those who have learned mnemonics can set in places what they have heard and deliver it from memory. (Yates, pp. 6-7) 'For the places are very much like wax tablets or papyrus, the images like the letters, the arrangement and disposition of the images like the script, and the delivery is like the reading.' (*Ibid*, quote from *Ad Herrenium*.)
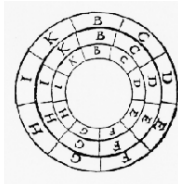
In effect the *loci* are retained by the memory and can be retrieved time and again by superimposing another series of images for another series of connections.

Other mnemotechnic systems have intrigued our research and have been influential in our intuitively structured arrangement of *Savanorola Strains*. There are Medieval and Renaissance mnemonic systems that have a marked theological orientation and can be seen in the frescoes of Ambrogio Lorenzetti at the Palazzo Pubblico depicting virtues such as Justice and Peace, and the *Abbey Memory System*. Other mnemonic systems include: *Grammar as a Memory Image and Visual Alphabets* (1533), *Hell as Artificial Memory and*

Paradise as Artificial Memory* (1579), the incomplete and hermetically conceived *Memory Theatre of Giulio Camillo* (16th century), Giordano Bruno's Memory System from his treatise *De umbris idearum* (1582), Ramon Lull *Ars brevis* (1617), Robert Fludd's *Ars memoriae* (1619). All of these systems use diagrams associated with cosmological architectural, theological concerns, or serially disposed connections that function in an emblematic capacity that connects image and/or activity to a word or letter. This combinatory function or topographical mapping provides landmarks for the memory to retrieve what is needed at any given time–a mental filing system linked to images and text.

Cultural memory and the vanishing experiences of all of our pasts that have been recorded and will be re-recorded for the archives of the future is of major importance. How and what information will be retained in an accelerating Borgesian library of electronic babel and images in generations to come? What if anything will remain of a society's and individual's memory if experience has been diminished and filtered at a conscious level to such a degree that experience is "reduced to its barest essentials?" (Richard Wolin, *Walter Benjamin: An Aesthetic of Redemption,* p. 228). Are we ready for an accelerated variation of alienation and interiorization created by electronic surrogate experiences? Or are the advocates of computer technology bringing us Promethean gifts that will globally link us to experiences and new forms of knowledge that will fire our imaginations? Utopian/Dystopian dreams and predictions are merely two sides of the same coin.
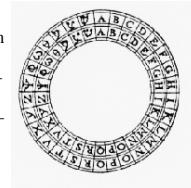
Earlier in this century, Walter Benjamin, the critic and essayist, noted that human perception had been radically revised. In effect, the notion of traditional experience had been decimated by the avenging angel of progress.
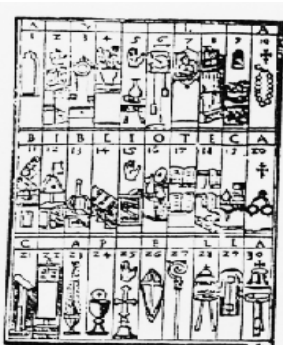

Ars Combinatoria from Lull's *Ars brevis* (1617) (From Yates, p.183)

Memory wheels, from Giordano Bruno, *De umbris idearum* (1582) (From Yates, p. 209)

21

Previously, the dissemination of cultural memory or remembrance *(Gedächtnis),* was transmitted from generation to generation, and through that process, knowledge could be disseminated. But traditional experience, expiring on the pyres of technological advances had, according to Benjamin, destroyed memory's role in the traditional sense. Later on as William Olander pointed out in his essay for *The Art of Memory: The Loss of History* catalog: "What we see today is not what was seen even a decade ago, for the art of memory and the loss of history imply a remarkable shift in our perception whose special effects we are only beginning to uncover" (Olander, p. 12). The computer in this sense has become a high-speed tool for thinking, imaging and storing and is capable of housing entire components of texts, images, and sound that allow for the rapid deployment of this information. The ability to retrieve information has certainly gone beyond the *Memory Theatre of Giulio Camillo,* the *Ars memoriae* of Robert Fludd or Giordano Bruno's *Memory Wheels.*

If memory is not a copy of experience, but the repository for the connections between different types of experiences, then learning can be seen as a way of artfully bringing together various connections. Knowledge seen in this light is an accumulative and ongoing process of linking various strands of associations and not by means of solitary impressions. With computers being used as high tech tools to think, write, and imagine with, we are only limited by our technology and imaginations. For future generations, creative technophiles will most likely produce artistic and informational strains that will tax traditional frames of reference to the maximum. We have the capacity to retrieve bodies of information and make connections in an infinite series of permutations. But memory and experience are not transmitted in the manner that Benjamin would have envisioned it. Unpacking his library as well as ours will certainly be a different experience in the future.

We acknowledge nostalgia as an ideology of absence wearing a utopian mask. Lived experience is unretrievable in nostalgic space. Underlying the computer's capacity to produce images and electronic discourse is an ideology of surrogate presence—a mask of infinite dreams and expectations. We want the impossible, stories of experience that can connect us not only by electronic circuitry but to that artisanal world of storytelling that Benjamin spoke of:

The storytelling that thrives for a long time in the milieu of work–the rural, the maritime and the urban–is itself an artisan form of communication…It does not aim to convey the pure essence of the thing, like information or a report. It sinks the thing into the life of the storyteller, in order to bring it out of him again. Thus traces of the storyteller cling to the story the way the handprints of the potter cling to the clay vessel. (Hannah Arendt, *Illuminations*, pp. 91-92)
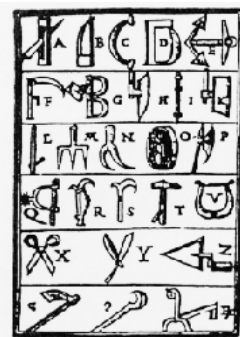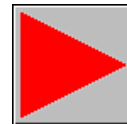
Savonarola Strains refers then not only to the loss of an artisanal form of communication but to the loss of books at the edge of dissolution–a tremulous balance between the memory of books that have flamed in our hands and entropy. But there is another side to the romance of flames that makes fire an intriguing metaphor for the computer as a rejuvenating emblem for the book of the future:

> **Fire is for the man who is contemplating it an example of a sudden change or development and an example of a circumstantial development…fire suggests the desire to change, to speed up the passage of time, to bring all of life to its conclusion, to its hereafter. In these circumstances the reverie…magnifies human destiny; it links the small to the great, the hearth to the volcano, the life of a log to the life of the world. The fascinated individual hears the *call of the funeral pyre*. For him destruction is more than a change, it is a renewal.**
> **(Gaston Bachelard, *The Psychoanalysis of Fire*, p. 16)**

More Queries and Subversion are needed
See Walter Benjamin, "The Author as Producer"

INTERFACE/CYBERSPACE

DOUGLAS ROSENBERG

According to the author and philosopher Michael Heim the ancient Greeks were fascinated by the concept of interface and in fact spoke with reverence of *prosopon* or one face facing another. He states "Two opposite faces make up a mutual relationship. One face reacts to the other and the other face reacts to the other's reaction...and so on ad infinitum. The ancient word *prosopon* suggests a spiritual interaction between eternity and time."[1]

It is believed by scholars that Homer lived and composed sometime in the eight century B.C. Yet his epic poems did not reach their present form until the sixth century B.C. when they were finally preserved in written form for the first time. If neither *The Iliad* nor *The Odyssey* existed in written form for possibly some two hundred years where did they exist? The epics were most likely committed to the collective memories of a number of people slightly changing from Homer's original form each time they were recited. I would submit that the contemporary term cyberspace (a computerized dimension where information both random or otherwise lives) is a sort of mnemonic stand-in for the art of memory. What we fondly refer to as the oral tradition is in fact the precursor to cyberspace. Heim states that "Rightly perceived, the atmosphere of cyberspace carries the scent that once surrounded Wisdom."[2]

Yet unlike memory, *cyberspace, hypertext, virtual reality* and other permutations of contemporary computer technology do not in themselves preserve *meaning*. What they seem to offer in its stead is the potential of unlimited access to information, all information prised away from its context and therefore its meaning. As Roland Barthes points out in *The Pleasure of the Text*, "If I read this sentence, the story, or this word with pleasure, it is because they were written in pleasure…How can we take pleasure in 'reported pleasure'?"[3]

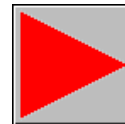The installation entitled *The Iliad and The Odyssey* addresses that pleasure and, further, the joy of the text as a living humanistic concern.
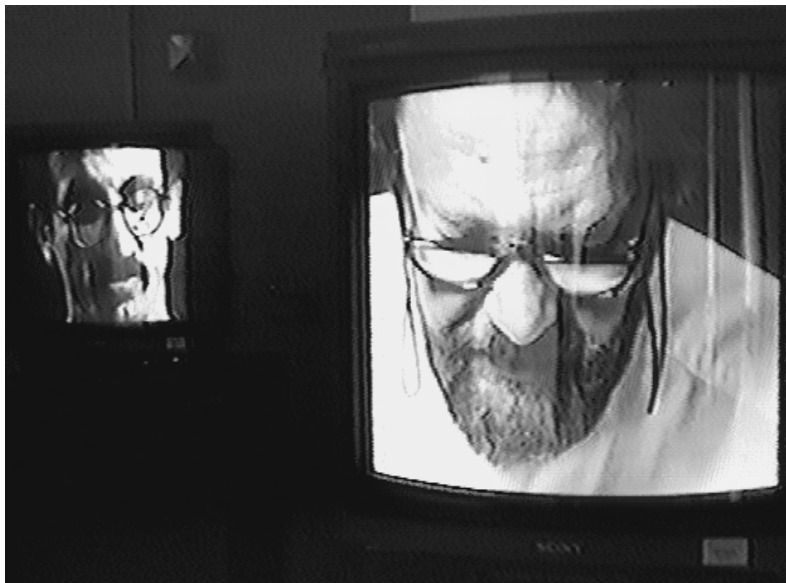
[1] *The Metaphysics of Virtual Reality*, Michael Heim, Oxford University Press, 1993 p.76.
[2] *Ibid*, p.85
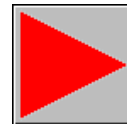[3] *The Pleasure of the Text*, Roland Barthes, Farrar, Straus and Giroux, Inc., 1975.

from *The Iliad and The Odyssey,* a video installation by Douglas Rosenberg

THE FUTURE OF THE BOOK OF THE FUTURE IS IN THE PAST

LI CHIAO-PING

> **book** (buuk) n.1.a series of written,printed,or plain sheets of paper fastened together at one edge and enclosed in a cover. 2.a literary work that would fill such a book or books if printed,he is working on his book. 3.(informal) a magazine. 4.a number of checks,stamps,tickets,matches,etc., fastened together in the shape of a book. 5.one of the main divisions of a written work. 6.a libretto. 7.a record of bets made;make book,act as bookmaker. **book** v. 1.to enter in a book or list;the police booked him for speeding, recorded a charge against him. 2.to reserve a seat or accomodation [1]

Once upon a time...

...the act of mark making was expensive and time consuming. Committing thoughts to paper was a formidable task and the decision to do so was a serious consideration. Books were handwritten and, therefore, penmanship and quality of content counted heavily. The readership of such prized handiworks was usually limited to those in privileged positions in society. However, modern technology (e.g., mechanical reproduction of printed matter) made it much easier for all to consume and, therefore, participate in writing,bookmaking, and reading. Today's chip and digital technology enables information to speed along its journey of communication from speaker to listener and from writer to reader much more quickly than ever before. As we look at the future of the book of the future, I wonder what implications there are for the book of the past.

Paper and Brush

Over two thousand years ago, instruments for writing were invented in China, both paper and brush.Slowly, over time, these tools evolved,from something rough hewn to something smooth, sturdy, yet delicate. The form of paper, for example, changed from bamboo skin to rice paper and brushes followed in similar fashion. The tools evolved in relation to the changing needs of the users, the calligraphers,writers, and painters.

The act of mark making was and continues today to be regarded as a significant achievement, representing artistic skill, and inviting aesthetic appreciation.Representing also a command of the language, mark making speaks of knowledge and power. The written word and language was, and continues, in China and elsewhere, to separate the scholars from the workers,privileged from the poor, those with knowledge and power from those without. Though the written language is the same throughout China and in Chinese speaking countries,many can not read it or write it. Chinese is a difficult language both in its oral and written forms. Visually quite beautiful, it is a pictorially-based monosyllabic language, where the direction, weight, and size of each brush stroke of every character must be learned, memorized, and executed successfully. This, coupled with the fact that there are also several dialects of Chinese spoken throughout China, partially serves to explain the slow progress of information processing.
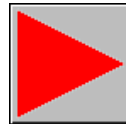
The struggle to keep pace has spurred the streamlining of the Chinese language, and like detritus, some "non-essential" brush strokes have been eliminated in the name of progress. As the impending information superhighway meets up with the (dirt)(silk) roads in China, I fear for the worst–that this beautiful language will adapt itself to the needs of the tools and not vice versa. What do we write? How do we write? The form and content of our future bookmaking must be considered. The advent of modern technology which makes information available to all is like a double-edged sword; I am filled with dread as what appears to loom ever nearer is the demise of paper and brush.

What future?

We must remember not to place a grossly exaggerated amount of weight on the value of accessibility. There is a price paid for this. The future of the book of the future is in its past. What is its future? It appears that like all else, its evolution will follow the current trend and walk down the path of the Cult of More whose mantra is "bigger, faster, stronger!" However, I advocate that the road of less is actually more. That which is hand-made, hand-scripted, or hand-tooled and that which has a direct link to the body/mind/spirit of its maker is more. The body, a corporeal universe of water, blood, tissue, flesh, nerve endings, and bone, learns and has a vast memory, a veritable storehouse of information pertaining to physical laws and emotional recesses. It is often said that that which is easily accessed and that which is not hard-won, not bled for, can not be as meaningful. I appreciate this sentiment and feel that what seems to get lost is respect: respect for the tradition, the discipline, and those who sustain and participate in it.

The future of the book? Let us remember that the medium is as important as the message. Information is not just data. It is content, it has substance, and it takes form. A book is many things: form, content, action. For the maker of the book, it is the outcome of one's thoughts, the contemplation and sweat which precedes the physical marking down of the author's ideas. For the reader, it is the interpretation of and response to the author's expression, the enjoyment of absorption, the memory (physical, intellectual, and emotional) which outlasts the kinetic experience in the act of reading the book.

Knowledge is power. Books carry knowledge.

It was, perhaps, not so long ago, that those in power ordered the continued ignorance of those ruled. Books themselves can be neither malicious nor benevolent. Rather, the responsibility for what lies between the covers remains in the hands of the author. The book is an empty vessel which may be filled with either sweet wine or bitter arsenic. Its usage by the reader is a different story. Even books are subject to human error.

Writing is a physical activity.

The body as instrument is a much older tool for "writing" than either the brush, quill, charcoal, pencil, pen, engraver, typesetter, typewriter, or word processor. However, the body writer/dancer rarely leaves a physical impression beyond the viewer's individual memories. The practice of such impression-making is not so rare. Take, for example, what happens often to fresh snow or to wet cement. A residual effect of the mark-making, a human printing press, is a

kind of palimpsest of the performance activity, leaving a physical record of an ephemeral art form. Making marks or imprinting is also an existential act, creating an impact, altering the course of others' lives simply by being. *Je pense donc je suis.* I mark therefore I am.

Fom. Content. Action.

The message is the medium. The medium is the message. How, Yeats wondered, can we tell the dancer from the dance? The dance can not exist without the dancer. The dancer performs what can be seen, felt, understood, and shared. In a temporal art form like Dance, the viewer/reader must move through time with the dancer to imprint into his/her memory the impressions of the dance unfolding. What lasts is an imprint in the memory of the viewer.

Artist Kazuaki Tanahashi says that "every line we draw carries our wish for our children and their children."[2] So it is in Dance. The markings made by the dancer bear the history (and present and future) of the individual. The movement signature, like one's writing style, can be analyzed and, perhaps, reveal the identity of this person who performed the marking, including his/her disposition, physical characteristics, personality, etc., as well as indicate where this person is going or has been. A dancer's movements create impressions on the space surrounding him/her, affecting the environment by leaping, stretching, and spinning into its negative spaces. The dancer's movements have a similar effect on the viewer who is asked to be alert, active, and ready to absorb, interpret and respond to the dancer's expressions, and carry away a memory (physical, intellectual, and emotional) which outlasts the kinetic experience in the act of reading the dance. However, the dance survives. The viewer can create and re-create a dialogue with the artwork/dance event. Markings, the residue, what remains in memory, can carry a message and tell part of the story.

Palimpsest

In early books, one finds words marked or crossed out as opposed to erased. These days, the use of the "delete" keystroke can magically and easily make things disappear. Dance performances are much like the early books. One is careful from the onset, from the initial act of mark making, to take well-prepared steps. You can not repair your mistakes. This is why live performance is the domain of the lion-hearted thrill seeker. It takes a similar kind of risk, boldness, and self-confidence to do crossword puzzles in pen. In a dance performance, like one's karma, only one's future actions can correct (or act as payment for) past ones. In a live performance, time marches on. In the larger scope of things, all is ephemeral. Some things just seem to last longer. What remains is a promise that the indomitable human spirit will persevere, endure, and overcome.
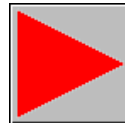
[1] Eugene Ehrlich, Stuart Berg Flexner, Gorton Carruth, and Joyce M. Hawkins, *Oxford American Dictionary* (New York: Oxford University Press, 1980), 69-70.

[2] Kazuaki Tanahashi, *Brush Mind* (Berkeley: Parallax Press, 1990).

Tome Li Chiao-Ping

Words and Movement: The Dancer as Kinetic Writer

ANNE L. HERMAN

All art is about communication. Each artist attempts to explain, decipher or even just pose, some of the life questions that all of us grapple with. The poet, the musician, the painter: each speaks with a special voice, hoping that those who hear them will think about and understand what they are saying. For these artists, their works become books–books of life experiences, of knowledge hard won and freely shared. Their voices, whether in ordered words, musical notes or paint strokes, are preserved in these life books, to be shared with all who seek them out.

Dance, too, speaks its unique language, one of gesture and movement. Dancers seek in their distinctive ways to answer life questions, to explore and share personal journeys of self discovery and growth. Dance, though, is an ephemeral art; its ideas and thoughts seem to last only the few moments that the dancer is in motion. Where are the books about the life dance? How are the dancer's ideas and thoughts contained and preserved?

The books are there. Dancers have become kinetic writers who trace their words and sentences in space with gestures and movement. And if a book is merely a container for ideas, thoughts, philosophies and emotions, then the dancer's body becomes the book. Memories, thoughts and insights are stored there, and then shared with audiences in performances. Those ideas and insights hopefully affect and educate the audience, just as does a book by Thomas Mann or the poetry of Baudelaire, a symphony by Mozart or a sculpture by Michelangelo.

Performance artist Erika Batdorf, based in Boston, has become particularly adept at crystallizing this movement calligraphy as she seeks the kinetic solutions to the life questions she has posed herself. In dances such as "Je t'attends" and "Invitation," Batdorf reveals that "there is a personal life to my movements." These movements speak to me; they resonate within me." [1] Her actions and gestures create a kinetic clarity and truth that is immediately apparent to the audience, even without words.

But many dancers have also discovered that their life books cannot be written with movements alone. Words and sounds must accompany gestures to give them added power. These dancers call themselves "performance artists," in part because of the multitude of aesthetic expressions that they use. Batdorf's recent work "Invitation" was full of primal noises, for example. They echoed in the performance space with an eerie reverberation. The sounds and their cadences struck the audiences in ways that were immediately felt, if not completely understood.

Li Chiao-Ping, who teaches dance at the University of Wisconsin at Madison, also uses words to lend strength and immediacy in her movements. In her dance "Tome," presented in Anchorage in October 1994 as part of the ongoing project "*The Future of the Book of the Future*," Li spoke of being caught between two cultures, one Chinese and one American. In this outgrowth of her seminal work "Yellow River" she spoke of her attempts to discover just who she is, and what culture truly is hers. "Tome" also became Li's struggle to understand the Western approach to knowledge, with its sense of acquisition and power attained through words and books. In opposition, she posited more primitive ways of learning, through an acceptance of the mysteries in life, and through mythology. The dance thus became a search, and ultimately a respect, for knowledge–of herself and her environment.

Interestingly, as Li wove her stories in words, her movements traced those same stories in space and on open books laid out on the floor. Li literally wrote her book with her dance. "I became a human printing press in
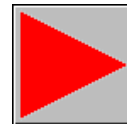
"Tome," she said, dipping her feet in pots of ink and leaving imprints of her foot movements on those blank pages. [2]

In her book *The Knowing Body*, author/dancer Louise Steinman says that "the body speaks in its own native language given to us at conception and forgotten by most at adulthood. [3] The dancer's task is to find that native language within his or her own body, translate its essential meanings, and then share this new-found knowledge with audiences.

For most performance artists, dances are journeys of self-discovery. Words, poems, and drawings become the sign-posts on this journey. Dancers keep journals filled with designs, shapes and notes that help them verbalize the physical process of creating a dance. These writings give information and direction to the kinetic journey that the dancer/choreographer has undertaken. This note-taking essentially makes movements visible to the choreographer. It externalizes what is at heart an internal and intuitive process so that the dancer/creator may discover what he or she has to say kinesthetically.

What do the emotions, the questions, the ideas that the dancer/choreographer grapples with look like? How does the dancer translate a feeling into a movement or a gesture? Although dancers pursue much of that kinetic translation through movement improvisations, some comes from other expressive mediums. Batdorf will often cover pages of her journals with single words, circled and linked to others. Her colored sketches may include stylized human shapes, spontaneous lines and squiggles or even smears of colors. To the outside observer, these words and sketches may have no coherent meanings. But for Batdorf they represent the struggles, the dead-ends, and the discoveries in her journey of creation.

Although words are an important aesthetic component in the creation of Li's "Tome" and "Yellow River," their use is more structured. Her journals reflect the dialogues she has with herself, and the conflicts she has in growing up Chinese in America. Bits and pieces of Chinese rituals and superstitions are interspersed with stage directions and movement sequences that underscore her performance text.

All artists, be they dancers, musicians, writers or painters, are both seekers and sharers of knowledge. They pose questions and then attempt to make sense of the answers they discover in the process of creation. Knowledge, though, is not just data or information. It also has context, form and shape. Ideas, dreams, thoughts, struggles–these all become the words of the artist's life-book. The artist then offers this life knowledge to the viewer, hoping to share experiences that are at once unique and universal in meaning.

For the dancer, the reason for performing is to communicate something worthwhile, whether it is with sounds, words, images or movements. Or a combination of all these artistic elements. Like their fellow artists, dancers seek to leave a trace of themselves in time. The dancer may leave that personal mark in space temporarily. But it is every dancer's hope that this individual mark, this personal statement of who I am, will remain more permanently, in their minds and in those of viewers of their kinetic "life book."

[1] Personal interview, September 1994.
[2] Personal interview, October 1994.
[3] Louise Steinman, *The Knowing Body: Elements of Contemporary Performance and Dance* (Shambhala, 1986), pg. 14.

Bad for You

J E R O M E   S T E R N   jstern@acns.fsu.edu

Long ago, when theater was being invented,culture critics wrote
diatribes and homilies saying it was bad for you because you
lost touch with reality and got corrupted by immoral actors
and lewd actresses and stories full of blood and rudeness,
and when novels started up they said the novel was bad for you
because it filled you with bad values and you would run away
with men with mustaches, and not marry the boy next door
and you would waste time that you could spend plowing and
quilting.
Then along came movies and the culture critics said movies were bad
for you because they filled your mind with nonsense and made
you want to be gangsters and to run away from home and
drive fast cars and wear slinky gowns and drink cocktails,
And they said radio was bad for you because if you could listen to
radio it would be the end of reading,
and all along there was music that was bad for you.There was the
waltz which was erotically stimulating and let people put their
bodies up against each other in public and that would lead to
venereal disease and the charleston was bad for you because it
was wild and chaotic and showed the breakdown in society and
rock and roll was especially bad for you because if you touched
when you danced it was just like sex standing up and if you
didn't touch, it showed the loss of meaningful relationships,and
disco was bad because it caused too many sequins, but was
better than punk that promoted drugs and sex and disrespect
for the law, and heavy metal that gave you bad hair, and rap
which gave you bad attitudes.
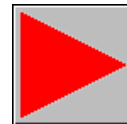
And of course television was bad for you because its commercials
made you materialistic, and it showed sports so instead of
getting healthy wholesome outdoor exercise you were just
lying around incorporating a model of social passivity, and quiz
shows were bad for you because they devalued knowledge into
trivia, and situation comedies, because they made you think all
life's problems can be solved in half an hour, and talk shows,
because they normalize deviance and news shows,because
they reduce life to sound bites and desensitize you to violence,
and Sesame Street shortens your attention span.
Newspapers are bad for you because they just tell bad news,and
slick magazines are bad for you because they make you
anorexic and the perfume ads cause allergy reactions,
and video games because they make you twitchy,
and e-mail because you spend too much time on the screen in a virtual
reality which replaces real reality,
and working out is bad for you because you make your butt the
center of your universe which leads to bad politics,
and basically whatever happens in our culture hardly begins to
happen before the culture critics flock to explain how it is bad
for you and dangerous, for whatever is now is evil.
But once it is past and gone and dead and out of business then it is
magically transformed into the good old days and wasn't it
wonderful the way it used to be so lively, our precious heritage
now sadly lost to us, poor us.

Erasers given away during the
opening reception
Robert Peters

Obsecration of Shame.....some thoughts

JEFFREY R. PATRICK

This piece is a
book.

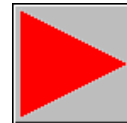I think that a **book** (in general)
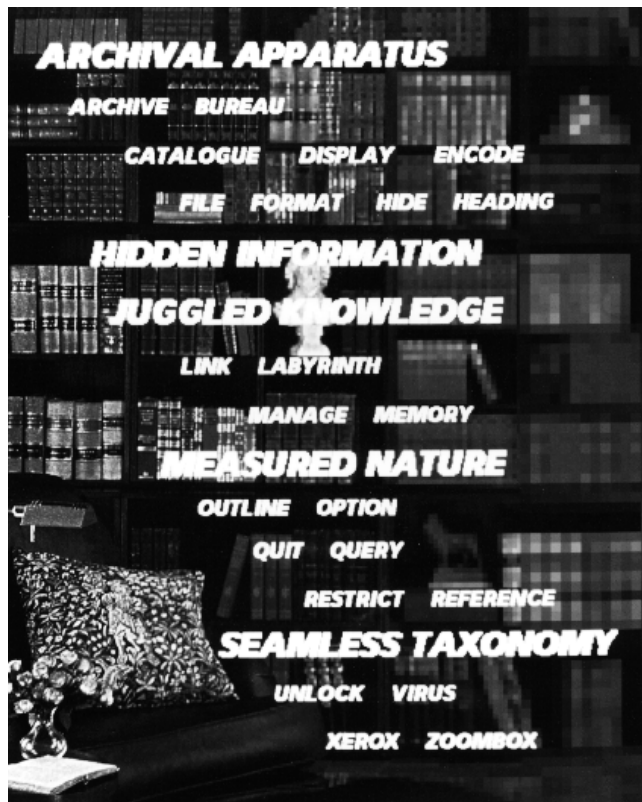
necessarily covers

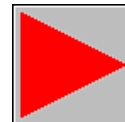*past/present/future.*

I am not interested in
pretty.

Shame: I feeI like I've kept so much repressed–boxed up. Yet... the memories are retrievable–they are accessible information. Making sense of this raw data is where the difficulty arises.

Obsecration: All this information...all this stuff that seems to be a significant component of me. I can't live with it and I can't live without it.

ARCHIVAL APPARATUS
ARCHIVE BUREAU
CATALOGUE DISPLAY ENCODE
FILE FORMAT HIDE HEADING
HIDDEN INFORMATION
JUGGLED KNOWLEDGE
LINK LABYRINTH
MANAGE MEMORY
MEASURED NATURE
OUTLINE OPTION
QUIT QUERY
RESTRICT REFERENCE
SEAMLESS TAXONOMY
UNLOCK VIRUS
XEROX ZOOMBOX

James Snitzer

Video/Digital Landscapes: Life at 72 dots per inch

MARIANO GONZALES

As a lifelong Alaskan, I have always been aware of the landscape and its amazing panoramic views. It is impossible to appreciate or even see the landscape without physically scanning the horizon. In contrast to this scanning process, my experience in making art made me more conscious of the simulated landscape. Even today, simulation continues to occupy the attention of a great many artists who construct windows echoing Renaissance formats that interpret nature by means of an artifice of perspective.

The practical aspect in the production of these simulated landscape spaces is that they must physically conform to the walls of whoever owns the works. In our culture, two dimensional images conform to an "aspect ratio" that has utility for the purchaser. When we see an image printed in a book or hanging on a wall, our eye's movement is restricted along the X and Y axis, becoming directed to the Z axis. However, no visual media can convincingly portray the landscape by solely directing the viewer towards a single vanishing point.

When I visited Japan in 1976 I became aware of new artistic possibilities in expression of the landscape. At one museum I saw an exhibit of two scrolls that were unrolled and laid on a table. As I recall, the scrolls were about 10 meters in length. At one end of the scroll was the image of the seashore. As I progressed along the length of the scroll, I saw imagery based on the life of the island which eventually stopped at the ocean's edge on the far end of the scroll. These scrolls enabled me to contemplate a small continuum of life on the island within the context of the landscape. I could see as little or as much as I wanted to in any order I desired. The image contained more information than I could assimilate at one glance.

In contrast to the scrolls, pictures with a one-point perspective are essentially passive formats whereby the artist directs the viewer towards a vanishing point. The viewer is locked into a hypothetically ideal position from which to see the image. In effect, this immobilizes the viewer to a degree. The scrolls however, had no well-defined vanishing point and were like books in which the landscape is a continuous page and the events pictured were the narrative. The artist is free to integrate many presentations within the apparent continuum. The scrolls could be "read" in the fashion of a
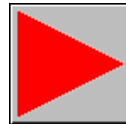

Mariano Gonzales

book with the added advantage that, unlike words, images can be assimilated in any direction.

Panoramic photography has had a major impact on my approach to depicting the landscape. A panoramic photograph is a uniquely compelling still–image because the viewer is not limited to a window through which the artist presents his vision. A panoramic can carry much more information. It presents a much wider vista which is understood in sections corresponding to the normal angle of human vision. The sequence is determined by the viewer. In effect, a panoramic picture is closer to experience because the viewer has the option of understanding the context or place of the information—in real life for example, our head pivots on our neck and our eyes follow.

The main advantage of all the traditional methods is the hyperfine resolution of film–based images. The disadvantages are that the equipment involves a slow process for set-up, favors longer distances, and the resulting image represents a discrete parcel of time as determined by the exposure of the film. As a result, it is problematic to include human activity in a traditional panoramic. Life is not a series of discrete parcels at hyperfine resolution.

Mariano Gonzales

In the years following my visit to Japan I often contemplated the potential represented by the scrolls. With the accessibility of high quality video and digital media many years later, I began to incorporate the lessons of the scrolls in my own work. To construct my images I first make scans with a video camera. Video technology is easily transportable and gathers a continuous flow of images and sound. It can function quickly within a great range of light intensity. The camera is leveled on a tripod or another relatively flat surface. It is then rotated either continuously or in increments corresponding to the focal length of the lens. Or as in the case of *Seattle City Block,* the camera is held steady as I walk the distance necessary for a linear scan. There is no time limit to the scan.

Video memory is a continuum that is stored and transported on videotape. Video memory is like a conventional camera shooting continuously at 1/60th of a second. Yet video technology gives us more options than still media. It is compact and immediate. It allows for precision or ambiguity. It is memory *ex machina*. At 72dpi, video images are low resolution when compared to conventionally scanned images or photographs. As a continuum, video images have far superior resolution in information about experience. When seen on video cathode ray tube (CRT), video memory appears to document reality. On a computer CRT, the image exists in the realm of possibilities. In both cases the image is in transition. The analog image is one step from experience and the digital image is one step from realization.

With the computer, video memory is converted to digital information (digitized) which is raw material for the construction of linear or layered panoramic. The digitized image is transformed from the actual documentation to the potential of raw material. This raw material encompasses the frame between the frames; all the moments, decisive and otherwise. Video memory is digitized in sections with a computer capable of converting video images with equipment such as the Power Macintosh AV. The digitized sections are corrected, manipulated and assembled using software such as Adobe Photoshop. The image is then outputted to an appropriate printer.

I am especially intrigued by the potential inherent in video/digital landscapes as a creative medium. The technology has long been utilized in the sciences to reconstruct landscapes observed from great distances (e.g. views from Mars). *Seattle City Block* documents a location and how it reflects humanity. *Party Shoes* recalls an event by emphasizing the pile of footwear outside the backdoor (a familiar image for Alaskans). Although a pile of shoes deposited by children may seem more accessible than rock formations on Mars, most of us never get close to either until we see it as an image.

At this time, I am also experimenting with reconstructing images from old film clips by using film clips in which the photographer's panning technique is consistent. It is simple to reconstruct an image of the environment despite the distance of many years. A good example of this process is my work titled *Airfield.*

As a medium for presenting visual information the integration of video with digital technology is unparalleled in its potential. One key to developing this potential is to recognize and avoid the restrictions that are common to other modes of expression. Video/digital landscapes is one alternative to standardized content and formats in imagery.

A picture worth a thousand words is too cheap!
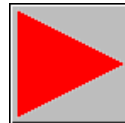
The Culture Tube: SS¹ Carbonized Texts

JEANNE E. ILGEN & C.E. LICKA

Aristotle: when we remember, "there is something in us like a picture or impression." *James Mill:* the idea of expe-riencing a past memory is "more like a sensation than anything else can be;so like that I call it a copy, an image of the sensation." *John Locke:* in responding to how we store and retrieve past experiences contended that memory was the "power to revive again in our minds those ideas which after imprinting have disappeared or have been,as it were, laid out of sight. . .The narrow mind of man not being capable of having many ideas under view or consideration at once, it was necessary to have a repository to lay up those ideas which at another time it might have use of. . .This laying up of our ideas. . . in the repository of memory signifies no more than this,that the mind has a power . . . to revive perceptions which it once had with the additional perception annexed to them,that it has had them before. . . Sometimes. . .ideas in the mind quickly fade and vanish quite out of the understanding,leaving no more footsteps or remaining characters of them-selves than shadows do flying over fields of corn;and the mind is as void of them as if they had never been there." *Thomas Hobbes:* "he that perceives that he hath perceived remembers". . . "Secondary perception". . . "Fancy and memory differ only in this,that memory supposeth time past,as fancy does not." *David Hume:* in discussing an idea being similar to an impres-sion in the case of the image of an absent object remarked:"It is not impos-sible," he goes on,"but in particular instances they may very nearly approach to each other.Thus,in sleep, in a fever, in madness,or in any very violent emotions of the soul,our ideas may approach to our impressions,as, on the other hand,it sometimes happens that our impressions are so faint and low that we cannot distinguish them from our ideas...the chief function of memory is not to preserve the simple ideas but their order and position." *Bertrand Russell:* "Memory demands an image...It is clear that insofar as the child is genuinely remembering,he has a picture of the past occurrence,and his words are chosen so as to describe the picture." *Norman Malcolm:* the need for a "feeling of pastness and familiarity." *Thomas Reid:* "Perhaps in infancy or in a disorder of the mind,things remembered may be confound-ed with those merely imagined: but in mature years and in a sound state of mind every man feels that he must believe what he distinctly remembers,though he can give no other reason of his belief than that he remembers the thing distinctly. . .This belief which we have from distinct memory we account real knowledge no less certain than if it was grounded on demonstration;no man in his wits calls it in question...We are so constituted as to have an intuitive knowledge of many things past but we have no intuitive knowledge of the
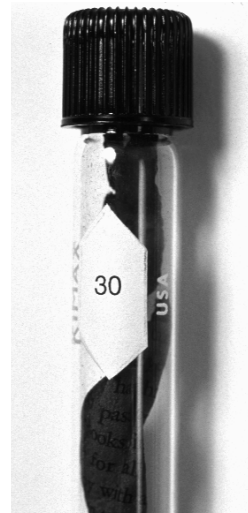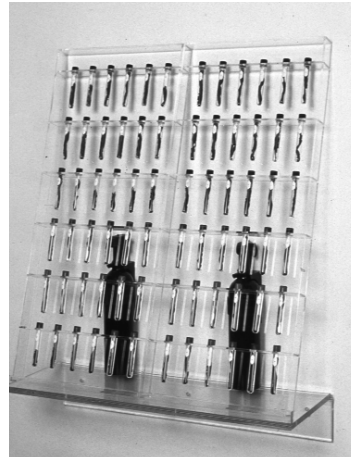

Savonarola Strains
Jeanne E. Ilgen & C.E. Licka

future." ***Gilbert Ryle:*** "The familiar truth. . .that people are constantly seeing things in their minds' eyes, or hearing things in their heads, is no proof that there exist things which they see and hear...Much as stage murders do not have victims and are not murders, so seeing things in one's mind's eye does not involve either the existence of things seen or the occurrence of acts of seeing them...Recalling is a conning of something already learned. It is going over something not getting to know something. It is like recounting, not like researching. A person may recall a particular episode twenty times a day. No one would say that he twenty times discovered what happened. If the last nineteen reviewings were not discoveries, nor was the first." ***Jean Paul Sartre:*** There can be nothing in the image except what we put into it. It is because we already know (have learned and not forgotten) what happened that we recall it . . . memory as "a real event in retirement." ***Ludwig Wittgenstein:*** "When I say 'he was here half an hour ago' (that is, remembering it) this is not a description of a present experience...knowledge without observation." ***Henri Bergson:*** memory functions as a link between an objectively determined and mechanical world we associate with common sense and science and the spiritual world that we know by virtue of intuition. In unearthing consciousness we find a memory that is incessantly working..."pure memory" is the result of our conscious barriers faltering for a moment and in that gap we are spontaneously aware of new insights as in dreams. This level of activity is connected to "pure duration." Pure duration is not serial time but fluid, no separate parts...the idea of "interpenetration" is essential and like a musical melody has a beginning, middle and end. But the musical analogy is inadequate...we can distinguish individual notes to a degree, but to change one note would change not only a portion of the melodic line, but the entire composition. In the final analysis Bergson would argue that to a degree we remember everything and to forget something is just a matter of denying our memories a chance to breathe. Spontaneous memory is a crucial notion that helps to explain recollection being a significant experience that reveals our true nature. WHETHER WE IMAGINE OR RECALL WE ARE ENGAGING IN ABSENCE, WE ARE CONTEMPLATING SOMETHING THAT CAN'T BE SEEN OR HEARD BUT IT HAS MEANING FOR US AND IS STEEPED IN EMOTION. RECALLING SOMETHING IS A FUNCTION OF IMAGINING AND MEMORY AND THERE IS NO CLEARCUT DISTINCTION BETWEEN MEMORY AND IMAGINATION. BOTH CAN BE CONSTRUED AS A TYPE OF IMAGERY, KNOWLEDGE OR UNDERSTANDING. ***Walter de la Mare:*** memory conjures up "the child in us, the lost or forsaken youth." ***W. N. Hudson:*** "nothing is ever blotted out." ***William Wordsworth:*** "The Prelude," 1798, "Preface to the Lyrical Ballads," 1807. Towards an ambiguous zone where the "image" straddles the outside world and the world of our inner experiences. "I was often unable to think of external things as having external existence...and I communed with all I saw as something not apart from but inherent in my own immaterial nature." The loss of something past carries with it a feeling of sadness or regret. . . nostalgia. Images of memory with their emotional base are partially real and carry with them the idea of creation, or rather, "recreation." Memory as a consoling agent. "While yet a child, and long before this time/He had perceived the presence and the power/Of greatness, and deep feelings had impressed/Great objects on his mind, with portraiture/And color so distinct that on his mind/They lay like substances, and almost seemed/To haunt the bodily sense. He had received/A precious gift, for as he grew in years/With these impressions would he still compare/All his ideal stores, his shapes and forms,/And being still unsatisfied with aught/Of dimmer character, he thence attained/An active power to fasten images/Upon his brain, and on their pictured lines/Intensely brooded, eventill they acquired/The liveliness of dreams." ***Samuel Taylor Coleridge:*** "...so my friend/Struck with joy's deepest calm, and gazing

round/On the wide view, may gaze till all doth seem less gross than bodily, a living Thing/That acts upon the mind, and with such hues/As clothe the Almighty spirit, when he makes /Spirits perceive his presence." **Mark Akenside:** memory of perception and the retention of memories are imbued with meaning and useful for contemplative purposes, "but to man alone/Of sublunary beings was it given/Each fleeting impulse on the sensual powers/At Leisure to review with equal eye/To scan the passion of the stricken nerve/Or the vague object striking; to conduct/From sense, the portal turbulent and loud/Into the mind's wide place one by one/The frequent, pressing, fluctuating forms,/And question and compare *them.*" **Marcel Proust:** "For me voluntary memory, which is, above all, memory of the intellect and the eyes, gives us only the appearance, not the reality, of the past, but when a smell or a taste, rediscovered in totally different circumstances, reveals the past for us, in spite of ourselves, we feel how different this past is from what we thought we remembered, and what our voluntary memory painted for us, like bad painters who have their colours, but no truth." It is "involuntary memory" that gives us knowledge–direct knowledge of the past. Real memory is involuntary and involves chance. **Chateaubriand:** "What should we be without memory? We should forget our friendships, our loves, our pleasures, our work; the genius would be unable to collect his thoughts; the most ardent lover would lose his tenderness if he could remember nothing. Our existence would be reduced to the successive moments of a perpetually fading present; there would no longer be any past. Poor creatures that we are, our life is so vain that it is nothing but a reflection of our memory."

Savonarola Strains
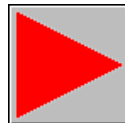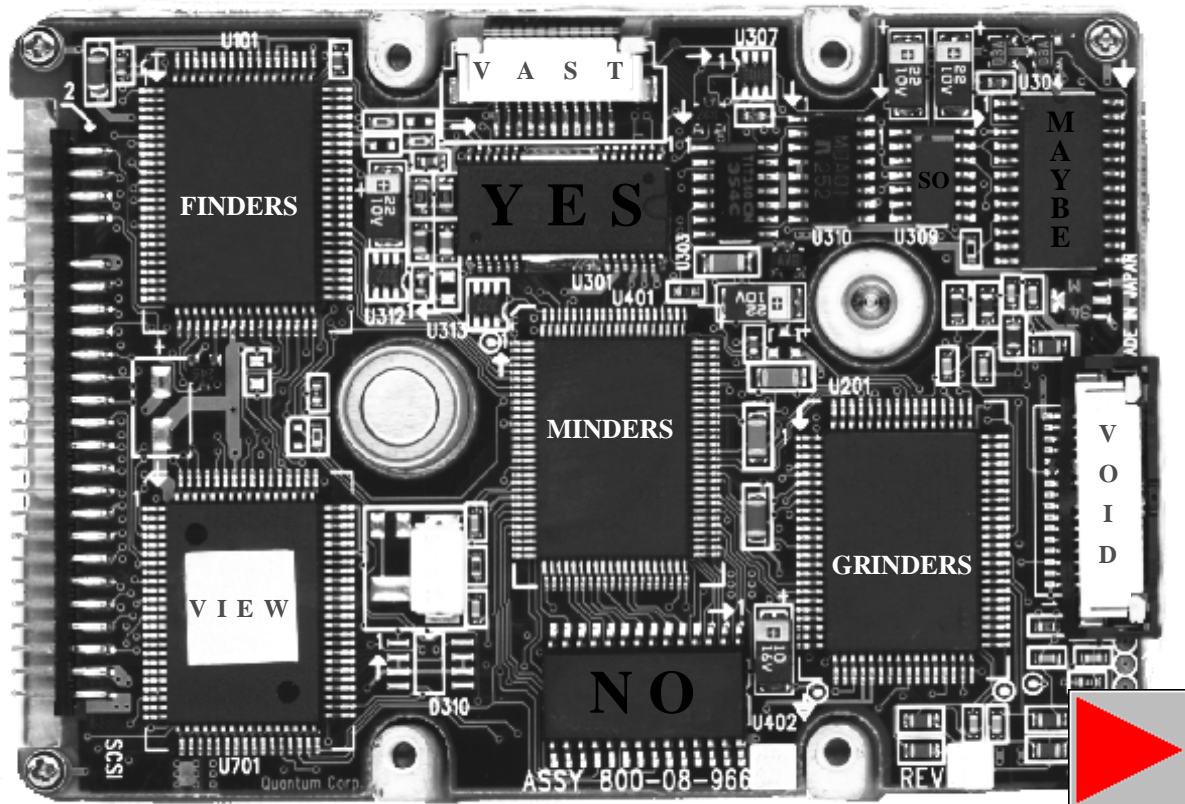Jeanne E. Ilgen & C.E. Licka

*SS^1 = Savonarola Strains ^{1}

Dear Diary:

My 30-something son was showing a newly acquired computer to his 6-year-old son. Together, they composed a story and entered it. The father pressed a key and the screen went blank. He pressed another key and the story reappeared on the screen. The 6-year-old gleefully embraced the machine.

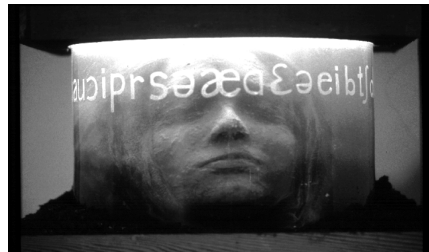"I love you, computer," he said. "You remembered my story."

JOEL H. JOSEPH

V A S T

FINDERS

Y E S

SO

M
A
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B
E

MINDERS

V
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GRINDERS

V I E W

N O

Hard Drive, Gail Rubini

Paul Windsor