

Mel Bochner, Meditation on the Theorem of Pythagoras, 1972/91. Glass slag and chalk on floor, 124 x 120 cm.

Where Has All the Uncertainty Gone?

Jon Ippolito

Now that we can download the Winged Victory of Samothrace from the Louvre's World Wide Web site, it is more tempting than ever to treat art as just another form of data. While the notion that a marble sculpture could be equivalent to bits streaming through a telephone line may seem a side effect of advances in modem technology, this attitude really has its origin at least as far back as 1970, when art critics were trying to come to terms with conceptual art. That year, Jack Burnham decreed, "in the case of most Conceptual art, the commodity is pure information," and Kynaston McShine chose "Information" as the title of the Museum of Modern Art's survey of conceptual practices. A quarter-century later, a good deal of contemporary art still presents information: maps of Berlin, diagrams of family trees, texts explaining the history of a seaport shown in accompanying photographs. Today's critics dub this

work "neo-conceptualism," conjuring up a pedigree that harkens back to work of the 60s and 70s. The New York Times, for example, noted recently that all of the plastic bottles that make up a "neo-conceptualist" installation by Seiko Mikami are labeled with details about hazardous waste disposal, prompting the conclusion that the work's meaning is "information itself." But is this the real legacy of conceptual art, that art can be pure, unambiguous information?

Answering this question requires doing some homework. First, it's important to look at actual works of conceptual art rather than relying just on historical documentation. Of course, few of the most radical artworks—exploding sculptures, closed galleries, attempts at telepathy—have survived from the 60s and 70s, except as some form of information, whether catalogues, documentary photographs, or interviews with the artists. This bi-

ased hindsight makes it hard to tell whether the original works of conceptual art were also reducible to information. Fortunately, several recent exhibitions, including "Reconsidering the Object of Art: 1965-1975" at the Museum of Contemporary Art in Los Angeles and "Mel Bochner: Thought Made Visible 1966-1973" at the Yale University Art Gallery in New Haven, have recently given us a second chance. The second task required to decide whether the conceptualists reduced art to information, as these shows make clear, is distinguishing between the various conceptual arts. For even though first generation conceptual artists never partitioned their work into mutually exclusive categories, over time their influence has crystallized into three separate models - Art as Critique, Art as Idea, and Art as Epistemology each of which uses information to different ends. Finally, the most important task is distinguishing

the neo-conceptual artists influenced by these three models from their artistic forebears like Marcel Broodthaers, Joseph Kosuth, and Bochner. As we shall see, the younger generation trusts information implicitly, in a way the older generation never did.

Among the artists influenced by the three models of conceptual art, it was the disciples of Art as Critique who were first tagged "neo-conceptual" by the critics. Certain works of the 60s and 70s. such as Broodthaer's ersatz museum, had exposed the way institutions pigeonhole the artifacts of culture; so in the 80s the simulated paintings and sculpture of Peter Halley, Sherrie Levine, and Jeff Koons were supposed to expose the commodity status of art. While these "simulationists" conducted their critique from inside the museum's own gilt frames or atop its white pedestals, their successors in the 90s have preferred to linger near

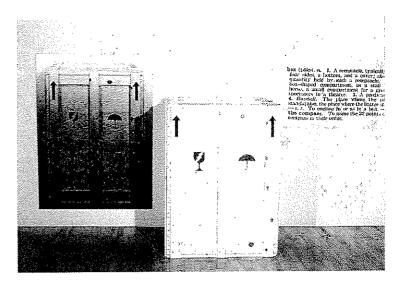
the museum door; there Andrea Fraser offers her surrogate acoustiguide, while Marc Dion imports a bestiary of urban wildlife across the threshold. Both seek to expose the order museums impose upon the objects they present. And out on the streets are Guerrilla Girls posters and Act Up leaflets, exposing the embarrassments of bastions of culture from the Whitney Biennial to the United States Congress. All in all, there's a lot of exposing going on, though in the transition from internal to external critique the denunciation has taken off its disguise (a critique of connoisseurship camouflaged as a color field painting) and stepped out in the open (a poster reading: "The Administration Has Blood on Its Hands"). In the process these works have given up trying to embody a critique, in favor of merely presenting one. The critique they present is a form of information, though it has none of the "take it or leave it" quality we often associate with information; its moral certainty gives us no other choice but to "take it."

Although Art as Critique was up till now the most influential strain of conceptual art, in the last two years Art as Idea has gained influence among contemporary artists. While artists who picked up the thread of the institutional critique use information to a pointed political end, the artists of this second lineage seem to value information for its own sake. Kosuth, the patriarch of this second bloodline, claimed that art could be pure idea, a self-definition analogous to an axiom of philosophy or mathematics. In his work from the 60s, Kosuth often narrowed his focus to definitions of individual concepts: One and Three Boxes (1965) conveys the idea of "box" through a physical object, a photograph, and a dictionary definition.

Kosuth's idealism lives on in contemporary art, although diffracted by a postmodern lens. While Kosuth's vision was analytic, his inheritors' is synthetic: instead of paring down to a single idea, they accumulate unrelated ideas. Ilya Kabakov explained in an interview in last January's Art in America that "the Postmodern consciousness arises in a society that doesn't need new discoveries, a society that exchanges information, that correlates all possible languages and establishes interrelationships between them." As Kabakov's quote suggests, the information these postmodern artists present is rarely discovered firsthand; more often it is meticulously researched, as in the assemblage of found information with which Ronald Jones entitles his assemblages of found forms. Untitled (This bookshelf served to hide the entrance....) (1990) for example, features a bronze cast of the baboon heart that "Baby Fae" received in an unsuccessful transplant in 1984, hanging from a facsimile of the bookshelf that Anne Frank hid behind in 1942. The trend to cobble together disparate ideas into a conceptual chimera has been growing especially among younger artists; the last season has seen the yoking together of, among other wacky idea-pairs, pirate booty and artistic heritage, Neil Armstrong and vampire lore, and testicular musculature and motorcycle-sidecar racing. To be sure, these ideas come with more readymade cultural appeal than the generic idea of "box" but they are ideas nonetheless, and with the possible exception of Matthew Barney, the physical presence of the work itself is far less important for the artists' careers than the words on their press releases. (Often the work is just words next to pictures anyway — a sort of illustrated press release. For these artists, the transition from gallery to Web page would be easy indeed, except for the fact that in a non-art context their work would cease to be "neo-conceptualism" and simply look like odd juxtapositions from Grolier's Multimedia Encyclopedia.)

So whether prescriptive or correlative, whether Critique or Idea, information is indeed the stuff of which these neo-conceptual works are made; the photos, maps, and bar charts are just souvenirs we can take home to show that we, too, are familiar with these facts. And because their information is relevant (as Critique) or interesting (as Idea), these artists assume their artwork will be too.

By contrast, the information in the original conceptual art of the 60s and 70s, with the exception of works by a few artists like Hans Haacke, was almost always irrelevant and usually pretty uninteresting. Who cares whether Cesium 137 has a half-life of 30 years, or whether 10,000 lines not touching can fit on a wall? Not only is it hard to pinpoint the social relevance of this information,



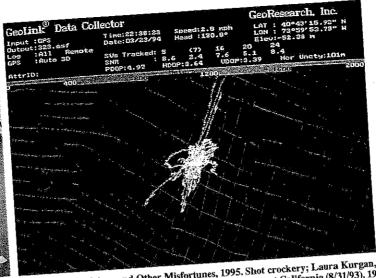
Joseph Kosuth, One and Three Boxes, 1965. Box, photograph of a box, definition of a box, 62 x 135 x 36".

it is sometimes difficult to ascertain exactly what, if any, information is being conveyed. What is the information communicated, for example, by Christine Kozloff's painting bearing the words "A MOSTLY RED PAINT-ING"? Or by Daniel Buren's striped banners paraded through the streets, or by Robert Barry's proposal "Something which is very near in place and time, but not yet known to me"? What is interesting in these works is not the information being presented, but the presentation itself --- the frame in which these artists chose to set this information, either inside or outside the gallery. Even in Kosuth's multiple definitions of "box," the gist of the work lies not in a successful evocation of the Platonic ideal of a box but in the tension between the perceptual and linguistic definitions of

Where the equation between early conceptual art and information really breaks down is with the third school, Art as Epistemology. The easy confidence with which today's artists trot out unquestioned facts for our consumption is definitely not a trait inherited from this branch of conceptual art's family tree, as proven by the current traveling exhibition of Mel Bochner's work from 1966 to 1973. At first glance, the ephemeral materials and diagrammatic look of Bochner's installations suggest they are indeed only vehicles for information. A strip of masking tape stuck to the wall bears handwritten numbers counted from right to left. A photograph shows the artist's hand next to a black arrow on the wall labeled "12 inches." A rock labeled with the letters A and B sits on a piece of paper on the floor; next to it is written "if nothing is between A and B then A and B are identical." But if there is knowledge in these works — how to count, how to measure with a ruler, how to tell what's next to what — then we have already learned it by the second grade. We take it for granted, use it every day, breathe it in like so much air.

But Bochner doesn't. What makes these works epistemological - the word is Bochner's own - is that upon closer inspection we find underlying each of these seemingly indisputable certainties the yawning question of how we know what we know. If we try to count along with the numbers on the tape from right to left, we will find the sequence is discontinuous, jumping to a new patch of tape every five numbers or so. Meanwhile a sequence of underlying numbers penned directly on the wall counts from left to right; this underlying sequence seems to be continuous, but it's hard to know for sure since the pieces of tape occlude portions of the counting on the wall. What seemed to be a straightforward sequence of numbers is really a visual investigation into the conflict between measuring things and measuring space. Likewise, the 12-inch measure in the photograph looks straightforward enough until we realize that there is no reason that a foot photographed should be 12 inches long when reprinted; the fact that the label reads "Polaroid photograph, rephotographed, enlarged,







Left to right: Christine Borland, Weakness, Disaster, Old Age, and Other Misfortunes, 1995. Shot crockery; Laura Kurgan, You Are Here: Information Drift, at the Storefront for Art and Architecture, NV 1994. GDS computer plots. Janet Cohen, Bultimore of California (2/21/02) 1995. Papel on page 12 v 0 1/4" Len to right; Christine portano, weakness, Disaster, Old Age, and Other Phistoriumes, 1993. Shot crockery; Laura Kurgan, 100 Are fiere: Miorination Drivate to right; Christine portano, weakness, Disaster, Old Age, and Other Phistoriumes, 1993. Shot crockery; Laura Kurgan, 100 Are fiere: Miorination Drivate to right; Janet Cohen, Baltimore at California (8/31/93), 1995. Pencil on paper, 13 x 9 1/4".

and mounted" shows that we have been set up for this coincidence by the artist. Nor should we be taken in by the fact that Bochner has used a single rock labeled both A and B to illustrate the proposition "if nothing is between A and B then A and B are

identical. In his work of this period Bochner orchestrated a terrific tension between what we think and what we see. When viewers presume that these works are merely information, without ambiguity, it is not because they lack the mathematical background of set theory — it is because they didn't look carefully. For Bochner's investigations remind us that the word "geometry" means "measuring the earth," and a central problem of his works from the 60s and 70s was the translation from the diagrammatic space of Euclid's axioms to the real space of the gallery floor and walls. Left in their own mental domain, Euclid's theorems, like Kosuth's definitions, can generally be proven consistent or inconsistent; but as soon as infinitesimal points swell into rocks and infinitely thin lines inflate into measuring tapes, problems of translation create inescapable visual conundrums. One of the best examples of this is Bochner's "disproof" of the Pythagorean theorem. This cornerstone of geometric logic holds that the squares of the shorter sides of a right triangle should, when added, equal the square of the longest side. When Bochner tried to illustrate this diagram with rocks, he found the formula didn't hold: he always had three

rocks left over. The discrepancy can be explained as a doublecounting of the three vertex rocks, or as a misleading identification of points with intervals but what's important is that we start to wonder why textbooks treat the formula as a self-evident

Bochner's investigations are a kind of institutional critique, in the sense that 1, 2, 3 and "X is between A and B" are institutions we patronize without being aware of them. Nevertheless. unlike most contemporary institutional critics, Bochner didn't decide ahead of time what the "point" of each work would be; there is often no preferred interpretation to his work. When Descartes purged his philosophy of received notions, he was left with the conclusion "I think, therefore I am" to serve as the rock-solid foundation for his enterprise. When Bochner purged his work of received notions, he was left with the conclusion that rocks were not so dependable after all — that fundamental to his enterprise was the very questioning of certainty.

This is the real casualty of the shift from conceptual to neo-conceptual: the ability to live with uncertainty and the desire to understand it. Unfortunately, when most of today's younger artists adopt the ephemeral materials or systematic approach of older artists like Bochner, the older generation's skeptical and inquisitive spirit gets lost in the translation. The Guerrilla Girls may be skeptical of authority, but they rarely direct that skepticism toward their own practice. The per-

centages and bar charts on their posters reflect good intentions, but they also reflect the same undue faith in statistics that props up Ross Perot's infomercials. Taking one step closer to ambiguity -- though not a very big step — are the artists who fasten disparate images together in a rebus to be decoded: a molecule of benzene painted over a pristine forest means "Nature is being polluted." Once we've matched the political platitude to the formal device, of course, the ambiguity dissolves, and the moral certainty of the message relieves us of the responsibility for questioning the slapdash juxtaposition that led to our conclusion. Finally there are the artists who shackle together ideas with only the most tenuous relationship practicing saber parries while rollerblading around to various automated teller machines, for example - and present them as texts and photos on a gallery wall. If there is ambiguity in this work, however, it is an uncertainty about the artist's intentions, not some fundamental ambiguity about our world or the conceptual framework by which we understand it. And no matter how unconventional the ideas, what never gets questioned is the presumption that the silkscreened texts and framed photographs that stand in for these ideas are a straightforward record of events outside the gallery walls. These artists would be quick to scoff at an easel painter who claimed that his oil paintings were just straightforward views of a landscape, imposing no ideology of their own. Yet these same artists

trust their diagrams to act as a transparent "medium" by which the viewer receives a bundle of recommended opinions or interesting facts. Do they think the lesson of conceptual art is that we can use language as a transparent, objective vehicle for ideas? Every art has an obligation to question its own ideology, and part of that ideology is embedded in its form. As Bochner wrote in a wall drawing in 1970, "Language is not transparent," and his work proves that a captioned photograph is no more free of bias than the printed word.

So what ever happened to the epistemological Conceptual art epitomized by Bochner's investigations?

I'm not entirely sure of the answer to this question, but part of it may be that our culture is increasingly driven by information that we have to take for granted in order to survive. The Greeks thought long and hard before they claimed to understand what it really meant to say that one rock was between two others. How many net surfers really understand the html code that brings Web pages to their computer screen, or the machine code that html is built from, or the quantum physics that underlies the semiconductors that the machine code runs on? Unfortunately, most contemporary artists are just as complacent; the typical digital artist dishing out scanned photographs on a Web server is no more questioning the fundamentals of technology than the painters of geometric abstractions are questioning the fundamentals of geometry. Forget the



Ronald Jones, Untitled (This book shelf served to hide the entrance to the secret annex at Prinsengracht 263. Amsterdam, Mr. and Mrs. Otto Frank, their daughters Margot and Anne, Mr. and Mrs. van Daan, and their son Peter hid in the annex from the Nazis between July 9, 1942 and August 4, 1944 when the Grune Polizei raided the house and arrested both families. The "bookshelf-door" device to hide the entrance was the idea of Victor Kraler, an employee of Mr. Frank. It was built by Mr. Vossen the father of Elli Vossen, another employee of Mr. Frank. According to police records, an unnamed person received seven and onehalf guilders per Jew for betraying the Franks and van Daans. Margot and Anne died in the Schonungsblock no. 19 in Bergen-Belsen prison camp at the end of February or beginning of March 1945. Hanging from the bookcase is the heart of an East African "Olive" baboon like the one used in the xenograft, or cross species transplant, performed on "Baby Fae" October 26, 1984 to correct her congenital heart defect known as "Hypoplastic Left Heart Syndrome." The transplant was performed by Dr. Leonard L. Bailey, Chief of Pediatric Heart Surgery at Loma Linda University Medical Center. "Baby Fae's" parents consented to the xenograft, choosing it over the nominal "Norwood Operation" to correct her heart defect. The "Norwood Operation" has a 25-33% mortality rate. Xenografts have a 100% mortality rate. "Baby Fae" died on December 3, 1984), 1990. Paint on wood, patinated bronze, edition of three, 70 x 42 x 14".

warnings of Heisenberg and Gödel that uncertainty is fundamental — the fact is, we don't want to admit how little we know about where our information comes from. There's a lot of information out there on Web pages and America Online forums, but unexamined information is only useful for people who don't mind being misled.

known universe" and winding down through galaxies and solar systems until he reached the distance to his subway stop, then to his front door, to his typewriter, to the lens of his glasses, and finally to his retina. Now that faxes and e-mail offer almost instantaneous contact with far-off points on the globe, these distances may feel less intimidating than when Graham first typed them. Nevertheless, Graham's list reminds us how extravagant the promise of unimpeded information transfer really is, for it assumes that telecommunications and other technologies can safely transfer data across all of these distances without loss or degra-

But are all the checkpoints on the information superhighway really free of obstruction?

A few contemporary artists have begun to explore this question, and in so doing to carry on the charge of epistemological conceptual art. Laura Kurgan pursues her investigation on a planetary scale; for You Are Here: Information Drift (1994), she linked a hand-held receiver to the Navstar Global Positioning System, a constellation of 24 satellites orbiting the Earth that broadcast position and time signals. The U.S. military used the GPS during the Gulf War to fix the positions of aircraft, map minefields, and course-correct pilotless missiles. Although Kurgan's attempt to fix the position of the Storefront for Art and Architecture in New York was perhaps less critical to national security, it nevertheless revealed something about GPS that never makes it into Navstar's product descriptions: the likelihood of error. Thanks to imprecise satellite clocks, imperfect orbits, and ionospheric interference - not to mention the signal degradation intentionally introduced by the military to thwart its use by unfriendly forces - Kurgan's GPS computer plots looked more like dispersed clusters of pixels than precise outlines of the Storefront building. Kurgan has also investigated the "background interference" of supposedly neutral display elements in cyberspace addresses, such as the dot, slash, and tilde of World Wide Web ad-

Two young British artists have meanwhile been exploring the "middle distance" of Graham's list, which links a locale in the neighborhood, such as

Graham's subway station, to one's own front door. This sort of linkage is traced all the time by police detectives, who rely on fingerprints, DNA tests, and other forensic technologies to connect evidence found at the scene of a crime to a specific suspect. Abigail Lane has created a game to test the accuracy of this technology. She arms two players with stamps of her thumb and fingerprints; one gets stamps of her left hand and the other her right. Whoever first manages to convict Lane of a crime wins. While Lane plays the criminal, Christine Borland plays the detective; her work often requires working closely with forensic specialists. In A Place Where Nothing Has Happened (1993), she brought police to a block of derelict buildings in the heart of Tyne, England. It was a routine investigation - analyzing glass fragments, casting tire treads, and gathering other potential clues except that what was being investigated was not a crime but the very process of investigation. In laying out the delicate pieces of evidence on a glass table, Borland put on display the fragile substances on which decisions of guilt or innocence are often based. In From Life (1994), forensic experts delved still further into a case, in fact right up to the victim's nose: Borland employed specialists in osteology and facial reconstruction to sculpt the head of a young woman from her skull. Similar reconstructions have served as evidence in courts of law, yet as Borland learned in the making of From Life, there is no known scientific basis on which to reconstruct the nose and other fleshy features. That there is an art to this investigative act challenges the objectivity implied by the entire enterprise.

There remains one more scale to be examined: the leap from the lens of Graham's glasses to his retina. On the eve of the third millennium, we are not yet the integrated cyborgs that Donna Haraway predicts we will become, and there is yet some tiny gap across which the spark of an image or sound must jump before it enters our consciousness. Perhaps this gap is an opening, a space in which art may yet insert itself. As geometry once mapped the mind to the earth, another set of conventions now map the cathode ray tube to the eye, the telephone receiver to the ear, and the mouse to the hand. These conven-

tions are as ripe with mistranslations as Bochner's diagrams, but only a few contemporary artists are going to the trouble to look for them. The Bauhaus-like screens on Macintosh computers inspire Rainer Ganahl's wall drawings. We are usually conscious only of the data in a computer's central window, but this "front end" is only what the computer's designer wants us to see. What about all that information the computer is processing that we don't see, tucked away in the computer's unconscious? The action in Ganahl's diagrams is usually on the periphery - icons, tool bars, and text cut off by the edge of the screen - suggesting information we only glimpse out of the corner of our eye. And why don't we ever hesitate to comply with those intimidating warnings like "Unauthorized Action: Shutdown and Restart" flashed on the screen with a bomb pictogram and a Pavlovian beep? Though Ganahl may seem to be merely framing information, it is more that he is drawing the frames themselves and drawing our attention to how they structure our attention. Plots of other interfaces may take a scattershot form. Janet Cohen watches baseball games on TV to estimate the locations of pitched balls as they enter the batters' strike zone; whether the resulting drawings chart the hand-eye coordination of the pitcher or of the artist is worth thinking about. Different technologies, of course, offer different interfaces to probe and undo. Regardless of what the end product of this technological epistemology looks like, the investigation into uncertainty not being afraid to look for it and examine it - is more important to our society now than ever.

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"Reconsidering the Object of Art: 1965-1975" was organized by Ann Goldstein and Anne Rorimer for the Museum of Contemporary Art, Los Angeles, 15 October 1995 to 4 February 1996. "Mel Bochner: Thought Made Visible 1966-1973" was organized by Richard Field and premiered at the Yale University Art Gallery, New Haven, 14 October to 31 December 1995; it travels to La Societé des Expositions du Palais des Beaux Arts, Brussels, 1 March to 12 May 1996, and to the Städtische Galerie im Lenbachhaus, Munich, 26 June to 8 September 1996.