FEND

LUCY LIPPARD

Fend

ARCHITECTURE PROPOSITIONS

PUBLIC POLICY

The function of architecture is to organize habitat.

Habitat now is, of course, scarcely organized.

Most of the organization of habitat has been left to industrialists. Consider the automobile. Or refineries and pipelines.

The architects have confined themselves to the design of buildings.

But the city, the place where humans live, remains the premier architectural question.

To speak of city planning or regional planning as somehow separate from the planning, or design, of a personal space, is to suppose that aesthetic principles or logics somehow fade out or need transliteration at larger scales.

The architects simply have not had the nerve to do architecture on large scale — with the atmosphere, the waters, the productive hinterland, the entire technical and physical apparatus by which a city lives and breathes.

They can think on large scale, with the entire space, but they do not allow themselves to practice that way.

They fear to be denounced as megalomaniacs by the parties now determining the character of our environment.

Yet the political question, the question of establishing a territory and arranging the material conditions in that territory for well-being, remains unresolved.

The political question is an aesthetic question and an architectural question.

How else might we organize habitat, the space in which we co-exist with the species, but by the use of senses acutely trained?

If the society is to succeed in its com-petition with the species, if the society is to co-evolve rather than collapse, architects — in joint venture with artists — assume political leadership.

Peter Fend

FOREST MAZE

To be constructed in the courtyard (80' x 60') of a pilot-project public school in the South Bronx. Commissioned by the Board of Education of New York.

A tree stands at the center of the courtyard. It becomes the center of the maze. It rises above the maze and can be seen with occasional glimpses.

How to get to that center, however, becomes another matter. The maze is so confusing, distracting and yet pleasing, that a visitor may very well become involved in some alley or corner rather than reach the center.

The maze is built with plug-in intermodal elements. It is built of the materials and in the procedure of an architecture that became popular with Frei Otto of Germany, Archigram of the UK, and the post-metabolists of Japan. This architecture is open-ended, to be built with a kit of parts: all the parts are mass-produced and can be clipped-on or plugged-in to each other in a great variety of ways, according to the desires and building ambitions of the user and owner itself. This architecture is, then, an architecture without architects, in the field, and with architects only at the factory, in the industrial design office, and occasionally with prestige, model structures. Once such architecture becomes common, the public that would assemble it and enjoy it must becomes familiar with the language and potentials of space. The FOREST MAZE helps achieve this familiarization.

Standard tubular-steel bars are simply bolted or plugged into each other to make a forest of posts joined by beams. Then tensile materials of various colors and opacities, such as cloth, stretch fabric, vinyl and plastic, are stretched between various posts in various ways to create a very great complexity of light and shade, of avenues and cul-de-sacs, of colors and atmospheres, of views into the rest of the maze with its layers of translucent, transparent and opaque membranes.

Space is sensed to be an accumulation of membranes and an intersecting of energy fields. It is plasmic and semi-solid, as the Futurists conceived it. When it is sliced up into a kaleidoscopic array of colored light and shade, all just with direct sunlight, space is seen to be a medium for light--a medium that can be manipulated and altered almost like a material substance.

The maze is built of scaffolding and inexpensive fabrics. It is durable, but its design is impermanent. It demonstrates for its visitors a way of building and shaping their environment which, because of its simple components and assembly techniques, can be done by almost anyone in almost any way. As people who live with architecture daily, they would become ambitious to start practicing and learning the language of architecture and space. FOREST MAZE could initiate a useful learning experience.

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NEW —

CONTRACT FOR STRETCH FABRICS AS STRUCTURAL MATERIAL

GLOBAL SYSTEM

The Ocean Earth Construction and Development Corporation, an architecture venture, prepares regional plans and primary-sector projects through its Ecosystem Service. It differs from other companies in its field in relying on recent art. The earth-survey program organizes and displays digital data from satellites with methods of structuralist film, photodynamism and field-theory painting. The earthworks program organizes sites for multispecies management with constructions derived from Earth Art. The wastes conversion and hydrocarbon programs combine proven technologies within a sequence outlined by Conceptual Art. All projects are developed within the physical setting of hydrological basins--not of freshwater only, but rather more, of saltwater. These basins, indicated with concepts from Earth Art, encompass all the terrain of the planet, and can therefore effect a regional-planning for the globe.

OCEAN EARTH CONSTRUCTION AND DEVELOPMENT CORPORATION, OECD,

conceives, designs and builds prototype constructions and plans, and it distributes those prototypes through

television productions
art and architecture expositions
license agreements with manufacturing corporations and geographic states or corporations.

Prototypes are prepared in collaboration with or in conjunction with research scientists and engineers at the institutions, agencies, architecture and media firms, and corporations, which stand to gain from their development.

These are prototypes to be developed and exhibited by OECD. They will be developed at least to the level of exposition and scenario and at most to the level of extensive patent protection and royalty-agreements for licensed manufacture.

1. bottom-harvesting, adjustable-holdfast seaweed rig
2. waste conversion system through pyrolosis to bioprotein production
3. keratin extrusion from bioproteins, to be used for nutrient recycling or as a rebuildable material
4. immunological electroconductive fields
5. convex-disc marshes
6. marsh construction system generally
7. electronic battlefield simulation of ecosystems
8. earth-observation systems:
   a. color-coding
   b. rapid interspersion of color readings in video or film
   c. framing of scenes within saltwater hydrological basins
9. counterweighted megastructures with loft levels
10. plug-in containers with flanged posts for slide-in walls
11. windbreaks and other elastic load-bearing structures
12. exhaust-heat suspended canopies
13. windholds and other equilibrating rigid sail forms
14. hypobaric chambers for rest
15. zero-live-load, elevated public transport structures

We do not know if our particular conceptions or designs will work or be most efficient. We do know that something like them, or performing the same task they would perform, is essential to our long-term well-being. To list:

1. continuous, safe supply of hydrocarbons
2. total wastes conversion, with extractible ash residue
3. active marshes as sources of ecological strength and stability, both in water and on land
4. free flow of information about our physiological condition
5. stable, sustainable, highly-diversified ecosystems
6. efficient, owner-manipulable, alterable, transposable, cities, with shelter from wind load and elevation above the ground so as not to damage water, soil flows

ARCHITECTURE

CONSTRUCTION OF METABOLIC SURROUNDINGS

Drawing — Systems diagrams showing flows in organisms, ranging from microbes to ecosytems. Primary exchange relations devolve on: CO_2 - O_2 - CH_4.

Painting — Multiple color readings of a surface, interjected in film or video sequence over brief-time spans, with repetition leading to recognizable colorstreams. Viewer compares income spectral readings of site against algebraically-prepared model-sequences that indicate a certain metabolic state. Use with satellite or other digital-data spectral sensors.

Macro-Sculpture — Planet. For now, earth. Conceived as a spinoff from sun which has not reached stable orbit or spin and which still has internal disequilibrium. The irregularities in relations of planetary bodies make earth not be smooth, not be evenly covered by its life medium: the salt ocean. Ocean bottom breaks into plates which shift and collied, coalescing into heaps called continents. We consider each roughly self-contained body of ocean, with adjacent upheaved floor, as a sculptural entity. We identify with that body of ocean all the lands, or upheaved floor, which drains the products of evaporation (rain) and sedimentation and vulcanism (soil) into it. Basins of course are not totally isolated, but they can be a object of coherent ecological and economic management.

Micro-Sculpture — Inducing sub-cellular information to be mediated across membranes, leading to functioning imitations of the adjacent macromolecules and cells. Example: Allow microorganisms grown on a hydrocarbon substrate (Beuys' Fat Corner), which is in turn generated from pyrolysis of urban-industrial wastes, to be gradually incorporated into the simplest-known self-replicating three-dimensional structures: the proteins of hair, feathers, skin and scales; the epidermal proteins. These proteins, derived ultimately from wastes, could be introduced to animal feeding grounds (e.g., marshes) as nutrients.

Earth Sculpture — Earthworks and signs (lures) to gather waters and species. Attract animals to site and make them vulnerable to ecological exchange: predation. Cones and pits near salt flats help mix freshwater with salt in animal-burrowed and fertilized soil. Expansion of marshes, and then construction along migratory pathways, increases effectiveness of species and nutrient transfer--leading to ecological buildup of hinterland, ideally suitable for wild animal cropping.

Earth Painting

Distribution of nutrients, chiefly from converted waste streams, among marshes and other feeding grounds. Usually in phase with migrations of nutrient-transfer animals. As monitored by aerial scanners, these actions constitute a sort of bombing--they change the density distribution of species, which therefore changes the colors of earth's surface as recorded by the spectral scanners.

Industrial Architecture

Military architecture made commercial. Conducted in no-man's land, it organizes terrain for harvests of wild species and for rapid transport out to markets. Requires legal sanction against fencing of productive ecosystems: one's prosperity as a land manager depends on one's capacity to set up trap-lines and transport-lines which do not inhibit movement of higher species, especially to the site; one's prosperity as a plant harvester depends on one's capacity to keep the site full of so many different animal and plant species as to preclude epidemics. Offshore, large seaweed and fish rigs attract populations, with low attrition rates--again without barriers or monocultural regimes. The offshore rigs are monopoly property of the ocean administration, guaranteeing stability of a commonwealth.

Human Architecture

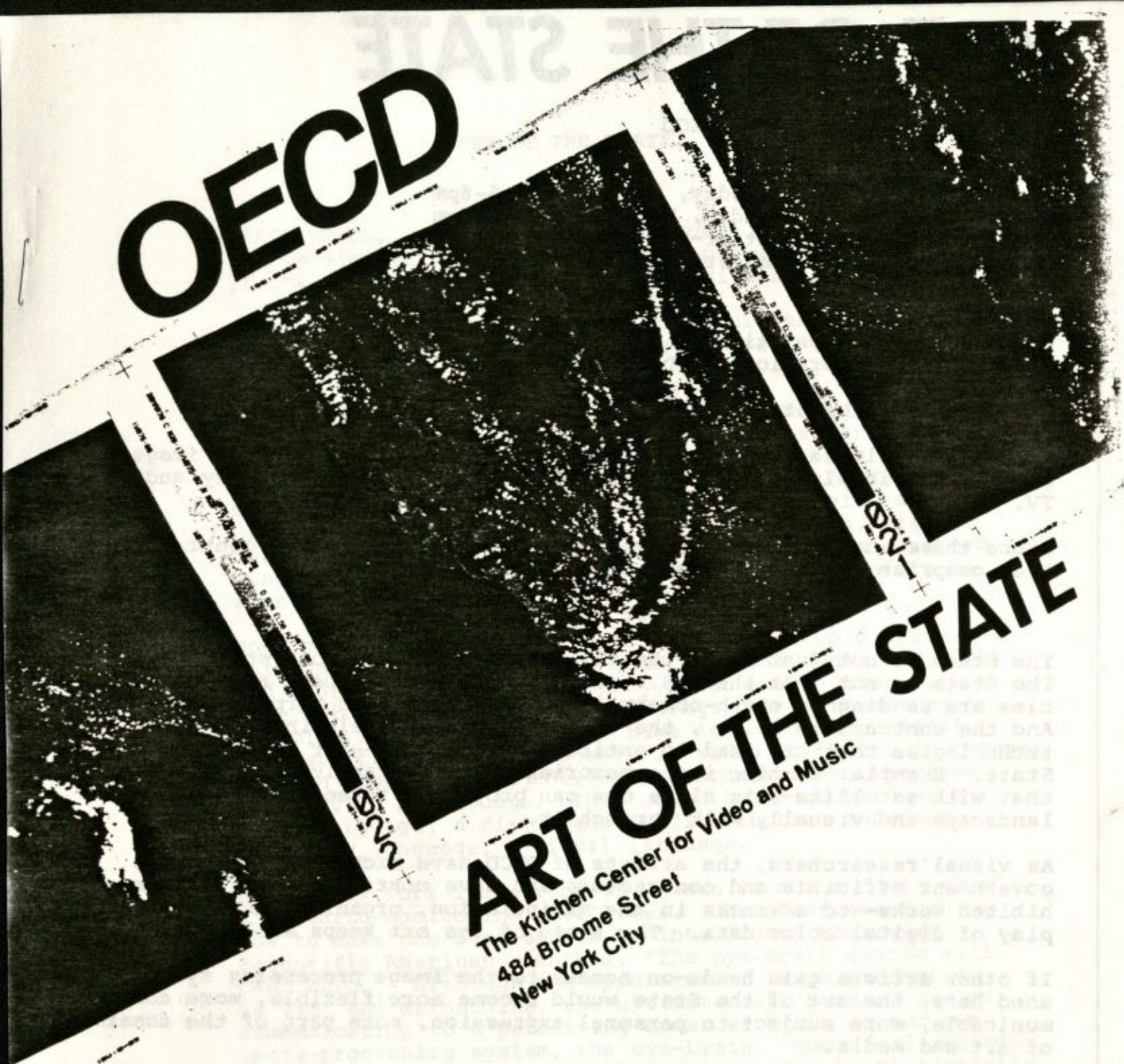
Thorough imitation of the body on large scale. We enter structures that function like our bodies, with requirement that all structures be away from or above marshlands, flatlands and deep forest. Structures set either into hills or up on counter-balanced pilotis. We return to the trees or the caves among hills.

Spine. Structure achieve uplift mainly by cantilevers, in counterbalanced beams from central fulcra, by cables, and by a ball-like foundation that mimics the human foot. Buildings function as human does, with forces in one direction counterpoised against forces in opposite direction. Cables and adjustable counter-weights behave in tension much like muscles and tendons. The spine reaches out to encompass arms, legs, limbs--the platforms on which loads (offices and resident lofts) are placed. Each platform contains utility outlets maintained by the ocean basin regime (government). The fee for use of these outlets effects all public finance: there is no need for taxation, or even rent.

Circulatory System. Transport system of moving sidewalks and freightways set on aqueducts of water or heavier-than-air gas, which--being pumped--function like blood system.

Pneumatic System. Wind load modified and reduced, for local circulation of air (including plants' oxygen), by canopies and rigid-sail windscreens, commonly held aloft by exhaust gases from city's machines and air-pumps.

Cells. Transportable containers, which can be bought or sold much like the fixtures (or parts of fixtures) in present loft tenancies. Can be suited for special functions like sleep (iron lung model) or intense thought (vido-computer-multimedia chamber: brain space). Suited for spines' up-borne platforms as plug-ins.



ART OF THE STATE

The Kitchen Center for Video and Music
484 Broome Street
New York City

ART OF THE STATE

Produced by SPACE FORCE, OECD

February 4-27
Opening Reception: Thursday, February 4, 6-8pm
Closing Discussion: Sunday, February 28, 6-8pm
Gallery Hours: Tues-Sat, 1-6pm
The Kitchen, 484 Broome Street
Tel: 925-3615

SPACE FORCE, an operation of the Ocean Earth Construction and Development Corporation, OECD, presents:

the state of the art in earth observation.

This also includes advances in the state of the art in digital image processing, in planetary and celestial modeling, in photography and TV.

Since these advances are achieved by governments and their contractors, they comprise not only a state of the art but also an

ART OF THE STATE.

The State is not just NASA: the military can display much more. The State is not just the U.S.: the Japanese and European space agencies are sending up earth-observation satellites that surpass ours. And the contractors . . . , the contractors are developing new image technologies that can lead to entirely new markets--far beyond the State. Example: combine image memories with interactive videodiscs so that with satellite-data alone one can project a three-dimensional landscape and visually walk through it.

As visual researchers, the artists of OECD have exchanged views with government officials and contractors and have contributed--in the exhibited works--to advances in the manipulation, organization and display of digital color data. The state of the art keeps evolving.

If other artists gain hands-on access to the image processing systems used here, the art of the State would become more flexible, more communicable, more subject to personal expression, more part of the domain of art and media.

These video programs and photographic sequences are first efforts of SPACE FORCE towards production of art that's

direct from outer space.

We begin, being human, with planet Earth. And we are:

Bill Dolson
Peter Fend
Colen Fitzgibbon
Win Knowlton
Paul Sharits
Wolfgang Staehle
Glenn Steigelman
Taro Suzuki
Eve Vaterlaus
Joan Waltemath

We have cooperated with, and would like to thank:
Charles Bohn and William J. Campbell, Goddard Space Flight Center, NASA; Dr. Lothar Beckel, University of Vienna; Richard Pendergrass, LogE/Interpretation Systems Incorporated; Dr. Janet Bare, Satlab Inc., and Willoughby Sharp, of Integrated Telecommunications.

ART OF THE STATE

SPACE FORCE, an operation of the Ocean Earth Construction and Development Corporation, OECD, presents an installation of the state of the art in earth monitoring.

It therefore begins a sequence of inquiries into space technology generally and its appropriation by human consciousness.

Earth monitoring from space is a high-technology form of landscape rendition. As visual researchers, artists can assist in advancing such landscape rendition to a pliable and expressive means of visual communication. Earth monitoring, like most space-vehicle imaging of planetary bodies, involves an elaborate array of sensors, digital data systems, and eventually a mathematically-programmed display of meaningful colors, and it could therefore be seen as part of the general evolution of art.

Now, major questions have arisen as to how to display the earth-monitoring data, what colors to use, what contrasts and field-intensities to employ, what images overall to effect for impact and understanding: altogether, how to organize information through time in a two-dimensional multispectral surface subject, in video at least, to changes through time. The objective is communication; the task is to build a language. This could be considered as a color language, a field density-distribution language, a display language, a visual language.

As The New York Times reports, there is now a "data glut" from earth-monitoring satellites. The chief question is how to make the data usable to intelligent observers. Scientific American remarked, "The eye-brain system will need help." Although the apparatus of image production is vast and astounding, the ultimate task remains one of communicating to a perceiving human with his or her own image-processing system, the eye-brain. Numerical records of data can be accumulated, but they cannot be meaningfully processed by humans except, chiefly, through images. As Remote Sensing of the Environment argues, "An image is, of course, the most efficient way to convey a large amount of information to a human operator."

SPACE FORCE feels that questions on image-making and communication raised by space scientists can be answered effectively through consultation with artists. It feels compelled to respond to these concluding statements in Remote Sensing of the Environment:

> Additional research is needed in three areas: (1) determining which wavelengths of the electromagnetic spectrum are most useful for identifying each earth resource . . .; (2) determining which color combinations, of the many that can be used in producing image enhancements, are most easily and accurately discerned by the image analyst; and (3) determining in representative instances the net gain, if any, resulting from the use of such image enhancement techniques.

It is concluded that a great deal of work must be done not so much with the image-processing and production hardware as with the image-processing software--the programs by which intelligible color displays convey a great deal of information in a brief period of time. The "image analysts," or viewers, are now inundated with very often incomprehensible imagery, and it seems appropriate to call on artists to begin working with the imaging systems.

Art history suggests the trend. Four hundred years after the beginning of the Renaissance, the pictorial inventions of the Renaissance were mechanized and made automatic with photography. Since then, artists have undertaken new researches. Pointillists determined how to render an image with points of color, much like the pixels in digital-data imaging. Futurists and Suprematists extolled aerial photography and tried to create in paintings the sensation of looking down, upon a field, rather than into a box-space. The Futurists proceeded to call for organization of color and "lines of force" in "force-fields," and they theorized that a motile, flexible medium could render changes in color and perception of color through time. This medium would be more elastic and dynamic than cinematography: it is present now, in the computer displays for satellite digital data, and in video. Through the 50s and 60s, field-theory became a dominant concern, particularly in Europe, and in the 70s there emerged, in the US and UK, color-field studies through time conducted solely in film, video and computer console displays. While these progressions in artistic inquiry have occured, meantime the camera has been perfected to such an extent that it has become a video or photograph image scanning instrument, notably in Landsat and other earth-observation systems, and it seems natural that visual researchers would soon want to gain hands-on access to such an elaborate instrument. Landsat has been said to be the "most important photographic experiment in history": it would follow that it can become a basis for an important experiment in art.

SPACE FORCE

Ventures into space have opened to mankind frontiers and possibilities previously unimaginable. The technology of space exploration has provided us with a plethora of new information, images and perspectives. Humans have gone from seeing the planet as a vast, open expanse to seeing it as a single sphere, with delicate energy balance, moving among many in space.

Untimately, humanity has changed its own nature through the use of its imagination. It now begins to control its evolution. Space exploration and space technology have radically changed human perspectives, and could therefore affect human conduct.

Science and art have in tandem been responsible for cultural change. Now, as scientific knowledge advances, as the flow of information increases, it becomes crucial that artists increase their correlative rate of synthesis. Scientific and artistic inquiries often remain confined to the circles in which they develop; consequently, scientific advances into outer space are still extraneous abstractions for most of the planet.

We seek to expand the cultural response to space technology. We seek an expressive use of the hardware and software used by science and industry. We initiate a dialogue of artists and scientists--with benefits for science, for art and for the public.

As a group, Space Force expects to broaden the scope of understanding in our culture. It seeks to realize the primary role of the artist--as presenter, disseminator and demystefier of new thought. We see outer space to be a limitless arena for humanitarian, cultural and utilitarian functions, and we intend to present ideas towards construction of civilizations oriented within outer space.

In the spirit of Vanguard and Pioneer, Space Force starts a series of artist-designed projects. These projects utilize the great log of scientific and technological discovery with the goal of preparing mankind to manage its future in a responsible and creative manner.

SPACE FORCE

OCEAN EARTH CONSTRUCTION AND DEVELOPMENT CORPORATION

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1. The Ocean Earth Construction and Development Corporation exists to build structures, video programs, displays or information-transmission systems, which cannot readily be built or achieved by one artist or individual.

2. There are no employees of Ocean Earth Construction and Development Corporation who are career artists.

3. In any project undertaken by OECD, individual artists who take part establish with OECD a research or production contract which is specifically, individually arranged, with particular limitations and/or fees, and which in general would have these aspects:

    a. The contract is limited in time and scope to successful completion, often in specific sub-contract basis, of a portion or aspect of a team-produced art work or construction.

    b. Credit for what in particular the individual artist achieves is due to the artist for that pre-designated area of work.

    c. In all areas other than those specifically identified by OECD as the research, design patent or trade-right objectives of a particular project, any individual artist developing any new forms, methods or works of art, may retain those innovations as his or her property, may claim credit for them as "facilitated by project contract with OECD", and may exploit those innovations to the fullest extent desired in his or her individual artistic career.

    d. Salaries are not paid. There is no consequent structuring of a salary and authority heirarchy. Artists engaged in particular projects are paid retainer fees and are provided with pre-determined budgets given the particular project at hand: greater or lesser budget allocations in no way reflect on the merit of an artist's career, work or even ideas in the area of the project. A major artist can participate in a particular project to a very limited extent, and receive a very limited retainer or cost-plus fee. A lesser artist may initiate a project through OECD and may actually coordinate and combine the efforts of other, more established artists--for that particular project.

e. Monies paid to or budgeted for artists on particular projects are set at the amount necessary to completion of the overall project. Participating artists receive what is necessary to getting the job done, and what they receive can include: retainer fees during the term of construction or research, wide range of individual development, copyright and traderight privileges, access to equipment otherwise inaccessible to the artist, prestige from and credit for participation in a construction. In the case of some video productions, for example, a substantial full-time retainer fee may be paid for the duration of production, with the producer or co-producer retaining limited rights of personal distribution or sale of the production. In the case of visual or sculptural research, as with vector-graphics hardware, for example, a fee may be only enough to allow for the time spent in travel to and work with that hardware, for the period of time considered necessary for the particular corporate project, but very broad copyright and development design rights are retained by the artist for his or individual art career.

f. In certain cases, a group of artists as well as individual artists can contract with OECD for purposes of producing a show, construction or program, often under joint assignation. Such a group is "Space Force". It is possible for OECD to arrange trade-name status or protection for such groups.

g. Sanctions can be applied against artists who fail to meet contractual obligations toward fulfillment of a particular project on which they are to work for an agreed-upon contribution or product. These can range from denial of credit to denial of retainer fees, product or image-development rights, etc.

h. Product and intellectual property rights of OECD will be spelled out beforehand in each contract with artists participating in a particular project, and will be agreed upon by the contracting artists individually vis-a-vis OECD.

4. The Ocean Earth Construction and Development Corporation has the trade names "Ocean Earth", "OECD", and "OECD Corp.", and it may have the d/b/a designations of "City Bild", "Ocean Earth", "Relay", "Space Force" and "Weltraum".

5. The Company does not profess to be an architecture firm; it contracts with corporations, agencies, art-agencies or governments to research, construct or develop large-scale art projects, including structures.

6. Specific works produced by artists on an OECD project may be jointly credited, with credit first to the artist, e.g., "Taro Suzuki/OECD", or, as at The Kitchen, "Space Force/OECD".

7. The term "career artist" applies to architects as well as creative artists. Scientists who may participate on projects of OECD, such as the Amazon imaging project, are retained per project as "consulting scientists" or "independent consultants".

8. OECD conducts research in, and intends to obtain patent/trade-secret rights regarding any such researches in, these sectors of investigation and construction:

- electrical-fields, force fields
- offshore rigs
  tracer/phenomena imaging programs
- ecosystem structures, earthworks
- mimic-conversion systems
  video monitoring systems
  satellite-data imaging systems
  oceanographic/hydrological mapping
  tensile canopies and fabrics
  pneumatic structures
  capsule plug-in architecture units suited for freight transport
  loft megastructure design features for plug-in
  hypobaric pump systems
  counterweight, bascule structural systems
  windhold and reverse-thrust pocketing systems
  aqueduct mass-transit structures /electromagnetic systems
  tensigrity structural systems

STRUCTURES / PROCESSES

In general, any innovations in these areas of research will entail some patent or trade-secret rights for OECD. The individual artists who help achieve these innovations are entitled under terms of specific per-project contracts to arrange for sharing or jointly-holding such rights with OECD. Related innovations outside the immediate product-range of the above-listed sectors of investigation and construction (e.g., tensigrity structures supporting air-freight containers, as developed by Win Knowlton, say) would very likely remain the property of the innovating artist, with little or no intellectual-property rights for OECD.

9. The Ocean Earth Construction and Development Corporation is a vehicle for constructing and prototype-developing the elements of an architectural program outlined by Peter Fend. Mr. Fend is the Principal of the Company. For certain banking and legal purposes, he may have to be assignated "President", but in fact he is not President because he is not presiding over any body of workers. OECD offers individual artists and architects non-employment business contracts in order to get defined, client-identified constructions or programs realized.

LANDSCAPE PAINTINGS

OR RATHER MODELS OF PLANETARY SCULPTURE

PETERFEND
ARCHITECT

(All images listed are draft works.)

1. Amazon Gulfstream — one of the two consequences of Amazon rainfall

" BRAZILIAN "
WESTERN — being proposed for The Cousteau Society in telecastable weather-satellite imagery; now they want TV footage along this format for the Amazon Basin solo

they saw the Global System downtown; we started talking

a section of this ("Caribbean Action Plan" to parody the State Department) is at the Buren/Rivkin loft

Amazon Africa has not been photographed: it's the other half of the overall Amazon Atlantic, or North Atlantic treaty organization, schedule of depressions

people think I deal with water: not really; I deal with depressions, and this image shows a series of them torquing along, colliding into each other

2. East Asia Slippage — a non-verbal vindication of East Asian aspirations, separable into a number of sections (not shown, for example, an image of why Cambodia--carved out in characteristically European paradigms of landscape architecture, e.g., the formal garden) of course should be swallowed up in a Gulf of Siam bulge

3. Japanese Archipelago — what biologic incited their landing on the Aleutians in '42

4. Japan Ocean

" JAPAN "
OCEAN

what the Black Dragon ("Amur River") Society of Japanese officers wanted in the 30s, and what they tried to get in 1939 until a minor general named Zhukov massacred them (so badly that they decided to give up on this and instead force China into an alliance against the US and UK) at the tip of that northwestern curling tail

technically: the Japanese Sea and Sea of Okhotsk Basins; a western Pacific corollary to what California will eventually look like too

California Current image can be photographed to illustrate resemblance

this is not a geographical parody of the Fiorucci angel-emblem

5. West Med

an earth ship
an outline looks like those dancers
in Matisse's Joie de Vivre
when you're there, it's more like
Calme, Luxe & Volupte

if you'd rather be agressive and punk, I can show another basin of the Mediterranean Basin, that of the Gulf of Sidra--or (larger) Libya

the complete assemblage, including Black Sea (Austro-Hungarian Empire vestige) Basin, was at the New York/ New Wave Show, a benefit for Diego Cortez

6. Arabian Sea

a buttress against Russian anxiety (they have their own basins, as shown in "Soviet Policy" at P.S. 122), made legitimate by the visual logic of Caspar David Freidrich's The Polar Sea

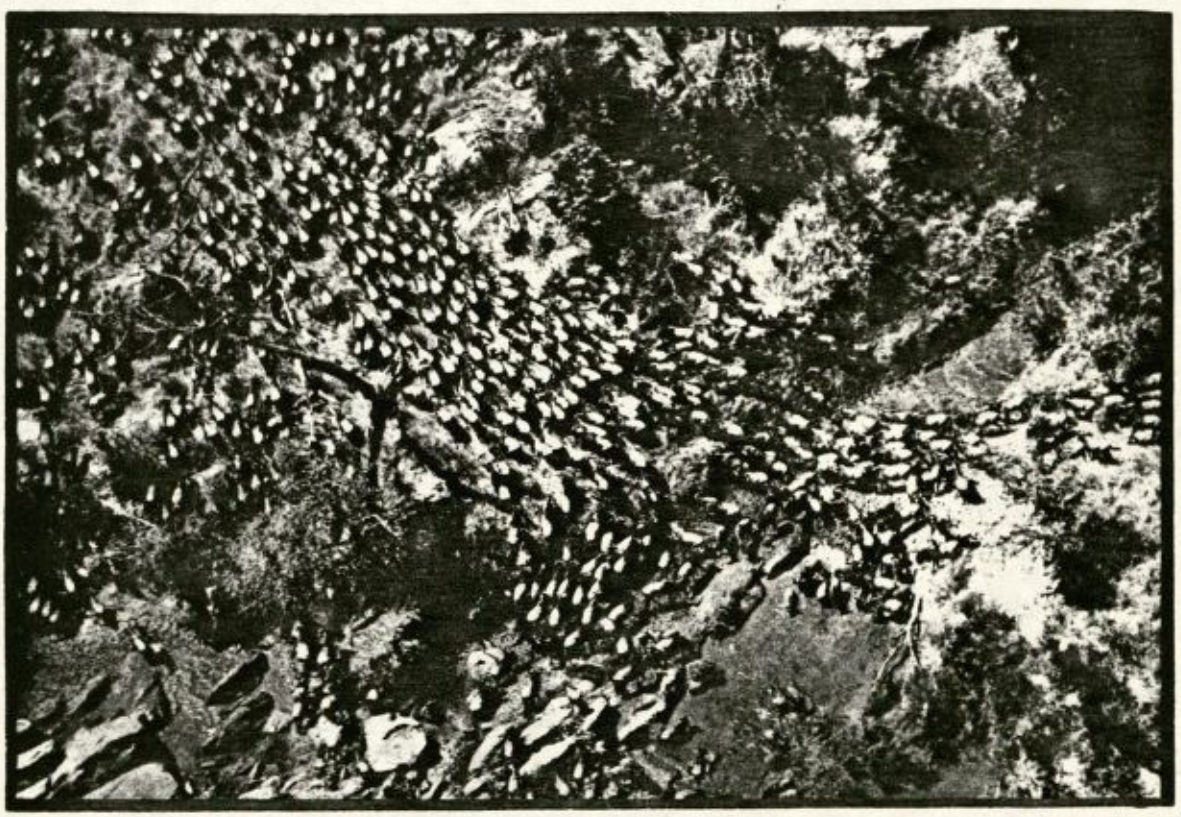
7. NATO

back to the Amazon question

while people talk of abandoning NATO, and then fear the consequences, they might consider this alternative--already discussed by the artist with the UN Regional Seas Program, of the UN Environment Program

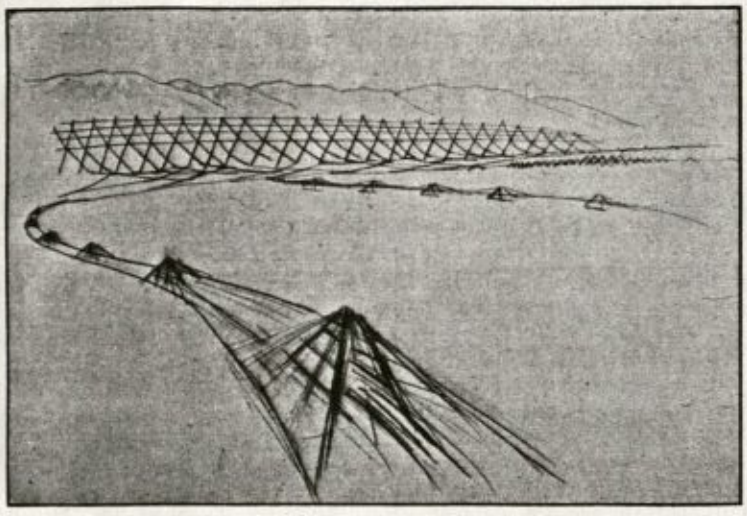
first prepared as part of several days' talks with The Cousteau Society

BIG GAME OVERRUNS BIG CITY



MASSIVE TIDE OF ANIMAL BODIES RUSHES TOWARDS BIG CITY. ARTISTS RESPOND. According to biologists who have studied other such massive migrations, including migrations ending in massive die-offs, the animals approaching the big city--ungulates here--are trying to reclaim ancient homelands. The city, biologists say, is sensed to be illegitimate and monopolistic. It denies other animals their space. It smothers crucial marshes and feeding grounds. It layers over with concrete and buildings any mating grounds. It lowers the water table, denying underground animals their chance to live. It cuts off paths of migration, even for insects and birds. It greatly reduces the variety of animals needed for ecological stability. Like most cities, it damages ecological processes for hundreds of miles around. And like nearly all cities nowadays, it poisons everything. The city is now being threatened with destruction. Biologists have no clear concept of how to respond. The emergency is being met by the persons in society who make a profession of mediating relations between humans as animals and other animals--the animal magicians, the artists.

FEND
OECD



Peter Fend, Megastructures, 1979.

PETER FEND'S GLOBAL ARCHITECTURE

JONATHAN CRARY

Back in 1963, Buckminster Fuller wrote hopefully that the coming decades might see the emergence of what he called "comprehensive designers," who would be a synthesis of "artist, inventor, mechanic, objective economist and evolutionary strategist." It may be surprising to find someone meeting Fuller's specifications now active in the labyrinth of artists' spaces in Lower Manhattan. Only 30 years old, Peter Fend is an unusual jack-of-all-trades, even in the plurality of the current New York art scene. He has a formidable background in biology, physics, zoology, history, architecture, urban planning, and economics, and his competence in a wide range of related areas is remarkable. He worked briefly at the World Bank, did regional planning in the Midwest, has extensive wilderness living experience, and has worked nights at the Fulton Fish Market. For the last several years he has participated in a variety of artist-run projects and exhibitions in New York, including the Times Square and Real Estate Shows and the New York New Wave Show at P.S. 1.

Taking off from the American landscape tradition of Frederick Law Olmsted and Robert Smithson, Fend's work is based on a vision of the world as a living earthwork and on the goal of forging a functioning and habitable global environment. In articles, drawings, maps, video, and multi-media proposals, Fend practices architectural thinking on a large scale. For him any kind of urban planning is inseparable from the entire physical system of air, land, and water by which a city lives and breathes, and he integrally links his architecture to working with oceans, farming, and energy sources. Although active in designing urban megastructures, he believes the most immediate task is to make secure and viable the biological underpinning of city life. What distinguishes Fend from other artists involved in large-scale environmental projects are the visionary scope of his work, his insistence that environmental engineering entails major political and economic reorganization, and the seriousness of his efforts to put his plans in practice.

Two of his central concerns are pollution control and renewable energy sources. Fend is an expert on waste treatment and conversion methods; in articles and lectures he discusses how urban and chemical wastes can be broken down into hydrocarbons, emphasizing how this hydrocarbon base not only can be turned into energy but also into food in the form of yeast and fungi. At the same time Fend sees the oceans offering another, and potentially infinite, supply of both these essentials. He demonstrates persuasively that meeting food and energy needs through ocean farming of kelp and through waste conversion can be extremely profitable, thus creating financial incentive for keeping the seas unpolluted. The trick is to convince the public they can eat oil and garbage.

For Fend, such new forms of food production would diminish the need for land-based agriculture. An article he wrote several years ago began, "Agriculture will destroy us," and proceeded to explain how farming depletes soil, reduces diversity of species, removes essentials for higher life from circulation, and releases biocides from fertilizers into rivers and seas. His post-agricultural world is a science-fiction vision of immense tracts of jungle, marshland, and savanna, all vital components of a living planet. Instead of domesticating farm animals, he proposes vast areas of open range land which large herds of wild animals would be allowed to repopulate, and he cites recent research proving, much to the dismay of vegetarians, that more meat for human consumption can be produced per acre on wild land than through traditional animal farming. Again, he looks to meet human needs while preserving the land's richness and diversity.

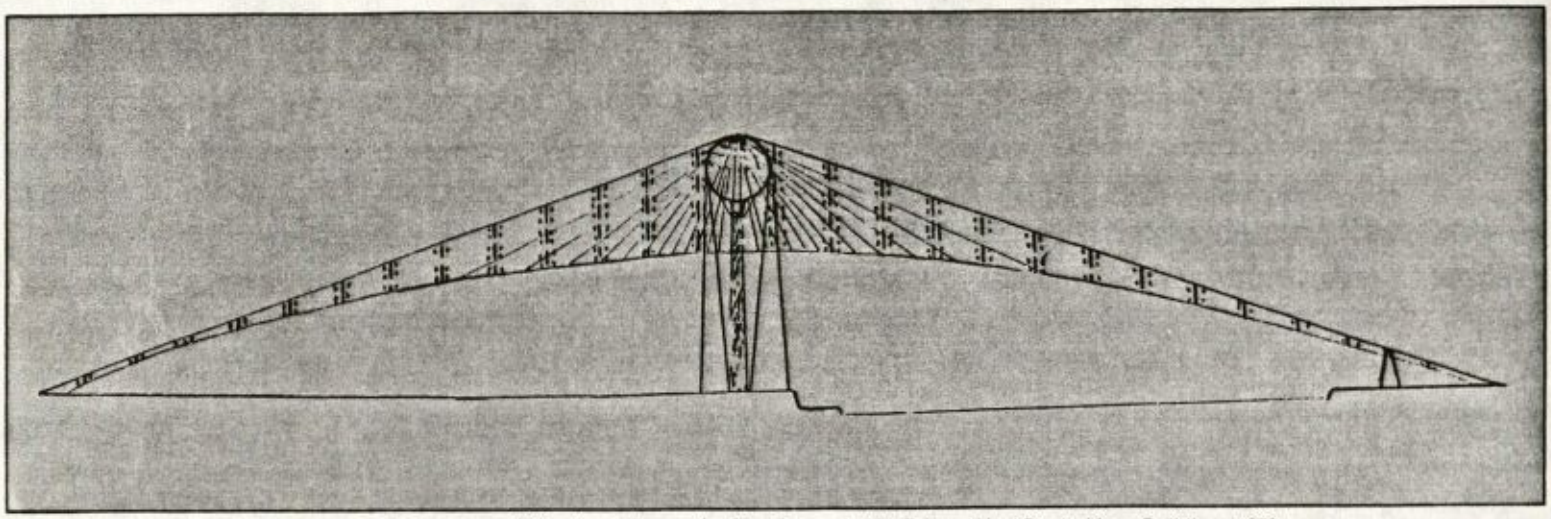
One of the most controversial aspects of Fend's plans is how he links economic and political organization with his proposed ocean-based industries. Key to his thinking is the idea of structuring his environmental management schemes on a decentralized and local basis. Much of his recent exhibited work has been about defining viable geographical regions that could support ocean farming programs. After several years of studying world geography and ocean currents, Fend has redrawn the political map of the globe into new configurations defined entirely by topography. Instead of current national boundaries, Fend sees the world as an aggregate of watershed basin areas, shaped by mountain ranges and the flow of water to the sea. Each of these zones he identifies as a "saltwater polity," eco-

Peter Fend, Drainage Basins of US and USSR: Potential Autonomies, 1979.

nomically autonomous territory, self-sufficient in food and energy. Like a 20th-century Physiocrat, Fend believes that an economy is a natural system in which all wealth originates directly from the earth, that economic principles should derive directly from the physiology of the body. Notions of production and consumption are replaced by exchange and circulation.

Fend delights in showing how many of his topographically determined basin areas closely correspond to regions sought by separatist movements or which match the territorial ambitions of various imperial powers throughout history. In a project called *Iran Plan*, he showed how Iran could be split up into five autonomous basin regions that recognize the territory of the Kurds, of oil-rich southwest Iran (the current war zone), and of other nationalities now subsumed by today's borders. His new regional mappings also suggest solutions for important international problems. Pointing to a mountain-bound area containing most of the Sinai, Fend says confidently, "This will be Palestine," and he elaborates an image of a new Palestinian state with an economy based on fishing industries and ocean production of methane and hydrocarbons. "Underground water sources will be tapped, dry lake areas fertilized, causing increased vegetation. Railways, pipelines, linear megastructural settlements will connect coastal industries with inland cities. The Sinai will be a green land again." Whether such a transformation actually happens is not the issue; what matters to Fend now is to expand notions of the possible in global thinking.

Fend insists that Renaissance ideas of space still govern attitudes to the environment. Just as quattrocento painting described a world in which space existed independently of its contents, it also implied a space that would remain constant des-



Peter Fend, Prototype of Windbreak-Canopy for City, Supported by Exhaust Heat Ducted from Buildings, 1979.

pite the extraction of material from it, a notion behind present-day exploitation of natural resources. Fend also sees this Renaissance idea of space persisting in recent art. He is critical of Alan Sonfist's fenced-off parcel of land, off West Houston Street, which attempts to recreate the original vegetation of prehistoric Manhattan. Fend sees this framing-off of space as a falsification in that it denies all the vectors of air, rain, garbage, birds, and insects that weave that space into a much larger environmental mesh. Futurist art was important in giving Fend a sense of space as a field of multiple interpenetrations in which no aesthetic or technical problem can be isolated from the entire active and mobile territory in which it is implicated. Other, more recent art contributed to this view of the world as circulatory, in flux, and intestinal: gravity and flow system pieces by Smithson and Oppenheim, Beuys' *Fat Corner*, Carolee Schneemann's *Meat Joy*, and Klaus Rinke's tubing.

Since he became active in the New York art world, Fend has worked almost exclusively in artist-run or artist-controlled undertakings. In 1979 he joined in a collaborative association with five other artists who had all felt the need for a structure to facilitate expanding their activities beyond existing art institutions. Those involved—Jenny Holzer, Colen Fitzgibbon, Peter Nadin, Richard Prince, Robin Winters, and Fend—formed an organization roughly modeled on a law firm but which offered aesthetic and media counsel rather than legal counsel. Their business card read: "Practical esthetic services adaptable to client situations / Our consultation includes a review of your needs and suggestions for realistic action."

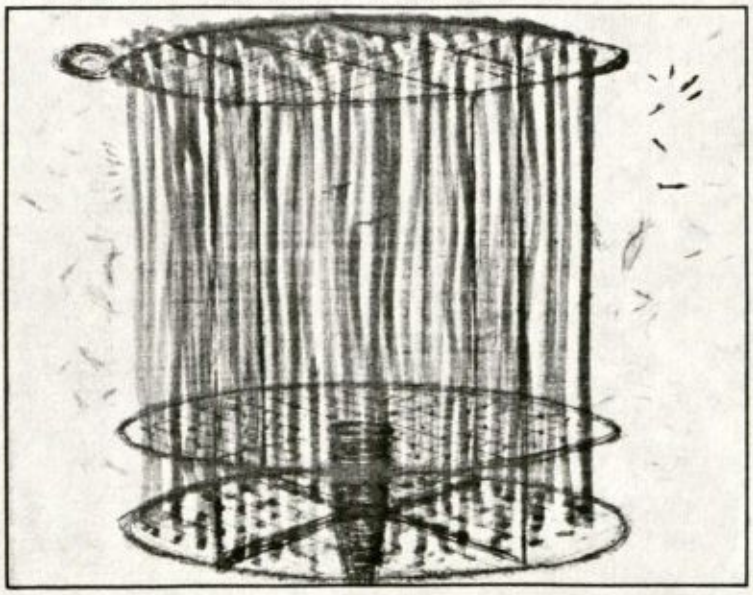
Some of Fend's independent New York projects have been planning schemes for parts of the city. One of his best received works was his contribution to the January 1980 Real Estate Show. Titled *Delancey Street Goes to the Sea*, it was a detailed plan about how the Lower East Side actually could secede from Con Ed and restructure its tax payment and rent system to enable it to incorporate separately from the rest of the city (as Beverly Hills is to Los Angeles). At the heart of the plan was a community-owned and -run waste treatment facility that would generate self-sufficient energy, as well as marketable food and fuel products. An outgrowth of this project was an elaborate proposal, exhibited last fall in Duisburg, Germany, for a radical reorganization of the steel industry and landscape of the entire Ruhr region.

In the much discussed Times Square Show, Fend displayed an architectural project for midtown Manhattan in which 42nd Street would be leveled and replaced by a green swath of parks, trees, and gardens. Overhead a megastructural skeleton would serve as a constantly changing bazaar and entertainment area. Some Times Square Show participants felt Fend's plan was too respectable for that event and were disappointed that it would have "de-sleazed" the 42nd Street area by wiping out the porno industry.

Recently, Fend has initiated what is his potentially most important enterprise to date. He is now coordinating Ocean Earth Construction and Development Corporation, a legally incorporated firm which he hopes will be a credible and effective base from which to deal with business, scientific, and government institutions, as well as a structure to accommodate other artists' projects that reach beyond the gallery. Identified as Ocean Earth Corporation, Fend now can communicate with various companies that have expressed interest in some of his specific designs and can deal with them in a trade secret-protected situation. Some of the ideas he plans to market include an offshore seaweed harvesting rig, waste conversion equipment, and a modular architectural system involving air freight containers. Other plans include tensile canopies for urban climate control, an international video distribution program, and megastructure frameworks. Robert Smithson's work as a consultant for the design of the Dallas-Fort Worth airport is often singled out as an example of the artist breaking out of his/her traditional role to become a participant in non-art planning. Fend's latest venture seems to realize many of the possibilities implied in Smithson's airport project.

If Fend's corporate undertaking gets nowhere, it can be chalked off as another in a string of failures by artists to operate effectively outside an art world context. But even a small measure of success would encourage the hope that artists can have significant influence on economic, scientific, and social planning. Cultural institutions have reduced the artist's role to sideshow performer, one who will never play in the big tent, and most artists, even those who insist they want a joining of art and life, are enamoured of their own social marginality and have a romantic stake in their own powerlessness. If Marcel Duchamp's fake Monte Carlo bonds of 1924 bespeak the detachment of most artists from major networks of power and exchange, the legal documents inaugurating Fend's corporation signify an alternative conception of the artist's role in which aesthetic and social thinking become indistinguishable.

Peter Fend, High-Yield Bottom-Harvesting Seaweed Rig, 1980.



SCOTT HANSON GALLERY

415 West Broadway, New York, NY 10012 • (212) 334-0041

FOR IMMEDIATE RELEASE **18 April 1988**

THE SCOTT HANSON GALLERY

PRESENTS AN EXHIBITION

OF WORKS BY PETER FEND

THE SCOTT HANSON GALLERY presents an exhibition of works by **Peter Fend** from April 21 to May 24, 1988, at 415 West Broadway (tel: 334-0041).

Peter Fend is an architect whose prime concern is the Planet. Assuming that the architectural task is to create a habitable environment, he asks what must be done to achieve that. He draws on Earth Art for terrain work, on Conceptual Art for structures, and on Video Art for more efficient displays of site information, and he gathers a wide range of ecological and structural science in order to establish what the editor of Architecture Aujourd'hui described as one of the most practical and thorough programs of construction of viable cities within vigorous hinterland. Much is a continuation, as with Matta-Clark, of Constructivism and Futurism.

In this exhibition, Fend presents his territorial plans. He shows maps of saltwater basins, usually in assemblages corresponding with the spinoff of Earth's planes from the Poles. Each assemblage results from natural forces, and so is striking and aesthetic. But each assemblage also constitutes a delineation of public space, and so suggests political possibilities.

(more)

A starting point has been the years of investigation into Renaissance architecture and the correlative formation of the Renaissance garden-modeled nation state, by Vincent Scully of Yale. The investigations, recently published as a book, show how the formation of nation states, starting with France, correspond with the expansionist program of construction of Renaissance-spatial forms. Towards the end of his book, Scully asks what might be the new spatio-territorial forms arising from recent Art. The maps on exhibit are Fend's response.

Drawing on the saltwork analyses of Marcel Duchamp, as Marchand du Sel, and on the subsequent salt-earthworks of Dennis Oppenheim and Robert Smithson, for example, Fend identifies the saltwater basin as a region in which to site those earthworks, or commensurate unpolluted and vigorous cities, or any ecologically suitable architecture. Each basin is a collector of salts, soil, and water -- and of pollutants. Each can be managed and monitored as a whole. And almost all of them now, sometimes very seriously, are beset with loss of topsoil, deforestation, saltification of groundwater and soil, contamination with pollutants and wastes, and habitat decline. These facts are well known. The maps outline frameworks within which to respond.

To suggest direction, Fend also shows the first elements of a program for action, one derived from the Fat Corner works of Jospeh Beuys, the other from video art, and manifested as satellite monitoring for mass media.

Gallery hours are Tuesday - Saturday, 10:00 AM - 6:00 PM.

For further information contact: Linda Silberberg 212-334-0041.

OCEAN EARTH

Ocean Earth Construction and Development Corporation

17 Cleveland Place
New York, NY 10012

212 219-8712
212 777-6232
Telex 125126

Dear Lucy,

In the art world, we are OECD.

And from the looks of things, we may well have an office in Paris.

But there, they call the First World organization the OCDE. So we don't have to pretend to be their competition. We can simply take over from them.

TELEVISION GOVERNMENT

I recall that sometime ago you said that Voice readers should not bank on it.

Try to tell that to the Embassy officials of Iran, Iraq Algeria (which is contracting for satellite monitoring of the Sahara, as well as the War, through the hostage negotiator Mr. Mekedeche), the Royal Institute of Internatinal Affairs, and a NATO general who would rather not work with the US at a Dutch institute.

We still believe in democracy. We believe in two party systems. Like Beach Party, to be set up against the Green Party. But no more Republicans or Democrats. And no more US, of course.

As you know, the maps are the plans.

I meet with the UN Environment Program in Geneva before May to consolidate our position in authoritative basin-mapping of regional seas.

It may be said that this is not art. If so, I am not interested in art. I am interested in reality.

ART ON THE ATTACK

FIRST BLOOD

I WILL NOT DISCUSS WHAT THIS WORK HAS COST PERSONALLY

A VIDEO NARRATIVE - WAR STORY

Once I did a show called Italy Wins World War. That was written up in a few art magazines, and now it's being contracted for real with the Algerian military.

Now, to keep pushing the outer edge of the envelope of history, I do a story called

ISLAMIC SOLUTION.

The story grows out of a question put to me by the Iranian Embassy in The Hague. They were looking at our satellite pictures and analysis of how they were not going to win the war with Iraq, and they asked me what my "Islamic solution" might be. I looked up at the ceiling for a moment, explained that I was not much of an authority on Islamic belief, and then gave them My Solution to the war.

That solution is really a Persian solution, or a Zoroastrian one, but I'm not going to complicate memory with a lot of history. I can just talk about Islamic art, about mosaics and patterns on the ground, about satellite imaging of those mosaics and about making earth into paradises which appear Islamic (i.e., abstract, colored, as fields) from space.

The consequence of such an Islamic mosaic solution is subordination of all political and spatial thinking to gravity, particularly to the effect of gravity on things fluid--such as water. Basins replace nations as Islamic entities. They replace Western geometric nation-states, based on outstretched Christ figures for their pattern, with Islamic and Persian concepts of gardens, with water and vegetation organized in a continuously cycling field.

To establish the story, we begin with the non-solution. We begin with the war. We look at the primary structure of the war, the structure which makes all the Holy Zeal of the Iranians crumble into oblivion: the massive water structure dug out among salt flats, downstream from the Garden of Eden, as they call Al Qurna. Then we show how the water structure can be expanded into a vast wild marsh, a vast wildland, a hunting-fishing paradise, a wild garden. And we show how this links into similar marshes throughout the Islamic world there, from Ethiopia thorugh Saudi lands to central Asia, along flightlines of migrating birds and insects. And, as a political event, a sort of historical wrapup, we show the emergence of a new Persian Empire, with the same decentralization and looseness of before, with a Persian (Farsi) core which includes only a part of present-day Iran, and with the separatist parts of present-day Iran spun off into autonomous basin states. The beginning is in the war with Iraq: Iraq wins; the Arabs win; and the Arabian Gulf gains separation from Iran, at last severed from its fossil fuel base.

This is a historical fantasy. But we will make it as real as possible. Not "realistic". But real.

That means we will incorporate real satellite evidence of real war structures, and we will outline real military options for opposing forces. We will suggest real policies for the real opposing forces, so that maybe, as with the Algerian military now, they begin to adopt some of our ideas--under contract.

Thematic dances, thematic organizations of space and materials in which to move, are made by Petra Rhijnsburger, from Holland.

Earth art is produced by Dennis Oppenheim, especially, and also is drawn from Heizer, De Maria, Nauman, Beuys, and the other old-time earth shapers. Why not? What the Iraqi army builds now looks like earth art. Does art imitate war, or does war imitate art? They can mimic each other, and make each other much more.

Then we get serious. We look at the big slit being built at the Womb of history, we look at the slit being made like a -- well, talk to Carolee Schneemann. My friend Carolee would do something about this deathtrap killing 300,000 Iranians or so in the middle of a bunch of desiccated salt flats, now infertile, and becoming fertile again by the opening and massaging of a gap, a gap thorugh which the waters can flow, and in which the species can meet and multiply. We are watching the creation of a cunt-tree. You can't just talk about earth art. You have to dig in, rub and fertilize. With animate materials, like bioproteins and starfish. We investigate the limits of reality. We press against biological possibility. We see if the eco-system cannot respond to the clues emerging from recent art.

And whenever it gets too confused, back to Petra, doing her organization of space with a dance, with a laying of mosaics and arranging of blocks and spilling of water in her Islamic grids. Grids which became compulsive after questions about the sexuality of the artist, Peter Fend.

Much of the budgeting comes from broadcast television, which pays for the satellite imagery and war footage. We look especially to a $30,000 deal from WDR in Germany, with spinoff productions from Sweden and Holland. We use films from Schneemann and Oppenheim, with perhaps some additional video footage. We video-document the tuinen (gardens) by Petra Rhijnsburger: there are three now, with water, with blocks, with tiles, And we do a lot of post-production. Most of the work is post-production, for in video there's plenty of footage already available. Editing is by fellow participants in my company, OECD, such as Wolfgang Staehle, Ingo Gunther, Colen Fitzgibbon. Paul Sharits, who holds shares in OECD, may also play a role: abstract narrative, with abstract color fields, becomes real. In this TV production, or rather VIDEO NARRATIVE, with TV possibilities for release, we work with a key maxim learned from broadcast companies--get as much as you can for nothing.

Iran key in Pentagon war scenario

Report creates imaginary circumstances for global conflict

By RICHARD C. GROSS
United Press International

WASHINGTON — A Pentagon secret scenario envisions a world war being sparked by a Soviet invasion of Iran following the crumbling of the Ayatollah Ruhollah Khomeini's regime.

The scenario is an appendix to a secret 106-page Pentagon blueprint for directing military policy and force and resource planning between fiscal years 1985 and 1989 projected to cost nearly $2 trillion.

The document notes the scenario "is not a prediction of future events nor a guide for the employment of forces." Its intent is to present a sequence of events for planning purposes and provide assumptions on which to judge U.S. readiness to fight a war on many fronts.

Scenarios and contingency plans are routine for the military but the document provides a clear glimpse into Pentagon thinking about the U.S. response to Soviet actions and how a world war could erupt.

The scenario spans 125 days with D-day spread over 10 days as the Soviets invade Iran and the United States responds.

By "D-day minus 42," the Soviets and the Warsaw Pact countries begin selective mobilization and the U.S. re-positions its carrier battle groups. The scenario unwinds:

• D-day minus 37: Soviets initiate large-scale exercise in Western Russia and worldwide naval maneuvers. The U.S. dispatches more aircraft and naval forces to Saudi Arabia and the Rapid Deployment Force goes on alert.

• D-day minus 16: Soviets proclaim readiness to invoke 1921 treaty of friendship with Iran and step up rail traffic toward Iranian border; Poland, East Germany and Czechoslovakia prepare for a major military exercise; NATO orders reinforcements to wartime strengths.

The U.S. declares readiness "to do whatever is necessary to protect U.S. vital interests;" orders a yellow alert; requisitions Merchant Marine fleet; Rapid Deployment Force units move to embarkation points.

• D-day minus 12: The U.S. determines a Soviet invasion of Iran is imminent, orders partial moilization, dispatches the deployment forces to Middle Eastern countries "that have permitted the pre-positioning of materiel;" U.S.-based Marines move out.

• D-day minus 6: Soviet forces move toward Iran, with advance elements already in Iran; Iran requests international help; U.S. demands Soviet restraint; deploys forces into Iran.

• D-day: Soviets attack throughout Iran with 24 divisions of multiple spearheads; Saudia Arabia admits U.S. forces; Iranian forces oppose Soviets; U.S.-Soviet air forces engage over Iran; U.S. Air Force hits behind Soviet lines; U.S. and Soviet naval forces engage in Indian Ocean; U.S. units move out to reinforce NATO; Cuba heightens readiness; Washington declares full mobilization and begins conscription.

• D-day plus 4: Warsaw Pact prepares for invasion of Western Europe; West Germany reinforces troops and other NATO nations follow within a day; Turkey opens bases to U.S. forces; U.S. recommends full NATO mobilization.

• D-day plus 6: NATO orders mobilization; Allied shipping and transport aircraft made available for reinforcement and resupply of Europe.

• D-day plus 16: North Korea attacks South Korea; Warsaw Pact attacks central Europe with at least 90 divisions, attacks U.S. and NATO naval forces, lines of communication and island bases; France commits its forces to NATO.

NATO defends against attacks; U.S. forces in South Korea defend against North Koreans; U.S. deploys reinforcements to South Korea.

• D-day plus 30-40: "Engagement of U.S. and Soviet forces in Iran begins."

FIELD OF PLAY

LUCY - YOU ARE WELCOME TO RECOMMEND BACKERS

TV PROPOSAL TO RONALD FELDMAN FINE ARTS

Underwrite initial production costs for Central America scrutiny, centered at the Honduras-Nicaragua border near the Gulf of Fonseca.

We'll get it on the air and get it paid for. You get your money back, pending we cover costs, and you get raw material for a polished art-world production--our version, rather than various TV companies' versions.

CBS would probably take it. And we already know that WDR and AVRO in Germany and Holland want it.

Proposed advance commitment: $3,000.

OECD

CENTRAL AMERICA

We have been advised that the Big Pine III maneuvers in the Honduras this Spring will be more sizable, and perhaps more provocative, than military sources suggest.

We are ready to undertake a satellite investigation of those maneuvers. We would compare Spring 1985 data with Spring 1984 data, revealing changes between the two years and therefore the extent of military buildup. By getting an overview of the terrain, of infrastructure and of the layout of the buildup, we would be able to see the overall geometry of military plans. We would therefore have a sense of the options for movement, and of the chances for--and sites of--any escalation.

In past satellite monitoring projects, as of the Falklands, Beirut and the Iran-Iraq war, we have been able to anticipate military movements before they occur. By seeing the whole picture, and the lay of the land, we accurately foreseen ensuing military actions. Such foresight is not infallible. No firm predictions are proposed. But a sense of the options for opposing sides does arise, and the events that do ensue can probably, at least, be anticipated. We would seek to provide the US and world public with a sense, based on solid evidence of the terrain and military buildup, of what the US might do in Central America--not just what it says it will do there.

The cost of US telecast for a Central America satellite survey is $12,000. US or North American rights can be secured with a $4,000 payment. Such payment commits us to the purchase and processing of baseline data for any study of Central America, from Spring 1984.

We are able now to purchase data from February 1985, and to compare it with data from late January 1984. This data covers western Nicaragua and the frontier with Honduras. We expect to obtain data tapes by late March, 1985. Such tapes give us a jump on analysis of what will occur this Spring--starting in March.

February 21, 1985
updated February 28, 1985

OCEAN EARTH

Ocean Earth Construction and Development Corporation

ONE OF OUR MARKETS?
CONGRESS

U.S. Senator Is Investigating Military Buildup in Honduras

TEGUCIGALPA, Honduras, Feb. 5 (Reuters) — A United states Senator said today that the Reagan Administration appeared to be diverting funds from joint United States-Honduran military maneuvers to build permanent military bases in Honduras without approval from Congress.

Senator Jim Sasser, Democrat of Tennessee, arrived here on Friday to investigate a report from his staff about the reported construction from his staff.

"It appears," Senator Sasser said at a news conference, "that military commanders in Honduras are proceeding with a very susbstantial buildup of military facilities, in some cases, without congressional approval."

Senator Sasser, an opponent of President Reagan's Central America policies, is the senior Democrat on the military construction subcommittee of the Senate Appropriations Committee.

May Hold Hearings

The Senator said that upon his return to Washington he "may hold Congressional hearings to insure that the Government is not unilaterally increasing U.S. military involvement in the area."

The report by Senator Sasser's staff, made available here, said United States military comnanders "have revealed a plan for a port-airfield base at Puerto Castilla."

President Roberto Suazo Córdova has expressed support for the idea of a base on the northern coast, but Mr. Suazo and United States officials have said that no decision has been reached.

Plans to Visit Installations

Aides said Senator Sasser would visit all the installations built here during current United States and Honduras maneuvers, known by the name Big Pine II, to see whether they were being used for other purposes, including support for Nicaraguan rebels who are fighting the Sandinista Government.

Honduras has received increased United States military aid as a result of the Reagan Administration's efforts to stop what it calls the export of Marxist revolution by neighboring Nicaragua.

The six-month-long maneuvers have involved about 5,500 United States soldiers and 6,000 Hondurans and are scheduled to end on Wednesday.

Nicaragua has protested the maneuvers, saying Managua feared the exercises were a prelude to a United States-led invasion of Nicaragua.

FERNSEHREGIERUNG

Ocean Earth Construction and Development Corporation New York

Mit der wachsenden Verfügbarkeit digitaler Satellitendaten von der Erde als Ausgangsmaterial für Fernsehsendungen ergibt sich die Fernseh-Regierung. Der Zustand der Erde wird für alle erkennbar. Die Öffentlichkeit wird über die Bedingungen der eigenen Wohlfahrt informiert. Auflösungsvermögen und Observierungsfrequenz erhöhen sich ständig: innerhalb weniger Jahre werden deutsche, französische und holländische Satelliten ein Auflösungsvermögen von 20, 10 und 8 Metern erreichen. Kein ökologisches Mißmanagement, keine Umweltvergiftung, keine militärische Operation, kein Städtezerfall, keine landwirtschaftliche Veränderung, kein Rohstoffabbau bleibt unentdeckt. Der Große Bruder schaut zu, und er ist – als Fernsehregierung – wir.

(1) BEOBACHTUNG ÖKONOMISCHER RESSOURCEN: Falkland Inseln; Analyse von Pebble Island zeigt Kelp (Seegras) [Bild 1–3 grün kodiert] und Unterwasserlandschaft in 3-D-Projektion [Bild 4] zur Bestimmung idealer Lage für Kelpanbaukonstruktionen. Kelp kann, geerntet und fermentiert, enorme Mengen an Methan erzeugen, durch dessen Export ökonomische Unabhängigkeit ermöglicht wird.

(2) ÖKOLOGISCHE ÜBERWACHUNG: Amerika – Ostküste: Diese Satellitenbilder eines Sundes, umgeben von Sümpfen und Farmen, zeigen dort Einmündungen verschlammten und mit Insektizid- und Düngerrückständen beladenen Flußwassers und dessen Einmischung in die Meereswasserströmung [Bild 2, violette Zone]. Ähnliche Analysen zeigen durch Farbkodierungen CO_2-Vergiftungen, Eutrophie, Pflanzenkrankheiten, die Auswirkungen sauren Regens. Zur Zeit führt OECD eine solche Analyse der Schäden sauren Regens in Nordeuropa und der Belastung der oberen Adria durch verschmutzte Flüsse durch.

(3) MILITÄRISCHE INSPEKTION: Mit wachsender Schärfe der Satellitenbilder werden militärische Operationen vorausberechenbar. Überraschungsmomente und Geheimhaltungsversuche werden erschwert. In einer Mehrjahresstudie von Beirut zeigten wir 1982 (a) die fast flächendeckende Zerstörung der PLO-Stadtteile [Bild 3, gelb kodiert] und konnten (b) die Stoßrichtung des bevorstehenden israelischen Angriffs voraussagen. Den Verdacht über die Existenz eines libyschen Luftwaffenstützpunktes innerhalb des Hoheitsgebietes des Tschad konnte bestätigt werden [Bild 4]. Vor Jahren dort errichtet, diente er als Stützpunkt für die Luftangriffe auf den Süden des Tschad. Wäre dieses Bildmaterial schon vor einigen Jahren gesendet worden, hätte der Angriff vielleicht auf diesem Wege gestoppt werden können. Auf den Falklandinseln konnten wir größere ölverschmutzte Grasflächen entdecken (d. h. provisorische argentinische Landebahnen) sowie auch Küstenbefestigungen [Bild 3 der 1. Reihe]. Eingedenk der Ausrüstungslage britischer und argentinischer Streitkräfte konnte der Ort des britischen Angriffs vorauskalkuliert werden. Die Rechnung ging auf.

(4) KONSTRUKTIONSPLANUNGEN: Mit Hilfe von stereoskopischen oder Radar-Satellitendaten oder topografischen, gekoppelt mit Spektraldaten, können Computer wirklichkeitsnahe dreidimensionale Projektionen eines beliebigen Ortes erzeugen. In Verbindung mit Video können wir einen Flug durch jedes gewünschte Gebiet simulieren oder auch Daten von Konstruktionsplänen hinzufügen und so den Bau von Landstraßen, Dämmen, ganzen Hafenanlagen simulieren. Die Öffentlichkeit kann die Geschäfte der Politiker und Technokraten beobachten – noch bevor eine Entscheidung gefallen ist – und zwar in Farbe, perspektivisch, aus allen möglichen Blickwinkeln in einer Art Stadtrat via Fernsehen: Television Government.

Produced by GLOBAL SURVEY, an operation of OECD. Regional planning and monitoring contracted worldwide. Video: Bill Dolson, Colen Fitzgibbon, Ingo Günther, Wolfgang Staehle. Image Processing: George Chaikin, Paul Sharits, Glenn Steigelman. Terrain Modeling: Carl Weiman. Televsion: Peter Fend, Taro Suzuki. Main Office: 54 Franklin Street, NY, NY 10013, 212-219-3490. In Germany: Postf. 270147, 4000 Düsseldorf 11.

From catalog of exhibition in Berlin, 1984.

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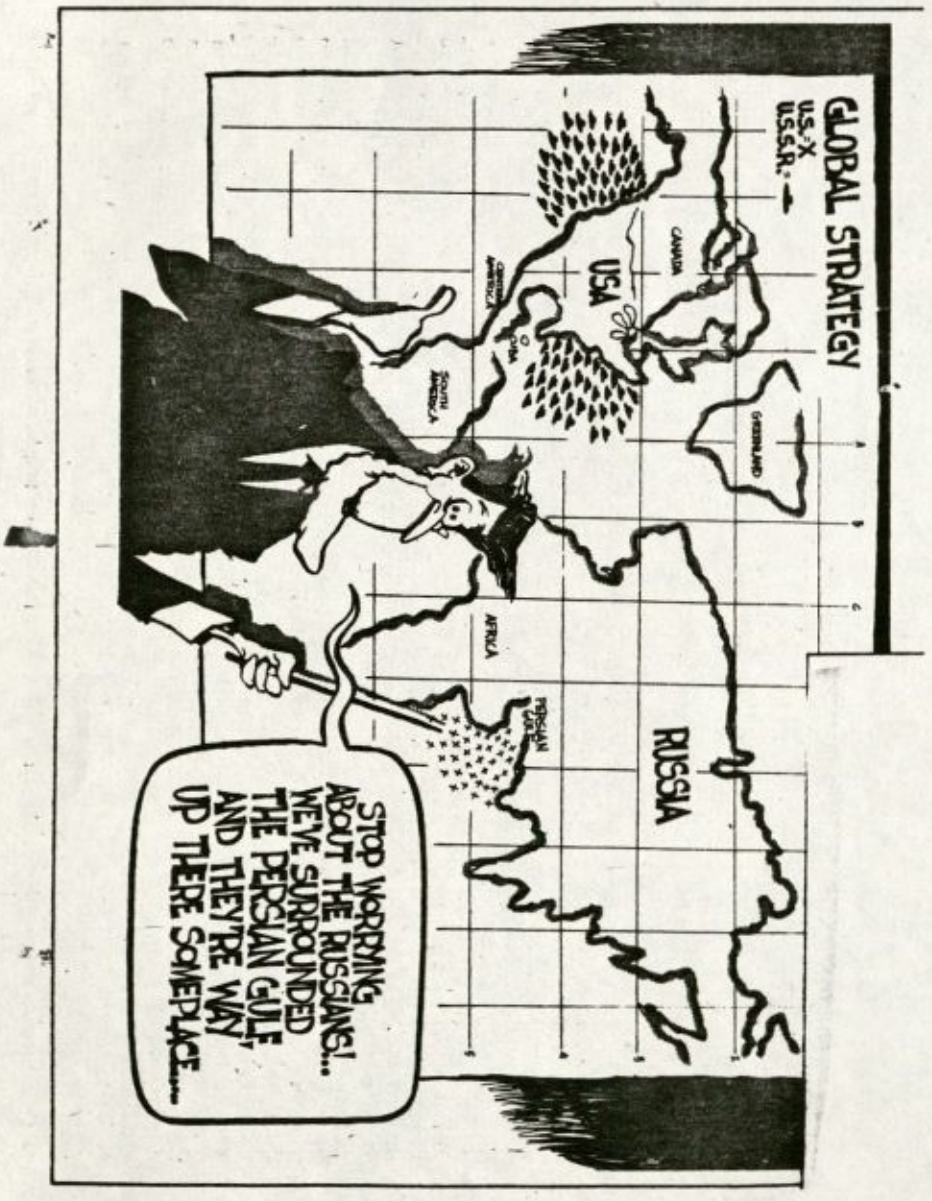


We would like to give Mr. Reagan a nervous breakdown.

February 1, 1985

PUBLICATION

Financial Times	Michael Field
CBS Evening News	David Martin, Bill Healey
Antenne 2 Samedi Magazin	Bruno Albin, Philippe Gassot
Sunday Times	Dilip Hiro, James Adams, Cal McCrystal, Steve Milligan
New Scientist	Peter Fend & Ingo Gunther
South	Peter Fend & Ingo Gunther
The Guardian	David Fairhall
Sunkei Shimbun, Sunday	Eve Thorson (London)
Royal Institute of International Affairs, London	Valerie Yorke
Persian Weekly (Kayhan)	former Shah outlet; frontpage lead

IMPENDING

ABC World News Tonight	John McWethy
Swedish TV 2	A. Soederberg
AVRO magazine	Peter Varenkamp
Israeli television	via Ben Elkerbout, Holland
WDR magazine (major TV budget)	Klaus Hennig
Die Welt	Ingo Gunther & Peter Fend
Aviation Week & Space Technology	Bill Dolson
Jane's Defence Weekly	Derek Wood, Bill Hutchinson
BBC One Radio	Steve Chilcott
Bild der Wissenschaft	Ingo Gunther & Peter Fend
Die Zeit	R. Ginsburg

Iraq's dam pushing back Iran's border

by James Adams and Dilip Hiro

ANALYSIS of American satellite data suggests that Iraq is using a huge artificial lake to push its frontier into Iran, and enhance its ability to seize Abadan island in the strategic Shatt al Arab waterway. Until now, it had been thought that the only Iraqi waterworks were in the marshland around the Majnun Islands further north and that they were designed purely for defensive purposes.

The analysis of the data from a US Landsat remote-sensing satellite has been carried out by Peter Fend and Ingo Gunther, directors of Ocean Earth Corporation, an American company that analyses satellite data for economic and environmental purposes. Their findings will be published this week in the magazine *New Scientist*.

The existence of the lake, one of the largest man-made stretches of water in the middle east, has apparently been undetected for the past seven years. The construction necessary to create it first began in 1977, before President Saddam Hussein became leader of Iraq and while the Shah still ruled Iran. Work is still going on.

The lake is situated just north of Basra, Iraq's second largest city. It is seven miles long and eight miles wide. Running in a tongue to the north-west is a flooded trench 20 miles long and one mile wide. To the north, running alongside the border with Iran, is another 30-mile-long flooded trench. Water for the project is drawn from the Shatt al Arab, which marks the junction of the Tigris and Euphrates rivers.

Trench (far right) from lake breaches Iran's frontier

Mystery surrounds the exact purpose of the project, which experts estimate has cost well in excess of $1 billion.

Peter Fend of Ocean Earth believes the lake and the trench have defensive and offensive military applications. He says: "The trench is a very useful barrier defence in an area that has seen some very heavy fighting. And in the south-east, a new trench is being built that is already 10 miles long and has crossed the Iranian border." Fend argues that if this trench is extended five miles it will join up with the Karun river, which runs through Iran. He says that if the trench in the north is extended 40 miles it will join up with the Kharkeh river, which also flows through Iran.

Fend says: "If the trenches to the north and south link up with Iranian rivers, then Iraq will be able to control large areas of Iran." Iraqis would not only be able to control Iranian water supplies in this way, but they would also be in a position to flood Iranian land. Fend adds: "This would also give easy access to Abadan Island through a dry peninsula in the north."

Military strategists are not convinced by this argument, although they are unable to suggest a reasonable alternative explanation. However, it is pointed out that Iraq has ambitions to develop its agriculture in the south of the country and the lake could be used for that purpose.

What may have happened is that an investment in agriculture has been used and expanded by the military to their advantage.

● IRAN is believed to be considering chartering two of the world's biggest oil tankers on a long-term basis to serve as floating oil stockpiles out of range of the Iraqi air force, Lloyd's list said this weekend.

کیهان

چاپ لندن

بنیانگذار ومدیرمسؤول: دکترمصطفی مصباح زاده

شماره ۲۹ . پنجشنبه ۲۷ دی ۱۳۶۳ خورشیدی - ۱۷ ژانویه ۱۹۸۵ مسیحی

توطئه عراق برای تغییر مرزهای ایران فاش شد

عراق توطئه تازه‌ای را برای تغییر مرزهای خود با ایران آغاز کرده است. هدف این توطئه بلعیدن بخش هایی از خاك ایران ازطریق ایجاد دریاچه‌های مصنوعی است.

گروهی از تحلیل گران امریکائی از روی عکس هائی که ماهواره‌های آمریکائی از مرزهای ایران و عراق برداشته‌اند، اعلام کردند که عراق با به‌آب انداختن اراضی وسیعی در مرزهای خود با ایران تلاش می کند مرزهای بین المللی خود را با ایران به‌داخل خاك ایران عقب زند.

به‌گفته این منابع دریاچه‌های مصنوعی که در مرزهای جنوبی ایران و عراق بوجودآمده است، بسرعت گسترش می یابند و ظرفیت آنها برای بلعیدن جزیره آبادان در دهانه شط العرب هر روز بالاتر می رود.

گزارش پیترفند و اینگوگاندر، مدیران شرکت «اقیانوس - خاك» - که مطالعات ماهواره‌ها را در زمینه انرژی و تغییرات جغرافیائی بررسی می کند - قرار است در مجله «دانشمند جدید» به‌چاپ برسد.

در گذشته تصور میشد که عراق فقط منطقه نیزارهای مجنون و باتلاق های هویزه را برای جلوگیری از پیشروی ایران به‌آب انداخته است.

دریاچه مصنوعی در مرز جنوبی ایران و عراق - که از هفت سال پیش ایجاد شده بود - تا کنون مورد توجه قرار نگرفته بود.

این دریاچه در شمال بصره واقع است و ۱۱کیلومتر عرض و ۱۳کیلومتر طول دارد و به‌سوی شرق و جنوب شرقی بصره متمایل است. آب این دریاچه از شط العرب گرفته میشود و از نقطه تلاقی دجله و فرات توسط کانالهای زیرزمینی بسوی منطقه‌ای که دریاچه در آن واقع شده است، هدایت می شود.

این طرح که بیش از یك میلیارد دلار هزینه آن شده است ازنظر جمهوری اسلامی نیز مخفی مانده بود. به‌همین دلیل در عملیات بصره، نیروهای جمهوری اسلامی بسبب برخورد ناگهانی با این دریاچه نتوانستند به‌هدف های نظامی خود دست یابند.

به‌گفته یك کارشناس نظامی این طرح - که در آغاز جهت مشروب کردن زمین های زراعی جنوب و ایجاد منطقه کشاورزی بوجود آمده بود - اینك وسیله‌ای در دست نظامیان عراقی است که ازطریق آن در درازمدت مرزهای خود را با ایران به‌سود خود تغییر دهند و پس از آنکه نتوانستند ازطریق تجاوز نظامی به‌خاك ایران هدف های خود را عملی کنند اینك با بهره‌برداری از دریاچه‌های مصنوعی نیت خود را عملی می کنند.

عراق امیدوار است که با تغییر مرزهای ایران در چارچوب این توطئه تازه بتواند در مذاکرات آیندهٔ صلح به دو هدف مهم برسد: هدف اول ایجاد استحکامات نیمه طبیعی تازه برای دفاع از بصره و منطقهٔ نفتی مهم رمیله شمالی است. ایجاد دریاچه‌های مصنوعی، هرگونه حمله مستقیم نیروهای ایرانی را به‌جنوب عراق بمراتب دشوارتر خواهد کرد.

هدف دوم رژیم بعثی به‌دست آوردن کنترل منابع عظیم نفتی است که در مناطق مرزی ایران و عراق قرار دارد. این منابع که میزان آن چند میلیارد بشکه است جزو غنی ترین ذخایر موجود در خاورمیانه به‌شمار میرود.

جمهوری اسلامی تا لحظهٔ چاپ «کیهان» (دوشنبه بعدازظهر) در این باره اظهارنظر نکرده بود.

(گزارش‌های ویژه را در صفحه ۱۴ بخوانید)

تصویر فوق دریاچه مصنوعی شرق بصره را در ژانویه ۸۳، و وسعت گرفتن آن در اوت ۸۴ را نشان می دهد موقعیت دریاچه در مرزهای دو کشور در نقشه مشاهده میشود.

سه‌قلوی «تاریخی» ایرانی در لندن متولد شدند

لندن - یك زن ایرانی در این هفته با یك زایمان هیجان انگیز وارد تاریخ پزشکی شد. خانم شهلا اخگر - که قبلا عقیم بود - نخستین سه‌قلوی آزمایشگاهی را جمعه گذشته در لندن بدنیا آورد. خانم اخگر به‌سبب ابتلاء به سل شکم، عقیم شده بود.

سه‌قلوها همگی پسر هستند و با کمك دکتر یان کرافت یکی از معروف ترین کارشناسان بچه‌های آزمایشگاهی در انگلستان، بدنیا آمدند. مادر و سه‌قلوها در بیمارستان خصوصی هومانا در محلهٔ سینت جانزوود لندن استراحت میکنند و حال همهٔ آن ها خوب است.

خانم اخگر ۲۹سال دارد و در ماه مه گذشته پنج نطفه در رحم او کار گذارده شد.

عروس ودامادایرانی قربانی سقف به

بازرگان: انقلاب به‌بن بست رسیده‌است

تهران - انقلاب اسلامی به‌بن بست رسیده است و آینده‌ای میکند.

نهضت که رهبری آن را مهدی حاکم ناراضی و ناراحت اند. اعم از تحصیلکرده و اداری، مرفه شهری و

Persian Weekly (Kayhan), Jan 15, 1985

This was the leading newspaper under the Shah, and they have asked for more material from us.

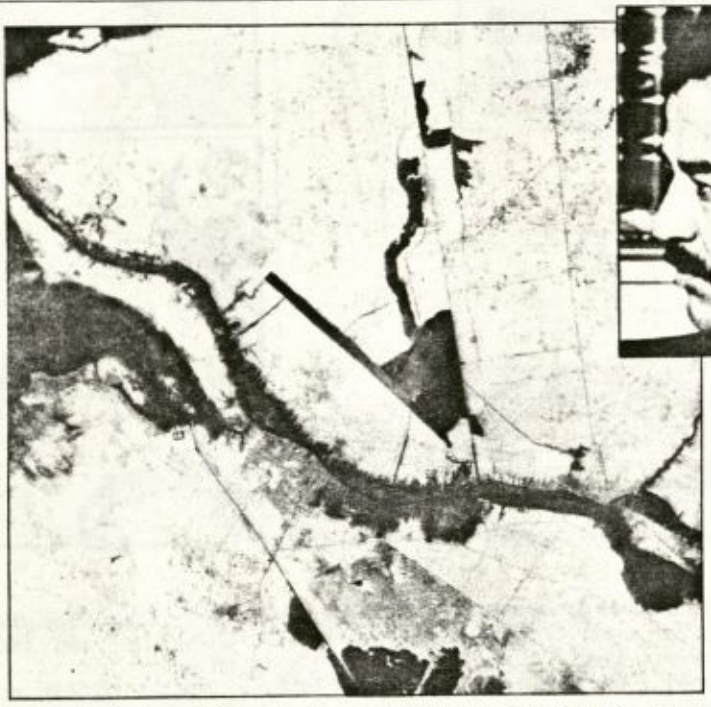
Iraq's secret weapon: water

Iraq has secretly built a giant artificial barrier of water in a desert battle zone of the Gulf war. The cost so far is more than $1 billion. Analysis of satellite pictures suggests that the lake may ultimately enable Iraq to rearrange the area's rivers and annex the crucial Shatt al Arab waterway and the oil-rich province of Khuzistan

Peter Fend and Ingo Gunther

IN 1981 the Iraqi government claimed that it had a "secret weapon" in its year-old war with Iran. Until now speculation about the nature of this weapon has centred on Exocet missiles and poisonous gases. But a series of images from satellite-data obtained between 1977 and 1984 suggest that the weapon is a massive piece of hydrological engineering in the salt flats, east of the port of Basra. Iraq has built a huge water barrier that is more than 50 kilometres long and up to 10 kilometres wide—and it is still growing.

The water barrier may eventually allow Iraq's President, Saddam Hussain, to fulfil his promise, made in December 1980 at the start of the Gulf war, that "all areas occupied by Iraqi troops in the Iranian province of Khuzistan ... will remain under Iraqi dominance and will be annexed to Iraq and integrated into the earliest maps of the country."



Camera Press

Water in the desert: The giant water barrier acts as both defence and an arm of attack for Iraq's President, Saddam Hussain (top right)

Among the ruins of the ancient civilisation of Susa in Mesopotamia lie about 10 000 square kilometres of salt-encrusted flats. These flats were once irrigated fields. They are now barren of life, except for migrating birds and insects during the occasional floods. They are good for little except tank battles. In the past five years, they have been the scene of the most heavily contested battles of the war between Iran and Iraq. Up to half a million people have died there. The key to the future of this wasteland, and to the war itself, may lie in a hydrological engineering project being undertaken by the Iraqis.

The evidence for this lies in analysis of a series of photographs and video tapes of the war zone, compiled from data collected by the US's remote-sensing satellite Landsat.

In the autumn of 1980, Iraq invaded Iran with the avowed purpose of gaining control of the entire Shatt al Arab, including the oil terminal at Abadan island, and "liberating" Khuzistan. By April 1981, the Iraqis had completed a giant water-filled trench east of Basra. It was 1·2 kilometres wide, 30 kilometres long and 3 metres deep—just deep enough to drown a man. It is not clear when the work started, but it may have been as early as 1977.

The Iraqis filled the trench with water from the nearby Shatt al Arab waterway. Giant pumps, detected by satellite imagery, sent the water in and out through four narrow canals.

The huge trench looks like an extremely expensive, but extremely effective defensive moat for Basra which straddles the only relatively dry land across southern Iraq. But there could be much more to it than that.

While the diversion of the waters of the Shatt was being built, the Iraqis pushed deep into Khuzistan. Most military analysts expected a swift Iraqi victory. Yet, despite their obvious superiority in the attack, the Iraqis baffled experts by not pressing on with the advance, and not committing aircraft or infantry. They appeared unwilling to consolidate a bridgehead across the one natural defence for the Iranians, the Karun River. Then, starting in the winter of 1982, the Iraqis retreated. Since 1982 Iran's "human waves" have attacked Basra in vain, foundering in the "killing grounds" east, north and south of that moat.

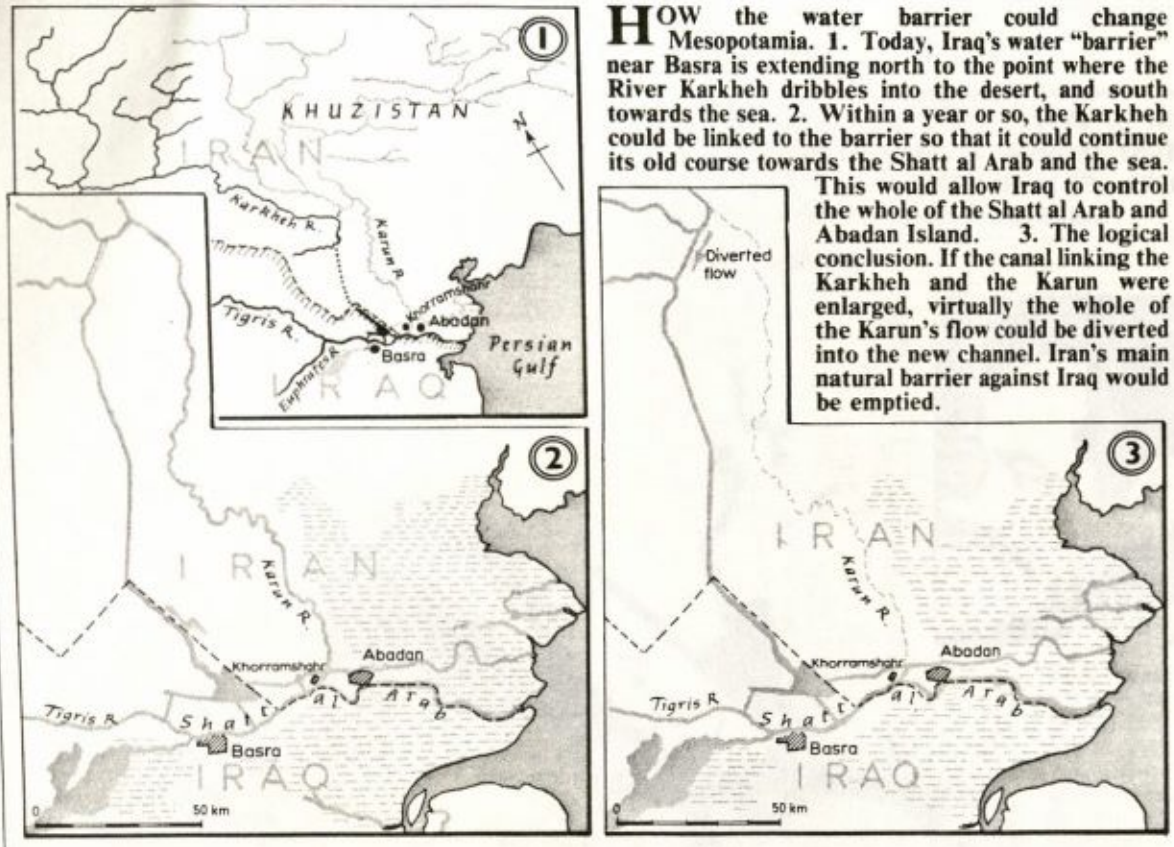
Since those futile Iranian attacks upon Basra began in 1982, the water diversion has more than tripled in size. By January 1983, it had been extended with a lake, 10 kilometres wide, at the southeast end. Two canals have been built from that lake. One narrow canal extends through Iranian territory towards Khorramshahr, and another shallow channel, which is two kilometres wide, heads due north. Construction continued through 1984. The original trench effectively blocked Iranian attacks on Basra, but the lake and canals have no obvious purpose in defending Iraqi territory. So why have they been built? One theory given to us is that the extensions are being made by the Iranians, not the Iraqis. Iran, it is said, wants to empty the barrier before launching an assault on Basra. But the evidence of the satellite data contradicts this. By July 1984, the water body extended 40 kilometres north and 10 kilometres southeast towards Abadan Island. The northern channel goes uphill—not very useful for draining the lake. And the channel heading southeast ends in marshland, from which drained water would inevitably back up.

Wherever the canals go, the Iraqis position their arsenal of heavy weapons behind them. As the body of water grows, the Iraqis advance. What was first a shield for defence had become a shield behind which to conduct an offensive.

In the southeast, the Iraqis have advanced behind the water shield, back into Iranian territory. The advances also allow Iraqi tanks access to the sole stretch of dry land leading to Abadan. In its previous offensives, Iraq had to attack Abadan from marshlands.

So far, the Iraqis have excavated some 400 million cubic metres of heavy salt-laden clay to build the lake and canals. Much of the work has been done under fire from Iranian troops. Civil engineers we have spoken to say that excavation alone must already have cost at least $1 billion. Moreover, the project was underway before or very soon after Iraq attacked Iran in 1980. It seems certain, therefore, that the project was conceived, planned and approved *before* the initial attack. We conclude that the structure is a central part of Iraq's military strategy in the Gulf war.

Inside present-day Iran, two river systems descend to the Mesopotamian Plain and the Shatt al Arab from among the mountains to the north. They join the more famous waters of Iraq's Tigris and Euphrates. One of these Iranian rivers, the Karkheh, passes through the ruins of the ancient Mesopotamian city of Susa, and then dissipates into countless abandoned canals and exhausts itself.



HOW the water barrier could change Mesopotamia. 1. Today, Iraq's water "barrier" near Basra is extending north to the point where the River Karkheh dribbles into the desert, and south towards the sea. 2. Within a year or so, the Karkheh could be linked to the barrier so that it could continue its old course towards the Shatt al Arab and the sea. This would allow Iraq to control the whole of the Shatt al Arab and Abadan Island. 3. The logical conclusion. If the canal linking the Karkheh and the Karun were enlarged, virtually the whole of the Karun's flow could be diverted into the new channel. Iran's main natural barrier against Iraq would be emptied.

The water lands up in salt pans, occasional playas (temporary salt lakes), and vast areas of white salt flats.

The second river, the Karun, is twice as large. It loses up to 70 per cent of its water to evaporation, but still gets through the desert to the Shatt. In so doing, it forms a natural line of defence for Iran against Iraq. The Iranians have deliberately flooded land around the Karun several times to halt Iraqi advances.

There is sizeable evidence that Iraq's ultimate objective in its desert waterworks is to destroy this line of defence and advance into Khuzistan, which is populated largely by Arabs rather than by Iranians.

The Iraqis have worked patiently, under direct exposure to enemy fire, to restore a small flow of fresh water from the Karkheh to the lowest reaches of the Shatt al Arab. If this were extended to create a proper river flowing south into the Shatt or the Bahmanshir, the Iraqis would have extraordinary potential for radically altering the drainage patterns of the region.

The economic and political consequences would be vast. For instance, a short canal already links the Karun and Karkheh, before the latter runs dry in the desert. Iraq could enlarge this canal and divert water from the Karun into the Karkheh (see diagrams above). This would prevent flooding along the Karun, reduce its flow and make it much easier for Iraqi forces to cross in an invasion.

We cannot, of course, be sure what the Iraqis will do or intend to do. But we can determine what is reasonable in terms of hydrological engineering, and assess the potential military use of such work. But the benefits for the region go beyond military ones.

If a steady flow of fresh water were re-established through the Karkheh valley to the sea, the salt flats could be flushed out, drained of salts, and life could return.

During the flood season, some water from the Karkheh trickles south and collects in hollows north of the Shatt al Arab and forms temporary salt lakes. Since digging their excavations, the Iraqis have replaced these temporary lakes with a single body of fresh water flowing to the Shatt and the sea. They have also gathered waters trickling down from the north first into some holding ponds and then into a wide channel leading into a rather broad lake, from which drainage continues further, by several canals, to the Shatt al Arab and the sea.

The great enemy of water engineering in the desert is, of course, evaporation. Up to 90 per cent of the flow of the River Tigris, for example, is lost to evaporation between Kut, halfway towards Baghdad, and the sea.

Moreover, irrigation projects increase rates of evaporation. They spread waters out over shallow pans with modest flows and no clear outlet. Either the water is absorbed in the ground and by plants, or it evaporates. One consequence is an accumulation of salts in irrigated soils. Salts make the land useless to life. This is the legacy of Susa. The irrigation system of that ancient civilisation eventually poisoned the soil and killed the River Karkheh.

The solution is to drain the soils to allow water to flow more quickly through the system. This reduces the amount of salt the soil absorbs, and increases the water's capacity to carry away salt. By building a large lake and single channel in a salt-encrusted terrain, and in integrating this with freshwater from the Shatt al Arab, the Iraqis will create an effective salt-drainage system. Whether by accident or design, they have begun to execute exactly what is necessary to make the desert return to life.

A hydrologist would recommend that the Iraqis continue the excavation of the channel northwards for a further 50 or 60 kilometres to meet the River Karkheh. The steady rise in altitude along the channel from 3 metres above sea level to 40 metres would ensure a gravity flow.

The volume of the Karkheh is modest. The flow of water averages 155 cubic metres per second. To fill what has been excavated so far, the Shatt would need to give up about 500 m^3/sec, a considerable part of its flow. This means that the saline flood plain of the Karkheh now receives a volume of freshwater more than three times greater than normal.

Once the Karkheh was connected, the intake from the Shatt could probably be disconnected, and the entire lake and river system would maintain enough head, force and volume to retain its size.

But, to ensure sufficient water, hydrologists could recommend adding water from the Karun, using the existing canal linking the Karun to the Karkheh. The Karun has an average flow of 330 cubic metres per second. Such a link could virtually empty the Karun.

In this war, the consequence of feeding waters from the Karun into the parallel river of a revived Karkheh would be to destroy the main defence of the Iranians against Iraq—both as a river and as a means for flooding surrounding land to prevent enemy advances.

The heavy artillery and armour of the Iraqis could move across once flooded lands and capture Khuzistan.

Even if the fortunes of the war prevent the completion of these hydrological works in the way that we have described, Iraq has already accomplished a major feet of engineering with important consequences for the area, whoever controls it. □

Peter Fend and **Ingo Gunther** are officers of the Ocean Earth Construction and Development Corporation, which produces video earth surveys and earth engineering studies from New York and Düsseldorf.

A Guardian news article called "Mystery of Iraqi Ditch" reports that the "British military intelligence assessment is that the satellite pictures have merely disclosed a massive defense work."

A "massive defense work", we presume, should be stable, and the "Iraqi ditch" is not. It cannot be maintained in its present state. To retain its volume, and to therefore protect the border, it must receive waters from the Shatt-al-Arab--waters enough to lower the river level at Basra and make that city ineffective as a port. Alternatively, it can receive waters from the Karkheh River, to the north. But that plan works best if the "ditch" is extended up to the Karkheh, well inside Iran. To stay effective, the ditch must either draw more water from inside Iran, and must therefore invade Iran, or must continue to draw water from the Shatt al Arab and make that primary economic artery useless.

Supposition that the structure is merely a "defense work" is undercut further by the fact that by mid-1984 it entered Iranian territory at two points, at one point inward 10 km, and the apparent fact, reported by Iraq, that Iraqi forces have again started to invade Iranian territory.

The recent Iraqi incursions are said to be near the Majnoon Island salient maintained by the Iranians inside Iraq. Since attacks across the waters surrounding Majnoon would be fruitless, we suppose that they are made on the dry land inside Iran and behind the Iranian salient. This accords with the direction of growth of the ditch, and therefore the direction of movement by the Iraqi forces.

As a massive river and lake receiving waters from the Karkheh, as well as the Shatt-al-Arab, the ditch is likely to accumulate waters trickling down from the north in any event, and particularly during flood season. Some degree of canalization to the north already exists. It would be fairly easy to further that canalization with more excavation, to form a single channel of water collection and flow. It would be easy, and reasonable, to continue excavation to the north and bring the ditch closer and closer to a more natural source of water--the Karkheh. The line of water along the present Iran-Iraq border would then be stabilized, making what might be considered as a "defense work" durable and complete. The defense work, then, better performs its function when it enters Iran, up to the Karkheh.

We cannot imagine the Iraqis maintaining the present, 1984 configuration of the water barrier for decades. They would then have to sacrifice Basra as a port (if eyewitness accounts regarding the port are corect), and they would face the grim prospect of continuously filling an extendible body of water, but never enough to let it extend any further.

DRAFT FILED
WITH SOUTH, LONDON
INTRO? (commissioned)

By 1977, before the Iran-Iraq war, the Iraqis were building a giant salt-drainage project in the alluvial fields of a river which had long ago exhausted itself deep inside Iran. To succeed, the project had to be extended into Iran up to where that river now ends. By consent or by force, the Iranians would have to cooperate.

It so happens that this salt-drainage project has served as a barrier to attempts by Iran to travel across Iraq and gain control of the Head of the Gulf. It also so happens that probably half, and perhaps more, of the Iranian casualties in the war have been caused by or taken place at the salt-drainage project. And it so happens that the project, in gradually expanding during war, has become an extendible moat behind which the Iraqis can advance. The Iraqis have extended the moat to recover lost territory and to return to the political border. They have even begun to slice into Iran behind the moat. Why should they not continue to slice in?

DRAFT FILED WITH LONDON

Comments furnished by Ocean Earth

TEXT

The scarce Landsat data available for the southern front of the Iran-Iraq war shows that Iraq has built an enormous body of water, behind which it has successfully defended the key passage throughIraq, at Basra, and has regained Iraqi territory once lost to the Iranians. The data also shows that construction was underway in 1977.

The Iraqis call this body of water Fish Lake, and they say it was started as a fisheries project. A giant trench 25 km long, 1.2 km wide and 3 meters deep was dug out parallel to the Shatt al Arab, about 10 km to the east. Waters from the Shatt al Arab were conducted in and out of th trench through narrow canals, assisted by giant Japanese pumps. According to civil engineers active in the Middle East, excavation of this structure alone cost at least 300,000,000 pounds.

To reporters, the Iraqis have pointed out housing for fish breeders, shore facilities and a large, civil power station. They say the enormous developmenet project has unfortunately been converted into a military defense structure, with a threefold expansion in size. Construction has progressed under intense enemy fire.

At this time, we have found no authorities on international fisheries develoment, or agricultural development generally, with any knowledge of a massive,capital intensive fisheries project nearBasra. We

have also found no engineers who believe, from the satellite evidence, that the initial 25 km trench was built for fish breeding or farming. We understand that fisheries developmenet in Iraq has been concentrated on existing fishing practices among the marsh Arabs. We doubt the Iraqi explanation for Fish Lake.

Economic observers say that a large nunmber of construction contracts were apparently let near Basra in the late 1970s and into the war, only to Iraqi companies. No facts could be obtaind on what was being built. The usual boasting about development projects was replaced,in this case, by secrecy. No Western construction companies active elsewhere in Iraq, on similar excavation and channelprojects, have been found to have any knowledge of Fish Lake. We assume a military purpose.

Fish Lake straddles a faultline a ridge of reltively dry ground cutting across the vast marshlands covering mostof the Mesopotamian valley. This faultline has allowed for easy passage from one side of the Gulf to the other. Hence the location of a trading center at Basra. Hence, also, the strategic importance of Basra. If that city is taken, and if the dry-land corridor is crossed, then Iraq is split apart and the invading force has direct access to the entire Arabian Peninsula. Other crucial cities in Iraq, such as Baghdad and Kirkuk, are relatively hard to reach, and their seizure could be as hollow a victory as Napoleon's capture of

Moscow: if one takes those targets, one is surrounded, far away from other objectives. But if one takes Basra, one has almost traversed Iraq, one then threatens other Arab states, and--in the case of Iran--one has consolidated a grip on the head of the Gulf and its predominantly Shia population. If a war were to break out between Iraq and Iran, Iraq must above all defend Basra. It must above all deny possession of theHead of th Gulf and the entire Shatt al Arab. If only for defensive and precautionary purposes, the construction of "Fish Lake" makes sense.

We suppose, then, that the Iraqis were building a large military structure against Iran by 1977, three years before they invaded Iran and two yearsafter they submitted, unhappily, to the border terms of the 1975 Algiers Agreement. The Baathist regime in Baghdad had vowed to undo that border agreement and to regain control at least of the entire Shatt al Arab. The regime had also spoken much of "liberating" the southwestern Iran province of Khuzistan, which they called "Arabistan." In 1977, there were clearly military strategists in Baghdad who peeparing plans for a war with Iran. Although the Shah sought to dominate the Gulf, his regime voiced no dissatisfactions about the 1975 Algiers Agreement and no designs upon Iraq. Rather, the Shah was struggling to maintain his grip on outlying provinces, notably those alongside Iraq--including "Arabistan." In 1977, the Shah was in power but was weak: as the Iraqis have learned since they invaded Iran, they would probably have fared better in Khuzistan against the Shah, who was not liked, than against the Ayatollah Khoumeini, whose moral authority has unified Iran. We question the argument that Iraq attacked Iran because of the

Revolution. They may have harbored plans for war, for an attack, all along, and may have preferred to attack a weak Shah or transitional regime than to confront the Ayatollahs.

We have argued that a giant trench alongside the Shatt al Arab east of Basra was built for military purposes, that it was built in anticipation of a war with Iran, and that Iraq more than Iran would be the aggressor in such a war. We have argued, then, that Iraqi offensive plans against Iran included construction of Fish Lake.

According to hydrologists and engineers, the body of water first excavated in 1977 and subsequently expanded through now would most likely function to drain salts. Leaving aside military considerations, it could most reasonably be developed to restore the flow of fresh waters through the vast expanse of salt-encrusted elluvia inside both Iraq and Iran remaining from ancient irrigation practices on the River Karkheh, inside Iran. The Karkheh once flowed in force to the sea. The ancient city of Susa dissipated it among countless irrigation canals and eventually produced 10,000 square km of saltified, useless terrain. To restore any of this terrain to life, one must pump fresh waters through it and restore drainage patterns in which the encrusted salts can leach out. The initial 25 km trench of Fish Lake assures a flow of fresh waters within the alluvial slope. The next task, hydrologists say, would be to collect what few waters feed into the area into ppols and trunks. and set in a gradient from upland to the sea. To complete the project, one would extend a trunk channel upstream to where the Karkheh now ends, 50 km inside Iran, and to extend another channel

(unlike the slim, pump-aided intake and outlet canals for the initial Fish Lake) out to the Shatt al Arab or Karun River, hence to the sea.

Precisely this development has taken place since 1983. A 2-km broad channel has been extended 35 km northwards within 18 months, between January 1983 and late 1984, and a 15 km long canal has been extended to within 10 km of the Karun River and the north bank of Abadan Island in the southeast. The Iraqis have reported that these extensions were Iranian attempts to drain waters from Fish Lake; satellite scrutiny discounts such reports. The northward channel extends uphill, receiving ever-greater trickledown from the Karkheh to the north, and the southeastern canal ends most recently in a marsh, allowing little outflow. More ominously, the Iraqis come in behind all extending canals with elaborate fortifications, bringing to bear on their side of outstretching moats the four-to-one superiority in firepower of their heavy weapons. And the extending canals are slicing already into Iranian territory.

On January 28, the Iraqis announced a three-pronged offensive in the southern front into Iranian territory. They modified this report shortly afterwards, replacing "territory" with "positions." Given the growth of the water barrier, and given the hydrological/salt drainage function of such barrier as it extends north 50 km inside of Iran and southeastward north of the Iranian city of Khorramshahr, to cut off Iran's Abadan Island, we reasonably suppose that Iraq seeks to re-enter Iranian territory and to gain control of what was once the Karkheh Basin, as well as Abadan Island.

We are told that Iraq would not dare to provoke the Ayatollah Khoumeini again with a re-entry into Iran. But since the Ayatollah refuses whatever to talk peace, and insists only on a victory over Saddam, then Iraq may have no choice but to again attempt an invasion. Iraq may have no choice but to extend its water defense system near Basra into an offensive shield behind which to press both north to the Karkheh River and south east to the Karun at Abadan Island. It may have no choice at least to extend the 2-Km wide channel northwards, into Iran, simply to outflank and finally overcome the Iranians on Iraqi territory at North Majnoon Island.

There may be larger designs. To speculate now may be premature. We observe, however, that Iraq's initial invasion of Khuzistan, though lacking in vigor or coordination, was based on plans prepared for Iraq by British advisors in 1950. Since 1972, those British advisors have been replaced by Soviet advisors. The massive waterworks built since 1977, since two years after the Algiers Agreement "imposed" on Iraq, demonstrate an extraordinary sophistication in military and hydrological engineering -- a sophistication which no construction company we have consulted so far can fathom, and which is most developed now in the Soviet Union. If the waterworks were extended north and southeast, to form a throughflow of fresh waters among salt flats from the Karkheh River to the Gulf, then they could also be tied in with waters normally flowing to what military analysts say is the "main natural defense barrier" of the Iranians in Khuzistan against the Iraqis-- the Karun River. Have there not been considerations, at least, of the potential --upon reaching targets almost reached in 1981 north of Ahwaz--to divert waters from the Karun and advance across

Khuzistan?

Certainly the Soviets would like to see a fragmentation of Iran, a loosening of Khuzistan from any regime in Teheran. And certainly the Soviet advisors since 1972 would have tried to improve on what plans for taking Khuzistan were prepared by the British in 1950. And certainly the Soviets, from their Stalingrad and Leningrad experience, have learned to lure an enemy into attacks on defenses which first exhaust them and then encroach upon them. Given the long-standing desires of the pan-Arabists in Iraq to "liberate" Khusistan, and given that the Iranians have exhausted much of their might and prestige at Fish Lake, might we not suspect a long-term offensive function of the Fish Lake waterworks--as part of a Soviet-style strategy to divest Iran of Khuzistan?

CONCLUDE? OUR THESIS

of its first invasion in 1980-1, and given the relatively few losses incurred in its retreat to behind the defesne at Bara, with datastrophic losses since then for Iran, ~~we may assume that~~ and given finally the need for Saddam Hussein to justify the war ~~effort~~ by winning at least some territory in Iran, by forcing some adjustment in the Algiers Agreement, we may expect that Iraq ~~will soon launch new offensives back~~ will soon begin to ~~attack Iran~~ invade Iran--or at least impose its will.

Regardless of military fortunes, there remains the fact of a giant body of water ~~which~~ 50 km river is extendible for another 50km ~~into~~--- up to the Karkheh River, in Iraq, and which is extendible for another 7 km to the Bahmanshir River, on the north side of much sought Abadan Island, and which in its completion to the Karkheh and Bahmanshir Rivers would flush out the salt flats below the Karkheh which now render useless nearly 10,000 sq km ~~of land~~ along the Iran-Iraq frontier. There remains the potential for reviving now useless terrain along the present frontier, and of expanding the saltwater, tidal marshe system along the Head of the Gulf, to the genefit of the ecology of the Gulf and its basin. There remains the potential, in effect, of building a mammoth fisheries project, wild rather than farmed, which undoes the damage of irrigation projects from ancient civilizations. At present, the Iraqis ~~stand ready to~~ -- prepare to appropriate this entire rggion. Would they, in success, realize the ecological potential? Or might thez, in partnership with Iran, cooperate on ~~what~~ completing ~~that~~ has so far been undertaken?

Comments furnished by Ocean Earth.

— we're doing a new version now for ASC awaiting Jan '85 data

Transscript of CBS Newscast

CBS - Evening News 7:00 EST, Oct. 10th 1984

Introduction (by Dan Rather)

"Last February, when Iran launched a human-wave assault against Iraq, an estimated 16.000 Iranian were killed, 18.000 were wounded. The total dead in Basra attacks, probably more than 200,000.
Since the spring Iraq has been waiting for another of those massive attacks - one that Iran has boasted would give it victory.

But as Pentagon correspondent David Martin reports tonight Iraq has not been sitting around and waiting." This implies that since February the structure was built. It was under construction as early as 1977, and was effective defense throughout the war.

David Martin:

"These satellite photos obtained by CBS-News show for the first time the extraordinary defenses Iraq has constructed to repulse Iran's much predicted final offeosive. They were constructed years before final offensive plans.
This giant water obstacle lies directly between an estimated ½ million Iranian troops and their primary target: Basra, Iraq's second largest city. Basra is vital not as a large city, but as part of the only dry-land bridge from east to west.
The Iraqis diverted the Tigris and Euphrates Rivers into a giant trench 20 miles long and 1 mile wide. Not mentioned: the northward-bearing channel 30 miles long, 2 km wide.
The trench flows into low lying land creating a vast lake that is 10 feet deep in places. The land is higher in elevation than that of normal playas. All was excavated or dam
All this water, none of which shows on maps of the region, walle has literally changed the face of the landscape and the war.

Retired Major-General Fred Hanes is a consultant for CBS-News."

The General in front of a monitor, showing the trench:

"I just don't see any possibility of the Iranians getting through. Unmentioned, as he uses his pointer: the advances made by the Iraqis behind the post 1982 extensions from lake.
They have three options: They can either go over, they can go through, or they can choose and try and go around that line. The westernmost line he indicates is no longer the main line.
These two options, it seems to me, are the only ones they are open to them, because it is very difficult for an untrained force like theirs to break through and they have no airborne capability of any note." No mention of Iranians being forced to retreat as the water barrier grows larger, since the late 1981 pressure of Iran upon Iraq.

Transscript/2

David Martin:

"Pentagon officials say the Iraqis now have a three to one advantage in armoured firepoweron the Basra-front. Which explains how they can take advantage of the water-shield. **These pictures taken by a commercial satellite show faint outlines where the Iraqis have dug in that firepower, just behind the water obstacle.** The positions outlined are very far behind the main water obstacle used now, the N-S canal. **All of it would be trained on the Iranians as they try to break through the narrow corridors at either end of the obstacl** Iranians have less and less room to break through, since 1982. **Corridors which would rapidly become killinggrounds.** Arrows are mostly in territory regained by the Iraqis. **American analysts doubt the Iranian leadership would risk the political backlash from sacrificing so many lives in an attack doomed to failure.**

More likely is a prolonged stalemate or a massive shift of Iranian troop to dryier areas further north.

David Martin, CBS-News, the Pentagon"

We doubt prolonged stalemate, given the growth of the water barrier and the likelihood of its growing to outflank the Majnoon salient. Also, the massive shift question, which would entail a drive very much farther north, beyond the Khuzistan border, spells further trouble for Iran. Defenses along the central and northern front are formidable, and terrain is not as easy to cross. The first and prime issue of the war is that of sovereignty over the Shatt al Arab, and then over Khuzistan. The southern front is therefore the main front. Iranian defeat there almost certainly entails Iranian defeat in the war.

TV PITCH

Months of intensive military and engineering analysis by NATO officers, irrigation and soil experts and construction engineers, along with image processing of high-resolution and regular Landsat data at a world-rank institute, have led to--

a complete story on the Iran-Iraq war,
centered at its primary front.

According to the analysis, we have discovered the main strategy of the Iraqis against Iran. That strategy, aimed at "liberating" the oil-rich, Arab-populated southwestern part of Iran from Tehran's grip, rests squarely on a long, wide body of water which first blocks any victory by Iran and then, by gradualllly growing into Iranian territory, renders useless Iran's chief defenses and allows an easy sweep for Iraq across Iran's southwest.

An arm of this Iraqi water body stretched out 30 km within 3 months, to within 10 km of the Iranian border. Seven months later, this last January, the Iraqis made the first claims since 1982 of having breached that border. Seven months later, the Iraqis began doing what we predicted from the satellite evidence and what political experts were all saying would never occur--they were invading Iran again.

The water body was under construction before the war began, and it was ready for use when the war started. Since then, unbeknownst to the world public, it has served as the Trojan Horse for Iranian defeat. It was ready for wave upon wave of Iranian troops when the Iraqis quickly retreated after an initial invasion of Iran, so arousing Iran's anger, and it destroyed wave upon wave. It has accounted for about half of all Iranian casualties. It has shattered Iranian morale and made talk of a Final Offensive, which the world public long awaited in its ignorance, nothing more than talk. It lay in the path of a bait called Basra, which lies on the road to Saudi Arabia and Kuwait, and Iran fell upon it disastrously. When we show our satellite imagery of the water structure, their faces drop and talk of "Islamic solutions" and "imposed war" vanishes. Sophisticated hydrological engineering prevails over Iranian religious zeal.

Now that that Iranian will has been stymied, the Iraqis have begun to extend their water barrier inside Iran--allowing for ever greater penetration. If the constructiom work continues thus, Iraq will win--or will at least impose its will on Iran.

This satellite survey, coupled with recent ground footage, makes virtually all prior news reports about the war unreliable even in past reference. A complete, new story comes forth.

Ocean Earth
February 1, 1985

WE WERE RIGHT---

REPORTED IRAQI ATTACK
JANUARY 28, 1985

Analysis of satellite imagery led us to the conclusion that Iraqi forces would press into Iranian territory within a year of so of our latest imagery, taken July 28, 1984. The gradual growth of a large Iraqi moat showed that Iraqi forces were advancing towards and sometimes into Iranian territory, and that the advance into Iran would continue.

We have often been told that such a conclusion disregards the Iraqi declarations of no longer seeking Iranian territory and of no longer seeking to offend Iran. We have been told that Iraq only wants to maintain such an unbreakable defense as to persuade Iran into abandoning first its Final Offensive plans and then its war effort altogether. We have also been told that major backers of Iraq, such as Kuwait, Saudi Arabia, France and, on a much reduced profile, the Superpowers, will not permit Iraq to re-invade Iran, and wish chiefly to bring both countries to the peace table with the border unchanged. We have therefore been told that, despite what the satellite evidence suggests, Iraq will not enter Iranian territory again.

On January 28, 1984, according to Reuters, Iraq said it was again entering Iranian territory.

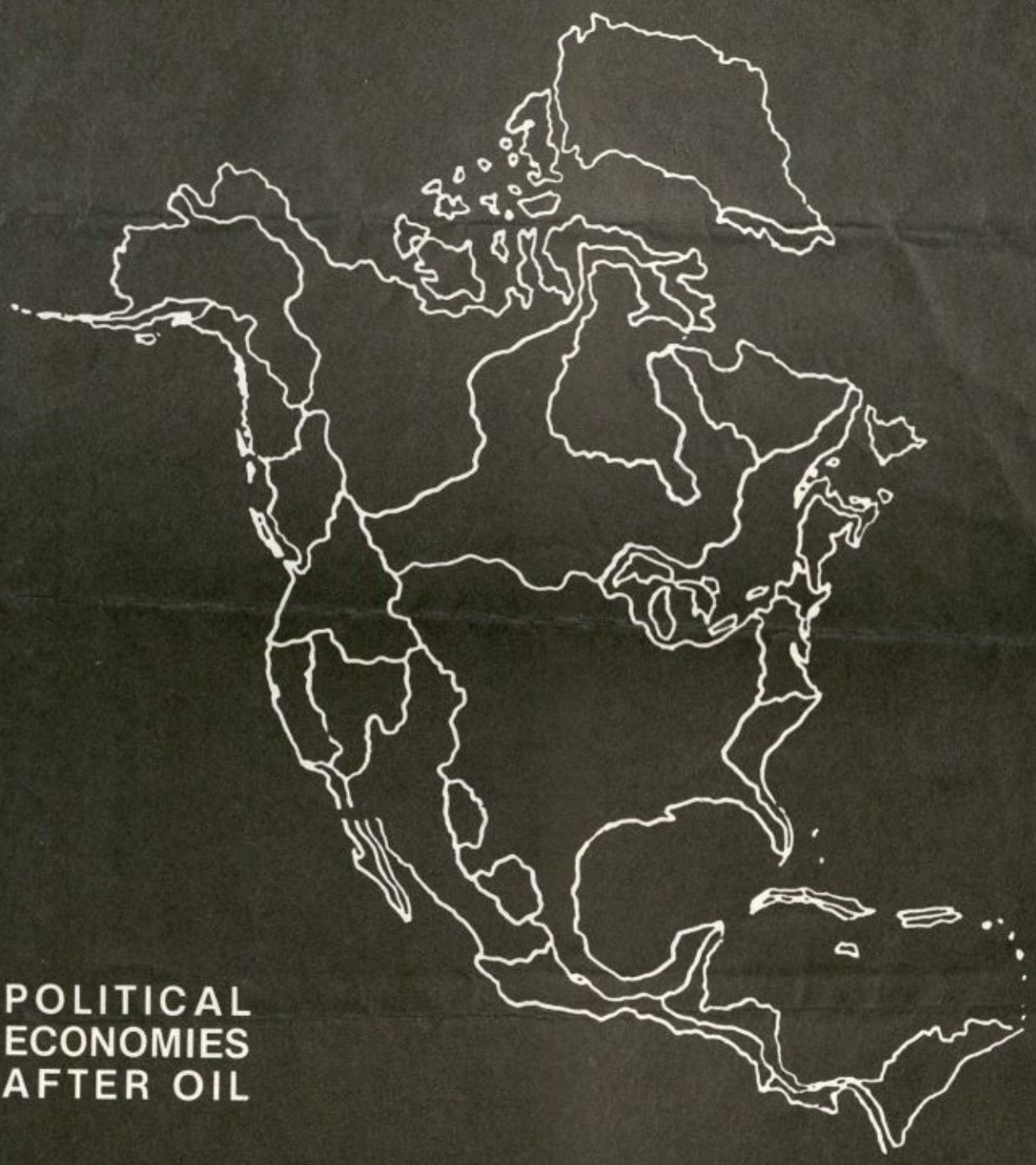
> Iraq said today its forces had launched a new offensive in the southern sector of the Gulf war front. A military spokesman said Iran's Third Army Corps launched a three-pronged offensive on Iranian territory during the night and at dawn today. He said the Iraqis entered Iranian territory and occupied some areas, killing a large number of Iranian troops. The Iranians were unable to repel the Iraqi thrust, he added. The reported offensive is the first by Iraq on Iranian territory in more than two years. . . .
>
> Reuters, Middle East wire, 28 Jan 11:46

Shortly afterwards, in less than 45 minutes, Reuters issued a blanket correction of its earlier transmission.

> Please read. . . "offensive on Iranian positions" instead of. . . "offensive on Iranian territory". . . (changing "territory" to "positions"), and. . . "He said the Iraqis occupied Iranian positions" (deleting reference to Iranian territory as sent). . . (This makes clear that Iraq did not saz it had entered Iran). Reuters, Middle East wire, 28 Jan 12:28

Michael Field of the Financial Times, among other journalists, privately voiced skepticism about the "corrections" to the Reuters account. He said that probably the Iraqis put pressure on Reuters to remove any suggestion that in fact Iran was being re-entered--and being re-entered on the southern front.

The present political and economic division of space does not satisfy our needs. We work towards a reorganization of existing elements into more functional configurations.



POLITICAL ECONOMIES AFTER OIL

3N 84 West Broadway, NY, NY 10007, Tel (212) 732-1153,
Open Friday and Saturday, 1-6 PM, Opening
December 7, 6 PM.

OECD

We are conscious that another organization with our acronym regards itself to be an economic development organization, but like Luis Echeverria we suppose that no such development can succeed without sound planning of our materials base: the Earth.

We are developing a satellite monitoring program, in both video and hard-copy formats, and we are conducting this program within the framework of oceanographic basins. Such a framework affords analysis and observation of: soil-runoff and accumulation processes, upwelling sites, ocean currents, mammal and fish migration patterns, aerial animal migration patterns, hydrological basins within oceanographic basins, and attendant meteorological patterns.

We premise all investigation with the belief that animals--in great number and variety--are crucial to successful ecosystems. We share the scientific belief that management of wild species in complex, open habitat, both on land and in the sea, yields superior crops on a sustainable, non-depleting basis, and we intend that earth-observation studies be conducted towards effecting such management.

For purposes of a Cousteau Society/Brazil Government/ Caribbean Action Plan expedition in the Amazon and its ocean outwash, we would produce hard-copy and video-copy versions of aerial and satellite imagings for use by scientists on the ground, by large-area survey facilities, and by telecast agencies like Cable News Network.

/ Coming up negotiations with Cousteau

Complete water and sediment
circulation studies by OECD

Complete ISI, SATLAB, Goodyear, Grumman and possibly Spectral Data earth-imaging processes, backed by IBM computer systems, for entire Amazon Basin, and then for the Equatorial Current which sweeps past the Basin into the Caribbean Basin, Gulf of Mexico and Gulfstream. Survey could encompass entire cycle of waters and salts from Gulfstream and its European landfall down the Iberian coast to West Africa, with waters returning to the North Equatorial Current which flows past the mouth of the Amazon and receives its enormous freshwater and sediment volumes.

Survey is conducted with recognition of legal authority of UNEP Regional Seas Program, which could become a jurisdictional body for respectively defined ocean areas.

Survey tailored for such land and ocean uses as:

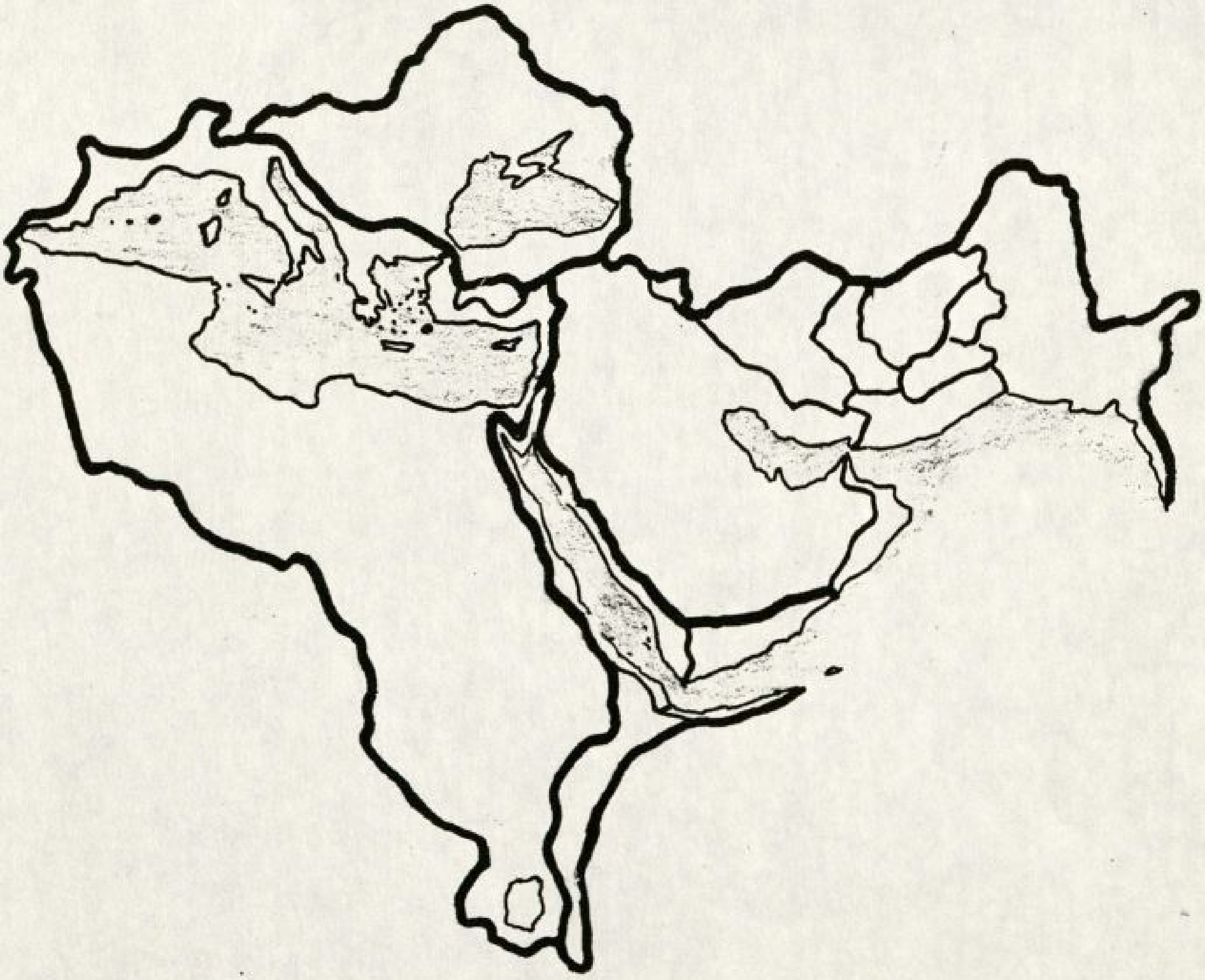
multispecies management of indigenous animal and plant species in the uplands
open-sea mariculture, including algae harvesting at upwellings for degradation into non-polluting hydrocarbon gas
comprehensive regional, infrastrcture and urban planning

A LogEtronics Views system, which would facilitate imaging, would cost the Brazilian Government $300,000.

A rapid mosaicing software program, using software possibly of IBM or Honeywell, as consulted on by Firman, Kluver and Dolson.

Corning NY/New Wave

ITALY WINS WORLD WAR



ITALIAN-LED CONFEDERATION of autonomous republics sanctioned by United Nations Regional Seas Program. Each republic claims it can achieve total economic self-sufficiency. Named after respective seas: Mediterranean Sea; Black Sea; Arabian Sea; Red Sea. Set up massive methane-from-biomass program and effect complete oil embargo. Vow total restoration of wild habitat to pre-agricultural era, with tests first in Ghadaffi's Libya, a seceded Ukraine, and Afghan lands.

The Ocean Earth Construction and Development Corporation contracts with the Italian Military Command, in league with the military commands of Switzerland and France, to organize these joint campaigns in the Mediterranean.

- Comprehensive modeling of Mediterranean Sea.
- Offshore engineering to yield large harvestable algae supplied with nutrients from upwelling structures.
- Upland ecosystem construction, starting in Sinai and the Camargue.
- Contracting with Italian state oil company for production of bioproteins suitable for dissemination in marshes; bombing missions outlined to Air Force along migratory schedules.
- Development of weapons and transport systems for efficient kill and evacuation of game.

The site in which to begin, where there is a joint military European force including Italians, is the Sinai.

Once success is achieved there, we progress to the Nile (Egypt, Sudan) and the eastern shore of the Mediterranean.

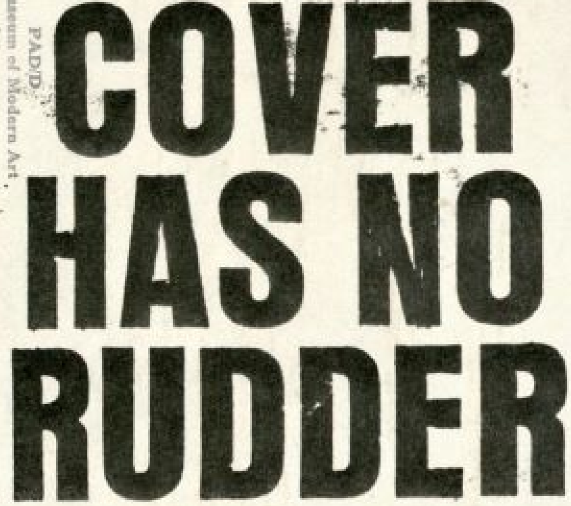
Effects spill over to the east, and induce changes in the Arabian Gulf and Red Sea Basins.

Results persuade shift in attitude of Arab states most hostile to the North, Algeria and Libya--these states continue to maintain close ties with France and Italy.

Swiss military command initates the Rhone project, emanating from Geneva, the seat of the UN Regional Seas Program. They specialize, along with Italian lagunari, in engineering.

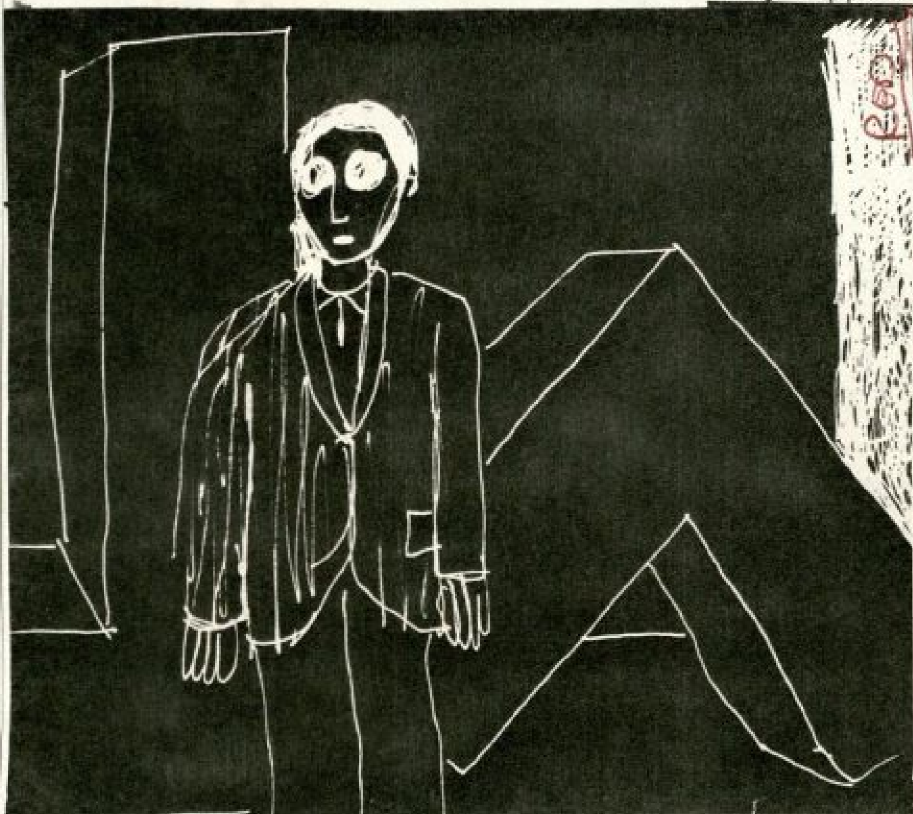
Manpower is both military and, especially in south, civilian.

Lippard



Peter Fend, wall poster 4/80, NYC; detail.

Lucy Lippard, card "Propaganda Fictions," etc...



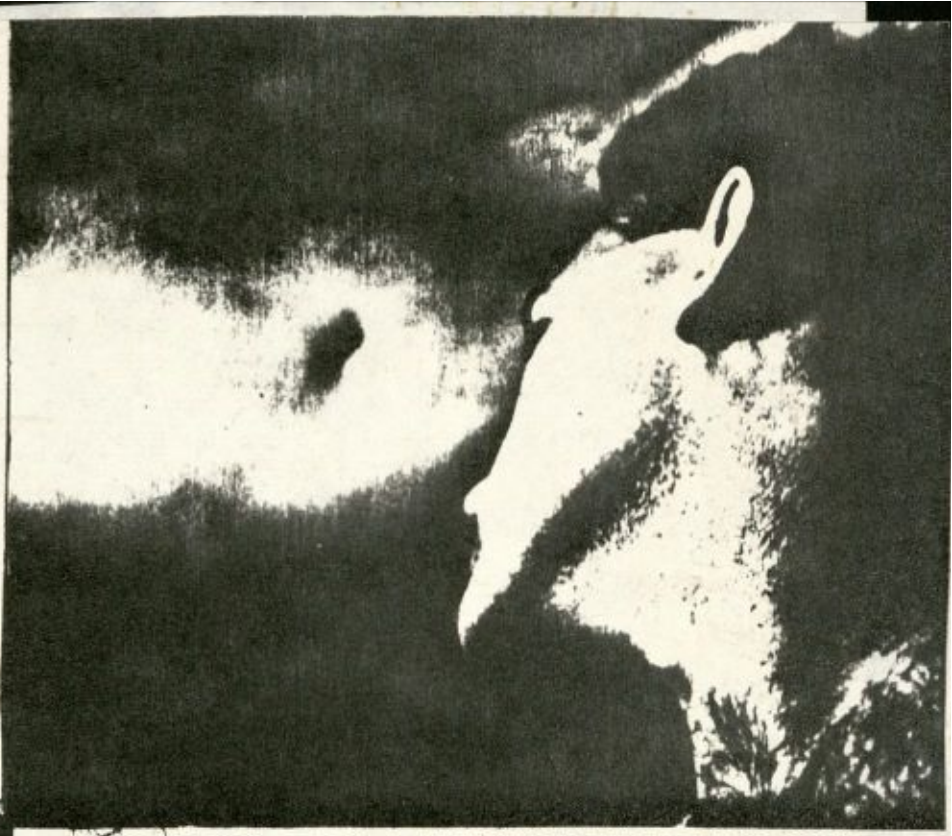
Red

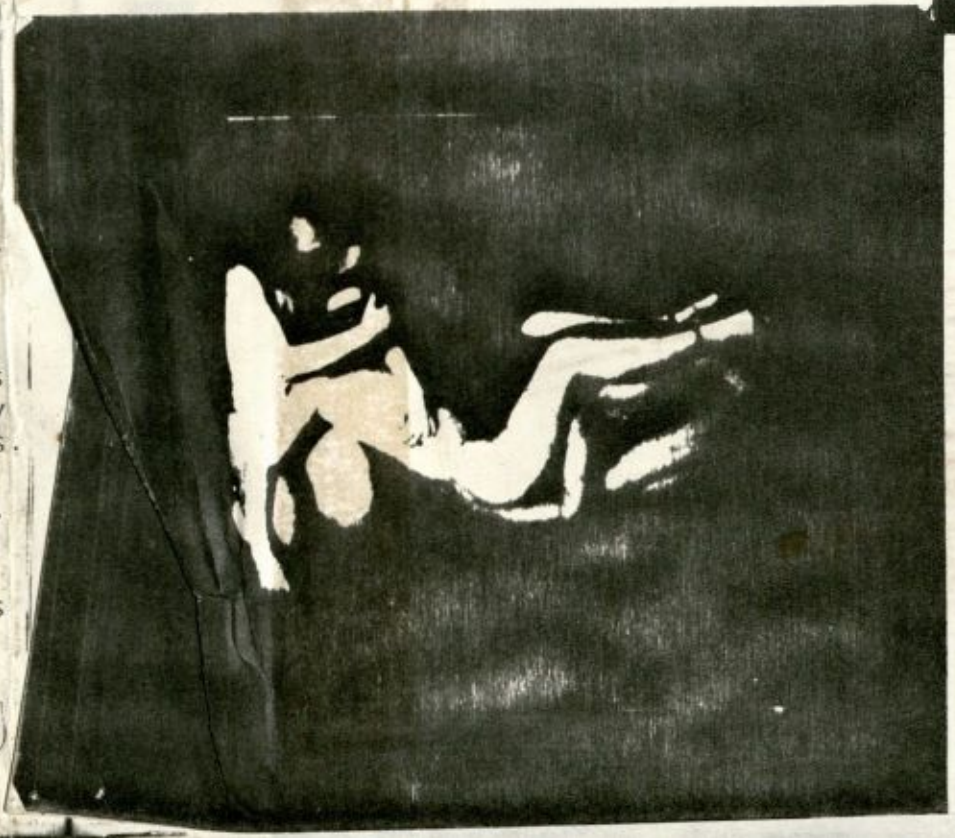
"The liveliest events in the art world always happen when artists take things into their own hands...These are the hopeful and angry products of a spreading art world crisis of faith, and may mark the beginning of a new and noncondescending meeting of art with social concern." Lucy Lippard's comments (SEVEN DAYS: 4/80) focused on several loosely organized groups of artists "often working anonymously and collaboratively." They include Co-Lab, Fashion Moda, and works shown at White Columns, PS 122, Grommet Art Theatre, The New Museum, Brooke Alexander's gallery, from CUDLAB, El Taller Boricua. (more...must write it properly...working on text now) These images are reproductions of cards announcing the events and artists' showing in the past few months.

NB: LL - this is a ROUGH (for position only, etc.)
also "CURRENTS" is on a RED BACKGROUND STRIP

CAPTION (Review)

DANGER LIVE ARTISTS

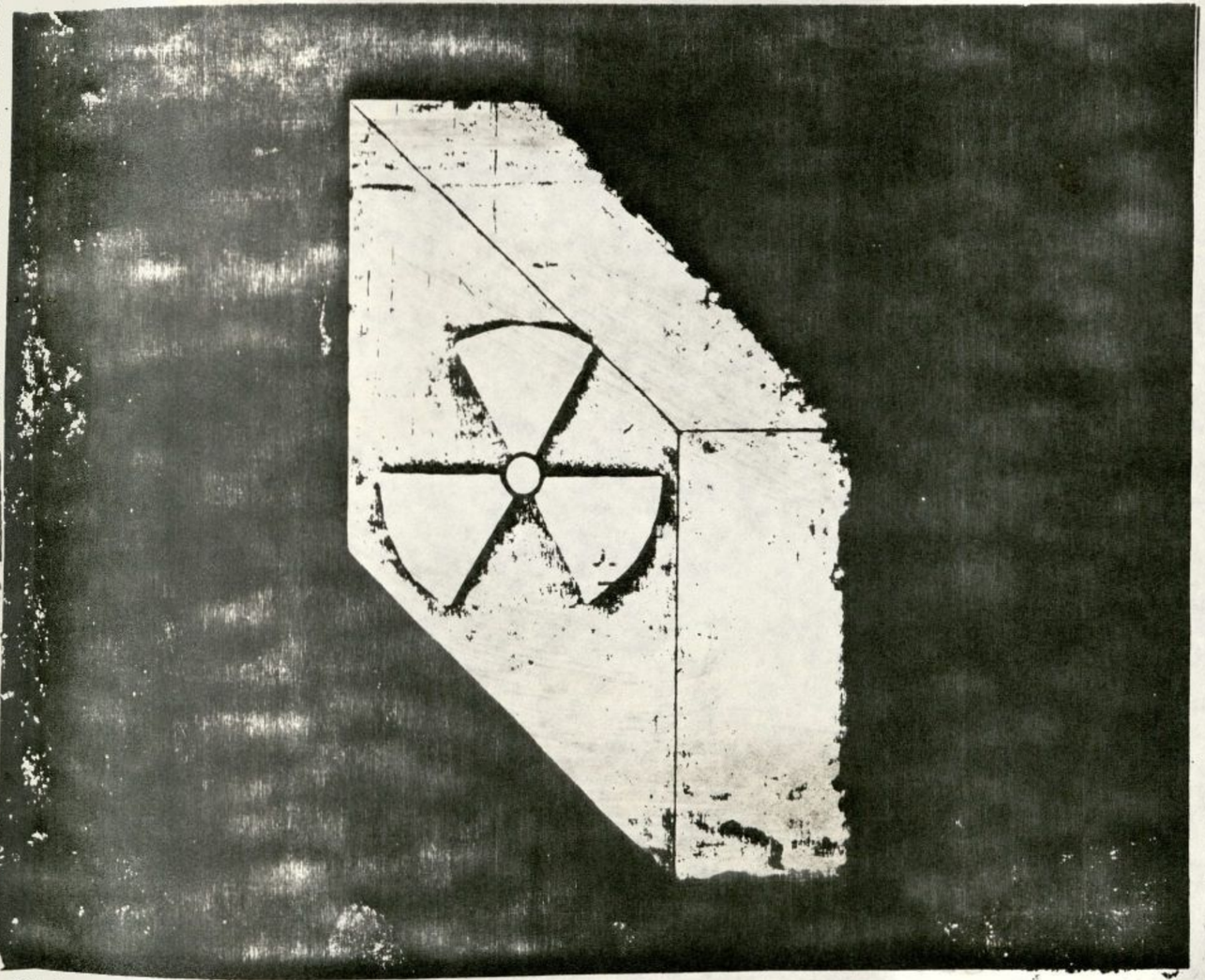




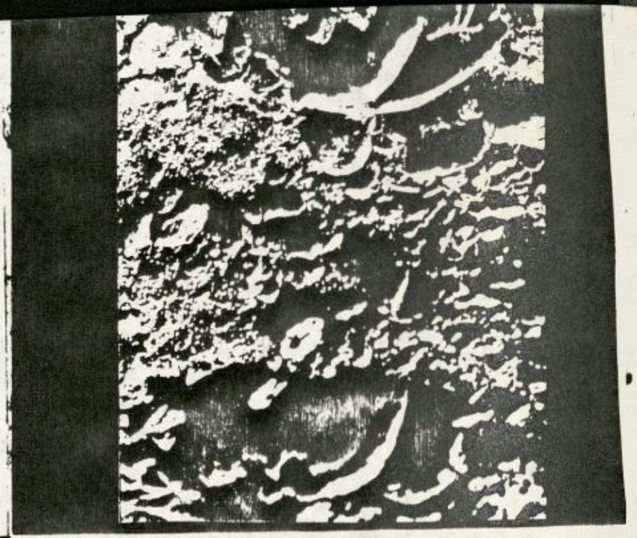
20-MEGATON BLAST

WITHIN A RADIUS OF 4 MILES FROM THE DIRECT HIT THERE IS TOTAL DESTRUCTION OF LIFE AND PROPERTY. WITHIN A 10 MILE RADIUS MOST SURVIVORS ARE SUFFERING FROM SEVERE RADIATION BURNS AND MULTIPLE INJURIES WHICH GO UNTREATED. WITHIN A 20 MILE RADIUS MOST OTHER SURVIVORS ARE QUICKLY KILLED IN THE UNCONTROLLABLE FIRE STORM. ALL TOLD, 2/3 OF THE CITIES' POPULATION ARE ANNIHILATED INSTANTLY. IN THE NEXT FEW DAYS, ACUTE RADIATION POISONING WILL KILL 20% OF THOSE STILL ALIVE BRINGING SUCH DEVASTATION THAT THE LIVING WILL ENVY THE DEAD.

JOSEPH NECHANSKY



CHRISTIAN DE BOSCHANEK



Since the exhibition space, by stopping the vehicle, places it only in a non-place, the vehicle makes a space of its own, the vehicle takes on the function of 'image'; the space, rather than being an image, is in the position of having an image, the space is 'embarrassed' by the imposition of ornament as symbol (or, more precisely, by the ornament's announcement—almost with a fanfare—that symbolizing can happen here: form, then, is separated from content, content is freed from form, allowing, e.g., an institutionalized form to be intruded on by (and to be the bearer of) radical content.

Since an exhibition-space, by storing an image, presents that image as a product, a piece can be a showplace of products that signify themselves as readily available in capitalist culture and interchangeable (and, hence, valueless); the piece, then, decorates (as if with a medal) the space and the viewers inside the space, with the mark of an honor conferred by a culture whose mechanisms have lost their power.

Since an exhibition-space is a place where people will gather together anyway, it can be used for a structure that forms a community, calls a community-meeting to order (gallery as table-and-chair); once the community is grouped together, an order—and the community itself—can be put into motion (gallery as passage, ladder); lest the passage take the viewer away, or lest it cause a private viewer to disappear into a general publicness, the exhibition-space has to close in a viewer, force intimacy of viewer with viewer (gallery as wall).

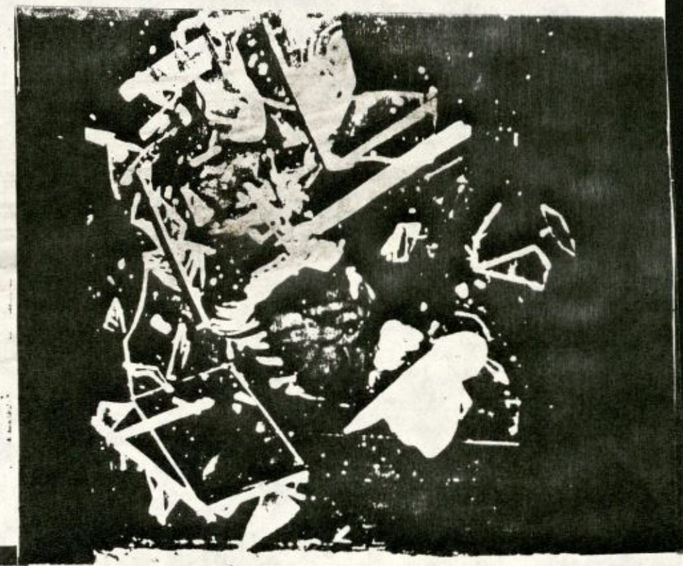
"Okay. Everybody inside. It's now time to go outside. The coffins are being prepared. The limo has arrived, and the coffins will be ready as quickly as possible. Do we have all pall bearers? Yes, We have lots of pall bearers. Anybody wearing enough black is welcome to be a pall bearer. Pall Bearers, this way. Everybody inside should now go outside. Don't worry. You will all get back in."

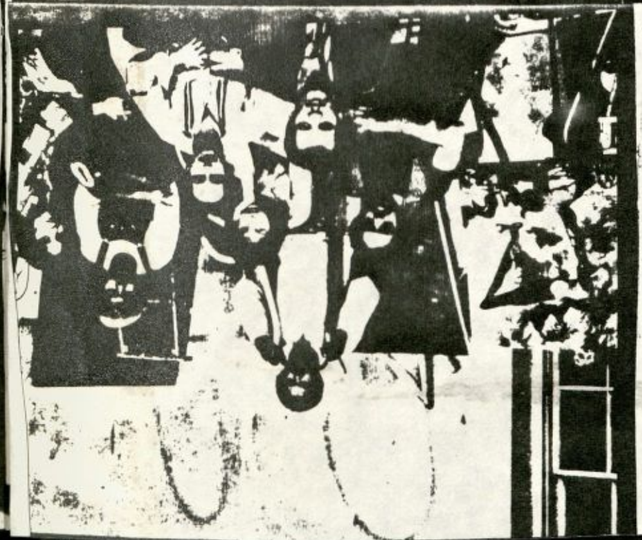
Eloquently phrased, Willoughby. Yes, indeed. There were a lot of pall bearers splendidly turned out for the big funeral. Your friendly smirking Transylvanian priest, black-veiled women, using the same Zelda for the evening. Also more somber shades of black as, after all, there was supposed to be some element of dignity.

And upstairs there was a lovely collection of coffins and corpses. Moonie's drum kit, Morrison's leathers, Sid Vicious' "what me worry?" They had all done it their way. Innocent enough plane crashes, Parisian pneumonias, tunafish sandwiches and junk.

All right, we have had enough death. Let's have some life. Let's have some good old disposable novelty trash. Let's have some high camp. Let's have some outrageous burlesque. Let's have performers who can ruthlessly kill off all the illusions they create. Let's have icons who can change their faces with classical European efficiency. Let's have some illegal chords. Let's have some improvisation.

Rock and roll is not a particularly improvisational medium. Only a few chords are properly cliched enough. Only a few images are saleable enough. Success has a tendency to encourage repetition of product, and this tends to encourage ruts. Genuine chameleons may play with rock and roll or even look like rock and roll for a moment. But they don't live like rock and roll. That is why they are survivors.





Now that the wall applies pressure on a viewer, now that the exhibition-space functions as an instrument of oppression, the exhibition-space turns in on itself, becoming the support for a machine that turns on the gallery from the inside (the implosion is automatic).

In order for the agent and viewer to maintain a place in the action, a piece can provide an instrument that comes from the outside (an analogue for agent's position) and inserts itself, imposes itself, inside the space; once inside, that instrument can be hooked on to the characteristics, quirks, of the particular space, whatever they might happen to be, and maintain a tension that a viewer is tempted to release, sending the instrument back outside, the instrument taking with it at least a part of the shelter (architecture/system) that houses it.

As long as there is no space left to consider (since the space has been destroyed at least in language here), a piece can be a vehicle meant to travel from (non-)place to (non-)place; this specious space, then, is there only to store a vehicle that should be on the move, that has no place here. (This sounds like—should sound like—'studio art,' the convention of work being made in the agent's studio and then transported to showing-space, selling-place: what's being assumed, then, is that, in the culture we know, the standard that must be reckoned with is not 'space' or 'viewer' or 'mentality/autobiography,' etc., but, instead, the exchange between studio and gallery, the exchange between labor and market and consumer.)

STRUCTURE OF THE BODY

SKELETON KEEPS FALL IN DOWN ONE WAY & THEN OTHER

HUMANS BALANCE

THEY FALL BOTH WAYS EACH TIME

COUNTER BALANCE WEIGHTS MUSCLE

EXAMINE BACKBONE WITH RIBS

SECTION OF CORE

FROM CORE EXTENDS A BODY ARMS LEGS MASS

BACK BONE ACTS LIKE A FULCRUM

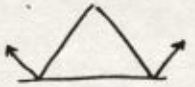
MUSCLES AND MANY FIBRES DO BALANCING

BUILD MUTAS ERECT HUMAN BUT AS SPINE WITH A SET OF WINGS

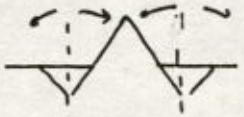
FALL DOWN BOTH WAYS

SPLIT THE BUILDING IN HALVES SO THAT IT CAN HOIST UP GREAT WEIGHTS & LEAVE SITE FOR BEASTS

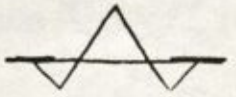
STANDARD BUILDING AMEITS



SPLIT FOR FULCRUM PAIRS ON RANSITE

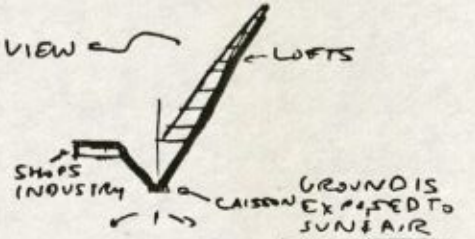


COUNTER BALANCE UPON THE FULCRUM

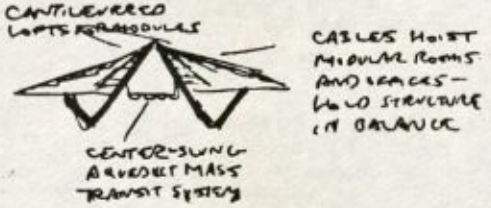


TWIN FALL BALANCES

ONE SPINE CITY FORM

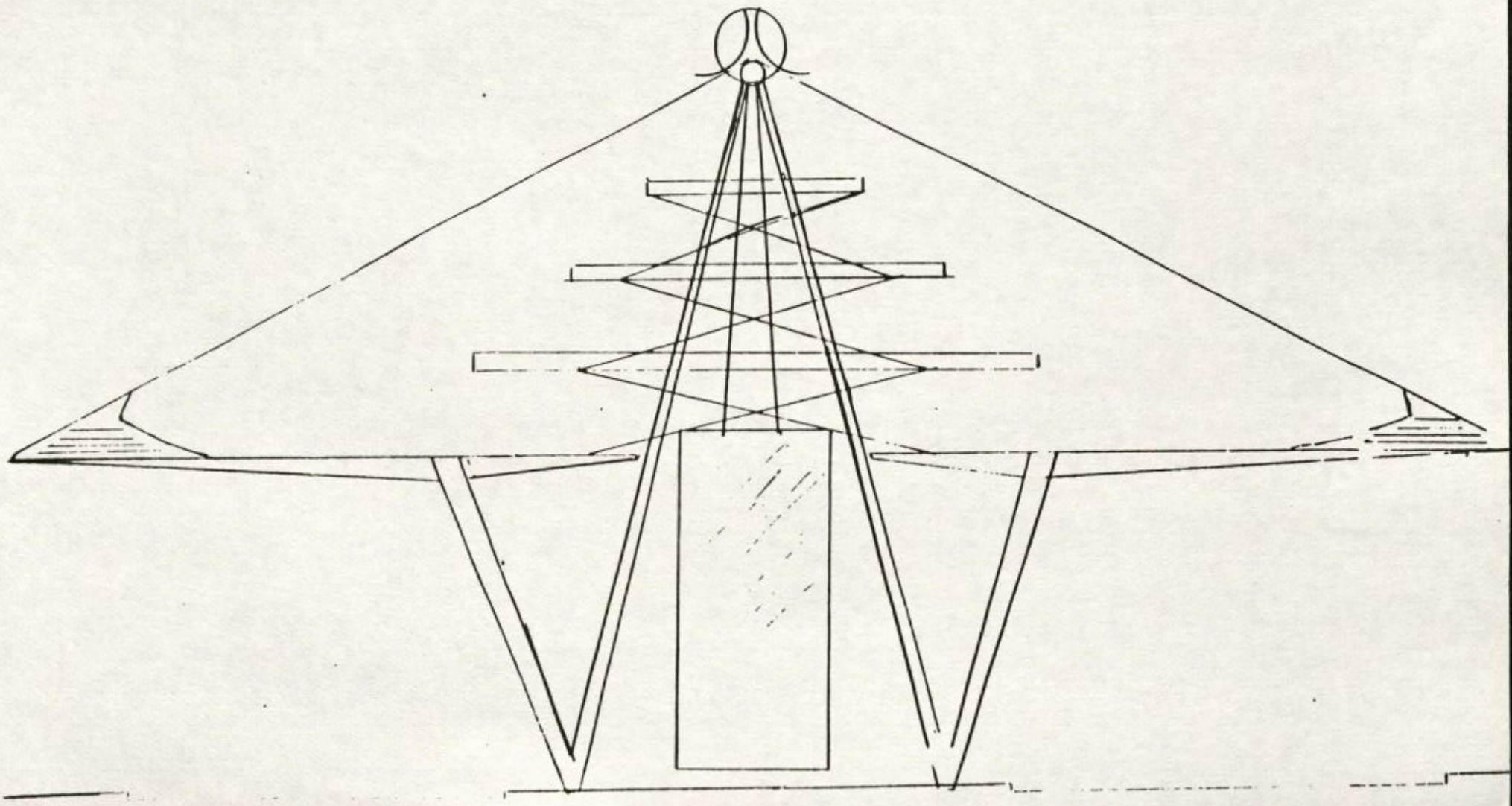


TWO SPINE CITY FORM

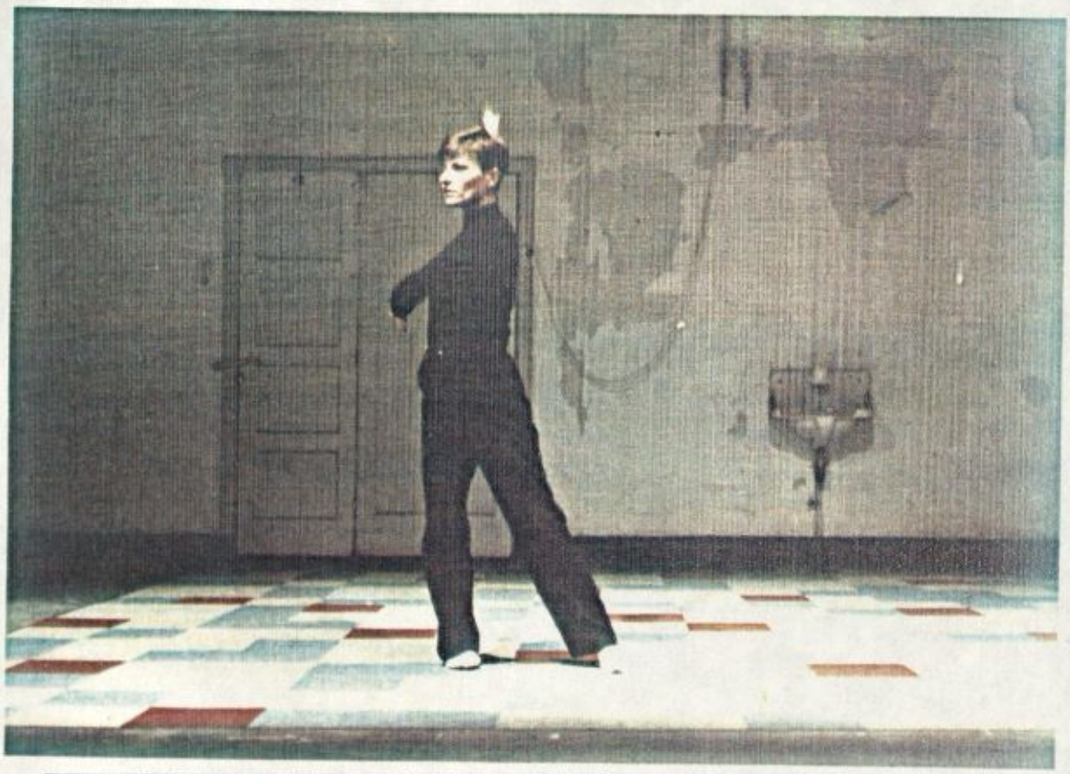


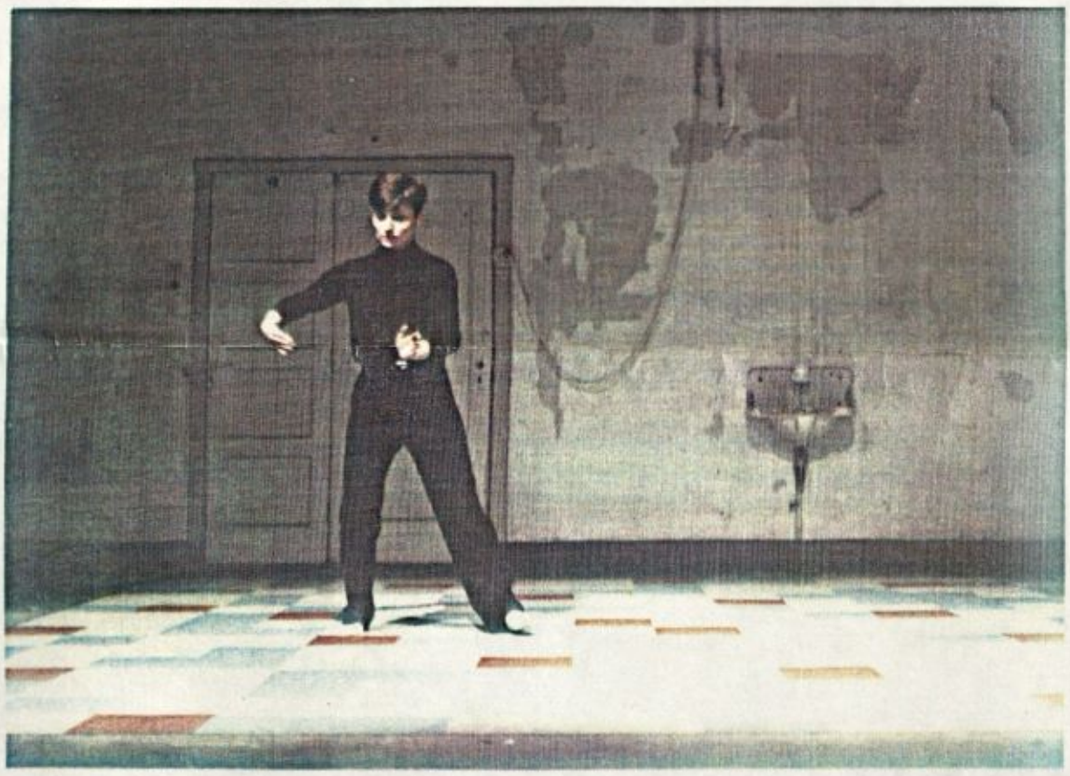
THE BRONX IMITATES SKELETON AND LIFTS ABOVE THE ANIMALS

video-media-dance club, with
Serra's 35-ton sculpture at
Franklin & Varick as counter-
weight against bascule disc



PETRA RHINEBURGER
"ISLAMIC SOLUTION"





FIELD OF PLAY

Nadin sket
~~Feed 54~~

IN GENERAL

To consider what you do is necessary. We earn our living as construction workers. We agree with the position that the implications of walls tend to be larger than what hangs on them. The apparent unconventionality of any activity has to be seen with reference to the conventionality of the space that houses it. No space is neutral. The present division and definition of space does not satisfy our needs and yet we are economically forced to maintain and build a structure that is at variance with our sensibilities. To point to the contradiction is to accept we are in a position of basic compromise, not through choice or failure but through necessity. But this is our culture, we decide. We are given certain economic choices within a narrow framework; if you break the framework you are punished. The economic framework defines the way you spend your time. Time is the most valuable thing we have.

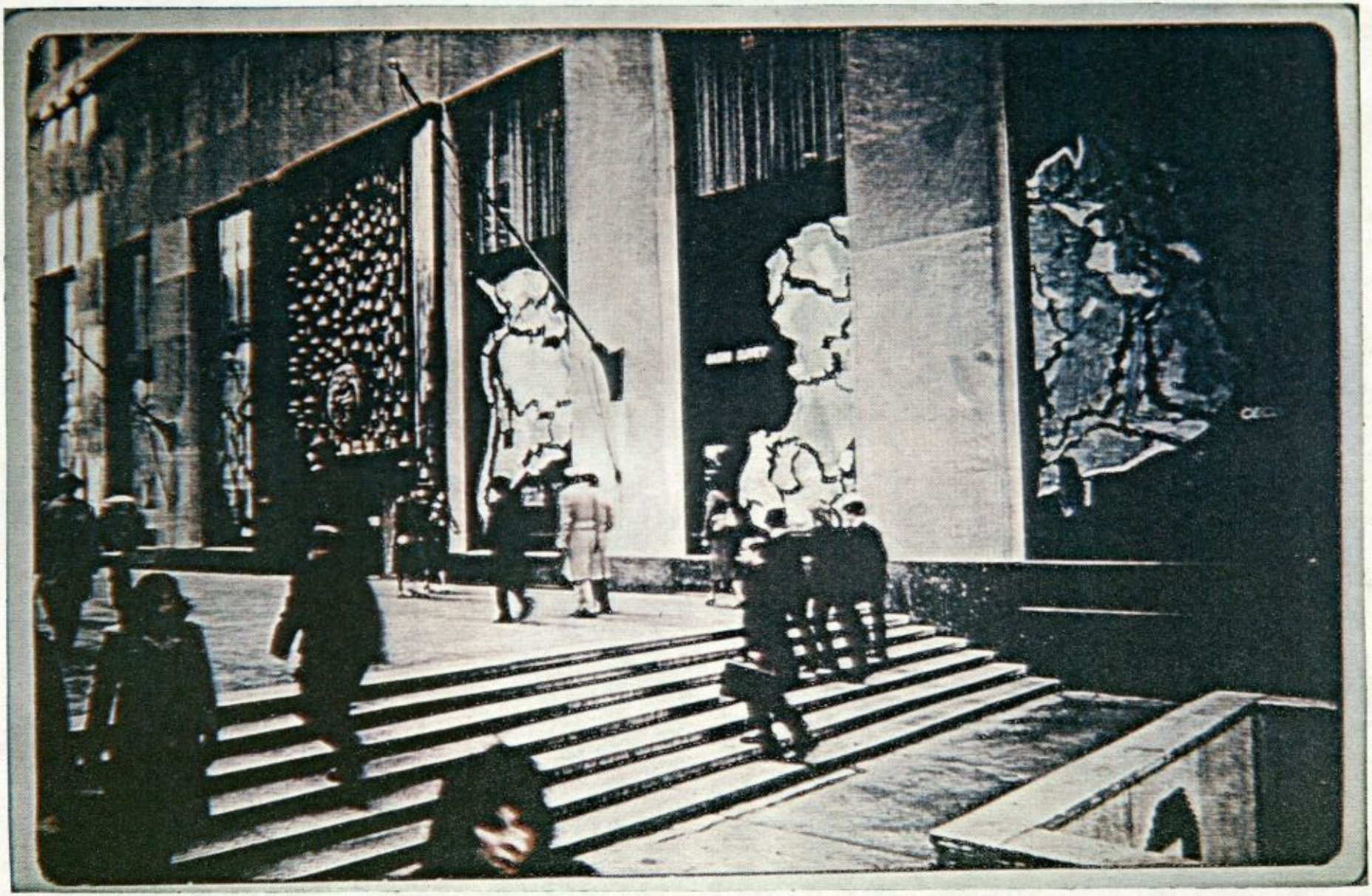
The value of the construction of objects and definition of space has to be examined. Within objects are embodied the implications of their creation. Within defined constructed spaces are embodied implications directly affecting our political state. It is untrue that we can act outside the structure; there is no choice between participation and non-participation. We participate to redefine ourselves; we desire a structure that is suited to our needs. To use what we know, to speak of what we do, to work towards a reorganization of existing elements into more functional configurations.

AN ACCEPTANCE OF FACT
DEMONSTRATION OF ECONOMIC FUNCTION

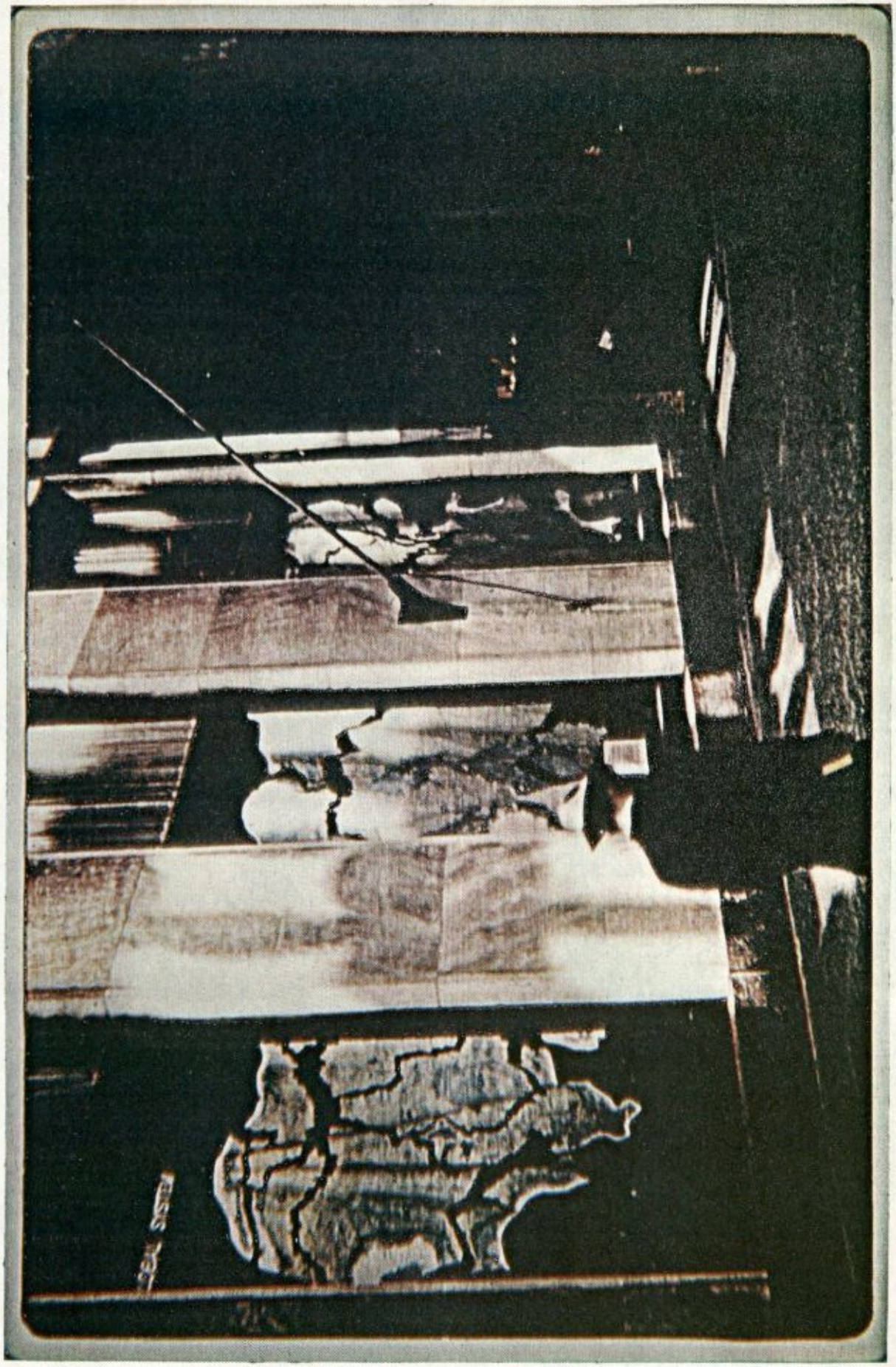
An office built for Rotary Supply Corporation
at 55 North Moore Street, NY, NY,
by Nick Lawson, Peter Nadin.
The job was completed November 19, 1979.

NADIN
84 WEST BROADWAY
NYC 10007

Lucy. Lippard.
138 PRINCE St.
N.Y. N.Y. 10012.




LOBAL SYSTEM



ART OF THE STATE
DISCUSSION
THE KITCHEN
SUN 2/28 6 PM

THE ART WORLD

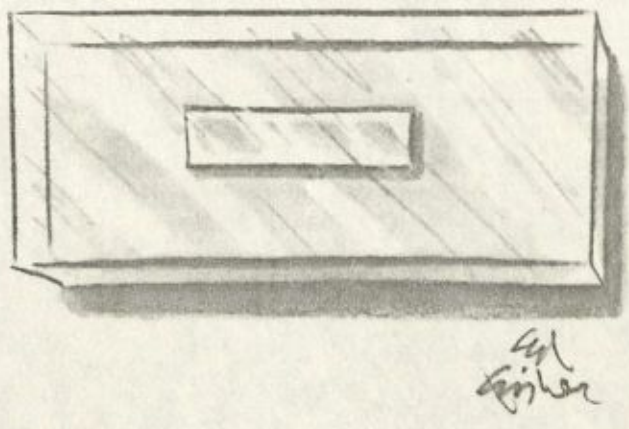
The Natural Problem

FOR several years, young artists have been looking more to the past than to the future. This is partly the result of their education. Many of them have been through at least four years of training in university or college art departments, where they absorbed a lot of art history and looked at a lot of slides. Professionally savvy about recent art, they are well aware of the premium on novelty—the near-necessity of coming up with a specific image or "look" that will catch the eye of dealers and collectors—and it is only natural for them to ransack the image bank of the museum-without-walls. In another sense, though, the current looking backward reflects the widespread belief that modernism is dead—that a century of experimentation with new materials and new ideas and new attitudes has run its course—and that, since this is the case, one might as well go back to painting on canvas, and reëxamine tried-and-true styles (German Expressionism, for example) and subjects (landscape, portraiture). One of the more significant aspects of the current "Robert Smithson: Sculpture" exhibition at the Whitney Museum is that it upsets this whole notion of the modernist demise. Organized by Robert Hobbs, curator of contemporary art at the Herbert F. Johnson Museum, in Ithaca, New York, where it opened in November, 1980, the exhibition has also been on view at the Walker Art Center, in Minneapolis; the Museum of Contemporary Art, in Chicago; the La Jolla Museum of Contemporary Art; and the Laguna Gloria Art Museum, in Austin, Texas. After leaving the Whitney, in April, it moves on to Europe, where it will be the official United States exhibition at the 1982 Venice Biennale. My guess is that it is having and will continue to have a powerful impact on younger artists, some of whom may now have to think twice about looking backward.

When Robert Smithson died, in 1973, at the age of thirty-five, he was known mainly as an earth artist. Smithson, Michael Heizer, Walter De Maria, and a few others had carried out large-scale sculptural projects in remote areas of the world during the late sixties and the early seventies—projects that used the land as material and heavy-duty machinery as sculptural tools. "Spiral Jetty," Smithson's fifteen-hundred-foot-long, gently curling peninsula of rocks and mud at the north end of the Great Salt Lake, in Utah, was, to my mind, the most impressive of these, and the only one that became familiar to a large number of people, through photographs published in art magazines and also in the mass media. (The work has been under water since the mid-seventies, when the lake rose and covered it.) Heizer and De Maria have continued to work on earth projects in the years since 1973, but the movement itself has received little attention, for fairly obvious reasons. Most of the existing earthworks are situated so far from urban art centers that few people have actually seen one. Both Heizer and De Maria have made it clear that a photograph is no substitute for the experience of seeing their work *in situ*, but they have not yet solved the personal problem that their work poses; namely, how to function as an artist outside the gallery system while depending primarily on that system for support and recognition. Smithson was very much aware of this problem. He spent the last two years of his life trying to resolve it, and his solution, as Hobbs makes clear in the exhibition and in the excellently organized book that serves as its catalogue, was as ambitious as they come.

The urge to be "outside art" has been a persistent one in our century. Oppressed by tradition and art history, certain artists have longed to throw it all off and start out from zero. "I wanted to be like a new-born child, knowing nothing, absolutely nothing of Europe," Paul Klee wrote in 1902. The Dadaists' all-purpose derision fell most scathingly on art and artists, not excluding the masters of modernism; Picabia once exhibited a child's stuffed monkey and called it "Portrait of Cézanne." Marcel Duchamp thought reverence for art a form of heresy. Fifty years later, some of these ideas still have force, and their influence shows up in the work of artists as far apart as Jean Tinguely and Joseph Beuys. Tinguely, the Swiss-born fabricator of poetic machines, has spent much of the last decade working on a gigantic construction in the forest of Fontainebleau, sometimes by himself and sometimes in the company of like-minded artists whom he invites to collaborate with him. The construction is in the form of a mechanomorphic human head, some eighty feet high, with an interior network of capillary chutes through which metal spheres roll noisily at intervals; its lavish tongue is a slide for children. The head in the forest may become public property one day, but for the time being the artist has no such plans. He is content to be working on it, outside art.

The commercial success of Pop Art in the sixties came as a nasty shock to Tinguely, Yves Klein, and the other European *nouveaux réalistes*. They, too, were interested in the contemporary reality of advertising and popular culture, but they felt that the artist's job was to find new pathways to individual freedom through the thickets of mass-market conformity. Once the contemporary American art boom got going, nobody paid much attention to the artist's social role. Success was its own justification. The boom even



THE SINGLE STANDARD OF MORALITY
(IN ITS HERMETICALLY SEALED CASE AT THE NATIONAL BUREAU OF STANDARDS)

accommodated itself to Minimal Art, which had seemed at its first appearance a severe antidote to the jocose vulgarity of Pop. Those puritanical, high-tech, smoothly finished, single-color minimal shapes, as it turned out, were just what the interior decorators could use. There was no getting beyond the system that way.

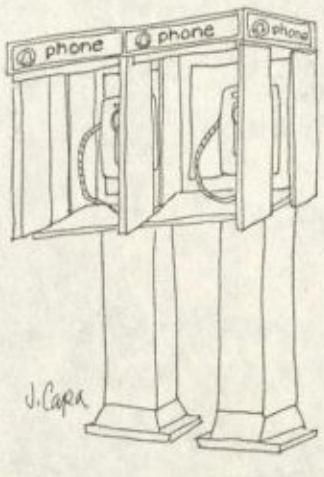
Smithson made important contributions to Minimal Art. One of his early Minimal sculptures was in the 1966 "Primary Structures" show at the Jewish Museum—the show that focussed attention on Minimal Art as a movement—and for several years afterward his steel forms and glass "strata," shown at Virginia Dwan's New York gallery and elsewhere, were as strong and severe as anything being done in that line. But Smithson, who started out as an Abstract Expressionist painter, was never entirely comfortable as a Minimalist. He mistrusted abstract art, for one thing. "Abstraction in a funny way seems to take you very far from any kind of natural problem," he said in 1971, "and I've always been drawn to natural problems." As a boy growing up in the grimmer suburbs of New Jersey (Passaic, Rutherford, Clifton), he had wanted to be a naturalist. His collections of minerals, fossils, and reptiles and other fauna occupied a special room in the basement of the family home. Both parents encouraged this interest; they also indulged his passion for maps by letting him plan their vacation trips by car across the country. Smithson's decision to be an artist rather than a naturalist did not vitiate his concern with "the natural problem." He got deeply interested in crystallography. The formation and growth of crystals came to seem to him a possible paradigm for aesthetic structures, and several of his Minimal sculptures were based on crystalline patterns.

Smithson was a great talker and writer of essays. He did most of his talking informally at Max's Kansas City, the main New York artists' hangout during the sixties, but in 1966 he was invited to be on a panel at Yale to discuss art and the city. An architect in the audience found Smithson's ideas so impressive that he got his firm to hire Smithson as an "artist-consultant" for the firm's major objective at the time, which was to land the contract for the new Dallas-Fort Worth airport. Smithson spent about a year on the project. Although the firm did not get the airport contract, the

experience encouraged him to think in terms that were far from Minimal. He began making trips to the New Jersey Pine Barrens and to abandoned quarries, often in the company of other artists, whom he tried to interest in doing collaborative work there. The "Site/Non-Site" works that came as a result of these trips were actually a form of earth art in reverse. Instead of going out to make things in the desert, as Heizer and De Maria were starting to do at about that time, Smithson in 1968 brought back sand samples from the Pine Barrens and exhibited them, in specially constructed wooden bins, at the Dwan, together with an aerial map of the area from which they had come. Natural material "displaced" from its site was thus inserted in the artificial space of the "non-site"—in this case, an art gallery: a "nowhere" white room whose only purpose was to be a temporary container of works of art. He went on to do many more of these works, using geological material from as far away as Mono Lake, California. But for Smithson this was a transitional activity.

Smithson, Heizer, and De Maria itched to break away from galleries and exhibitions, and to make works that existed independently in nature. The sort of works they had in mind were big, and they would cost a lot to make, and this presented a problem. Most of the major earth projects in the seventies were financed by wealthy individuals, either collectors or dealers. Smithson was able to carry out some smaller projects more or less without subsidy—for example, the "rundowns" of viscous material, which he allowed to take their own course on the land, and the various "mirror displacements," which involved his travelling to specific locales where he would insert a series of mirrors in the landscape at intervals, then photograph and remove them. But "Spiral Jetty," his major earthwork and the one that established his reputation, was financed by Virginia Dwan, his New York dealer. A more sympathetic and intelligent patron could not have been found. When Virginia Dwan closed her gallery in 1971, she continued to help certain earth artists realize their projects. But even Smithson, who once complained that "photographs steal away the spirit of the work," felt he had to go on showing photographs of "Spiral Jetty" and other pieces in art galleries. "Painting, sculpture, and architecture are finished, but the art habit continues," Smithson wrote in a 1967 essay. The earth artists professed to be contemptuous of the art market and its multiform corruptions. On the other hand, nobody wanted to make invisible art. If only eight people saw your work in the Great Salt Lake or the Nevada desert in the course of a year, was the work really valid? If a tree falls in the forest with no one around to hear it . . . The art habit dies hard.

Relatively widespread publicity about "Spiral Jetty" did not make it any easier for Smithson to carry out his subsequent projects. He travelled restlessly around the country looking for sites and sponsors. He bought a small island off the coast of Maine, then decided it was too "scenic" for the project he had in mind. He went to the Florida Keys and the Salton Sea, in California, but nothing quite panned out. Smithson completed only one major new work after "Spiral Jetty." It was called "Broken Circle/Spiral Hill," and it turned his thinking once again in a new direction. Invited by the directors of an international art fair in Holland to create a temporary earthwork for a public park, Smithson elected to make it in an abandoned sand quarry near the town of Emmen. The quarry, which was scheduled to become a recreation area at some future date, had the non-scenic, ravaged look that Smithson liked. "Broken Circle/Spiral Hill" bore a direct relationship to the site and to Holland: one half of the circle was a dike surrounded by water. The people of Emmen liked it so much that they voted to maintain it permanently, which pleased Smithson. The experience also led him to think about land reclamation as the raison d'être of earth art.



Up until 1971, Smithson had shown no interest in this idea. His unsentimental attitude toward nature usually led him to places that had been scarred or devastated by man—abandoned quarries or dumps or industrial waste-

lands. He wanted to draw attention to these modern ruins; he saw them as examples of entropy, the universal loss of energy that is also a natural process. Smithson had mixed feelings about the ecology movement, which had been in large part responsible for blocking a 1969 plan of his to cover a barren island near Vancouver, British Columbia, with broken glass. He found a lot of the ecological arguments simplistic and puritanical—especially those that seemed to view man as being outside (and inimical to) nature. "To me nature has three different aspects," he said. "There's wilderness, and there's the country, where man has been, and then there's the urban area. And the urban area is no more unnatural than Yellowstone Park." Mining for coal, to Smithson, was a natural process; and strip-mined hillsides were ideal sites for earthworks. After "Broken Circle/Spiral Hill," at any rate, Smithson started writing letters to large corporations with proposals for land reclamation through art. Smithson believed that the artist could mediate between industry and the ecologists. He was not out to beautify the strip-mined hillsides. His projects would call attention to what had been done to the land by man, just as the Grand Canyon calls attention to what has been done to it by wind and water. He wanted access to the devastation caused by the gigantic machines of the strip miners, such as Hanna Coal's seven-thousand-ton Gem of Egypt earthmover that stood twenty stories high and could scoop up a hundred and thirty cubic yards of earth in its bucket. What a solution to the dilemma of the artist outside art! "Art should not be considered as merely a luxury," he wrote in one of his proposals to industry, "but should work within the processes of actual production and reclamation."

He was amazed that the big corporations did not see it. The political movement against large-scale strip-mining for coal in the West and Midwest was gaining momentum in 1971. With the help of an influential New York businessman, Smithson put together a prospectus and mailed it to some fifty corporations—Anaconda, U.S. Steel, Union Carbide, Peabody Coal, Kennecott Copper. He designed a specific proposal for Hanna Coal's vast stripping operation in the Egypt Valley of southeastern Ohio: a thousand-acre tract of embankments and jetties that somewhat resembled his Emmen quarry piece but was on a far

larger scale. Hanna declined to commission it. Few other corporations bothered to respond at all.

One that did was the Minerals Engineering Company, in Denver. Smithson made several drawings for a "Tailing Pond," a terraced receptacle for the waste products of this company's silver-and-lead mine in Creede, Colorado. The firm actually decided to commission the piece, and Smithson went out to Colorado in the summer of 1973 to work on it. Work was delayed for technical reasons, though, and while he was waiting for clearance he drove to Texas with a friend and met Stanley Marsh, a wealthy art enthusiast who was interested in commissioning an earthwork for his ranch, near Amarillo. Smithson chose his site and staked out a winding, ascending earthen ramp. Marsh chartered a small airplane, so that Smithson could survey and photograph the site from above. The plane went into a dive and crashed a few hundred feet from the staked-out area, killing Smithson, the pilot, and the photographer.

The period in which Robert Smithson completed all his mature work was remarkably brief—only nine years—but his influence is still very much alive. It can be seen in the work of the so-called site-specific sculptors and in the more recent development of works that lie somewhere between sculpture and architecture. It is also evident in a new generation of earth artists, one of the most interesting of whom is Smithson's widow, Nancy Holt. The people who dismiss Smithson as a failed visionary, an artist who never did get outside art, miss the point of his basic proposition. He believed that art could be an integral force in our society, as it had been at other times and in other societies; he held that the problem of art, like the problem of nature, was neither modern nor postmodern but contemporary.

—Calvin Tomkins

•

HOW'S THAT AGAIN? DEPARTMENT

[*From the Lakeville (Conn.) Journal*]

His experience in opera was evident in his exemplary collaboration with Alicia de Larrocha in Mozart's Piano Concerto No. 24 in C minor.

•

REAGAN SAYS
NUCLEAR WAR
CAN BE BRIEF

—*Baltimore Sun.*

About ten minutes, we figure.

WHAT WE ARE GOING TO DO

Starting with a contract with Algeria for satellite monitoring of the Iran-Iraq war to end that, and proceeding with monitoring of the Sahara.

Next, definition of areas for administration in the Arab Gulf, interior Iran and other basins of what was once a loosely-confederated Persian Empire.

heuteKunst

Internationale Kunstzeitschrift/International Arts Review DM 10. (L. 3.000 $5.)

Nummer 25, Juni-Juli 1979

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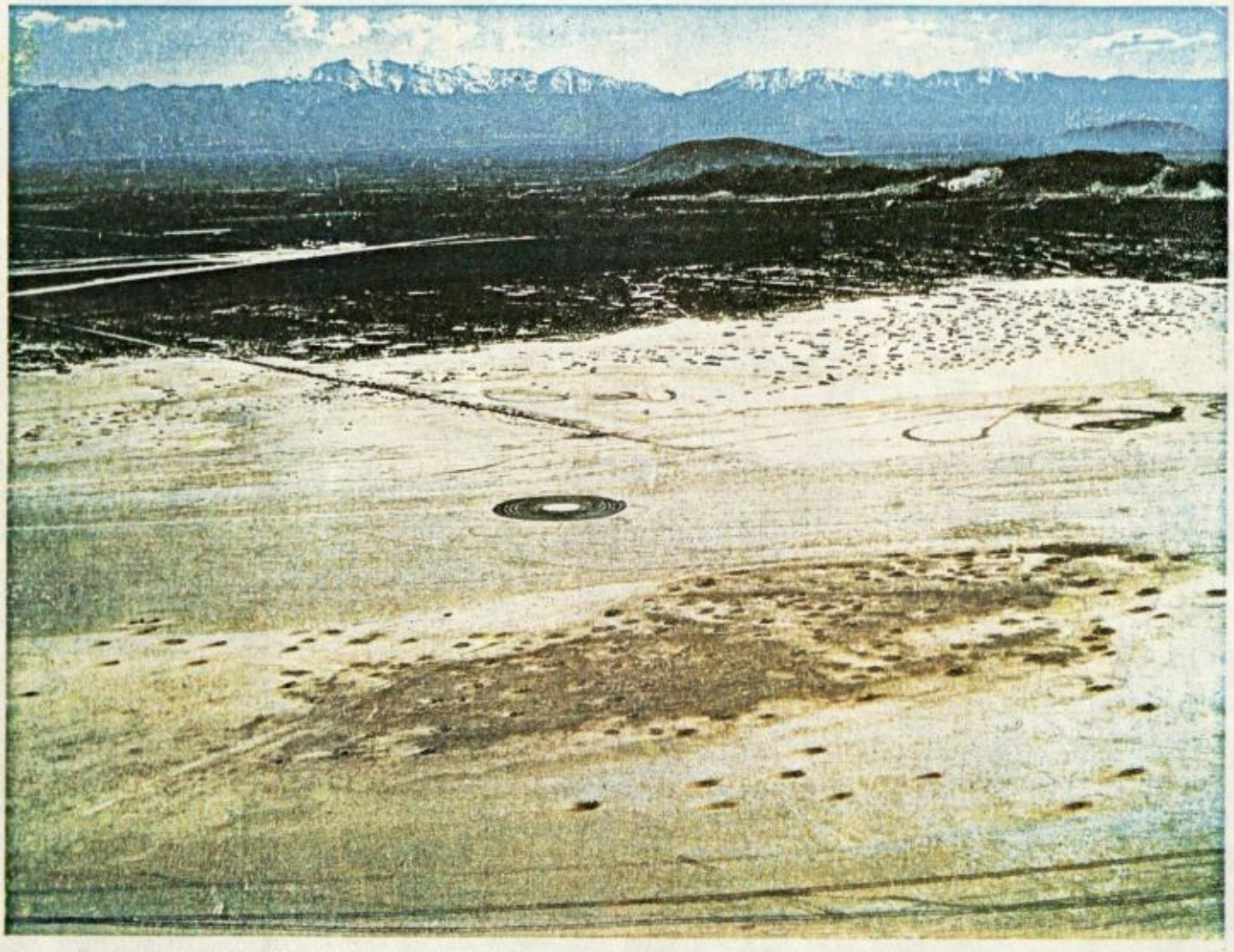


Dennis Oppenheim "Devils Hole" 1978

I RECALL YOUR DEMATERIALIZATIONS OF THE ART OBJECT. NOW, WAR MIMICS ART --- SHALL ART TAKE A LEAD AGAIN?

City of the Dead

A large stretch near salt flats or marshes, perhaps in dry maountains, is staked out as a Relocated Burial Ground. Here, residues of the city, including humans, are returned. ~~For a long time~~ funerary architecture has long tried to stop time and store, as if forever, unalterable residues. This logic extends to the piling up of wastes ~~in stupid lumps, a piling~~ that depletes the land and covers it with Poison. Cities have become Ghost Towns. They resemble the ziggurats in their destruction of water and salt cycles. Result: "the land gave everything and took nothing in return" and "there is a constant breath going outward."

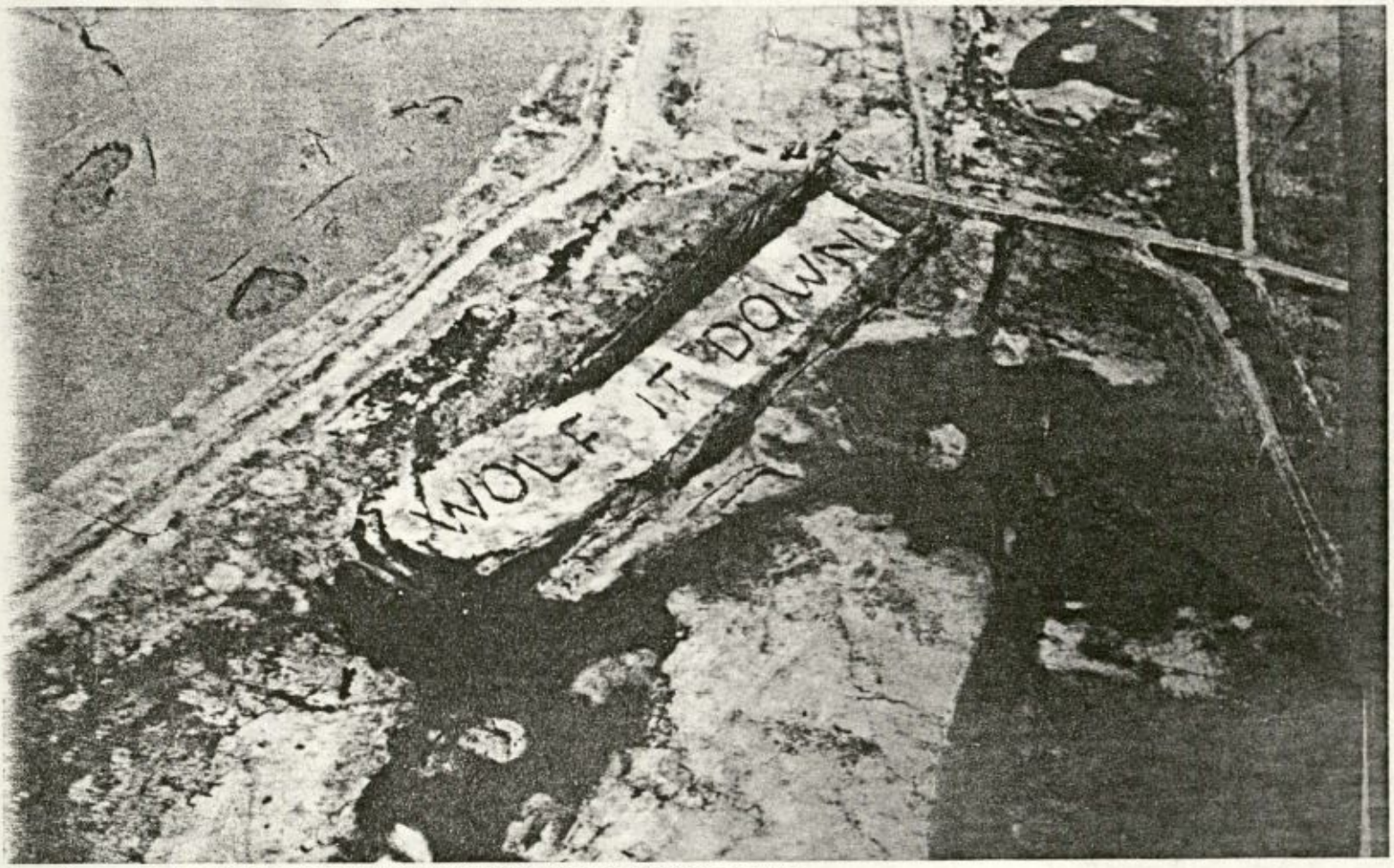
Now ~~the burial ground~~ funerary architecture is set on a journey Back to the Mountains. It is located amid ancient hunting and trapping grounds. To get there, the city undergoes a Gallery Decomposition: The "architectural catalyst" is removed, it is pyrolyzed. The end products are reduced to tars. They are "returned to locations of preliminary processing." The city's materials go into Reverse Processing: once pooled as tars, they can be stretched out upon terrain in an Identity Stretch pattern. Or microorganisms can be cultured on the tars to yield a yeast with the ingredients, now animate, of star dust. Or the microorganisms can be further upgraded by membrane transmission of information, a sort of illumination, to regenerate feather follicles into the materials of FEATHER Ridge Transfer. Whatever, the site is activated, the city of the dead comes alive.

The city of the dead is a sump, a marsh. It contains Dead Furrow interspersions of wet and dry terrain which are monitored from Viewing Stations for Exterior Field Locations. The site is like a Branded Mountain: it is considered as a system and it has an economic function. In a "product-oriented production system,"

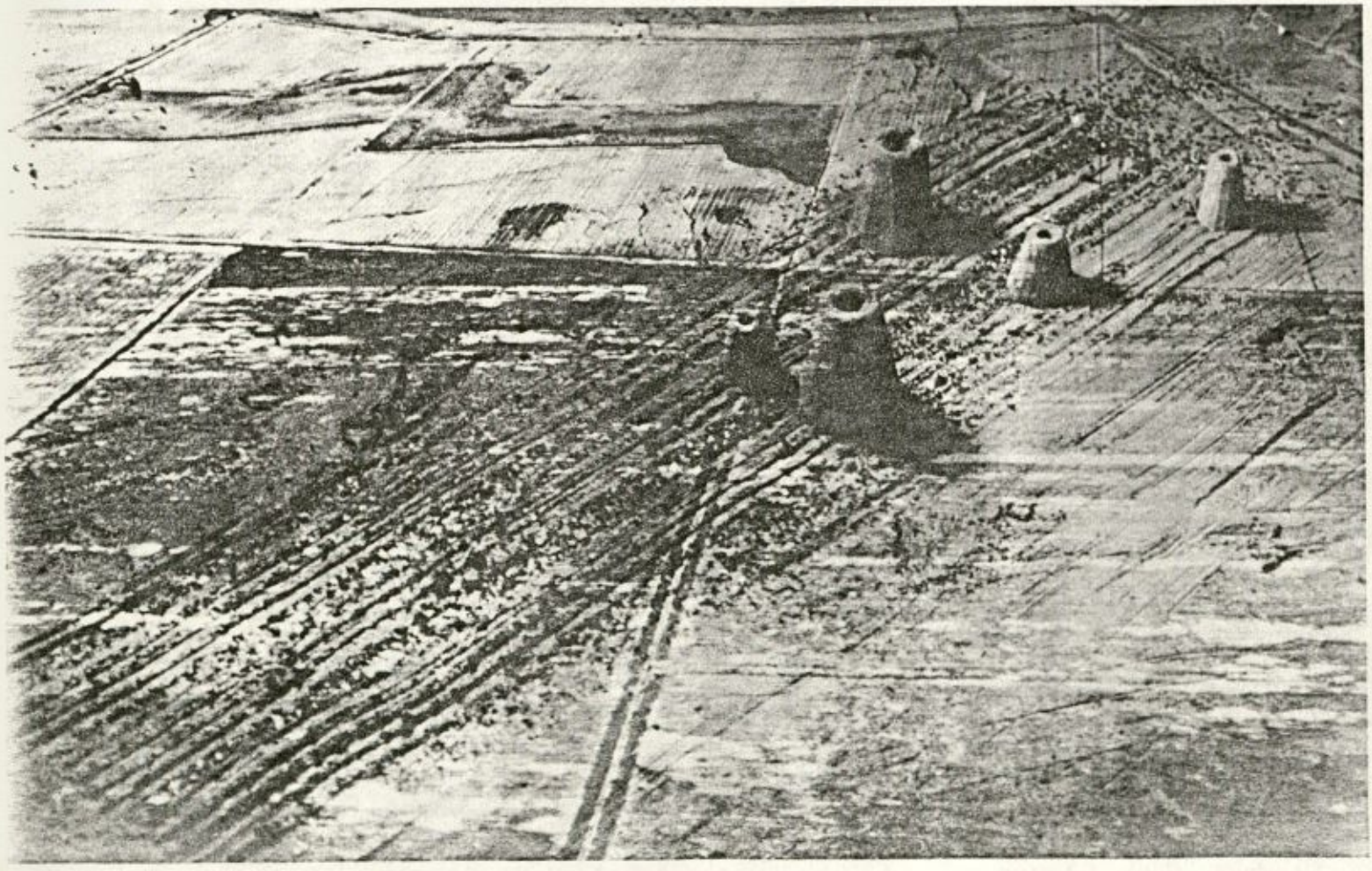
promte forms of cave animals; they condense waters in pools; the ground benearth, interpenetrated with burrowings, becomes a sponge. Animalspopulations rise. So do rates of killing, or exchange. The mire begins to spread outward. Unwary creatures become caught in and expanding Devil's Hole. Migratory Dream Lines ~~of kind and air species~~ converge, then spin about in a vortex which appears under aerial infra-red cameras as an Electric Range of animal motion. ~~The site erases~~ with winding paths, with "traps marking the frequency of intersecting travel," within a ~~Rainbow Pass.~~

Year by year Devil's Hole ~~grows larger~~ enlarges. A once arid stretch near salt flats becomes an interpsersion of tars, muds and salty waters. Mud Flats form. The architect builds more traps, more tight spaces into which animals gather, kill and die. Death Holes atract land animals out to the edge or upon the narrowing spit: herbivores go there for the water; carnivores go there for the herbivores. ~~Aquatic~~ Nearly ~~edge~~, aerial animals converge and take their chances wthin Screen Test Cages. They meet, they fight and die, they breed very ~~fast~~ wildly.

The city of the dead had once been desert. Now itis treated as a ~~battleground~~ wasteland. Turrets crop up and harvest ~~some of the~~ game. Targets ~~receive droppings from airplanes.~~ get blastedby airplanes and then receive the remnants of human cities. In the arid setting, Mud Flats give off steam. The heated rates of organic respiration lead then to a moist column of air. The column lifts off and becomes a Whirlpool. It becomes an Eye of ~~the~~ a Storm. As more of these clouds erupt from the landscape, the sky receives a "constant breath." It begins to contain patterns, to transport formations, to build watery roofs that eventually collapse. ~~The~~ "I should have done the sky," the artist said. He does it: spreading out the city in its remnants among Land Clouds of ~~residues,~~ organisms, he builds a city for the dead humans that breaths up constantly-shifting sky cloud forms

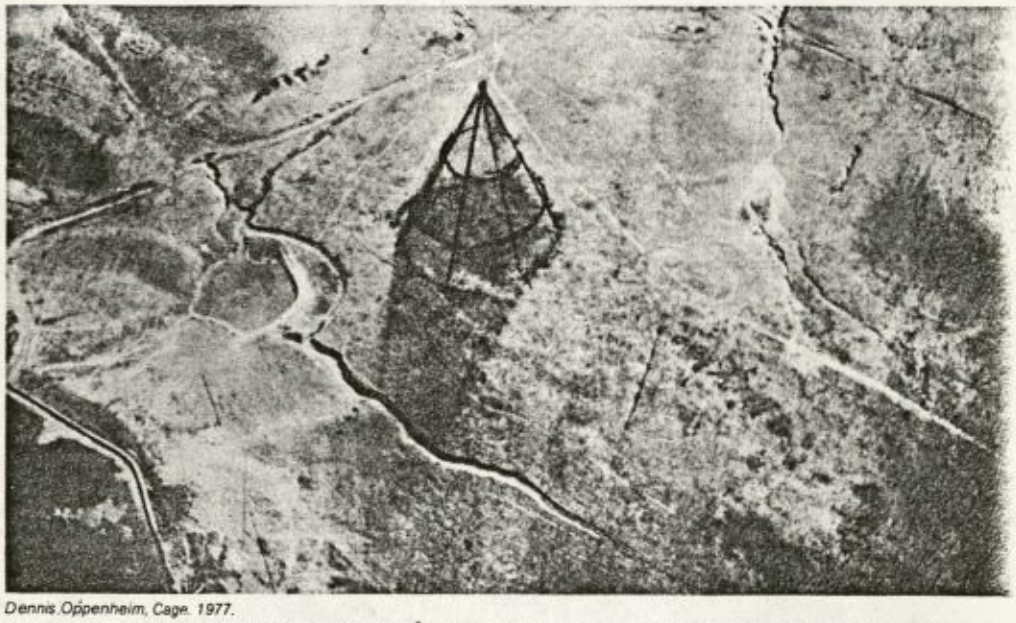


Dennis Oppenheim, Wolf it down, 1977. Project Proposal for Western United States. Materials: Excavated earth, concrete, tar.

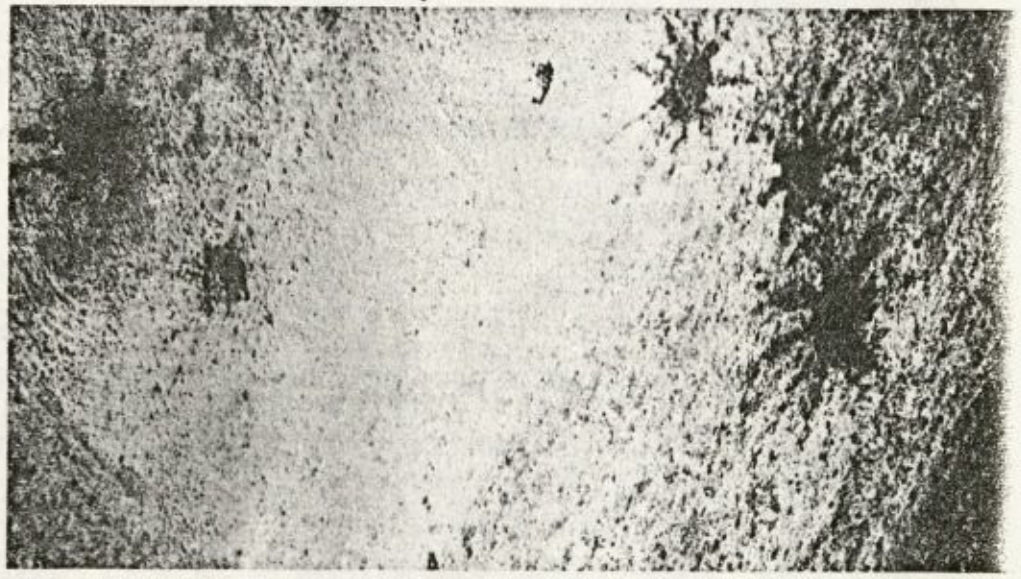


Dennis Oppenheim, Dry Wells.

Die Totenstadt - Eine Architektur nach Dennis Oppenheim



Dennis Oppenheim, Cage. 1977.



Dennis Oppenheim, Three downward blows (Knuckle marks). 1977. Procedure: Underground explosions at 5 to 6 feet below ground. Approxima diameter of craters: 4', 6', 8' and 10'. Lplo, Montana. Aerial view.

Eine grosse Fläche in der Nähe eines ausgetrockneten Salzsees oder Sumpfes, vielleicht in einem trockenem Gebirge, ist abgegrenzt als **"Versetzter Begräbnisplatz"** (Relocated Burial Ground). Hierher bringt man die Residuen aus den Städten—die irdischen Reste des Menschenkörpers miteingeschlossen.

Totenarchitektur hat lange Zeit versucht die Zeit anzuhalten und die Residuen zu Konservieren. Diese Praxis führt zum Ansammeln von Abfall, welcher das Land erschöpft und vergiftet. Städte wurden zu **Geisterstädten** (Ghost Towns). Sie sind Zigguraten ähnlich in Zerstörung des Wasser- und Salz-Kreislaufs. Resultat, sagt Dennis Oppenheim: "Das Land gab alles und erhielt nichts zurück" und "ein ständiger Atem ging nach außen."

Jetzt basiert eine Totenarchitektur auf einer **Reise zurück in die Berge** (Back to the Mountains). Sie verlegt sich in die alten Jagdgründe. Um dorthin zu gelangen begeht die Stadt einen **Galeriezerfall** (Gallery Decomposition): der "architektonische Katalyst" —Wasser—wird durch Pyrolese entfernt. Das Endprodukt ist auf Teer—oder einen anderen Kohlenwasserstoff — reduziert. Das städtische Material unterliegt einem **Umkehrprozess** (Reserse Processing). Der gesammelte Teer kann über ein Terrain ausgebreitet werden als eine **Identitätstrecke** (Identity Stretch). Mikroorganische Kulturen entstehen auf dem Kohlenwasserstoff. Die Mikroorganismen können in das Innere eines Gärbottichs wachsen. Mehr, die Mikroorganismen können weiterentwickelt werden durch die Regeneration von Federfollikeln zu den Materialen von **Versetzung des Federkamm** (Feather Ridge Transfer). Das Gelände ist aktiviert: die Totenstadt wird lebendig.

Die Totenstadt ist ein Sumpf. Sie ist durchsetzt mit nassem und trockenem Terrain, als **Leblose Furche** (Dead Furrow; Viewing Stations for Exterior Field Locations). Das Gelände ist wie ein **verbrannter Berg** (Branded Mountain): es ist System, eine ökologische Einheit, und es hat eine wirtschaftliche Funktion in der Ökonomie. Es ist kein produktorientiertes Produktionssystem. Im solchem System, Zerstörung des erhaltenen Produkts eines Geländes erwirkt - **Lücke** (Void). Aber die Totenstadt, als Stadt für tote Menschen und lebende Tiere in ihrer Verflochtenheit, ist ein lage-orientiertes Produktionssystem. Es gibt keinen Schutz vor Raubtieren; kein Pflügen oder Zähmen: das Gelände ist wild.

Der Architekt, nach Oppenheims Werken, schafft die Voraussetzungen für die Rückgabe des Endprodukts an das Land. Die Stadt ist so nahe als möglich bei den Materialen, von denen sie getragen wird. Das tragende Material, gezeigt in **Kleines Boot, verloren im schwarzen Meer** (Small Boat Lost in Black Sea), ist ein hydrologisches Becken das sich von den Bergen zur See neigt. Indem der Architekt das ganze Becken ausbeutet gibt er die Residuen der Stadt den Höhenlagen zurück, von wo sie via Flüsse, oder **Kobalt Vektoren** (Cbalt Vectors), zur See zurückkehren. Der Architekt baut Wasserkreisläufe. Mit "Besamung aus der Luft" aktivieren Flugzeuge das Gelände für die Tiere. Die **Landschnitte** (Land Incisions) erhalten ihre Ladung. Mit **absteigenden Schlagen** (Downward Blows) hinterläßt der Künstler einen Streifen Fallgruben. Wasser und Salz vermengen sich; Schlamm breitet sich aus. Insekten und Vögel werden angelockt. Und in der Oberfläche in der Nähe der Salzfläche begünstigen **Trockenquellen** (Dry Wells) die Vermehrung der Untergrundtiere. Sie schützen den Untergrund vor Sonne und Wind. Sie locken Wandervögel und Höhlentiere an, sie kondensieren Wasser in Tümpel: die Erde darunter, durchsetzt mit Höhlen, wird zu einem Schwamm. Die Tierbevölkerung wächst. Der Schlamm breitet sich aus. Denn, eine Savanne, die sich als Netzwerk bildet, begründet eine Oase.

Unbedachtsame Tiere fallen den **Totenhöhlen** (Death Holes) zum Opfer. Anfänglich konvengieren die Tierpfade als gerade **Traumlinie** (Dream Lines), später drehen sie sich in einer Spirale wie sie in den infra-roten Luftaufnahmen in **Elektrischer Spielraum** (Electric Range) erscheint.

Jedes Jahr vergrößert sich die **Teufelshöhle** (Devil's Hole). Ein ehemalig dürrer Streifen von abgelagertem Kies wird zu einer Vermischung von Teer, Schlamm und Salzwasser. Schlammflächen bilden sich. Der Architekt baut mehr Fallen, mehr enge Räume in welcher Tiere zusammentreffen, fressen und krepieren. Landtiere werden von den **Totenhöhlen** auf eine sich verengende Spitze gelockt. Pflanzenfresser kommen wegen dem Wasser; Weiter draußen, drängen sich die Flugtiere, kämpfen um Lebensraum (Screen Test Cages). Todesraten steigen. Vermehrungsraten nehmen zu.

Die Totenstadt war einst eine Wüste. Nun ist sie ein Schlachtfeld. Es bleibt ein Niemandsland. Türme ragen auf und ernten wilde Tiere. Zielscheiben liegen flach, warten darauf von Explosionen aufgerissen zu werden, warten darauf mit den Resten der Menschenstädte befruchtet zu werden. In der sie umgebenden trockenen Atmosphäre, steigt Dampf auf über der Totenstadt. Durch die organische Respiration in den **Schlammflächen** (Mud Flats) steigt eine feuchte Luftsäule. Die Säule steigt und wird zu einem **Strudel** (Whirpool). Es wird das **Auge des Sturms** (Eye of the Storm). Wenn mehrere solche Säulen aufsteigen, erhält der Himmel einen "ständigen Atem", er beginnt Wolkenfelder zu bilden. Farben ändern sich, ein Dach aus Wasser entsteht, das schließlich als Regen zusammenbricht. "Ich hätte den Himmel machen sollen," sagte der Künstler Oppenheim. Er tut es durch Erdarbeiten innerhalb eines architektonischen Programms; schafft der Künstler jene Zirkulation des Wassers, welche Muster in den Himmel malt.

Peter Fend

(Übersetzt aus dem Englischen von Wolfgang Stahl)

GULF HEAD

The birds that fly from the Soviet Union during winter--especially from the Asian inlands--fly to East Africa via Palestine and the Head of the Arabian/Persian Gulf. Everwhere they go they encounter desolation. At the head of the Gulf, where there were marshes and prey there are salt flats. By the Gulf itself, there is petro-chemical pollution. To the northeast, around the Caspian and Aral Seas, and even in Siberia, ever larger amounts of land turn to salt flats and evermore drastic measures, most likely catastrophic to world climate, are contemplated by the Moscow regime. To the southwest, in East Africa, the drought famous to Ethiopia extends across all borders.

There are fewer birds now in the flyway than before. There are fewer birds, much fewer, passing through the Head of the Gulf. As fewer shipments by air, rail or road would damage an economy, so fewer transfers from site to site of nutrients by migrating birds would damage an ecosystem. And with that, there are fewer flights--fewer transfers of nutrients--by insects. And fewer incomings and outgoings to salt marshes of fish. And therefore less land animals, less nutrient circulation, less vegetation as part of the cycle. If the human agricultural and irrigation practice, compounded by industrial construction and pollution in vital marshes, were to transform the bird and fish ports along the Asian-African flyways into salt-encrusted or pollution-contaminated wastelands, then of course there would be drought and famine in East Africa, of course a severe scarcity in Central Asian USSR, of course a sense of helplessness all around leading to (what else?) war.

In 1918, while the present boundaries of Iraq, Iran, Kuwait and other Mideast states were being decided upon by the victors over Turkey and Germany, the British War Council and Foreign Office agreed among themselves to separate the entire Shatt al Arab region from whatever might become of Turkey and to integrate it, under British control, with the British-held concession lands in Persia. The British decided, in effect, to treat the entire saltmarsh and estuarine-lowland region at the Head of the Gulf as a single unit. They proposed this because of the oil. But they could as well have done this because the region is a single ecosystem. From the viewpoint, up in air, of migrating birds, the single lowland region for management was, after all, One Place. Discussions with the French and other claimants to the oil properties led to a more artificial designation of boundaries. For an understanding, at least, of what is to be done with the region as ecosystem, as vital meeting-ground for species in transit, as link in a chain of nutrients transferred from Africa to Asia, we might adopt the 1918 British plans and look at the Head of the Gulf as One Place.

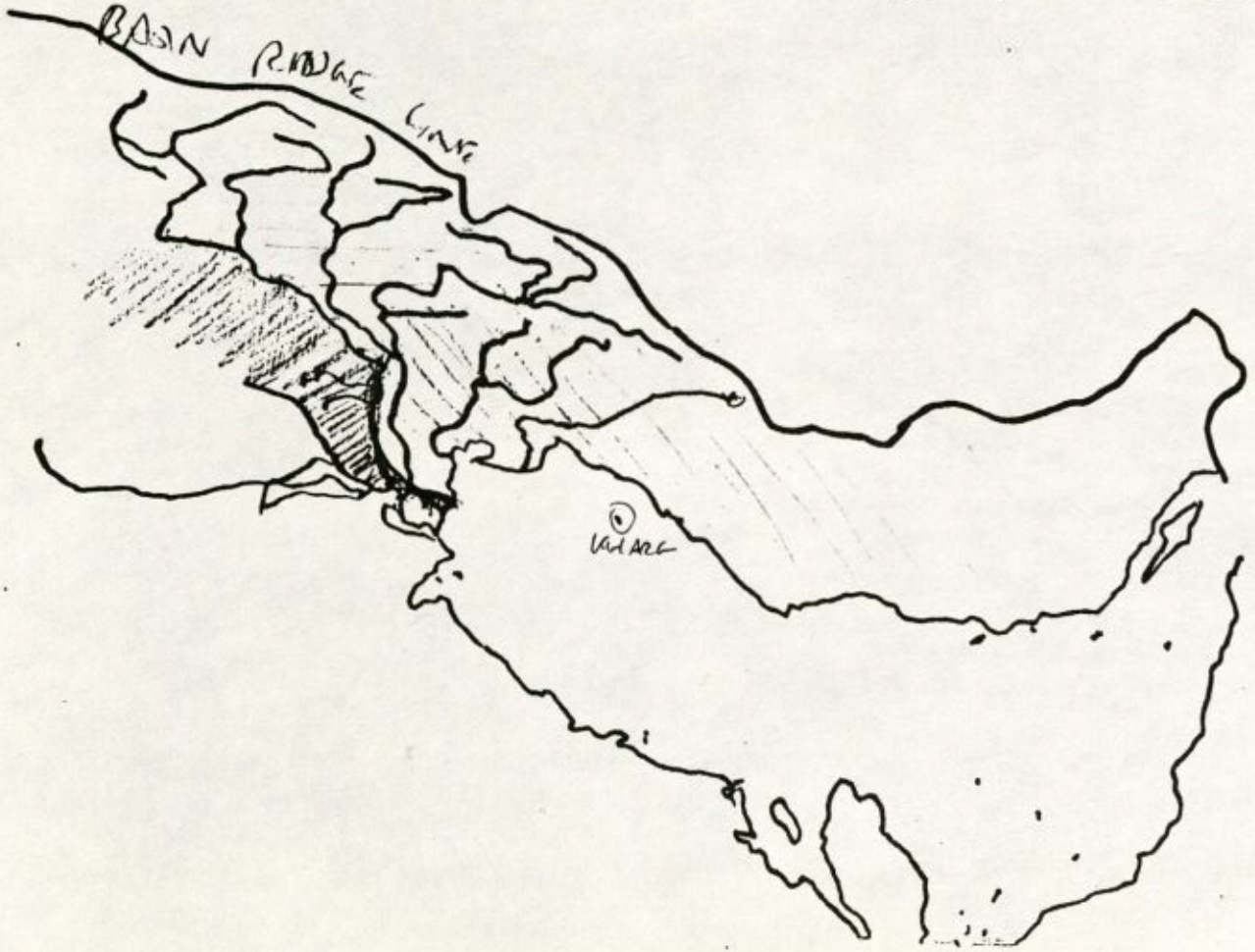
The ridgeline marks the border of the Consortium, etc. oil concession in Iran. It is also the high ridge of the Zagros Mountains and the Gulf basin. We conceive Iraqi plans, assented to by Saudi Arabia and Kuwait (with the major oil companies), to gain some control over this concession region. The river strategy suggests the progression of territorial holding shown.

(1)

(2)

(3) with Kuwait divided, advance to

LUKISTAN BASIN – ARAB GULF



PUSHING THE OUTER EDGE OF THE ENVELOPE OF HISTORY . . .

what we say to "them"

IRAQI OBJECTIVES

As Les Aspin observed recently in Foreign Policy, military analysis should incorporate an understanding of what each combatant wants, and therefore of what is in their strategic heads. If an analyst tries only to collect reported facts in order to be "right", he will end up being wrong--for he will not consider the iceberg of information beneath the facts on the surface, and will not consider how each side is thinking. Just as we in the U.S. have large-scale and long-term strategies, so might other, lesser countries.

The long-term strategy of the Iraqis, as champions of a pan-Arabist cause under their leadership, is to loosen the Arab regions of Iran from that country. The strategy, in effect, is to bring the area of the oil concessions, the area of the Consortium, which drains into the Persian or Arab Gulf, under non-Persian control. At least this may be said of Khuzistan, with adjacent provinces of Ilam and Luristan included.

We have noticed this strategic objective in Iraqi publications, which show maps of "Arabistan" as not just "Khuzistan" but also "Luristan" and "Ilam", and which indicate on those maps the rivers Karun and Karkheh, as if those provinces could be defined as Karun-Karkheh lands. I cite in particular a book called Le Conflit Iran-Irak, found at Antenne 2.and published by an Iraqi propaganda house.

We suppose from responses by The Middle East and South that Iraq's backers, notably Saudi Arabia and Kuwait, know about these strategic aims and tend to favor them. However, they would prefer that an entity such as the Gulf Cooperation Council administer any "liberated" provinces of Iran than that Iraq take over there. Such non-Persian administration of what was once the territory given over in part to the Consortium would not be troubling to the multinational oil companies. The arrangements for that region which were made in 1954 expired in 1979, and it would not be unreasonable now for the multinational companies participating in those arrangements to seek new contractual positions in the region. Such positions will not develop under the present Iranian regime. Multinational oil companies may wish a transfer of power in the Consortium region from Iran to an Arab entity.

The "open door," in the words of one industry observer, had been "bolted, barred, and hermetically sealed."

> In the early twenties when the American oil companies first became interested in oil concessions in the Middle East, they placed great emphasis on what was termed the "open door" policy, and, in fact, made the acceptance of this policy a sine qua non of their participation in IPC. In this they were actively supported by the American Government. In its initial stages the "open door" policy was broadly interpreted to mean freedom for any company to obtain, without discrimination, oil concessions, in mandated areas, particularly in Mesopotamia. . . . The "open door" policy which had been so strongly advanced was discarded in subsequent years without a single test of its adequacy as a practical operating principle.[9]

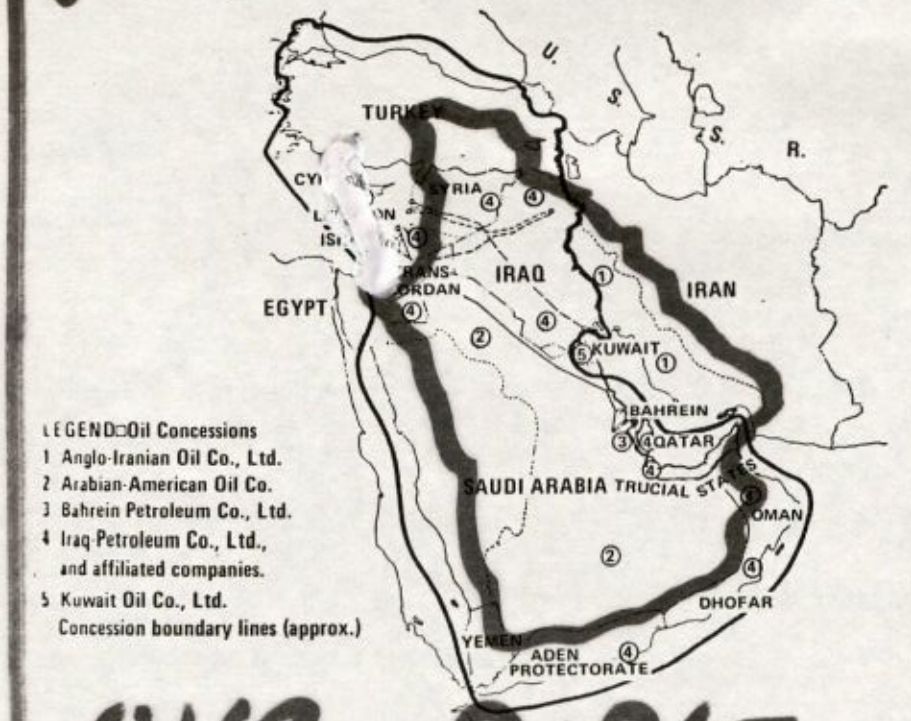
Competition among the owners themselves was precluded by retaining the "self-denying" clause of the 1914 Foreign Office agreement. Within an area circumscribed on a map by a "Red Line" encompassing most of the old Ottoman Empire (including Turkey, Iraq, Saudi Arabia, and adjoining sheikdoms, but excluding Iran, Kuwait, Israel, and Trans-Jordan), the owners agreed to be interested in oil only through the IPC (see Chart 2-2). When Gulf Oil, a member of the American group, sought permission to exercise an option to purchase a concession in Bahrein, IPC denied the request.

As one writer commented, the Red Line Agreement ". . . is an outstanding example of a restrictive combination for the control of a large portion of the world's supply by a group of companies which together dominate the world market for this commodity." In a confidential memorandum, the French described the objectives of the agreement: "The execution of the Red Line Agreement marked the beginning of a long-term plan for the world control and distribution of oil in the Near East." IPC was so operated as "to avoid any publicity which might jeopardize the long-term plan of the private interests of the group. . . ."

THE ENTRANCE INTO ARAMCO

While providing adequate protection against independent action by the groups within IPC, the Red Line Agreement could not prevent *nonmembers* from seeking concessions within the red-line area. When an independent organization, the British Oil Development Co. (BOD), obtained a concession in the Mosul area of Iraq, IPC began to secure as many concessions as possible within the red-line area, principally for the purpose of keeping them out of the hands of competitors. IPC

CHART 2-2
Oil Concessions and Facilities in the Middle East, January 1951



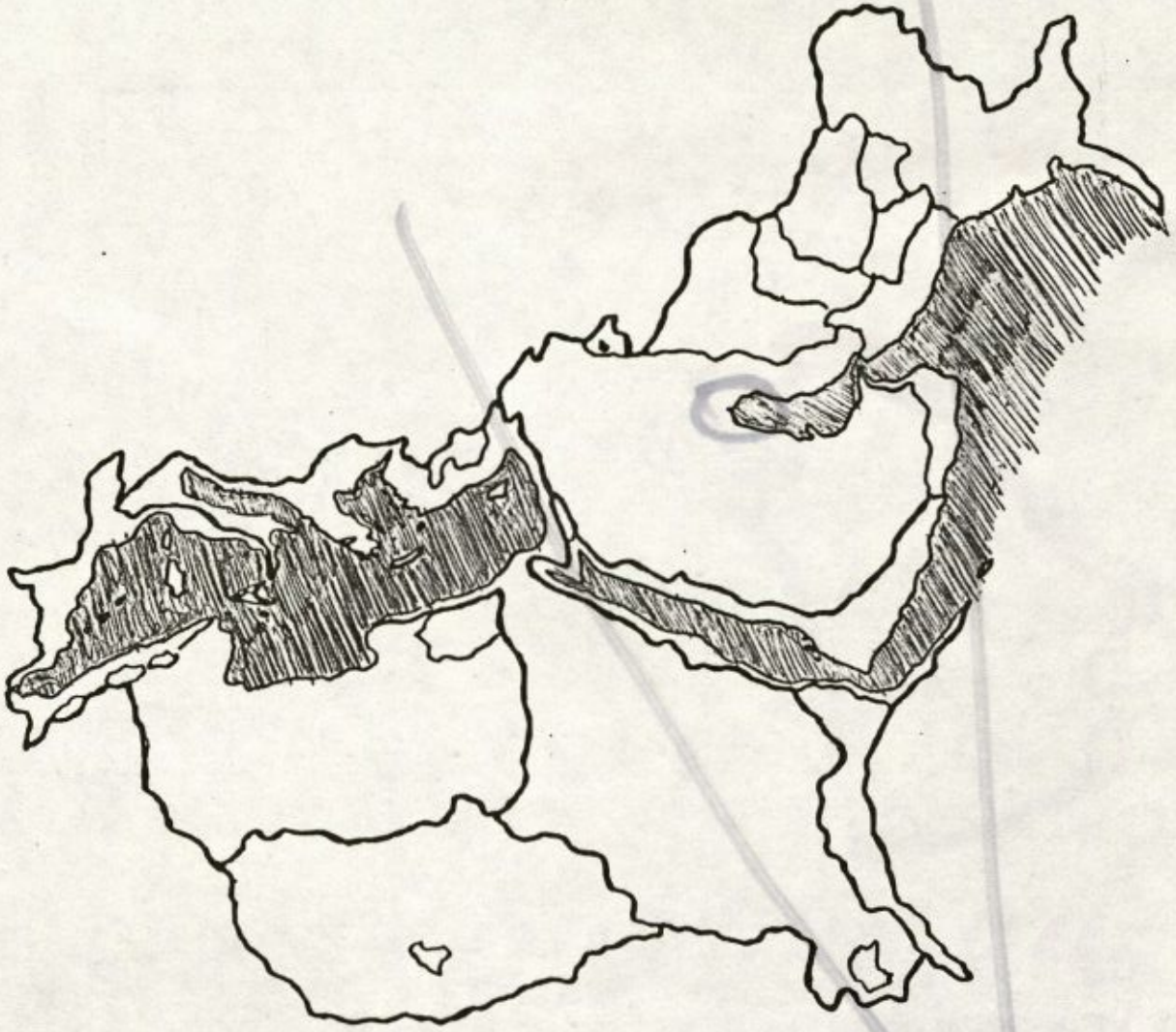
subsequently obtained control of the BOD concession by secretly purchasing its shares.

The same type of problem on a far larger scale developed when another outsider, SoCal (Standard Oil of California), discovered oil initially on the island of Bahrein and later in Saudi Arabia. Standard of California was a newcomer to the world oil scene, and as *The Petroleum Times* put it, ". . . what each large oil group fears more than anything else is the entry of a powerful newcomer in the established order of world oil markets."[10] A confidential memorandum found by the Department of Justice in Exxon's files discussed the

Policy for
Arabian Sea
Red Sea
Lake Chad
Mediterranean Sea
Rift

In accordance
with major nutrient
transfer (migratory)
flyways from Africa
to Eurasia

A proposal for
the Arab League
and for Islam
generally



WATER DRAINAGE BASINS OF
IRAN

– map not included

These regions tend to conform with the ethnic divisions of Iran. We prepose semi-autonomous management of those areas under satellite scrutiny and comprehensive Arabian Sea basin-management.

Iraqi ambitions for a pan-Arab presence in the Arabian Gulf need not be entirely denied, and Iranian (Persian) objectives of a non-East and non-West, Muslim role throughout the region need not be denied either.

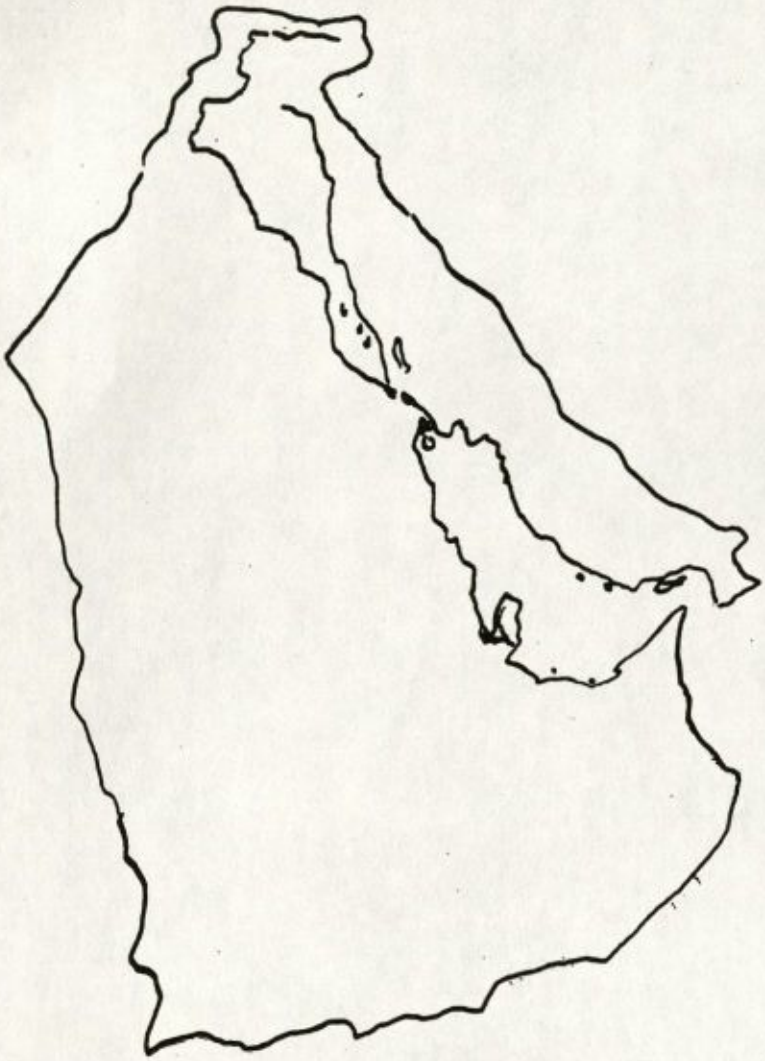
Whatever be the politics, the region would do well to have comprehensive hydrological management towards a long-term rejuvenation of the current desert lands.

FILES WITH BOTH IRAQ AND IRAN

IRAN

AWAY

First exhibited at
the Income and
Wealth Show, New Yo



"The United States has vital interests there. It will move in such a way that it protects those interests, even if that involves the use of military strength or of military presence.... I think that sending troops will have to be considered, quite plainly."

James H. Schlesinger, Secretary of Energy
Former Secretary of Defense

2.25.79

While some countries consider a Rapid Deployment Force for the Gulf, the peoples of the basin itself can organize under U.N. Environment Program authority into a vigorous Arabian Gulf confederacy.

Text for earth-

IRAN PLAN 1977
Persian Terrain

Recognize that Iran is a result of military compromises (largely between the UK and Russia).

Recognize that there has been a Persian empire with decentralized satrapy administration which embraced the entire coast of the Arabian Sea and which included the Persian high plateau (which drains inward into several basins).

Recognize that Iran is in danger of disintegration and that the major forces for such disintegration are ethnic.

The ethnic groups are generally concentered in basins.

The most separatist ones are the

Kurds	Lake Reziyah and Lake Van Basins
Arabs	Arabian Gulf Basin including areas sought now by Arabian Iraq
Baluchis	Arabian Sea slope between Straits of Hormuz and the Indus Basin
Pushtuns	Arid sinks between present day Iran and present day Afghanistan
Turkomens	Aral Sea Basin (which includes most of Moslem USSR).

In the center are the Persians themselves.

They occupy the interior draining basins between the Zagros and Elborz Mountains.

If they concentrated their energies there and monitored their situation there with LANDSAT satellite imagery, they coold actually effect an ecologically splendid basin state with its own saltwater cycle (independent of the major oceans).

These high basins already hold enormous reserves of natural gas.
And Iranian industry is retooling for a gas power base.
In time, the nutrient and harvesting cycle within the high basins could be developed to such a level that biologically derived methane gas (the chief component of natural gas) could become a plentiful and virtually inexhaustible power base.

The Persians must simply focus their efforts on their high plateau, and,
they must confederate themselves in a still larger system (much like the area of the Sassanid Empire) of the Arabian Sea Basin (and adjunct interior basins which could someday drain into the Arabian Sea if their rivers were replenished and therefore forceful enough);
this system also corresponds with the territory of the ancient Zoroastrians, who believed in cleanness of air, fire, water, and earth, and who were especially attentive to clean fire as effected by methane or natural gas.

"TRANSFERRED TERRITORIES"

In 1909, less than a year after the discovery of commercial quantities of oil in Persia, the First Lord of the British Admiralty--convinced that oil was crucial to the British Navy and therefore the British Empire--injected Government monies into the small British company which found the oil in Persia and formed a new, half government-held company, the Anglo-Persian Oil Company. The First Lord was named Winston Churchill. The company is now one of the largest corporations in the world: BP.

A month after what is now BP was formed, a British knight, who helped administer a part of Persia as part of an agreement with the Russians to administer another part of Persia, visited with the Sheik of what is now Khorramshahr to arrange for a port from which the newfound Persian oil could be shipped. The location he proposed, in the marshy terrain near Khorramshahr, was called Abadan.

By law, the Sheik's domain belonged within the Turkish Empire. But in practice there could also be allegiance to Persia. The British knight offered the sheik for Khorramshahr a large annual rent for construction of a pipeline to and port facilities at Abadan, and he initiated negotiations with the Turkish Empire for such access. By late in 1913, the Persians and their guardians the Russians and British came to an agreement with Turkey's Grand Vizier called the Transferred Territories Agreement. For the convenience of the Anglo-Persian Oil Company, certain territories were "transferred" to Persia where oilfields crossed the border or where, in the marshes near Abadan, pipelines and a port were required to export the Persian oil.

Meantime, inside the Turkish Empire and west of Persia, commercial quantities of oil were already being found--by the Germans. The world faced the prospect of a railroad, already contracted for and financed, delivering oil from Basra in Mesopotamia--near to Abadan--to the capital of Germany, Berlin. Churchill would not permit this. In 1914, in a bid for Anglo-German friendship as well as finance capital, the Germans proposed that all oil rights in Turkey be shared among themselves, the new Anglo-Persian company, the jointly British and Dutch Royal Dutch-Shell company, and (perhaps) the Americans. Churchill wanted no sharing, and he pressured Dutch, British and even Turkish shareholders to sell their own shares and buy only into Anglo-Persian. When the Dutch balked and the Germans persisted with at least 25%, Churchill went straight to the Turkish Government and proposed they forget all this confusion about a multinational oil arrangement and make a clean, 100% deal with Anglo-Persian--and he reminded the Turks of British warships nearby. But the Turks called his bluff and, after further concessions by the Dutch and exclusion altogether of the Americans, a multinational Turkish Petroleum Company came into being. For awhile.

A few days later, a month before the outbreak of war among England, Germany, France and Russia, Churchill ordered the mobilization--weeks before anyone else--of the British Fleet. When the war broke out, Churchill effected a prompt invasion of the Shatt al Arab. No Germans, just like no Russians or Americans or anyone other than the British (or the British-Dutch Shell concern), were going to get that oil.

"NARROW STRIP"

Early in the First World War, the Turks pushed along a broad front into Persia. Only around Basra and Abadan were they blocked. But in 1915 Churchill opened a new front against the Turks--at Gallipoli, and he sacrificed there in apparent failure several hundred thousand (mostly Commonwealth) soldiers. The "failure" succeeded in loosening the Turkish grip on western Persia and Mesopotamia, and by 1917 both the British and Russians were closing in fast on the rich oil fields in what is now Iraq--oil fields which the Germans, in attempt at alliance, had arranged to share with the British, the Dutch and a wealthy Turk. When the war ended, the Germans would thereafter be excluded. The Turkish Petroleum Company was revived--but with the French taking the place of the Germans, and with the Dutch properly subordinated after awards of knighthood and British citizenship for "war services" (i.e., making oil from the Dutch East Indies available to the British, and keeping Holland neutral at least). That wealthy Turkish shareholder, who maintained his stake by advising the Dutch and French on how to keep their positions against the relentless maneuverings by Anglo-Persian to command all assets, was called upon to arbitrate. He was called upon to set forth what shall be and what shall not be the Middle Eastern domain outside of Persia and Kuwait, both British controlled, in which the British would have to share at least some of the oil with other parties. The Turk drew a red line on a map defining within that red line, in what was being separated from the Turkish Empire (now defeated by war) to be administered by England and France, what would become the most valuable oil property in the world. The Red Line Agreement, as it came to be known, included Saudi Arabia and Iraq--now, in 1984, said to be the No. 1 and No. 2 countries in the world for oil reserves. The Red Line ostensibly outlined the pre-War Turkish Empire holdings in the Arab world. It could even be considered as an outline of whatever unified state the Arabs sought--and had been promised by the British and French. But it did not include those parts of the Turkish Empire, at least as once defined by law, which had been "transferred" to the Anglo-Persian Oil Company under the Transferred Territories Agreement of 1913. Without any formal declaration, without any surrender documents or treaty agreements, the "transferred territories" once permitted to the monopoly oil concessionaire in Persia were now incorporated, of course, on any political map of Persia. The name of the Turkish Petroleum Company was changed to the Iraq Petroleum Company, but what had come to be Iraq (with attendant oil production rights) was not, along the eastern border, what had previously been within Turkey. A "narrow strip of land" between newly-declared Iraq and Persia was left vaguely unassigned. This "narrow strip" is most of what was seized by Iraq sixty years later--in 1980.

Churchill had wanted 100% of the oil in the former Turkish Empire, and he succeeded in first negotiating and then fighting the Germans out of any railroad or pipeline direct from Basra to Berlin, but in the course of the fighting he had to acknowledge certain obligations to his allies (or at least helpful neutrals)--the French, the Dutch and the Americans. He tried hard to not acknowledge those obligations.

ANGLO-AMERICAN CONTROL

First, only the oil fields already discovered by the Germans (before anyone else, in 1905) would be exploited. This kept the cooperative arrangement in the Iraq Petroleum Company to a minimum. The British would continue pumping out most of the Middle East's oil flow through their 100% monopoly in Persia. Second, as the former Turkish Empire began breaking into parts, it seemed wise to try talking one of the separate rulers into a separate deal. Anglo-Persian sent a diplomat/businessman over to the powerful new king of Saudi Arabia to see about an exclusive relationship backed up by the British Navy--for "protection." The Saudi heartily detested the British emissary, who lacked the courtesy of writing legible letters, and in the following days he decided to sign an agreement with an American explorer instead. A few years later, with oil discovered and four American companies already engaged, it became convenient for the Americans (who had first edged into the Iraq Petroleum Company/Red Line arrangement by the back door) to announce that the Saudi king unfortunately did not wish to have any more companies, no matter what their treaty rights under the Iraq Petroleum Company framework, crowding into his domain. Third, if Americans must be brought into the system, okay, but then let's share Kuwait (a 50-50 arrangement ensued) and let's keep production and exploration down where there must be cooperation with "outsiders", notably the French and that troublesome but clever Turk. The oil resources in Iraq were consistently and deliberately unexploited, and the oil resources in Qatar, Bahrain and what has become the United Arab Emirates were scarcely mentioned.

The British tactics generally paid off. The Red Line Agreement became rather useless, and the bulk of Middle East oil production through World War II was under Anglo-Persian. The defeat and quasi-cooperation of the French in World War II gave the British a bargaining lever to force the French out of all territories within the Red Line (including Saudi Arabia) except (as a consolation prize) Iraq. The Americans had become staunch allies, dutifully undertaking the burden of the British Empire, and they cooperated with the British to form an Anglo-American cartel. In 1950, this cartel produced over 95% of all oil produced anywhere outside of North America and the Communist bloc. It proposed even to replace the rather unsatisfactory, non-monopoly IPC (Iraq Petroleum Company) with a comfortably unified International Petroleum Commission, and it settled in the end for a head office called the London Policy Group. Here, in one place, under one authority, the heads of Esso, BP, Shell, Mobil and Texaco all came to agreement--on how to organize all the world... except for the Russians, Britain's ancient nemesis and enemy in Persia.

From the beginning, the British Empire had concentrated on keeping out from its domains the Russian Empire. The conversion of that Russian Empire into a Bolshevik enclave gave Britain an ideological foundation for alliance with third parties against its imperial enemy, and whatever would be an International Petroleum Commission or London Policy Group, or the genuinely official OECD, could justify any manner of oil-monopoly action under the banner of defense against not a centuries'-old empire but godless Communism. Behind the rationale of "protection" against the Iron Curtain (a term coined by Churchill) the Anglo-American cartel dominated the rest of the earth.

CRACKS

During the next three decades cracks began to appear in the Anglo-American order. First, the state oil companies of Italy and France, seeing themselves left out or pushed around amidst the aggrandized British Empire (with American super-rogates), determined to be equally frank about the diplomatic and political nature of the oil business, and established the practice of country-to-country contracts. They would"service"a country with oil by seeking not concessions with royalties but 50-50 partnerships in production and distribution. Rather than play off one source of oil against another, intent on controlling "world market conditions", they would develop a cooperative relation with each source of oil to find a mutually profitable way of extracting that source's oil and finding specific country markets for it. Iraq liked this approach, and when it nationalized in successive waves the bulk of oil concessions once awarded to the IPC, following decades of having its oil supplies deliberately and consistently underexplored and underexploited, it set up fresh contracts with the French and Italian companies. Second, the supplier countries began to form their own state oil companies, both to produce and to contract (sometimes through other oil firms) on a country-to-country basis. Iraq first did this. Then Algeria. Then Iran. There could be cooperation with the Russians, as the Iraqis learned to their delight in the development of a once-IPC field by Russians and then the shipment of the first tankerloads through the vital lifeline of the Free World to . . . East Germany. And there could be putting an end to cooperation, as the Iraqis also practiced in their cancellation of the Soviet contracts after learning that the Soviets, like the Anglo-Americans, were unduly profiting from their shipments, selling them rather more in the West than their intended home market--for the usual, Western-style big markup. Similarly, the state oil companies have learned to wield control over where their oil goes, and for how much, and to what end. The London Policy Group, like the Gosplan apparatchiks their counterparts, would not be pleased.

The world's economy, particularly outside the Communist bloc, has undergone three major inflationary leaps, three oil price shocks, since the establishment of the prevailing East-West (or Anglo/American-Russian) oil order in the First World War. All of the leaps, all the shocks, ensue from events in the Mideast: (1) the full-scale switch-on of oil flow from throughout the Gulf, including particularly Saudi Arabia and Kuwait, which fueled the "economic miracles" of recovery in Western Europe and Japan; (2) the Arab oil embargo after the 1973 Arab-Israeli war; and (3) the Iranian revolution in 1979. In all cases, oil has become less cheap. For the nonindustrialized world, the so-called Third World, it has become disproportionately expensive. But in all cases also, none of the major oil companies within the Anglo-American cartel became poorer. When the Arab embargo ended, for example, the four-fold increase in oil prices could also have ended or been rolled back: not at all. The 400% increase fairly much remained, and the cartel acquired unprecedented profits. Could such increases and such profits occur again, with the conclusion of the Iran-Iraq war?

WHAT IF
THE CARTEL
LOST

Much has been said about how Iran must not win the war with Iraq, which Iranian diplomats emphasize is not just "a war" but is an "imposed war", and much has been said about how Iraq will never win the war, leaving therefore the conclusion that the war is unwinnable and should either end or simmer at a modest rate. It is acknowledged by all that if Iran won, and won big, disaster would befall the Western world. Presumably that means that whatever happened to Anglo-American and other Western oil interests in Iran might also happen in Kuwait, Iraq and Saudi Arabia--and so throughout the Gulf--and apparently this does not bode well for Western economies or, as the Anglo-Americans say, "the world market conditions." It may be assumed that whatever much has been said has been whatever much is generally permitted to be said. What is not said, which may more truly reflect the situation (no expert in 1973 predicted a permanent four-fold increase in oil prices), is: (1) what would happen if Iraq won?, and (2) who is actually hurt economically by reliance on oil from Iran? Rather: would a victory by either Iraq or Iran make any significant economic difference? And if it did, would that difference be attributable to the victor's rapacity--or to certain "adjustments" by the cartel?

Can we suppose that a Fundamentalist Shiite oil worker is less efficient and more greedy than an Aramco employee? Does an Islamic Revolution translate into higher prices? What productive capacity in the Gulf must be protected in the event of an Islamic Revolution sweeping west from Abadan? Do the consumers of the world stand to lose if either the Ayatollah or Saddam Hussein successfully impose their will on the other? Or do the members of the London Policy Group only stand to lose?

Of all that is said about the Iran-Iraq war, the residual conclusion is that neither side should win, and therefore both sides should--in effect--lose. Both sides should discover the error of their ways and come back into some pre-war fold, Perhaps they could come back to accomodation with the Anglo-American cartel. Perhaps they would realize that it does not pay to mix natinnalism with oil, and that it's better to be "international" like the executives in London, San Francisco and New York.

DOWN TOWN

published by the **LOWER MANHATTAN CULTURAL COUNCIL** FEBRUARY 1982 Vol. 5 No. 2 Arts Activities in Lower Manhattan

Art Lobby

By Stephen Forsling

With its tremendous volume of pedestrian traffic and unusual variety of open public spaces, the New York financial district has long proved an ideal forum for the display of visual art. Through February, Lower Manhattan residents and business employees can "window shop" among four new temporary art installations, each of which makes its own contribution to the already flourishing exchange between artists and the highly mobile downtown public. Entitled **Art Lobby**, the exhibition exploits the large areas of glass on the street level of several bank buildings at or near Chase Manhattan Plaza.

The project, which can be viewed in the windows at **Marine Midland, Chase Manhattan** and the former **Chemical Bank** buildings, is sponsored by the **Lower Manhattan Cultural Council** and is funded with a $7500 grant from the **New York State Council on the Arts**. Art Lobby represents the joint efforts of Frederieke Taylor, LMCC's director, and Jacki Apple, a visual artist who conceived the exhibition and assembled most of the artists for the window display.

"The plaza is really an enormous stage set, with the surrounding buildings acting as backdrops for a continuously moving audience," says Jacki Apple. "But from the outside there isn't much to look in at except a vast expanse of empty glass and unused space. It occurred to me that the windows in the lobbies of the buildings around the plaza would provide an extraordinary framework—as well as a frame—for the display of art."

The artists included in the exhibition make use of widely varying media and subject matter. Like all effective public art, however, each work is genuinely participatory, inviting a highly personal viewer response. If there is one common denominator among them, it is in the use each makes of information—its collection, dissemination and constructive and destructive potential.

Three of the four artists rely heavily on information in its verbal form. **Jenny Holzer**'s untitled work, located in the east window bays at Marine Midland Bank, is exclusively text. Nearly two-hundred fifty truisms, mounted on silver photostats, confront—at times provoke—the passing viewer. Given equal weight and arranged alphabetically, the statements parody popular clichés and aphorisms. They alternate between ominous Orwellian pronouncements ("Awful Punishment Awaits Really Bad People") and simplistic fortune-cookie sentiments ("Good Deeds Eventually Are Rewarded"). Often the directives blatantly contradict each other ("Children Are The Cruelest of All"; "Children Are The Hope of the Future") and many have their own peculiarly perverse logic that seems, on the surface at least, irrefutable ("Planning For The Future Is Escapism" and "Slipping Into Madness Is Good For The Sake Of Comparison").

Jenny Holzer (detail)

"These assertions range from far left to far right to far idiotic," says Holzer. "Some I even agree with." Holzer began composing her "miniature ideologies" a few years ago. Initially her didactic statements appeared on anonymous posters that the artist displayed throughout the city. "People would mark 'yes' or 'no' and add their comments next to the phrases," says Holzer. Exhibitions soon followed at alternative art spaces, including a window display at Franklin Furnace. "I prefer the way the statements function when they face the street," says Holzer. "They place a lot more responsibility on the viewer. I'm interested in the attitudes the statements reflect and in the motivations behind people's behavior. Clichés are carriers of basic beliefs and all of the statements had to sound real to gain credence." Even the ridiculous phrases gain authority by virtue of their direct address to the public. In "There's A Fine Line Between Information and Propaganda" and "You Are A Victim Of The Rules You Live By," both included in the artist's inventory, Holzer wryly comments on her own exploration of dogma and its potentially manipulative effects.

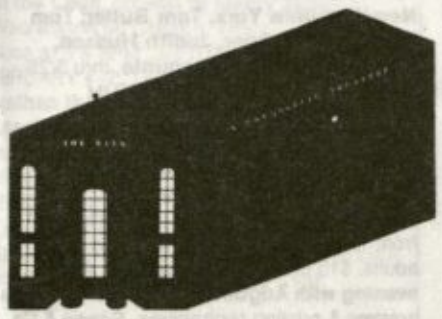
Mimi Smith (detail)

Across Nassau Street in the lobby at Chase, **Mimi Smith**'s silkscreen drawings bombard the viewer with words in quite a different way. Smith's subject is television; her theme is its deluge of both important and useless information in our daily lives. On one level Smith's drawings act as a visual demonstration of McLuhan's prophetic observations about the mass medium; on another they function as striking abstract compositions. Four translucent panels depicting huge TV screens fill up entire windows on the west side of the building. Smith, who utilizes the verbal rather than the visual content of television, fills up the screens on the two central panels with a transcript from a six o'clock news broadcast from October 1, 1981—the first day of the federal fiscal year, the beginning of Reaganomics and the initiation of government cutbacks. "Everyone listens and relates to the news," says Smith. "Even people who never watch TV watch the news." Accompanying the TV drawings is an audiotape in which passers-by can hear the news from October 1st along with multiple voices repeating snatches of conversation that Smith picked up from Wall Street watering holes . . . "technological and electronic advances have increased market efficiency . . . I need a raise . . . the Dow is down .29."

Smith began her TV drawings several years ago. "I have two children and it seemed as if the television was always on. I'd rarely see it—it was the constant sound of droning voices from another room that finally got to me. People may find a barrage of sound coming from multiple voices confusing in an artwork. It sets up a level of anxiety that we're willing to accept in our everyday lives, since most of the time we're only subliminally aware of it." Smith stresses that audience participation in **"October 1, 1981"**, is purely voluntary, however. "I want my work to fit into people's routines. They can either listen or tune it out—just like TV."

Lauren Ewing explores "economics, savings and the corporate soul" in **"The Bank: Opus Proprium,"** also at Chase Manhattan. An eight-foot-high freestanding wooden structure situated in the center bay on the lobby's south side, the little **Bank** is a "bogus object" and not to be confused with its big brother, says Ewing. Despite its direct reference to its immediate physical surroundings, **The Bank** is the only installation in **Art Lobby** that is not site-specific. The construction is the latest in Ewing's suite of sculptural projects that focus on social institutions. Other works in the series are **The Library, The Powerhouse, The Asylum, The Prison** (now on display at the Hirschhorn Museum in Washington, D.C.) and **The School**, which is still in its preparatory stages. "I try to deal with what is," says Ewing. "I want to deal with gigantic themes, independent of moral judgments."

The model for **The Bank** is the Greek treasury, which embodies the concepts of security, stability and steadily growing interest, all of which are traditionally associated with a savings bank. A running text, identifying the bank's characteristics and functions, completely surrounds the structure. Viewers standing at the entrance are drawn inside by two video monitors located in the vault. The videotape, entitled **"Text/Vide: Currency and Savings,"** expands upon the principles of savings and nondevalued currency. Short, cryptic phrases flash across the screen; the ephemeral accumulations in the videotape contrast with the powerful material presence of the surrounding structure.



Lauren Ewing

Ewing is concerned with institutions as microcosms and self-sufficient social units. **The Bank** demonstrates its relationship to the general public and the private person, and exists as a metaphor for both. **The Bank** is "infinitely referential," says Ewing, and in attempting to illuminate, through a multiple approach, all the attributes and apparatus of an institution, the artist readily admits the inherent complexity of her scheme. But at the same time, **The Bank**, with its familiar architecture, is instantly recognizable. "There's something everyone can connect to in the work," says Ewing. "A bank is part of everyone's known experience."

Peter Fend/OECD (South America panel)

In some respects the most unusual installation in **Art Lobby** is **"Global System"** at the Chemical Bank building. The exhibition is a venture of the **Ocean Earth Construction and Development Corporation (OECD)**, a firm that combines art and technology in regional planning. OECD is engaged in earth monitoring for the purpose of rebuilding a habitable environment on a worldwide basis. The artists who make up the corporation work in consultation with architects, ecologists and engineers to market models, drawings and multimedia proposals for business, government and scientific concerns. **"Global System"** was produced by **Space Force**, a service of OECD. Among the artists who participated in the design and execution of the project are **Peter Fend**, who conceived the project, **Wolfgang Staehle, Eve Vaterlaus, Joan Waltemath, Win Knowlton, Glenn Steigelman** and **Taro Suzuki**, the company's exhibitions director.

Two large-scale topographical world maps fill up six windows at the building's east entrance. Beginning with the Soviet Union and ending with Northern Europe, the maps swoop from north to south and then veer north again on an eastward slope—all contributing to an uncomfortable dislocation of one's sense of gravity. The geographical terrain is divided into clearly marked oceanic basin areas, each capable of supporting life with its own food and energy. At the base of the maps are two photo-caption sequences, highlighting two of OECD's current activities: the conversion of marsh wastes into usable sources of energy and the worldwide monitoring of river systems.

OECD considers its designs "too expensive, too large and too potentially lucrative" to fit into the traditional art-institution establishment. The artists who put together **"Global System"**, like Ewing, Smith and Holzer, all work predominantly outside the limits of the gallery and museum network; their work, as represented in **Art Lobby**, provides ample proof of the ability of art to function beyond a closed system in an architectural and social context. "After all," says Jacki Apple, "art doesn't have to be confined to the art world."

GLOBAL SYSTEM

OECD

One Thousand Square Feet
At Chase Manhattan Plaza

February, 1982

OECD

GLOBAL SYSTEM

BASIN SURVEY

OECD

PETER FEND 54 FRANKLIN STREET
NY, NY 10013 925-8974

FEB 16, 1982

Dear Lucy Lippard,

Mimi Smith mentioned to me your interest in doing a story on "Art Lobby."

If you do a story, please do not mention me in any capacity other than one of a number of people engaged in the corporation OECD.

As Mike Glier points out, it may be appropriate — if one wishes to effect political gains — to avoid the cult of personality.

Yours,

P