Interface: an installation strategy
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Museums, like other buildings, are not simply physical spaces but nodes in the networks that allow the in-and-out-flow of elements essential to their functioning, i.e., electricity, voice and image data, water, etc. In this sense the museum, the New Museum for instance, is always a point on some sort of trade route. I propose an installation strategy that puts the Trade Routes exhibit into this larger context of the museum and underlines the forces flowing through it. The installation thus attempts to relocate the exhibit within the layered and networked space increasingly characteristic of the museum, rather than simply the four blank walls of the building, walls that themselves contain and often conceal the mechanisms and pathways of this information flow.

If (as Laura Trippi has suggested to me) the artworks in Trade Routes are to be displayed in the middle of the gallery space with nothing on the walls, with the walls acting as a kind of "cyberspace," then this installation strategy would try to occupy or demarcate, in an unobtrusive and sporadic manner, the intermediate zone between the work and the wall. A few "head-up display" (HUD) stations, or perhaps a mixture of HUD units and teleprompters, would be dispersed across the exhibit at key locations and linked as a network through cabling. The viewer walks between the wall and the HUD units, facilitating specific views through the HUD units onto the work and other parts of the space. The result: a compression ring is formed around the work for viewing and reviewing, allowing an interpenetration between the space of the museum, the artwork, and the space of information. In this changing zone, the space of the gallery is in a sense inverted and pushed beyond its traditional borders, provoking a reflection on exactly where one is in relation to the work, information flow and the museum space ... and on the effect these spaces might have on one another.

This is an expansion of my initial proposal, in that it describes a display system that creates a particular kind of viewing space, a space through which ideas and experiences, information, may flow. I propose to work with the curators and participating artists to decide on the specifics of what flows through this information zone, and on the exact location of the viewing devices which cut those flows and make them accessible to visitors.

The installation uses a spun-off military technology called "head-up display" (HUD) as a device for locating or orienting the visitor in the space of the museum ... but not just the space of the museum. HUD is an imaging device used to project information onto a transparent surface in daylight, optically focused at infinity, allowing the user (originally an aircraft pilot) to focus through the transparent screen on the view beyond while reading or seeing at the same time the information on the screen. In this context, it would allow artists and curators the chance to present information in a manner that responds -- in form as well as content -- at once to the singularities of the artwork presented (each work could
be linked to one HUD unit) and to the new global realities of networked trade in information and images. Without imposing an interpretation of the exhibit, the installation strategy could locate it within a changing environment -- and redefine some of the so-called barriers between the private museum space and everything supposed to be "outside" of it.

In this sense (admittedly a somewhat abstract one) the installation could function as a map of some of these new trade routes, or rather as a series of maps directly tied to the particular questions raised by the individual artworks, in the information age. If mapping can be described as both a projection onto a space and as an ongoing transformation of a space, then, as an intervention into the exhibition space, the installation charts the space of information and dataflow. Taking advantage of the strange quasi-transparency of the HUD screen, the installation strategy aims to produce a layered and changing space, which opens the possibility for things and events to be defined and redefined in relation to one another.

SLIDES

1. AT&T Network Operations Center, NJ (source AT&T)
2. AT&T network usage map, call flow after San Francisco earthquake (source AT&T)
3. Citibank ATM (source Laura Kurgan)
4. Head-up display (top) in cockpit of F/A-18 (source McDonnell-Douglas)
5. View thru HUD of A-7E on deck of USS John F. Kennedy during air war against Iraq (source U.S. Navy)
6. View thru HUD of commercial aircraft landing in fog (source Flight Dynamics Inc.)

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Figure 2: Detail of exhibit strategy

a. Exhibited objects may be placed in relation to the HUD; however, they may also be approached without having noticed it.

b. Information in HUD constantly changes so that the exhibit space reflects a flow of information.

c. HUD units can be approached from the zone of information flow towards the interior of the space, or from the interior space towards the wall of the gallery (the HUD units can be oriented in either direction).
Figure 1:
Conceptual Diagram of the Exhibition Space

1. Exhibited pieces
2. HUD Units – transparent glass panels supported or suspended within gallery space. Projections can be read in daylight.
3. Cables connecting these units as a network.
4. Zone of information flow between gallery wall and HUD units.
5. Walls of gallery "dematerialized" by information flowing in from the "outside".
Figure 3:
Schematic diagram of one "Interface" unit.

One unit of the network will be attached to an electronic handrail
(introducing the space of the installation), and the rest will be glass
panes, i.e. teleprompters or HUD screens with information
projected onto them. Any information can pass through the
HUD, from news wire services to weather reports, any
text or image.

1. Point of Focus/image projection or photo on wall (optional depending on
   viewer orientation).
2. HUD screen: mounted within a larger piece of glass.
3. Electronic handrail (LED, optional).
4. Zone of information flow between gallery wall and HUD unit.
5. Viewer orientation through HUD may be from interior space of gallery
   through HUD towards the wall, or typically, from wall through the HUD
   toward the interior space of the gallery.
6. Artwork.
what?

streams of data, or information, enter the museum, are processed by personal computers, and displayed on transparent glass monitors arrayed in an "information zone" between the walls of the gallery and the objects installed in the center of the room.

what kind of data?

1. on-line news. ordinary news wire services (Associated Press, United Press International), network log printers (ABC, CBS, NBC, CNN, Unistar), weather and sports services (NOAA, Sports Network), traffic reports (Metro Traffic), and financial news (Reuters, Business Wire, Federal Filings).
2. telephone usage: volume of calls in the network, graphically represented (AT&T, Sprint, MCI) ... AT&T network snapshots forwarded video images.
3. money flow (Federal Reserve)
4. stock market ticker
5. 
6. 
7. 

what will it look like?

text and images scrolling across quasi-transparent HUD or teleprompter screens, alternating between the virtually unreadable true full speed at which data flows and the slowed down version which renders the flow readable.

how will the data enter, be processed and displayed?

information enters through dedicated phone line(s) directly into a PC (at least 286, preferably 386) equipped with multi-port boards, where it is processed (with commercially available software) and distributed through another PC to six HUD/teleprompter screens. An additional computer or VCR will be required for each screen which needs to operate independently, or partially independently, of this network. Some of the information can enter the museum through other routes, for instance through daily or weekly updates on floppy disk or videotape (which would require a VCR or a video-capture card in the computer), or through satellite downlinks hard-wired into the network.
what's needed?

hardware: to be rented or borrowed.

two 386 or 486 IBM-compatible computers, at least 40mb hard discs and 2mb RAM

boards: multi-port (provided by Wire-Ready software included in price below)
video capture (optional)
video-splitter

VCR

six 13” VGA monitors (reverse scanned if for teleprompter set-up)
six transparent display units (HUD, teleprompter, or two-way mirror glass)

software

Wire-Ready (for wire service processing and programming)

wire services/network information

these services would most likely arrive directly from the data providers themselves (wire services like UPI or Dow Jones, or information sources like AT&T or the Federal Reserve). I am, however, exploring an alternate strategy: to link up with a working newsroom or corporate environment, one which already subscribes to many of these services, and take a secondary feed from them. In this way, the project will not have to draw on the resources of several agencies but only one or two at the most.

a dedicated telephone line must be installed (possibly a satellite dish and radio antenna could be used instead—a cheaper option—depending on surrounding buildings etc.)—usually installed by the wire service company. Feeds from wire services and data lines should be compatible with ANPA standards if Wire-Ready software is used.

installation in museum

to be determined based on equipment available.