The Choreography of Site-Specific Media

Janet Abrams on Lisa Strausfeld

PENTAGRAM MADE A VERY SHREWD MOVE when it brought Lisa Strausfeld on board in January 2002. With her appointment, the firm brought into its ranks an alumna of the 1990s-era Visible Language Workshop at MIT's Media Lab, and thus one of the elite corps of graduates from a program whose influence is already proving disproportionate to their actual numbers and relative youthful careers.¹

Strausfeld's résumé includes a hybrid education encompassing art history and computer science at Brown University, followed by a master's degree in architecture from Harvard. Only then did she move "down the block" to the MIT Media Lab. It was there that I first encountered her in 1994, while I was conducting what turned out to be the last interview with her professor Muriel Cooper, the eccentric but brilliant director of the Lab's Visible Language Workshop.²

Strausfeld's arrival at the Media Lab coincided with the donation of several powerful new Silicon Graphics computers capable of generating three-dimensional information "spaces." "There was a serendipitous convergence: We got the first batch of SGIs, so it was the first time anyone in the VLW had worked in three dimensions," something which, fresh from architecture grad school, made perfect sense to her. She became interested in the structure of information and the abundant spatial metaphors we employ to denote our daily activities, and their possible computational equivalents.

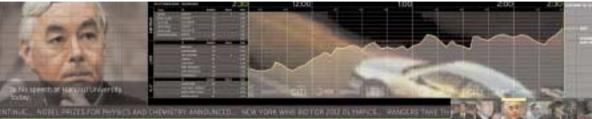
Strausfeld has continued to work at the frontiers of interactive design, through several career phases. After graduating from MIT, she established Perspecta, a San Francisco-based software-development company with two fellow Media Lab graduates, Earl Rennison and Nicolas Saint-Arnaud. She decided to leave that company even before the dot-com bubble burst, to join Quokka Sports, where, as director of its research arm, Quokka Labs, she developed prototypes for new ways of presenting live sports information on the Web. Shortly before Quokka's collapse in 2000, she moved to New York and went solo under her own



Opposite: Set design and projections for the off-Broadway play "Snatches," a docu-comedy by Laura Strausfeld based on the recorded conversations between Monica Lewinsky and Linda Tripp, summer 2001.







banner of InformationArt, working as a consultant to Pentagram to design a media wall for the new Pennsylvania Station in the renovated Farley Post Office building in midtown Manhattan.

In all these phases, Strausfeld has demonstrated an abiding concern for the relationship between architectural space and information space and for the reinterpretation and reapplication of the precepts of architectural modernism to the realm of data. Recently she has begun to turn back to architectural space per se, with commissions to "embed" information into actual buildings: the aforementioned Penn Station; a transportation hub at the World Trade Center (commissioned by the Port Authority of New York and New Jersey before Studio Daniel Libeskind won the Ground Zero rebuilding commission); and the expansion of the Walker Art Center in Minneapolis, designed by the Swiss architects Herzog & de Meuron. Of these, the first two were designed as speculative prototypes and are now unlikely to be built; the third is slated for implementation in 2005.

In all three cases, Strausfeld demonstrates a methodological approach markedly in contrast to

Above and opposite: Media Wall for the proposed redevelopment of Pennsylvania Station at the James A. Farley Post Office building in New York, design concept 2000.

typical "information architecture," a term she hates using because of its connotations of commercial interactive design. Imbued with her architectural training, she treats each commission as a "problem" and information as "site-specific"—to be experienced bodily rather than just through the eyes (and fingertips).

The clues to this structural approach are revealed in a diagram she developed at Quokka, a grid showing the different degrees of "immersive" experience offered by different display devices. Screen dimensions are charted against durations of engagement and their various social contexts: from the individual experience of the handheld device or desktop computer to the more convivial group setting *in* an arena beholding Jumbotron or other large-scale display. The diagram pinpoints Strausfeld's concern with the physical as well as with the emotional dimensions of experience. "The idea of embodying information has always been interesting to me. I like the idea of merging these two worlds—the world of abstract and intangible ideas and the world of physical things."

At Perspecta, she and her partners developed information structures that allowed viewers to "fly through" information so that, as you moved "closer" to a particular piece of information, more and more detail, or related articles, came into view. While Perspecta's clients were mostly in the technology-news sector, she and Rennison also developed a



more contemplative demo, the Millennium Project, which arrayed landmark early-twentieth-century events in science, art, and politics as "information objects" suspended in black "virtual space" according to their longitude, latitude, and date. When these seemingly neutral colored specks were approached, explanatory text would come into focus, like wall labels hanging free of their walls. The resulting "ride" was reminiscent of trailers for movies set in outer space—implying an infinite depth of knowledge available for discovery.

Moving to Quokka, Strausfeld, a self-confessed non-sports fan, made it her goal "to capture every emotion of live sports events through data" rather than through the typical pictorial means: photos of vanquished or triumphant athletes. "It was about giving the driest data an emotional content." Here, instead of using implied three-dimensional deep space to "contain" rich troves of data, Strausfeld and her team concentrated on montaging different species of information, in variegated bands and boxes, across the plane of the Web page. Bucketloads

of numbers (the nutrients on which sports fans nourish themselves) offered every conceivable measurement—racers' positions, times, distances, and route crosssections, for example. Syncopated against these statistics, several windows of live streamed video from the racecourse (cameras mounted on, say, a Tour de France bicycle or Grand Prix race car) offered a dizzying multiplicity of vantage points. Compounded by techno sound tracks and interviews with the heroes themselves, reliving their own first-person experience in "replay" mode, the choreography of time and space had a vertiginous, seductive beauty.

The overall effect of these dense but riveting charts was to elevate sports to the status of medical emergency—trauma as entertainment—with patients' vital signs urgently and anxiously monitored. With options to toggle between alternate synoptic views, users gained a sense of pseudocontrol over the

Above: Information "media stream" for prototype of a transportation terminal at the former site of the World Trade Center, 2002.



data—a panoptic position more akin to that of a sports producer in a TV control room, deftly selecting which sources of live feed to broadcast.

For Strausfeld, though, it's not just numbers that count. Just as the site is of critical significance in generating architecture, so is the siting of information within a physical landscape: not for her the gigantic, one-size-fits-all electronic display board, indiscriminately blaring out public information and advertising. Instead, she analyzes the architectural environment and makes "site-specific" interventions, modulating the support structures on which media will be presented so they become kinetic sculptures that just happen to deliver information—from the necessary but banal (as train times), to the apparently vital but largely ritualistic (stock-market figures), to the sublime but usually underfunded (e.g., public art projects, to whose presentation the "off hours" on the Penn Station and WTC media walls were earmarked).

If constructed, this monumental, two-hundredfoot long video screen would have been the dominant focus of this gigantic train-station concourse, one of our few remaining archetypes of public gathering spaces, besides the sporting arena and the airport. In lectures, Strausfeld frequently shows archive images of crowds in Times Square and Grand Central Station, assembled to watch epochal events like the first space shot: She is particularly interested in how the collective experience of news shapes social space. The Penn Station Media Wall is an expression of a (perhaps nostalgic) desire to create an information "hearth" that could connect myriads of strangers, momentarily joined by their need to reach assorted destinations; here, however, multiple "story lines" deliberately disperse the viewers' attention rather than focus them on a single commanding narrative.

On the dominant upper proportion of the screen, train departure times alternate with vast dynamic graphs of stock-market data. A sliding-panel effect allows one type of information to give way to another or, concertina-like, to expand outward to fill the full real estate, in a gliding motion reminiscent

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of shuffled theatrical flats. Talking-head interviews are relayed on the upper left at Gulliveresque scale, while the obligatory stock-market ticker chatters away on the lower margin and several smaller video feeds are shown lower right. Giant letters, spelling NASDAQ and other totemic acronyms, appear now and again on the main body of the wall, scrolling right to left over static data in smaller point sizes. Diaphanous curtains of information glide over one another, transparent, hierarchical, and strenuously factual but somehow also miragelike, dreamy, and intangible—befitting the (numerical, and predominantly financial) contents.

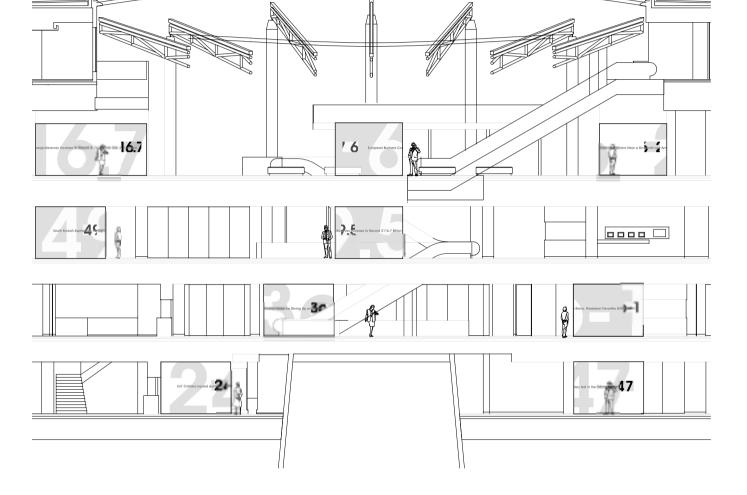
Perhaps this is why the Penn Station Media Wall has become a canonical work without ever having been built: It is, in the nicest sense, vaporware, a work of "paper (information) architecture" whose dynamic dancing data and kaleidoscopic dazzle incarnate the zeitgeist fantasy of an endless upward stock market—a visible representation of the frenzied advances of technology—importing the adrenaline rush and sensory overload of the floor of the New York Stock Exchange to the hall of a major transit hub. It perfectly captures the boomtown mood of late-1990s dot-com New York—a theme park, as one E*Trade advert of the time unapologetically put it, in which the "theme is money."

Postcrash and post-9/11, the attitude to technology has changed. Pentagram was invited by the Port Authority of New York and New Jersey to develop an information system for a transportation terminal on the World Trade Center site. Here, the data have slipped their moorings on the Big Board: Strausfeld threads a ribbonlike "media stream" (an eighteeninch-wide, high-resolution LED display) through the terminal's spaces, winding, bending, and curving along walls, overhead, or potentially even on floors. Moving at different speeds and in different directions, the interactive text and graphics "accompany" people walking through the space and anticipate their needs (providing imminent transit departures, distances to food concessions; weather advisories followed by ads for nearby rainwear stores). For consistency, each category of information is kept in the same type size and horizontal position within the "stream."

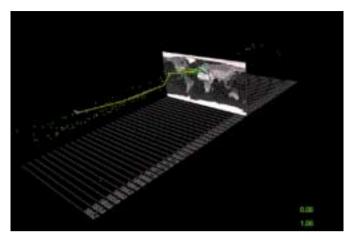
A grove of slim, seventy-foot-high obelisks rises from the floor of the main terminal hall toward the upper retail balconies. These are positioned in the space in conjunction with three low, rectangular video "partitions," with the spare, space-making intent of minimalist sculpture (Strausfeld is particularly admiring of Richard Serra's work). Branchless trees or dynamic totem poles, these programmable towers might, depending on the time of day, display the sound waves of arriving trains, carry local, civic, and national affairs, weather, or financial news, or simply serve as a bar-chart floor directory. Approached by visitors, the lowest six feet of each tower act as an interactive terminal, with further information about the actively displayed content or sponsor; after peak hours, when most "eyeballs" have caught their trains home, the towers would be released for public art presentations. Programmed collectively, advertisers might allow slivers of luxury brands to climb all five towers in sync, or show catwalk models in teasing partial glimpses that encourage the viewer to "fill in" missing information. Instead of revealing all, Strausfeld plays with the metonymic possibilities of commercial messages, sliced and diced as visual spectacle.

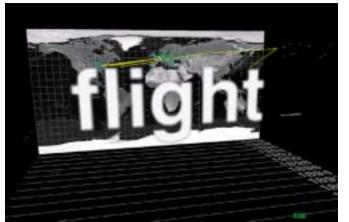
Indeed, her interests are increasingly turning toward the choreography of content. A diagram in Pentagram's WTC project documentation confirms this: An at-a-glance "score" of all the types of content that might be displayed during a typical twenty-four-hour schedule, it looks just like digital film-editing or music-authoring software, with multiple bands synchronized in a horizontal array. This chart "flattens out" the spatial differences between, say, the content in the West Concourse and the media walls in the Terminal Hall and strips away the semiotic complexities to reveal how much the meaning, the cognitive effect, of this system results above all from the syncopated disjunctures between different types of content, both horizontally (changing over time) and vertically (relative to one another, at a given moment). While Strausfeld recognizes the discrete iconic significance of different species of information (e.g., commercial advertising versus news versus public art images),

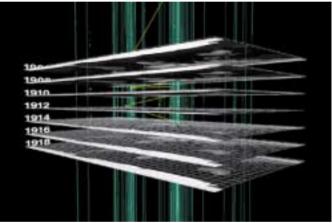
Opposite: Prototype for dynamic displays of financial information for the new Bloomberg LP headquarters in New York, to be completed 2005.



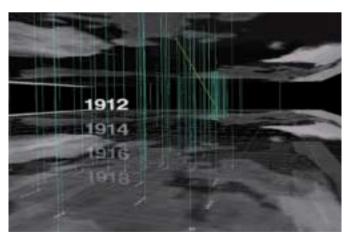
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the elegance and economy of this diagram suggest that, for her, what really matters is the overall orchestration of these media "channels" in time and space as a dynamic, site-specific system: that herein lies the relatively untapped potential of media in public spaces.

In the Walker Art Center proposal, Strausfeld takes an even more subtle and adventurous step toward her ambition eventually to "break free of the constraints of display. I'm interested in the work becoming independent of technology at some point: informed by it but not necessarily delivered by it."

Working with/in response to Herzog & de Meuron's architecture, Strausfeld eschews display panels in obvious places in favor of a hierarchy of information outlets. Whether these are gigantic letters projected onto a translucent exterior facade, or flat-screen monitors in the reception, or interactive wall panels announcing an artist's talk, or small, stealthy baseboard-level room-label displays, these nevertheless "speak" with a consistent institutional authority. "I like the idea that people think of the information as independent of any display, as a voice—the voice of the Walker—that's pushing information toward you, whether outside as you're driving to it, or inside. It's the difference between designing a banner for an institution and designing a sequence of banners that vary depending on where you are in the building, the time of day, and the kind of work on show."

Strausfeld sees herself moving toward editorial content development through the application of rule-based systems that "encode some kind of ambiguity in the best sense." Lately, teaching in the graphic design master's program at the Yale University School of Art, Strausfeld has instructed her thesis students to study the communication land-scape along Route 22 in New Jersey, the suburban environment where she grew up. And she has inevitably found herself revisiting the work of Venturi, Scott Brown, and Izenour, whose *Learning from Las Vegas* of 1972 became a kind of holy writ

Opposite: The Millennium Project, a custom software database visualization of people, significant events, and artifacts from the early twentieth century, developed at the MIT Media Lab. 1995.

about media in the urban environment, one now sorely due for updating.³

Cognizant of Venturi et al., but (thirty years on) with new tools, new densities of data, and the added dimension of interactivity to contend with. Strausfeld aims to create information experiences that have the lean but implicit richness of certain kinds of architecture-imbued with "moments of clear ambiguity," as she paradoxically describes it: "Before I even studied architecture formally, I was into the aesthetics of programming software. The most elegant solution to coding an algorithm was the shortest, the one with the fewest lines. There's a connection with architecture, where you design this artifact that doesn't move, this fixed thing that has to accommodate all these activities over time. Designing that elegant piece of code, designing a building that's the most essential form to accommodate all those activities: There's a certain design ethic about that, and an aesthetic that I admire."

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^{1.} Her MIT classmates included David Small, Grace Colby, Suguru Ishizaki, and Yin Yin Wong.

^{2.} Janet Abrams, "Muriel Cooper's Visible Wisdom," *I.D. Magazine*, September-October 1994. Strausfeld's use of very clean, mostly sans-serif typography and an elemental color palette worthy of Johannes Itten reflect both her architectural training and the abiding graphic influence of Cooper, who, as head of the media department at the MIT Press in the 1970s, designed the authoritative textbook on the Bauhaus and disdained the curlicues of postmodernist graphics as she reared a new generation of visual (interactive) designers.

3. Muriel Cooper also designed the original, 1972 edition of *Learning from Las Vegas*.