By John Weber

Thinking Spatially: New Literacy, Museums, and the Academy

Two thought-provoking recent columns in the New Horizons department of this magazine, one column written by Susan E. Metros and Kristina Woolsey (May/June 2006) and another by Jurgen Faust (September/October 2006), both addressed the question of visual literacy and new-media literacy amid the changing landscape of technology in higher education. I would like to talk about the same thing, but from the viewpoint of a newly arrived immigrant to the academy from the world of art museums. I agree with most of what these authors wrote, and I urge anyone reading this to reread those articles, especially because I'm shaping this column as a bloggish response to their ideas. In particular, I want to point to some intriguing spatial issues that lurk beneath the surface of the debate about visual literacy, new literacy, and the academy, mulling on the literal and figurative space occupied and defined by new-media, new-technology literacy. Whatever it is, that space is not like the space of the printed text, the fifty-five-minute lecture, or even the feature film. To the extent that this is not grasped, it may be difficult to argue for and create a place for the teaching of this new literacy within the existing space of higher education.

Metros and Woolsey point out that unless leadership comes from above, higher education is not likely to move quickly to institute curricular reforms and spur the growth of new programs and faculty lines that will teach students to function in a world of networked, rich-media publishing. I heartily agree, but the situation is, I suspect, even more daunting than they suggest. The problem is that there is no logical place in current curricular models or college/university faculty charts to locate core, nonspecialized coursework that unifies the acquisition of a basic new-literacy skill set. Yes, we have writing faculties and English 101 requirements, and yes, there are specialized courses in interface design, graphic design, photography, video, and so on. But if an institution wanted to offer a basic "21st Century Literacy 101" course to every student, who—within the academy as it now exists—could be called on to teach the course? Who is prepared to offer introductory-level, required coursework that encompasses a critical introduction to the static visual (e.g., photography) *and* the verbal *and* the moving images *and* the sound *and* a bit of graphic design to teach students to author well-argued, well-researched, and well-organized digital publications suited to a networked, online world? Where will these faculty live within the universe of disciplines as currently perceived? In a newly conceived Communications Department? In interdisciplinary coalitions of the English, Art, Media Studies, and Design Departments? Neither option strikes me as likely. But unless we create a space within higher education for the teaching of new literacy and unless we figure out who, as faculty, will live in that space, we can't solve the problem. As far as I can tell, discussions of visual and new literacy are frequently, if not always, homeless in the academy today: no academic department wants the whole package. Faust imagines cross-disciplinary teams coming together in a distributed environment, and that approach sounds effective for the kind of specialized, upper-division course he cites (an effort in videogame design). But what I'm talking about is a faculty component large enough to teach new-literacy skills to every single student. Perhaps a distributed, team approach would work, but based on the administrative complexity alone, this is not an obvious solution.

Admittedly, the skill set required to teach visual-literacy skills in a college or university environment is daunting. Simply getting students to write well is hard enough. Getting students to produce good writing combined with good images, sound, and video in a single digital document is far harder. But that is the job, and the colleges and universities that get the job done first will better prepare their students to function creatively and confidently in the working environments of the twenty-first century. As Faust argued, the multimedia computer linked to the Internet has laid the groundwork for a "Second Enlightenment Project," produced by the second publishing revolution that digital technology has served up.

If the first spatial issue confronting the discussion of new literacy is the constrained, text-heavy space of the academic curriculum and faculty chart, the second is the nonlinear space of the digital, networked environment. Its lateral, hyperlinked nature is different from that of the printed page, book, or journal. Although we may use books in a page-flipping, hopscotching manner, they are published as linear structures. Our reading of them takes place against that background, which imposes a distinct and mostly useful discipline and format. Within the space of the book, the reader can move forward and backward

but cannot move sideways (footnotes excepted) and cannot suddenly veer up or down. In the nonlinear hyperspace of a computer or network, one can move in all these directions, in a manner that is both figurative and yet real. Individual digital publications can utilize and enforce the same degree of hierarchical linearity that is common to books, but they rarely do. And the Internet is structured as a radically nonhierarchical, rhizomic web. What does this mean for students and for the teaching of new-literacy skills?

Frankly, I don't have an answer. But I do know that when an answer comes, it will involve students learning to construct their ideas, arguments, and evidence as structures that are spatially far more complex than those of the book. I'll offer some personal history to illustrate. In 1999, I was the head of the Education Department at the San Francisco Museum of Modern Art (SFMOMA). Our Interactive Educational Technologies program, led then as now by Peter Samis, was creating a new version of a rich-media, digital, art history learning program called *Making Sense of Modern Art* (MSoMA). The software commissioned to publish MSoMA both allowed and in fact forced authors to write in short chunks of text that were subsequently linked in a range of relationships that were primarily nonlinear but that were still conceived as units within a unified whole. Its authors were also encouraged to show rather than say much of what they were charged with conveying about art history. If there was a picture involved, we wanted to display it. If we could get an artist scholar to talk on video, we wanted to show the scholar onscreen rather than quoting him or her in a text. This was, in short, a boot camp for new-literacy skills.

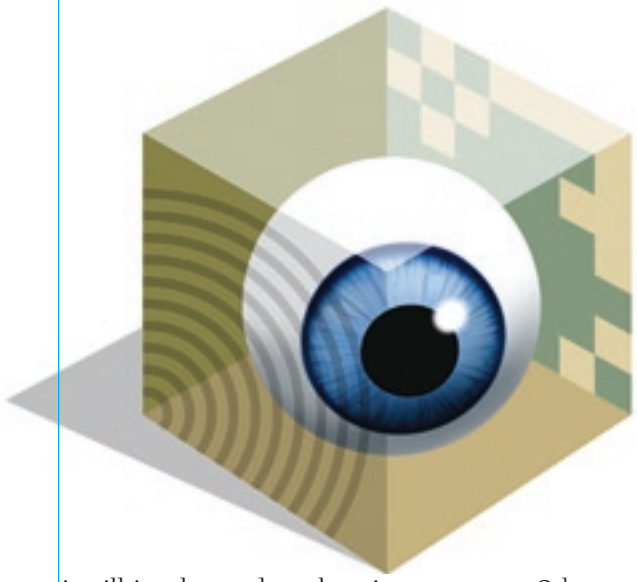

Illustration by Steve McCracken, © 2007

We recruited a cadre of gifted graduate students from Berkeley and Stanford. Though they were accomplished academic writers, we found that they needed to be substantially retrained—or to retrain themselves—to write for the nonlinear, show-it-don't-say-it digital multimedia environment. The lateral space created by MSoMA's *Pachyderm* publishing software[1] is carefully structured yet largely nonlinear. This meant that authors had to rethink assumptions about readers' behavior and write more self-contained thoughts, however related. It was like learning to write all over again—still rigorous, yet distinctly different in relational, spatial terms.

It was not an accident that a visual arts museum created *Pachyderm*. The museum space, like that of the Internet, is largely a lateral one. And although the museum experience is highly visual, it is never exclusively visual. Other parallels between the space of the museum and that of new digital media and the Internet are equally striking. Visitors move through the museum space in self-determined paths, going from object to object in an often random manner, mixing looking with reading, talking, and often listening. Conversations are overheard, and the space is a social one. Perhaps most important, a good museum finds ways to appeal to varied users with a range of learning strengths and experiential preferences. Some people like to look at things on their own, whereas others want someone to tell them where to begin. Educationally speaking, museum educators have learned that there is no magic bullet and that when museums try to create a one-size-fits-all way for visitors to learn about collections and exhibitions, they limit their effectiveness and fail their visitors collectively, if not in all cases. The potential significance of this to the teaching of new generations of students weaned on multimedia technology is clear.

My current position as director of The Frances Young Tang Teaching Museum and Art Gallery at Skidmore College has underlined for me the relevance of the museum space for discussions of visual literacy and new media in higher education. Founded in 2000 as an interdisciplinary museum, the Tang is used annually by up to 20 percent of Skidmore faculty. With strong encouragement from Skidmore's academic administration and with a healthy tradition of interdisciplinary work, faculty in more then twenty disciplines have taught selected class sessions in the Tang, co-curated exhibitions, and participated in museum public programs. As Skidmore faculty themselves are quick to point out to me, this engagement with the visual world is a risky thing for faculty untrained in it. Furthermore, coming into the lateral, meandering space of the museum exhibition means giving up a degree of physical control provided by the more hierarchical architectural space of the traditional classroom.[2] Happily, they have found the rewards of teaching in the museum space more than worth the risk and challenge.

Teaching students to learn and author in ways that incorporate the visual, nonlinear, and lateral space of digital media and the Internet is a huge challenge for higher education, but it is an unavoidable one. Museums, the spaces they create, and their objects and exhibitions can and should be an ally, a workshop, and a laboratory. That said, to make it all work will take unusual imagination, creativity, and leadership.

Notes

1. *Pachyderm* is now available to higher education on an open-source basis thanks to the considerable efforts of the New Media Consortium, SFMOMA, and funding from the Institute for Museum and Library Services. See <http://www.pachyderm.org>.
2. Indeed, regardless of how the academic classroom may be constructed physically, its hierarchy is structured as a single-point perspective centered on the professor, who ultimately holds power and control.

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