



NATIONAL ENDOWMENT FOR THE

Humanities

OFFICE OF DIGITAL HUMANITIES

Narrative Section of a Successful Application

The attached document contains the grant narrative and selected portions of a previously funded grant application. It is not intended to serve as a model, but to give you a sense of how a successful application may be crafted. Every successful application is different, and each applicant is urged to prepare a proposal that reflects its unique project and aspirations. Prospective applicants should consult the Office of Digital Humanities application guidelines at <http://www.neh.gov/grants/guidelines/IATDH.html> for instructions. Applicants are also strongly encouraged to consult with the NEH Office of Digital Humanities staff well before a grant deadline.

Note: The attachment only contains the grant narrative and selected portions, not the entire funded application. In addition, certain portions may have been redacted to protect the privacy interests of an individual and/or to protect confidential commercial and financial information and/or to protect copyrighted materials.

Project Title: Broadening the Digital Humanities: The Vectors-IML Summer Institute on Multimodal Scholarship

Institution: University of Southern California

Project Director: Holly Willis

Grant Program: Institutes for Advanced Topics in the Digital Humanities

**Application for the NEH Institutes for Advanced Topics in the Digital Humanities
Broadening the Digital Humanities: The Vectors-IML Summer Institute on Multimodal
Scholarship**

Organizers: Tara McPherson + Holly Willis

Project Narrative

Significance

The digital humanities today draw from a diverse array of traditions across a number of fields, bringing together over two decades of computational humanities with the affordances of participatory networks and rich media. Since the early days of networked and personal computing, a small but energetic group of humanities scholars has been actively engaged in leveraging the various robust capacities of the computer for scholarly gains. From early applications in fields like linguistics to experiments in hypermedia to contemporary text encoding projects and online repositories, humanities computing has produced specialized tools and expansive archives. At leading institutes such as the University of Nebraska and the University of Maryland, among others, summer workshops have offered academics hands-on access to aspects of text encoding, GIS, and data mining in relation to scholarly questions in humanities research.

These ongoing efforts in humanities computing have supported a strong core of researchers, but the tools and methods produced in these efforts have not always connected with more ‘traditional’ humanities scholars, even as these traditional scholars happily utilize the archived resources created for particular areas of study. More recently, a subset of scholars has begun to bring these long-standing traditions together with aspects of social computing and with emerging practices in interactive and aesthetic design, reflecting broader social shifts in the role of the computer in daily life. As scholars increasingly interact in a media-rich world, we have seen a renewed interest in the potentials of computing and digital media for scholarly research in the humanities. This interest is reflected in the creation of initiatives like this one at NEH, as well as by related endeavors in play at Mellon, MacArthur, and the ACLS, among others.

Our proposal emerges from this convergence of aspects of humanities computing and of broader digital culture. Our primary audience is the humanities scholar who does not have a great deal of computing experience but who has begun to express an interest in the digital humanities and in digital media more broadly. This scholar will have some sense that digital media might enhance or re-orient his or her research practices but does not yet have the skill set necessary to realize these intuitions. Specifically, we will offer such scholars the opportunity to explore the benefits of interactive media for scholarly analysis and authorship, illustrating the possibilities of multimodal media for humanities investigation. This approach will allow us to broaden the reach of the digital humanities beyond its current enthusiastic but relatively small core. The scholars participating in our program will learn both by engaging with a variety of existing projects but also through the production of their own project in collaboration with the *Vectors*-IML team. The projects they create will at once enrich their own understanding of the digital humanities and model the field for other scholars through their publication in the electronic journal, *Vectors*, and elsewhere online.

Multimodal scholarship brings together the analytical power of the computer with the expressive and interactive dimensions of the visual and aural media that so dominate contemporary life. This multimodal scholar complements rather than replaces other types of computing humanists, expanding the scope of the field. She aims to produce work that reconfigures the relationships between author, reader, and technology while investigating the computer as simultaneously a platform, a medium, and a display device. She thinks carefully about the relationship of form to content, expression to idea. She also takes her cues from popular culture, imagining what it would be like to immerse yourself in scholarly arguments as you might immerse yourself in a movie or a video game. She investigates what happens when scholarship looks and feels different, requiring new modes of engagement from the reader/user. She takes seriously such questions as, “How do you ‘experience’ or ‘feel’ an argument in a more immersive and sensory-rich space?” “Can scholarship show as well as tell?” “Will representing data differently change the ways we understand, collect, or interpret it?”

Scholars in diverse humanities disciplines study image, sound, and feeling. Indeed, some of the most cutting-edge work in humanities scholarship takes up questions of visual and aural culture and of the emotions. Nonetheless, we have been slow to explore the potential of interactive, immersive, and multimedia expression for our own thinking and for the ways in which we produce scholarship. While many scholars can imagine the affordances of new media for their research projects, they lack both the time and the skill sets necessary to engage deeply with the production of interactive technology. Much online scholarly publishing – from blogs to archives – continues to privilege text as the primary mode of scholarly expression. Very few summer programs afford humanities scholars the opportunity to create multimodal, interactive scholarship.

For over four years, the multimedia journal *Vectors*, edited by Tara McPherson and Steve Anderson, has served as an edge-case test bed for multimodal scholarship [<http://www.vectorsjournal.org>]. In creating the journal, we aimed to form a sustained space of experimentation with emergent modes of multimodal scholarship. In particular, we focused on the potential for new visual, affective, or sensory aspects of humanities research (in disciplines such as media studies, literature, history, and visual studies) and on the possibilities gleaned from rich collaboration across diverse skill sets. The journal grew out of conversations among faculty at USC's Institute for Multimedia Literacy (IML), where experiments in digital pedagogy were well underway. In that milieu, we came to understand that there were virtually no warranted spaces (like peer reviewed journals) where scholars could publish work realized in the expressive languages of new media. We pushed far beyond the 'text with pictures' format of much online scholarly publishing, encouraging work that took full advantage of the multi-modal and networked capacities of computing technologies. Simply put, *Vectors* doesn't publish work that can exist in print.

We recognized too that many scholars were interested in undertaking such work but hardly had the time or support structures they would need to become digital authors. In launching the journal, we deployed a fellowship model to pair scholars with first-rate designers and programmers. Each summer since 2004, a group of 8-12 *Vectors*' fellows has come together for a week-long residency seminar during which the potentials for multimodal humanities research is discussed and explored. The residency period is then followed by a sustained and iterative cycle of collaboration between the *Vectors*' fellow and a subset of our team (comprised of a designer, a programmer and an editor.) Our design and programming team doesn't simply "implement" a scholar's ideas in the manner of a technology support center; rather, the teams work closely together. Each member contributes specific skills, each interacts with technology, and all learn from each other.

In their thought piece "Envisioning a Transformed University," James J. Duderstadt, William Wulf, and Robert Zemsky argue that powerful new computing tools "are allowing scientists and engineers to shift much of their intellectual activity from the routine collection and analysis of data to the creative work of posing new questions to explore. IT has created, in effect, a new modality of scientific investigation..." [<http://www.issues.org/issues/22.1/duderstadt.html>] In the microcosm of *Vectors*, we have seen the beginnings of similar gains for humanities scholars, particularly in the ways in which a deep engagement with database forms and interactive interfaces allows humanities scholars to formulate new research questions based upon emerging relational forms of thinking. Scholars re-imagine connections between research and analysis that are not necessarily based on the structure of a linear argument, but may be multiple, associative, tangential, digressive, even contradictory.

The *Vectors*' process, from the initial fellowship application to the final projects, always meets scholars "where they are." That is, we ask them to begin their engagements with technology from a deep exploration of their own research materials and to move organically from these materials to working with our relational database tool that at once enacts and supports multimodal thinking. The growth and evolution that our scholars experience result both from their engagement with database forms and visual thinking and from their deep interaction and partnership with technologists, artists, and interactive designers [see attached appendix for feedback from *Vectors*' Fellows]. They begin in our week-long summer workshop and continue once our fellows have returned to their home institutions, with each project spanning 4-5 months.

We've had good success with distributed collaboration, with team members often working from

separate cities (or continents) by phone and by network. In the process, we have also begun to address how the *Vectors*' process might be scaled and sustained. We have developed a suite of middleware production tools and front-end templates that will allow us to shorten the production cycle on individual projects. At this point, a greater wealth of experience for scholars and efficiency of production would best be achieved through a longer four-week residential institute during the summer. Such a structure would afford a concentrated period of face-to-face collaboration and interaction. It would also allow scholars to leave the institute with a complete or nearly-finished piece as well as new ways of thinking about humanities research and publication in the digital age. The institute would support a broad range of project styles, from the emergent genres and aesthetic experiments that we are now exploring in the journal to a diverse range of "more accessible" public humanities projects that might deploy less experimental interfaces. We hope that many of these projects, following a process of peer review, will end up published on our open access online platform; others will no doubt "end up" elsewhere, as the field of multimedia online journals is slowly, slowly expanding, or they could be housed on IML's own server, through the extensive digital portfolio system the IML has developed. We are committed to publication of and ongoing server support for the projects.

Institutional Profile

The Institute for Multimedia Literacy [<http://iml.usc.edu>] is a perfect venue for hosting a summer institute. Founded in 1998 by the University of Southern California's School of Cinematic Arts, the IML is an organized research unit dedicated to developing educational programs and conducting research on the changing nature of literacy in a networked culture. The IML's educational programs promote effective and expressive communication and scholarly production through the use of multiple media applications and tools. The IML also supports faculty-directed research that seeks to transform the nature of scholarship within the disciplines.

The IML began with a few dedicated faculty and several groups of students, exploring how to incorporate multimedia skills, authorship and critical analysis in courses that might not otherwise incorporate such avenues of expression, with a strong focus on humanities classes. Since then, the IML has worked with numerous faculty and thousands of students, successfully integrating multimedia literacy into courses from across the academic spectrum, while also inspiring new forms of research and new teaching practices of participating faculty members. By 2004, the IML was ready to found its first program, Honors in Multimedia Scholarship, a cross-campus, four-year undergraduate program with equal emphases on critical thinking and multimedia production; the program culminates in an Honors Thesis Project in the student's major.

Directed by Holly Willis, the IML is home to a core 12-person staff, which includes several associated faculty members and a technical staff with experience assisting researchers in authoring a full array of multimedia projects, with special expertise in video production and editing, sound production and editing, Web design, animation, interactivity, hands-on programming and Web 2.0 tools. The administrative staff supports the Institute and its many collaborations and projects, focusing on budget, fundraising, program management and faculty support, as well as outreach and publicity. The IML is also home to the Media Arts and Practice Ph.D. program, and supports office and lab space for the program's staff, faculty and graduate students, as well as the events related to the program. The IML's state-of-the-art labs, diverse programs, mix of undergraduate and graduate students, broad range of faculty projects, and rich slate of speakers, screenings, and workshops makes it a vibrant center for making, discussing, and researching multimodal scholarship.

The IML's annual budget is \$1.2 million, which is dedicated primarily to staff salaries in support of the Honors Program and the Multimedia in the Core program.

The IML also supports *Vectors*, which has been selected for inclusion in LOCKSS, an international non-profit community initiative that provides tools and support so libraries can easily and cost-effectively preserve today's web-published materials for tomorrow's readers [<http://www.lockss.org>]. It is also one of the first journals selected for representation by the Open Humanities Press, an open access publisher of contemporary critical and cultural theory. A grassroots initiative by academics, librarians, journal editors

and technology specialists, OHP was formed in response to the growing inequality of readers' access to critical materials necessary for research in the humanities [<http://www.openhumanitiespress.org/>]. In April 2008, *Vectors* was featured in a plenary keynote by McPherson at the Coalition for Networked Information Spring Task Force Meeting.

Curriculum and Work Plan

The Institute is designed both as an introduction to key issues in the multimodal digital humanities and as a hands-on practicum in the creation of digital scholarship. Thus, the Institute will be organized around reading and discussion as well as demonstrations and laboratory work sessions. The addition of the reading and discussion component represents a substantial advancement over the current *Vectors* workshops, allowing for a more sustained engagement with scholarship about digital media and the digital humanities in order that all participants might share a common vocabulary and 'base' knowledge. By design, the reading and demonstrations in Weeks 1 and 2 are more extensive and then taper off in Weeks 3 and 4 as scholars move into more intensive design production on their own projects.

The institute will take place at the IML from mid-July to mid-August, 2009. Participants will be required to be in attendance Monday through Friday from 9 a.m. to 4 p.m., and optional activities will be arranged on the weekends to allow participants to take advantage of the rich network of digital culture opportunities in the Southern California region. During Weeks 1 and 2, discussion seminars will take place each weekday morning from 9-12, framed around the topics noted below (for readings, see the included appendix). These seminars will be led by Anderson, Willis and McPherson and are designed to introduce key research problems in the digital and multimodal humanities. They will combine brief lectures by the organizers, presentations by the seminar participants, and regular outside speakers. Afternoon sessions will run weekdays from 1-4 and will be based on a laboratory or studio model. These sessions will include demonstrations of exemplar projects, hands-on interaction with a variety of projects and tools, group and individual instruction in a variety of tools and platforms, and design meetings for individual projects.

During weeks 3 and 4, the group seminars will meet only twice per week in the morning to discuss readings, with the other three morning sessions devoted to open lab time for the preparation and production of project materials, with full tech support provided by IML staff members. Afternoon sessions will continue to be based on a studio model and proceed as described above, although the balance of demos and instruction to design meetings will tip toward the second category as participants advance further in their own project construction. Throughout the design process, participants will present their projects-in-process to the group for review and feedback, allowing each participant to learn from the design process and decisions others are making. Throughout the entire Institute, participants will also work together on an Institute blog, taking responsibility for leading the blog on at least two days during the four weeks.

Topics to be addressed in the seminar are as follows:

Week 1: Introduction to Multimodal Scholarship

The first week of the Institute will survey the shifting terrain of contemporary media-based and networked scholarship, examining shifts in writing (as in texts composed using collaborative software or books written "in public" with reader input), publishing (thanks to blogs, wikis and Web-based venues), and distribution. The overview will include examinations of various digital humanities projects, including archival projects, modeling projects such as *Rome Reborn*, and large-scale digital humanities initiatives such as *Project Bamboo*. Beyond the overview, specific attention will be paid to new modes of scholarly argument and analysis, emerging genres, and the ways in which new scholarly practices impact the university as an institution. Demonstrations will center on innovative Web-based scholarly projects and tools (such as *GAM3R 7H3ORY* and *Paris: Invisible City*), while the Hands-on Lab Workshops will introduce a full array of easy-to-use Web-based tools (such as Zotero, del.icio.us and Buzzword) designed to enhance the ways in which scholars manage and deploy research. Guests will include Sharon Daniel, an Associate Professor of Film and Digital Media at the University of California, Santa Cruz, who will present her award-winning Web-based interactive project *Public Secrets* (a *Vectors*-produced project),

and Phil Ethington, a cultural and political historian of the United States and an intellectual historian of the social sciences and the humanities, who will present his most recent multimedia project, a dense, interactive map of Los Angeles that allows users to toggle through multiple layers of time and information.

Week 2: Design Issues in Multimedia

This second week of the Institute offers an overview of design issues for those working with multimedia in the humanities. Presenters will consider contemporary uses of typography, interface design, computational design, and information visualization, focusing on recent examples and their application to scholarly multimedia humanities projects. Demos will survey Web-based scholarly projects and tools, including the Institute for the Future of the Book's authoring tool Sophie, the database-centered Korsakow System which allows easy-to-achieve interactive video projects, and other applications that suggest the changing landscape of scholarly publication. The Hands-on Lab Workshops will focus on the multimedia project development design process. Guests will include Anne Burdick, chair of the graduate Media Design Program at Art Center College of Design and designer of several transmedia projects, and Peter Cho, a media designer and artist whose research and practice explores computational design and typography.

Week 3: Database Design and Information Architecture

Week Three dives more fully into the design process as participants begin to develop their own multimodal project, focusing specifically on the structure and/or architecture of their project in relation to the discussions and template overviews of the previous week. Using a sequence honed over several previous workshops, presenters will move through four equally important stages: discovery, design, development and reflection. During the discovery phase, designers and scholars work together to establish a shared vocabulary and content priorities of the project; the design stage is devoted to mapping the basic strategies of interface design and user experience, leading to a set of features, parameters and user profiles; during the development stage, the goals articulated during the design phase are put into practice with scholars engaging directly in the process of integrating their work into a relational database structure via the *Vectors* dynamic backend generator; finally, the reflection stage includes establishing a metadata scheme that represents the project and the author's and designer's statements which are used to frame the project and the guide user experiences. Guests include Kim Christen, an assistant professor at Washington State University whose research explores the overlap of indigenous cultural heritage, intellectual property rights and the use of digital technologies in and by indigenous communities, and the creative team from USC's Labyrinth Project, which includes a long list of innovative scholarly multimedia projects.

Week 4: Collaboration and Process

The timeline of each week of workshops is tightly orchestrated to support the need for both exposure to existing models and strategies of multimodal scholarship and practical hands-on project design and development. In our experience with *Vectors* residencies, scholars, designers and workshop facilitators forge strong creative and intellectual bonds, which become a crucial element of the development process. A shared set of values and goals are articulated, discussed and shaped according to the needs of individual contributors, but certain core values remain remarkably consistent from year to year. Without question, the most consistent indicator of a successful collaboration is when designer and scholar achieve a deep understanding of the contributions of the other and when a shared vocabulary emerges that is related to both the design process and the topic of the project itself. By the end of this process, designers are often able to speak with confidence and sophistication about topics as diverse as the economic development of agricultural communities in 15th century Tuscany, while scholars possess unexpected familiarity with the functioning of tables and tags in a relational database. Guests will include Tim Lenoir, professor of history and Co-chair of the Program in History and Philosophy of Science at Stanford University who has created several Web-based projects. Doug Thomas is an associate professor in the Annenberg School for Communication at USC, and is director of the Thinking Through Technology project, which examines the redefinition of entertainment in the digital age. At this point in the Institute, participants will be thoroughly immersed in their own project creation, and the lab time will be spent with hands-on design and development. The Institute will conclude by evaluating the Institute, as well as by charting next steps

projects as they undergo the final stages of completion.

An important aspect of each workshop's success has been substantial planning in the months leading up to the summer program. Such pre-planning will be an integral part of our process. If our grant is successful, meetings with IML staff and the *Vectors'* team will begin soon after the award is announced in order to adapt the existing palette of IML workshops to our proposed format and to refine further the application and review process. We will also begin many of the logistics of summer institute planning, from developing lists of potential housing for participants to creating virtual resources in support for advanced organizing and communication amongst participants, including the group blog and other resources.

Participants

The Institute will be open to a total of 12 junior and senior faculty and graduate students. Humanities scholars interested in participation will submit an application package that will then be reviewed and ranked by at least four members of the *Vector's* editorial team and board. Applicants need not be proficient with new media authoring, but must demonstrate familiarity with the potentials of digital media forms and clearly articulate their motivations for creating a digital project. Evidence of the capacity for successful collaboration and for scholarly innovation is required.

Proposals should include a 6-page description of the project concept, goals, and outcomes that addresses questions of audience and innovative uses of interactivity, address, and form. It should clearly state the project's argument and its contribution to multimedia scholarship and, more generally, to contemporary research in the scholar's humanities discipline. The following questions should be addressed in the application: Why does this project need to be realized in multimedia? What is to be gained by the use of a rich media format for the argument or experience I aim to present? What media assets will best help me realize my goal? What type of experience do I hope to create for the user? How do I envision the function of my project: archival, experiential, argumentative, explorational, etc? This description must include an explanation of why a digital format is integral to the goals of the project. Other required materials will include two letters of recommendation; a description of the types of media to be included in the project; a brief biography and full c.v.; a list of anticipated resources that will be required (design, technical, hardware, software, etc.); a list of anticipated assets, including previously published work in any format related to the project; and sample media if available. Projects that articulate a clear understanding of the value of multimodal expression to their execution and that address the questions noted above will be given a higher evaluation by the judges.

Because participants will enter the institute with a variety of skill levels in multimedia production, the curriculum for the four weeks is highly flexible and adaptable. Scholars with greater experience in project design and creation will have adequate time to hone advanced skill sets by working with IML staff and the *Vectors'* design team. Those without much experience will also have individualized guidance. Both the IML staff and the *Vectors'* team have worked with scholar's at varied skill levels. The readings for the Institute have been chosen to allow all participants, regardless of skill level, to have a good general knowledge of key questions in the digital humanities and in multimodal expression.

Impact and Evaluation

The Institute for Multimedia Literacy has been conducting grant-funded research in technology-enhanced learning since 1998 and has a well-established set of evaluation protocols. Evaluation of these workshops will tap into the IML's existing infrastructure and evaluation personnel to assess the impact of this project. Specifically, we will focus on individualized assessment using qualitative means: videotaped interviews, surveys and case studies. Evaluation will extend beyond assessment, however, to create an archive of materials useful in demonstrating the importance of scholarly multimedia to emerging academic practices including such crucially elusive issues as peer review, tenure and advancement. Rather than treating evaluation as external and posterior to the project, we believe these evaluation efforts may serve an integral function during the unfolding of the workshops themselves.

Based on previous fellowship outcomes, participants will experience a transformative moment during which ideas about scholarship will evolve significantly. As traditional scholarly material encounters the visual and algorithmic alterations allowed by the database, scholars will discover rich new ways to conceptualize and understand their own work. These epiphanies in turn result in leaps forward in terms of their own project design, and the projects become truly innovative. As scholars return to their home institutions, they carry this experience with them, where it will impact their peers. We have also found that the scholars we work with continue to explore multimodal forms of scholarship, successfully securing future funding for new work such as the ACLS Digital Humanities Fellowship, UC system grants, and others awards. Additionally, one of our projects (“Public Secrets”) received a Webby Honoree Award. In terms of wider dissemination, the projects will be housed on a Web site devoted to the Institute, published in *Vectors*, and/or published online in a location of the scholars’ choosing, and the publicity efforts used to promote each issue of *Vectors* will be mobilized to announce these new projects. Sites for these PR efforts include *The Chronicle of Higher Education*, *Kairos*, *Currents in Electronic Literacy*, the Tech/Rhet list, Rhizome, boingboing, Turbulence and others. The Institute's wiki and blog, established in the weeks prior to the Institute's start, will continue to serve as a key resource and tool for continued interaction beyond the Institute. Participants will also be invited to attend events centering on scholarly multimedia in the IML's Second Life space. If a need to continue active meeting arises, that need will be accommodated using the best tools to facilitate interactions, as in the current *Vectors*’ development process.

Staff, faculty, and consultants

Tara McPherson (Co-Director) is the founder and editor of *Vectors*, and is an associate professor at the University of Southern California where she teaches courses in television, new media, and popular culture in the School of Cinematic Arts. Before arriving at USC, Tara taught at MIT. Her *Reconstructing Dixie: Race, Gender and Nostalgia in the Imagined South* (Duke UP: 2003) received the 2004 John G. Cawelti Award for the outstanding book published on American Culture and was a finalist for the Katherine Singer Kovacs Book Award from the Society for Cinema and Media Studies. She is co-editor of the anthology *Hop on Pop: The Politics and Pleasures of Popular Culture* (Duke UP: 2003) and editor of *Digital Youth, Innovation and the Unexpected*, sponsored by the MacArthur Foundation (MIT Press: 2008). Her writing has appeared in numerous journals, and she is working on a book manuscript on racial epistemologies in the electronic age. McPherson has organized several key conferences and seminars on digital media in the past decade and has been named one of three co-editors of a soon-to-launch MacArthur Foundation journal in digital media and learning. She is a member of the Academic Advisory Board of The Academy of Television Arts and Sciences Archives, has served as an AFI juror, and is on the boards of several journals.

Holly Willis (Co-Director) is the Director of Academic Programs at the University of Southern California’s Institute for Multimedia Literacy, where she teaches, organizes workshops and oversees academic programs designed to introduce new media literacy skills across USC’s campus and curriculum. She is also the editor of *The New Ecology of Things* (Art Center College of Design, 2007), a collection of essays, words, images and fiction that grapples with the potential and design challenges of pervasive computing, and she is the author of *New Digital Cinema: Reinventing the Moving Image* (Wallflower Press, 2005), which chronicles the advent of digital filmmaking tools and their impact on contemporary media practices. The former editor of *RES Magazine*, Ms. Willis has written extensively on experimental media practices for a variety of publications. She holds a Ph.D. in Critical Studies in Cinema-Television from the University of Southern California.

Steve Anderson (Co-Director) is an Assistant Professor of Interactive Media and Director of the Ph.D. program in Media Arts & Practice at the USC School of Cinematic Arts. He is also the associate editor of *Vectors Journal of Culture and Technology in a Dynamic Vernacular*. Anderson is currently completing a book and companion digital media project titled Technologies of History, which examines the construction of alternative histories in film, video and digital media. He has a Ph.D. in Film, Literature and Culture from the University of Southern California and a Master of Fine Arts in Film and

Video from California Institute of the Arts. Anderson has nearly a decade of experience designing, leading and contributing to workshops on multimodal scholarship, both as a core member of the *Vectors* editorial team and as a long-time faculty member and post-doctoral researcher at the IML.

Virginia Kuhn joined USC's Institute for Multimedia Literacy in 2005 after successfully defending one of the first all-digital dissertations in the country, challenging archiving and copyright conventions. Her dissertation was created in TK3, an electronic book platform that is the precursor to the USC-based, open source program, Sophie. Kuhn teaches in the Honors in Multimedia Scholarship program at the IML and is also working on the creation of a persistent, media-rich digital portfolio, along with the San Diego Supercomputer Center. In its beta stage, the digital portfolio provides numerous functions from assessment to pedagogical aid, from a showcase for student work to an eventual space for faculty work in digital media. Kuhn's research interests include digital rhetoric, visual literacy and critical multiculturalism. Her work can be found in online journals such as *Kairos*, *ebr* (electronic book review) and *Academic Commons*, as well as in print.

Erik Loyer is Creative Director of *Vectors*, teaches in USC's School of Cinematic Arts in the Interactive Media Division, and is an award-winning media artist whose work makes use of motion, semantics, narrative and music to explore the ways in which digital interactivity enables human eloquence. Loyer is the creator of The Lair of the Marrow Monkey, one of the first websites to be added to the permanent collection of a major art museum, and Chroma, the award-winning web serial about the racial politics of virtual reality. In addition, Loyer's commercial portfolio includes Clio award-winning work for Vodafone as well as projects for BMW, the Museum of Contemporary Art (Los Angeles), and Sony. His design studio Song New Creative builds interactive media experiences for cultural institutions, corporations, and artists. A key member of the *Vectors* team since its inception, Loyer has been instrumental in collaborating on more than a dozen scholarly projects and in developing the four-stage design process so critical to the *Vectors* model.

Craig Dietrich is the User Interface Engineer for *Vectors*, and is a new media artist and researcher who, along with exploring new modes with the *Vectors* Journal, is a MFA candidate in Intermedia at The University of Iowa. His personal and collaborative work centers on public engagement, interface, and trans-nationalism manifesting in traditional and new media forms. Dietrich is presently in production of "USA Today," a media project investigating trans-nationalism's consequences on American activity. His recent collaborations include Margaret Crane and Jon Winet's "2004-America & The Globe," "Impossible Geographies" at the SOTO Gallery and Fabrica Gallery in Brighton, "Z1SMS," a mobile device research project at the ZeroOne Festival in San Jose, and the international World Cup exhibition, "Goal 2006!"

Brief biographical sketches for the weekly presenters are included above in the discussion of the curriculum.

Budget Notes

The salaries included in the budget are for project administration, coordination and teaching, including co-directors (Willis, McPherson) and master teacher salaries (Anderson). They reflect NEH guidelines. IML lab and secretarial staff salaries in proportion to project demands are also included. Fringe benefits are included on these budget items. The consulting fees for Loyer and Dietrich represent an appropriate portion of their annual salary rates (figured as a daily rate) and include advance work in preparation for the seminar as well as some post-institute support for summer participants. Honoraria for presenters is based upon NEH guidelines (each presenter will join the seminar for the equivalent of one day). Salary to cover the efforts of Virginia Kuhn, along with other staff and support materials as needed are considered informal cost-sharing provided by the IML. Travel and hotel costs are included for presenters. Stipends for participants are based on NEH guidelines; also included is a housing supplement to offset the high cost of living in Los Angeles and to make travel and accommodations more feasible for graduate students and junior faculty.

Application for the NEH Institutes for Advanced Topics in the Digital Humanities Broadening the Digital Humanities: The Vectors-IML Summer Institute on Multimodal Scholarship

Detailed Curriculum and Workplan

Curriculum

Week 1: Introduction to Multimodal Scholarship

The first week of the Institute will survey the shifting terrain of contemporary media-based and networked scholarship, examining shifts in writing (as in texts composed using collaborative software or books written “in public” with reader input), publishing (thanks to blogs, wikis and Web-based venues), and distribution. The overview will include examinations of various digital humanities projects, including archival projects, modeling projects such as *Rome Reborn*, and large-scale digital humanities initiatives such as *Project Bamboo*. Beyond the overview, specific attention will be paid to new modes of scholarly argument and analysis, emerging genres, and the ways in which new scholarly practices impact the university as an institution. Demonstrations will center on innovative Web-based scholarly projects and tools (such as *GAM3R 7H3ORY* and *Paris: Invisible City*), while the Hands-on Lab Workshops will introduce a full array of easy-to-use Web-based tools (such as Zotero, del.icio.us and Buzzword) designed to enhance the ways in which scholars manage and deploy research. Guests will include Sharon Daniel, an Associate Professor of Film and Digital Media at the University of California, Santa Cruz, who will present her award-winning Web-based interactive project *Public Secrets* (a *Vectors*-produced project), and Phil Ethington, a cultural and political historian of the United States and an intellectual historian of the social sciences and the humanities, who will present his most recent multimedia project, a dense, interactive map of Los Angeles that allows users to toggle through multiple layers of time and information.

Readings

“Scholarship at a Crossroads,” Christine L. Borgman, *Scholarship and the Digital Age: Information, Infrastructure and the Internet* (Cambridge, MA: MIT Press, 2008).

“Cognitive and Educational Implications of Visually Rich Media: Images and Imagination,” Jennifer Wiley, in *Eloquent Images: Word and Image in the Age of New Media*, Mary E. Hocks and Michelle R. Kendrick, eds. (Cambridge, MA: MIT Press, 2003).

“Beginning Again: Humanities and Digital Culture, 1993 – 2000,” Jerome McGann, *Radiant Textuality: Literature After the World Wide Web* (NY: Palgrave, 2001).

“Extreme Inscription: a Grammatology of the Hard Drive, Matthew G. Kirschenbaum, in *Mechanisms: New Media and the Forensic Imagination* (Cambridge, MA: MIT Press, 2008).

“Regeneration: Multimedia Genres and Emerging Scholarship,” Steve Anderson, unpublished essay, 2007.

“Composing From the Underground: Combining Academic and Aesthetic Practices in New Media,” Cheryl E. Ball, unpublished essay, 2007.

“Presenting the Figural,” D. N. Rodowick, in *Reading the Figural: Philosophy After the New Media* (Durham: Duke University Press, 2001).

Hands-on Lab Practicum

Social software and tagging: del.icio.us, CiteYouLike and diigo

Managing bibliographic information: Zotero

Blogs and wikis: overview of platforms and the differences among them

Introduction to Vectors' database tools and templates

Demos

Web-based scholarly projects and tools:

Rome Reborn

The Valley of the Shadow: Two Communities in the American Civil War

Vectors Journal of Culture and Technology in a Dynamic Vernacular

Comment Press

GAM3R 7H3ORY, by McKenzie Wark

Paris: Invisible City, by Bruno Latour

Public Secrets, by Erik Loyer and Sharon Daniel

Guests

Sharon Daniel is an Associate Professor of Film and Digital Media at the University of California, Santa Cruz where she teaches classes in digital media theory and practice. Her research involves collaborations with local and online communities, which exploit information and communications technologies as new sites for "public art." Daniel is the co-creator of the Web-based interactive project Public Secrets, which examines the spaces of the prison system through the voices of incarcerated women. The award-winning project exemplifies precise and elegant interface design and the use of an algorithm to generate random "text boxes" that act as metaphors for the project's central thesis.

Phil Ethington is a cultural and political historian of the United States and an intellectual historian of the social sciences and the humanities. His central concern is with the historical conditions that enable and inhibit democratic citizenship. Ethington has pioneered the use of digital multimedia for advanced scholarship, publishing the American Historical Review's first online-only multimedia essay "Los Angeles and the Problem of Urban Historical Knowledge" (2000), and is now leading a digital publishing initiative for Cambridge Journals Online. He will present his most recent multimedia project, a dense, interactive map of Los Angeles that allows users to toggle through multiple layers of time and information.

Week 2: Design Issues in Multimedia

This second week of the Institute offers an overview of design issues for those working with multimedia in the humanities. After a short tour of graphic design history as it relates to Web-based projects and interactivity, presenters will consider contemporary uses of typography, interface design, computational design, and information visualization, focusing on recent examples and their application to scholarly multimedia humanities projects. Demos will survey Web-based scholarly projects and tools, including the Institute for the Future of the Book's authoring tool Sophie, the database-centered Korsakow System which allows easy-to-achieve interactive video projects, and other applications that suggest the changing landscape of scholarly publication. The Hands-on Lab Workshops will focus on the multimedia project development design process. Guests will include Anne Burdick, chair of the graduate Media Design Program at Art Center College of Design and designer of several transmedia projects, and Peter Cho, a media designer and artist whose research and practice explores computational design and typography.

Readings

"Design," Gunther Kress and Theo Van Leeuwen, in *Multimodal Discourse: The Modes and Media of Contemporary Communication* (London: Oxford University Press, 2001).

“The Space of Information: Digital Media as Simulation of the Analogical Mind,” Peter Dallow, in *Technospaces: Inside the New Media*, Sally R. Munt, ed. (London: Continuum, 2001).

“Fluid Mechanics: Typographic Design Now,” Ellen Lupton, in *Design Culture Now: National Design Triennial*, Donald Albrecht, Steven Holt, and Ellen Lupton (New York: Princeton Architectural Press and Cooper-Hewitt, National Design Museum, 2000).

“Database as Symbolic Form,” Lev Manovich, in *The Language of New Media* (Cambridge, MA: MIT Press, 2002).

“Media Machines,” Noah Wardrip-Fruin, in *Expressive Processing*, excerpts via Grand Text Auto, 2008.

Excerpts from *Beautiful Evidence* by Edward Tufte.

Hands-on Lab Practicum

Continued instruction on Vectors’ tools
Intensive Design meetings
Instruction in specific image and media tools as needed

Demos

Web-based scholarly projects and tools:
Korsakow System
Sophie
Text experiments by John Maeda, Ben Fry and Young Hae Chang Heavy Industries

Guests

Anne Burdick is the Chair of the Graduate Media Design Program at Art Center College of Design where she is deeply invested in defining the future of graduate level education and research in design. In her practice, Burdick collaborates with texts and writers to produce new modes of reading and writing. Despite winning the prestigious Leipzig Award for the “Most Beautiful Book in the World,” Burdick does not call her practice book design. Rather, she designs spaces for writing in diverse media and environments, which sometimes includes books. Her projects are wide-ranging: poetry installations for the Getty Research Institute, unique approaches to lexicography with the Austrian Academy of Sciences, experimental fiction at the Walker Art Center’s Gallery 9, and books of literary/media criticism by authors such as Marshall McLuhan and N. Katherine Hayles. Burdick has been the Design Editor of *Electronic Book Review* since 1995.

Peter Cho is a Los Angeles-based media artist and designer. He holds a Master of Fine Arts degree from the UCLA Design | Media Arts department, where his work dealt with issues of language, writing, and meaning and a Master of Science degree from the MIT Media Lab, where his design research explored custom models for typography in time-based and reactive media. He has received honors for his work from *Ars Electronica*, Tokyo Type Directors Club, New York Art Directors Club, *ID Magazine*, and *Print Magazine*. His work has been shown at the Telic Gallery, Ginza Graphic Gallery, *Ars Electronica*, Art Sonje, Seoul Arts Center, the Art Directors Club, and Cooper Union. His interests include issues of electronic textuality, narrative, and mapping.

Week 3: Database Design and Information Architecture

Week Three dives more fully into the design process as participants begin to develop their own multimodal project, focusing specifically on the structure and/or architecture of their project in relation to the discussions and template overviews of the previous week. Working with an array of tools designed to

foster relational thinking, participants will relinquish linear argument structures and explore new ways of expressing their ideas. Using a sequence honed over several previous workshops, presenters will move through four equally important stages: discovery, design, development and reflection. During the discovery phase, designers and scholars work together to establish a shared vocabulary and content priorities of the project; the design stage is devoted to mapping the basic strategies of interface design and user experience, leading to a set of features, parameters and user profiles; during the development stage, the goals articulated during the design phase are put into practice with scholars engaging directly in the process of integrating their work into a relational database structure via the Vectors dynamic backend generator; finally, the reflection stage includes establishing a metadata scheme that represents the project and the author's and designer's statements which are used to frame the project and the guide user experiences. Guests include Kim Christen, an assistant professor at Washington State University whose research explores the overlap of indigenous cultural heritage, intellectual property rights and the use of digital technologies in and by indigenous communities, and the creative team from USC's Labyrinth Project, which includes a long list of innovative scholarly multimedia projects.

Readings

“Game Design as Narrative Architecture,” Henry Jenkins, *Electronic Book Review*, 2004. <
<http://www.electronicbookreview.com/thread/firstperson/lazzi-fair> >

“The Hidden Side of Visualization,” Agustin A. Araya, *The Alliance of Digital Humanities*, 2003. <
<http://www.digitalhumanities.org/view/Essays/AgustinArayaVisualization> >

“Becoming Digital,” Daniel Cohen and Roy Rosenzweig, *Digital History: A Guide to Gathering, Preserving and Presenting the Past on the Web*
< <http://chnm.gmu.edu/digitalhistory/digitizing/> >

Hands-on Lab Practicum

The Whale Hunt, Jonathan Harris
Mind-mapping tools
The Vectors dynamic backend generator
Intensive design meetings
Instruction in specific image and media tools as needed

Guests

Kim Christen received her Ph.D. from the History of Consciousness department at the University of California at Santa Cruz in 2004. Her academic work focuses on contemporary global articulations of indigeneity. Specifically, since 1995, Christen has worked with Warumungu people from Tennant Creek, a remote town in the Northern Territory of Australia, on a range of community projects: writing a community history (Anyinginyi Manuku Apparr), producing digital video and audio recordings, and compiling archival data for use in the interpretive displays at the [Nyinkka Nyunyu Art and Culture Centre](#).

Marsha Kinder is a cultural theorist and prolific film scholar whose specializations include narrative theory, digital media, children's media culture, and Spanish cinema. Since 1997 Kinder has directed The Labyrinth Project, an art collective and research initiative on interactive cinema and database narrative at USC's Annenberg Center for Communication. She has published more than 100 essays and 10 books.

Week 4: Collaboration and Process

The timeline of each week of workshops is tightly orchestrated to support the need for both exposure to existing models and strategies of multimodal scholarship and practical hands-on project design and

development. In our experience with Vectors residencies, scholars, designers and workshop facilitators forge strong creative and intellectual bonds, which become a crucial element of the development process. A shared set of values and goals are articulated, discussed and shaped according to the needs of individual contributors, but certain core values remain remarkably consistent from year to year. Without question, the most consistent indicator of a successful collaboration is when designer and scholar achieve a deep understanding of the contributions of the other and when a shared vocabulary emerges that is related to both the design process and the topic of the project itself. By the end of this process, designers are often able to speak with confidence and sophistication about topics as diverse as the economic development of agricultural communities in 15th century Tuscany, while scholars possess unexpected familiarity with the functioning of tables and tags in a relational database. Guests will include Tim Lenoir, professor of history and Co-chair of the Program in History and Philosophy of Science at Stanford University who has created several Web-based projects, including one on the history of computer-human interactions and one on the history of bioinformatics. Doug Thomas is an associate professor in the Annenberg School for Communication at USC, and is director of the Thinking Through Technology project, which examines the redefinition of entertainment in the digital age. At this point in the Institute, participants will be thoroughly immersed in their own project creation, and the lab time will be spent with hands-on design and development. The Institute will conclude by evaluating the Institute, as well as by charting next steps projects as they undergo the final stages of completion.

Readings

“Who Is the Author? Sampling/Remixing/Open Source,” Lev Manovich, addition to Chapter Three of *The Language of New Media*.

“The Cyborg Author: Problems of Automated Poetics,” Espen J. Aarseth, *Cybertext: Perspectives on Ergodic Literature* (Baltimore: Johns Hopkins University Press, 1997).

The Social Life of Information, John Seely Brown and Paul Duguid (Cambridge: Harvard Business School Press, 2000).

“Show, not Tell: The Value of New Media Scholarship,” Cheryl E. Ball, *Computers and Composition* 21, 2004.

Guests

Tim Lenoir is professor of history and chair of the Program in History and Philosophy of Science. Lenoir is the author of *The Strategy of Life: Teleology and Mechanics in Nineteenth Century German Biology*, which examines the development of non-Darwinian theories of evolution, particularly in the German context during the nineteenth century. His other books include: *Politik im Tempel der Wissenschaft: Forschung und Machtausübung im deutschen Kaiserreich*, *Instituting Science: The Cultural Production of Scientific Disciplines*, which examines the formation of disciplines and the role of public institutions in the construction of scientific knowledge; an edited volume, *Inscribing Science: Scientific Texts and the Materiality of Communication*, appeared in spring 1998 from Stanford Press. Lenoir is currently engaged in an investigation of the introduction of computers into biomedical research from the early 1960s through the 1990s, particularly the development of computer graphics, medical visualization technology, the development of virtual reality and its application in surgery. With funding from the Alfred P. Sloan Foundation, Lenoir constructed two web projects on the [history of human computer interaction](#) and on the [history of bioinformatics](#). Lenoir has been a Fellow of the John Simon Guggenheim Foundation and twice a Fellow of the Institute for Advanced Studies in Berlin. He is the co-founder and editor of the Stanford University Press series, [Writing Science](#). Lenoir was named [Bing Fellow](#) for Excellence in Teaching 1998-2001.

Douglas Thomas is Associate Professor in the Annenberg School for Communication at the University of Southern California. He received his Ph. D. from the University of Minnesota in Communication in 1992 and specializes in Critical Theory and Cultural Studies of Technology. He is founding editor of [Games & Culture: A Journal of Interactive Media](#), a quarterly international journal that aims to publish innovative theoretical and empirical research about games and culture within the context of interactive media. He is author of *Reading Nietzsche Rhetorically* (Guilford Press, 1998), an examination of the role of representation in the philosophy of Friedrich Nietzsche, and *Hacker Culture* (University of Minnesota Press, 2003), a study of the cultural, social, and political dimensions of computer hacking. He is co-editor of *Technological Visions: The Hopes and Fears that Shape New Technologies* (with Marita Sturken and Sandra Ball-Rokeach, Temple UP, 2004) and *Cybercrime: Law Enforcement, Security and Surveillance in the Information Age* (with Brian D. Loader; Routledge, 2000). He has testified before the U.S. Congress on issues of computer hacking, cyberterrorism, and critical infrastructure protection.

WORK PLAN

Fall 2008

Continuing work on Call for Proposals, Curriculum, Demos and Online resources

February 2, 2009

Call for Proposals distributed

Begin work on housing for fellows

March 16, 2009

Erik Loyer and Craig Dietrich continue refining platform for production and publishing for projects.

April 6, 2009

Deadline for receipt of proposals

April 20, 2009

Review panel convenes

April 24, 2009

Participants announced

May 4, 2009

Participants confirmed

May 5, 2009

Travel and housing plans initiated

May 11 - 15, 2009

Workshop planning retreat for key instructors

Begin preparing assessment and evaluation tools

May 18 - July 12, 2009

Workshop materials finalized

Online resources launched and sustained interaction begins with fellows

Survey of fellows' digital skills and needs undertaken

Final preparations of systems and materials

Logistical coordination (catering, etc.)

Technical coordination for labs

July 13, 2009

Institute begins; work on production and publishing platform continues

Ongoing assessment and evaluation throughout Institute

August 6, 2009

Institute ends

Ongoing select design/technical support

Continued assessment and evaluation

September 7, 2009

Work on production and publishing platform concludes