NOTE: Grant proposals are confidential until funding decisions are made.

INSTRUCTIONS: The applicant(s) must submit two (2) copies of their application packet. The application packet consists of the Cover Sheet and the Proposal. Applicants send 1 (one) printed copy of their application packet, with signatures, to the Chair of the divisional research committee, who forwards the packet to the Chair of the university-wide Research and Professional Development Committee. Applicants send the second copy of their application packet as an email attachment to the Chair of the divisional research committee who forwards it on to the Chair of the university-wide Research and Professional Development Committee.

Date of Application: 1/15/14

Title of Proposal/Project: Database-Driven: the Underlying Symmetry of New Media Theory and Libraries

Expected Length of Project: 4 months of literature review, 4 days of onsite interviews and observation, 3 months of interview analysis, 2 months to create a poster, 5 months to write up as a paper

Total Funds Requested from LAUC University-Wide Research Funds: $2,218.60

Primary Applicant
   Your Name (include your signature on the paper copy): Emilee Mathews

   Academic Rank and Working Title: Assistant Librarian II, Research Librarian for Visual Arts

   Bargaining Unit Member/Non-Member: Unit Member

   Campus Surface Mail Address: 148 Langson Library
                                  P.O. Box 19557
                                  Irvine, CA 92623

   Telephone and Email Address: (949) 824-6672, elmathew@uci.edu
URL for home campus directory (will be used for link on LAUC University-Wide Funded Research Grants web page):
http://www.faculty.uci.edu//profile.cfm?faculty_id=5985

Co-Applicant(s)

Name: n/a

Academic Rank and Working Title:

Bargaining Unit Member/Non-Member:

Campus Surface Mail Address:

Telephone and Email Address:

Proposal Abstract (not to exceed 250 words):

New media theorists study the changing landscape of media and technology, and how these delivery mechanisms shape information consumption. These issues are core to librarianship; thus, gaining familiarity with new media theory, is useful particularly for liaison work and information literacy. This research project will relate new media theory to library and information science, by focusing on the current writings and projects of seminal theorist Dr. Lev Manovich and conducting an ethnographic research at the lab he oversees, the Software Studies Lab in San Diego. His lab team creates large-scale projects using big data and software to do cultural analytics, combining new media and digital humanities in innovative ways. My research question is: what does information science, digital humanities, and new media have in common, and how do they differ? This research will contribute to knowledge of these quickly evolving disciplines. By showing the research process and scholarly communication practices of this lab, I will provide a case study for libraries interested in e-research and digital scholarship services. I will be the research personnel, drawing on my education and experiences working with new media theory and library science. I will conduct an extensive literature review starting in July 2014; conduct onsite fieldwork in December 2014; and will present this research as a poster Spring 2015, and write an article by Fall 2015. I plan to publish in either Art Documentation, Leonardo, or the Journal of the American Society of Information Science and Technology (JASIST).

Does the proposal require any of the following:

Use of UC Library facilities or other site(s) requiring prior approval (Yes/No): Yes

If yes, include signature and position of person authorized to permit use of facilities on paper copy of application:

Dr. Lev Manovich, Director, Software Studies Initiative Lab. He has been contacted and approves of this research and my proposed use of the facility.

Release time (Yes/No): Yes

If yes, include signature(s) of person(s) authorized to approve release time on
Use of Human Subjects (Yes/No): Yes
If yes, attach appropriate university form to paper application form. The process of obtaining IRB approval or a determination of exemption from subject protection regulations does not have to be completed prior to submitting your grant proposal. However, the grant cannot be awarded without evidence that the approval or exemption has been obtained.
IRB application is in progress.

List any previous grant proposals (divisional and university-wide) from this program that have been awarded to the primary applicant or co-applicants by title. Include date of completion and amount funded: n/a

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Revised 9/2006 bhg
Part 2 Need for Research:

New media theorists study the changing landscape of media, technology and information in the digital age. While the objects of study (networks, software, databases, etc.) are the purview of information science or informatics, new media theory aligns with the humanistic tradition of critical theory. New media theory is taught in academic disciplines such as media studies, literary studies, and the visual arts, and many faculty and graduate students are intimately acquainted with its precepts. New media theory also lends itself readily to practice; that is, many thinkers and writers not only analyze and criticize emerging technologies, but also are fluent in writing software, coding data, and visualizing the results. It is related to digital art, digital humanities, and informatics.

I see six separate but overlapping reasons why new media theory and practice has so much to offer library and information science professionals:

- **Liaising**: many faculty and graduate students in the humanities, communication studies, and information science are conversant in new media theory; thus, when librarians discuss databases, archives, and software, faculty and graduate students immediately have understand these terms on multiple levels. If librarians become more knowledgeable in new media theory, they will have more intellectually rich communication with their liaisons; and be able to collaborate more proactively with potential researchers who want to use the libraries’ databases, archives to explore new media issues.

- **E-Research and Digital Scholarship Services**: Literacy in the tools and concepts new media researchers and digital humanists use will enable richer collaborations between libraries and faculty; additionally, providing library-derived datasets for these researchers to use would elevate the visibility of the library and create multiple avenues for communication between the libraries and its primary users.

- **The Iterative Research Process** Libraries are intimately involved both information seeking, and providing access to published works; however, learning about how the research process takes place in between these steps is valuable for strategic planning of resources.

- **Technology and Space** Understanding how researchers use technology in a devoted space will lend libraries a greater understanding of how technology can be brought into the library, and how libraries can bring technological spaces more seamlessly within the library.

- **Human Computer Interaction**: new media theory discusses how humans interact with emerging technologies, enriching user experience design in librarianship.

- **Information, visual, and media literacy**: new media theory discusses the ways information is shaped by delivery mechanisms, a huge theme in information literacy. By tapping into new media theory’s approach to media literacy, librarians can not only enrich their teaching to students, but also engage faculty in discussions of information literacy, using terminology that faculty are already familiar with and more likely to value.

This research project will investigate the connections between new media theory and library and information science. My research question will be: what does information science, digital humanities, and new media theory have in common, and how do they differ? To provide
answers, I plan to conduct a research visit to the UCSD Software Studies Initiative lab (descriptions of the lab and current projects below).

My research question will be served by observing firsthand the physical and technological capacities of the lab, and using ethnographic and interview techniques to analyze and interpret how lab team members interact with technology and conceive of their role, research purposes, and conception of final projects.


Founded in 2007 by professors in art, English, and information science, developers and scientists, they summarize their collective research aims as follows:

“1) Study of software and cyberinfrastructure and their deployment in modern societies using approaches from humanities, cultural criticism, and social sciences.

“2) Use software-based research methods and next generation cyberinfrastructure tools and resources for the study of massive sets of visual cultural data, asking theoretical questions which are important for humanities.”¹

It is funded by a diverse mix of foundations, including the National Science Foundation, the National Endowment for the Humanities: Office of Digital Humanities, and the Andrew Mellon Foundation. The lab partners with CALIT2 for supercomputing access and support.

Recent lab projects:

**Phototrails** [http://phototrails.net/](http://phototrails.net/) “Phototrails is a research project that uses experimental media visualization techniques for exploring visual patterns, dynamics and structures of planetary-scale user-generated shared photos. Using a sample of 2.3 million Instagram photos from 13 cities around the world, we show how temporal changes in number of shared photos, their locations, and visual characteristics can uncover social, cultural and political insights about people’s activity around the world.

“The project is part of the emerging research field of Cultural Analytics which uses computational methods for the analysis of massive cultural datasets and flows.”²

**Selfie City** [http://selfiecity.net/](http://selfiecity.net/) “investigates how people photograph themselves with mobile phones in 5 cities around the world. The project analyzes 3200 Instagram selfies shared in New York, Moscow, Berlin, Bangkok, and Sao Paulo (640 from each city).”³

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Part 3: Design and Methodology

Literature Review:
I plan to conduct an immersive literature review of new media theory to map core tenets to related concepts in library science. While new media theory has only been around since the 1990s, it is a sizeable corpus of work that would be untenable to study for a year’s time. Instead, I want to focus on the written and artistic work of seminal theorist Dr. Lev Manovich, as he is the main creative force behind the Software Studies Initiative Lab in UCSD. I want to concentrate on his theory of software studies, as highlighted in his recent book *Software Takes Command*, as it is particularly relevant to his recent work: Phototrails, Selfiecity, and current and future projects of the Software Studies Initiative lab.

Ethnographic Research:
Once I have mapped out the relevant literature, I will visit the Software Studies Initiative Lab in San Diego to do fieldwork. Using a cultural anthropology approach to ethnography, I will observe the rituals, interactions, layouts, equipment, and unique terminology; from there, I will create a nuanced description of the culture observed. In addition to naturalistic observation techniques, I will interview programmers, project coordinators, and theorists.

I will learn about the research process of the lab, project management, preferred equipment and tools, the different roles each person undertakes and the differences between these approaches. This will facilitate my research goal: to document the approaches of new media, digital humanities, and information science, and how they interact and intertwine.

Interview questions will include:

- How did you become affiliated with the Software Studies Initiative?
- How does the lab physical setup facilitate your work?
- How does the software and hardware you utilize facilitate your work?
- How do you work with data?
- What does computing and technology add to your discipline?
- Do you identify yourself professionally as an artist, a humanist, a social scientist, a computer scientist? How do you see yourself operating within these trajectories?
- What is your personal attitude toward technology and computing?
- What do you know about new media?

Intellectual outcomes from this design and methodology are:

- to cultivate knowledge of key researchers and practitioners in new media theory and art;
- to cultivate a sophisticated grasp of the similarities and differences of how library and information science and new media theory use terminology, understand the possibilities and limits of, and share goals in regards to media, information, and technology;
- to lay out a framework to understand new media theory and its application through art and its companion discipline, library information science;

Concrete outcomes include:
- Compiling an exhaustive list of key written works and projects
- Creating an ethnography of researchers
- Creating a case study for libraries interested in e-research and digital scholarship services that are inclusive of multiple or interdisciplinary needs

Part 4: Budget

Travel

Visit to San Diego

Duration of trip: 4 days, 4 nights
Travel: Personal Vehicle. Roundtrip mileage: 170 miles at $.56 per mile reimbursement = $95.20
Lodging: 1 night $139 plus 15% tax x 4 = $639.40
Per diem: $71 per day x 4 = $284
San Diego trip total: $1018.60

Travel expenditures total: $1018.60

Other expenditures:

Transcription fees:
20 hours of interviews=1,200 minutes
$1 per minute = $1,200

Total projected expenditures: $2,218.60

Part 5: Supplemental Budget Information Form

Please see attached.

Part 6: Personnel

Research personnel is limited to myself. My dual master’s degrees in art history and library science gives me the educational background and research skills needed for this project. I began researching into the theme of new media theory applied to library science in summer 2012, when I acted as the liaison to the Indiana University Bloomington’s Grunewald Gallery of Art, who was hosting the artist Buzz Spector, an artist who works with large installations of printed books. I enabled the gallery to borrow approximately 10,000 books from the IUB Libraries for this exhibition, and planned outreach events and complementary exhibitions that teased out themes of the show. The juxtaposition of art and library science when viewed through new media created a potent topic that engaged audiences from librarians to artists, historians, and critics. I co-presented several talks on the subject in 2013: “Engagement in Art and Libraries: When the Ineffable Comes up Against the Informational” at a multidisciplinary symposium held at IUB, and “Off the Shelf and into the Gallery: Engaging the User through Installation Art,” a presentation at the Art Libraries Society of North America Annual Conference. These themes
became further codified in my co-authored essay for the Buzz Spector exhibition catalog, “Off the Shelf and into the Gallery: Librarians on Buzz Spector.”

I view this current research project as an evolution of my initial research, curation, and writing activities, refining and reframing the ideas that connect librarianship with new media theory, as evinced through the visual arts. I follow the leadership of my library school professor and mentor, Dr. Ronald E. Day, whose works on librarianship most closely bridge the gap between critical theory and library and information science.

**Part 7: Timetable for Completion of the Projected Research**

From July 1, 2014 through December, 2014, I will assemble literature, conduct close critical reading, and map out the discursive frameworks. I will also create a list of key artworks and projects conducted in the new media art framework and digital humanities field to further contextualize the work of researchers and practitioners; and a list of potential key players in the field to keep tabs on as potential collaborators between disciplines.

I plan to visit the Software Studies Institute in San Diego in December, 2014. Once these research visits have been conducted, I will formulate my bibliography, list of key works and figures, and visualize connections between new media, digital humanities, and information science in preparation for my poster to be presented in May, 2015, at the Art Libraries Society of North America conference. From there, I will incorporate feedback and formulate my research into a written article.

**Bibliography**


Hochman, Nadav, and Lev Manovich. “Zooming into an Instagram City: Reading the local through social media.” *First Monday* 18, no. 7 (July 2013): 9.


