**Project description** for Proposal Development Funding for Michigan Humanities Collaboratory

 “Precarious Networks and Digital Inequalities: A Massively Multiauthor Monograph and Critical Mapping Project”

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Faculty Collaborators: Irina Aristarkhova (Art and Design) Anna Watkins Fisher (American Culture and Residential College) Tung-Hui Hu (English + Zell Writers’ Program) Silvia Lindtner (Information)

Doctoral Students: Iván Chaar-López, Meryem Kamil (American Culture and Digital Studies)

• Description of project

**1. Describe your research project and the anticipated stages of the work. (500 words)**

As cyberpunk novelist William Gibson wrote in 2003, “the future is already here, it’s just not evenly distributed.” Much critical attention in digital studies has been paid to infrastructural practices in the Global North, often assuming digital networks as unifying and global across diverse regions. We propose instead to trace the uneven distribution of digital life by mapping out digital inequalities as well as practices of resistance to dominant values and understandings of digital technology in and between the U.S., China, Mexico, Palestine, and on indigenous lands, over historical periods and differing scales. To do so, “Precarious Networks and Digital Inequalities” brings together and draws from the active research agendas of five faculty and two doctoral students to produce a collaborative research, writing, and digital mapping project that makes visible the life cycle of digital devices and infrastructures, their transnational travels and the governance of life through algorithms and biotechnologies.

While tropes of contemporary digital culture, such as the “cloud” or the “user,” produce a seamless and borderless sense of cosmopolitanism, they do so by obfuscating the wires, machines, corporations, and people who run it. In fact, digital infrastructures are complex technological, aesthetic, and rhetorical formulations, and they require collaborative and interdisciplinary expertise to excavate their material bases. Our research project is specifically interested in how users and producers of the digital from what Anita Chan (2014) has called “networking peripheries” engage with poor digital infrastructures, capitalistic exploitation, and the commodification of their bodies and the data they produce. We plan to focus on emergent forms of precarity and power both internal and external to the U.S. through algorithmic means that structure the lives of women, migrants, people living in the global south, and we will study novel objects, texts, and practices, such as drones, social media, maker spaces, video games, and reproductive technologies, as we do so.

We ask: *How can the materiality of digital networks both produce and respond to precarity?* How have digital networks governed digital bodies, altered sovereign protections over subjects, and perpetuated uneven access to digital resources? And how have aesthetic objects and practices disrupted and questioned the “black box” of digital technology?

We envision two specific material outcomes; first, an interactive, annotated map using Google maps or similar and second, a multiauthor writing project. The goal of the map is to trace previously invisible networks of digital creativity, use and production beyond more familiar Western-centric production cultures such as Silicon Valley. The essay is aimed at facilitating a highly collaborative writing project that unfolds alongside the ongoing mapping work. These two modes of digital production will allow us to connect several distinct but related topics: the placement of Palestinian Internet cables, the manufacture of electronics by Navajo women, the production and deployment of drones on the U.S. Mexico border, the technocultural productions of Chinese makers challenging Western centric views of “created in California” and “assembled in China”, and the distribution of feminist art through digital channels through collective writing and digital tools. Together, these products will critically link together the expressive and technological practices of the digital undercommons and the networks needed for their circulation. Connecting these diverse locales and practices, the essay and integrated map tells a richer story about the digital and its uneven distribution than we could produce working alone.

Our group’s expertise in researching digital inequality, identity, politics and cultural processes of digital production, and performance positions us uniquely to investigate the ways that life and death are mediated through technology. The proposed work spans a vast scope of practices across multiple sites, norms, and values. This demands a range of expertise and a truly interdisciplinary approach as represented by our team comprised by people active in digital studies, the arts, information sciences, and technology design. At the heart of this project lies the production of a prototype of a new digital scaffold for producing polished academic writing that includes multiple voices and points of view. This platform is aimed at bringing together diverse actors from scholars over activists to product designers. In mapping flows of objects, people, and resources, this project has a political goal, i.e. to empower those less privileged in shaping and constructing their social and technological worlds.

**Stages of work:**

**May**:

Meet twice per week for 90 minute co-working sessions to research digital writing, content management, and mapping platforms

•test-drive formats for individual contributions; produce short original pieces and share using Google docs.

•Create paper prototype that maps of sites of digital precarity.

**June**:

•Post completed prototype collaborative essay with integrated map to password protected site for review and archiving by Collaboratory

•Produce design specifications for programming team if project is funded

•Complete proposal for Humanities Collaborative Funding for one to two year project to produce full multiauthor monograph and integrated map that illustrates the circuit of digital precarity.

**2. What original contribution(s) will the project make to the humanities field(s) in which it intervenes, and to the humanities more broadly. Why is collaborative research appropriate to the project? (500 words)**

A collaborative, multi-authored digital monograph of this kind is uniquely positioned to innovate the field. Existing models of collaborative authorship and digital publishing have struggled to produce original content that makes compelling use of digital platforms. There is no existing original monograph in the humanities that includes more than four authors. The closest thing we have to this is the digital book [*Speculate This!*](http://wtf.tw/ref/uncertain_commons_speculate_this.pdf) (Duke University Press, 2013), which was authored anonymously (denying potential credit to junior faculty and graduate students). Two notable digital sites authored using the Mellon-funded tool Scalar, [*The Flows of Reading*](http://scalar.usc.edu/anvc/flowsofreading/index) [(2013)](http://scalar.usc.edu/anvc/flowsofreading/index), by Erin Reilly, Ritesh Mehta, and Henry Jenkins, and Nicholas Mirzoeff’s *We Are All Children of Algeria* (2012), are “complementary offerings” to printed books and do not stand on their own.

“Precarious Networks and Digital Inequalities” will prototype new methods for groups of seven or more humanistic writers to produce a book together using a platform that, like [Scalar,](http://scalar.usc.edu/) incorporates visual materials, but that allows us to composite individual contributions and to map a variety of contiguous subjects.

We expect to intervene in five fields: digital humanities, digital media studies, science and technology studies, ethnic studies, and gender studies. The digital humanities tend to be preoccupied with tool use; its practitioners often use software to automate the analysis of canonical texts to find new insights through distant reading. It is a way of putting old wine in new bottles. But as Alan Liu argues in *Keywords for the Digital Humanities,* the digital humanities risks irrelevance if it is unable to turn towards cultural analysis of the digital. Our project uses digital collaborative writing technologies to venture into wider critiques of these technologies using the traditional strengths of the humanities.We propose to work together to write a born-digital essay that connects both our spatial areas of study--China, Palestine, U.S.-Mexico, Navajo land--and our disciplinary areas of expertise: in short, to put new wine into new bottles.

Though we all work on different nodes of digital culture’s networked peripheries, we share a background and training in critical theory, feminist theory, and digital media theory and history. We are all long-form single author scholars or dissertators, some of whom have extensive experience writing monographs and others who are earlier in the process of producing emerging book projects. Nakamura, Aristarkhova, and Hu have published monographs on the topics of digital culture, inequality, infrastructure, biopower and technologized sexual reproduction, and we propose to both mentor each other as monograph writers and pioneer new ways for us to write a single argument, long-form monograph as a group.

The project will also contribute to digital media studies which has long neglected issues of digital inequality, identity, and difference. While this field has traditionally situated itself in formalist European media studies that focus on digital materiality in “developed” countries such as the U.S. and Europe (i.e. Parikka, Kittler, Ernst), our work deploys methodologies from the humanities and social sciences to historicize and analyze digital infrastructure--what Parks and Starosielski (2015) describe as “critical infrastructure studies.” This set of approaches builds on feminist and critical race theories and opens up possibilities to tackle crucial political questions in our contemporary moment.

**3. Describe the research team and explain what the faculty collaborators bring to the team. (200 words)**

Nakamura has administrative experience and can lead the group, ensure that deadlines are met, meetings are scheduled, and keep a watchful eye on the workload of team members, in particular junior faculty and dissertators. She is well acquainted with the digital scholarly community and the world of academic publishing and can find the right venue for publication and dissemination of the work.

Lindtner’s research focuses on histories and cultures of “making” and “hacking” in urban China, and along with Hu, has published work on digital infrastructures from a critical perspective. Lindtner’s training in Informatics brings expertise in social computing and ethnographical method to the group. Aristarkhova is trained as a philosopher of feminism and technology. Fisher contributes expertise in experimental media and performance that engages digital platforms to mobilize the constraints of our political present. As a former computer programmer, media theorist, and a teacher of electronic literature, Hu will offer project management expertise for creating born-digital writing.

4**. What is the anticipated role of graduate student collaborators? (200)**

Iván Chaar-López and Meryem Kamil are serious partners and equal contributors in this project because their area of expertise is unduplicated by other members of the group and their methods inspire a transnational focus that we could not achieve in any other way. Faculty and graduate students will be credited equally in the project.

Kamil’s research centers the materiality of information communications technology in Palestine and the aesthetics of images circulated from Gaza to the Global North during Operation Protective Edge to think through levels of mediation in online activism: from the actor, device, network, online platform, and to the solidarity activist.

Chaar-López’s research shows that the contemporary use of drones to track and target immigrant bodies in the border is built on the long, crooked trajectories of cybernetics and Vietnam-era intrusion detection systems. Drawing from media archaeology and actor-network-theory, Chaar-López traces the emergence of drone technopolitics through a history of the ‘datafication’ of the U.S.-Mexico border.

**5. What is the anticipated role of undergraduate students in the project (if any)? (100)**

We will employ advanced undergraduate students in the School of Information, Computer Science, and/or Art and Design who are paid hourly to assist with programming, design, and curation. Students will experiment with developing the digital form of this project by finding and fixing appropriate links and tagging content. They will also serve as user interface testers for the project.

**6. Describe the anticipated outcomes and products of the project. How will results be communicated and to what audiences? (200 words)**

“Precarious Networks and Digital Inequalities” will produce a free, open-access collectively authored essay and a digital map that visualizes the multiple sites that we study. These will be communicated to the public using social media to reach a) an engaged public audience including independent artists, digital workers, DIY makers and tech activists, and others whose work we include in ours and whose voices are not normally included in academic writing except as informants or subjects b) professors, doctoral students, staff, and independent scholars from the wider academic community.

This is an ambitious and radically collaborative project, and given the short time span of the grant, we propose to use the period of funding to break new ground in collaborative writing and to also tool-test the available technological and organizational platforms and resources needed to complete it. Should a long-term grant be funded, we hope to produce an inviting platform for massively multiauthored humanistic work that will be seeded by the research of the established and emerging scholars in the group and will attract users from a wide range of spaces inside and outside the academy. We plan to release this platform to the general public after its completion.

**7. Briefly describe each faculty member’s experience in mentoring graduate students. (300 words)**

We are an interdisciplinary group who have served as primary advisors and committee members for students in American Culture, Communication, Information, English, and Women’s Studies.

Lisa Nakamura has extensive experience mentoring doctoral students, having served on over 35 dissertation committees and as primary doctoral advisor for five students, two of which are completing dissertations in American Studies and Digital Studies. Aristarkhova has advised one MFA student in the Stamps School, has served as primary advisor for two students at Danube University, and has served on numerous doctoral committees in the College of Art and Architecture program and the Women’s Studies Department at Penn State.

Hu currently directs a doctoral dissertation writer in English and has served on dissertation committees and exam committees for three other graduate students. He has experience collaborating with doctoral students through the Rackham Spring/Summer Research Grant program.

Lindtner has served on doctoral dissertation committees and exam committees for four doctoral students in the School of Information. In addition, she directly supervises two doctoral students and two post-doctoral researchers.

While Fisher has mentored graduate students as a Mellon postdoc at Cornell, she has not yet had an opportunity to acquire extensive experience having started her appointment at UM this year.

Given this, senior faculty in the group will take the lead in the following activities: 1. Map best practices for mentoring doctoral students in collaborative humanities work while keeping them on track with dissertation writing;2. Train doctoral students how best to represent and claim credit for collaborative digital work on their c.v.’s and to potential employers in the academic and alt-ac job market; 3. Advise students on methods for measuring impact and prestige of digital platforms for their work, in particular new and rapidly changing forms of open access and multi-author humanistic writing.

**8. Describe the collaborative process and the work that you anticipate accomplishing during Spring Term (300 word maximum).**

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**9. What tole will each team member play in the proposal development work? (300 word maximum).**

Nakamura has administrative experience and can lead the group, ensure that deadlines are met, meetings are scheduled, and keep a watchful eye on the workload of team members, in particular junior faculty and dissertators. She is well acquainted with the digital scholarly community and the world of academic publishing and can find the right venue for publication and dissemination of the work. Lindtner’s research focuses on histories and cultures of “making” and “hacking” in urban China, and along with Hu, has published work on digital infrastructures from a critical perspective. Lindtner’s training in Informatics brings expertise in social computing and ethnographical method to the group. Aristarkhova is trained as a philosopher of feminism and technology. Fisher contributes expertise in experimental media and performance that engages digital platforms to mobilize the constraints of our political present. As a former computer programmer, media theorist, and a teacher of electronic literature, Hu will offer project management expertise for creating born-digital writing.