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A Research-Based Model for Digital Mapping and Art History: Notes from the Field*

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Abstract

Most digital mapping in art history today divides the research process from the visualization aspects of the project. This problem became the focus of a summer institute that Paul Jaskot and Anne Kelly Knowles ran at Middlebury College with the support of the Samuel H. Kress Foundation. Our article both reports on the institute and suggests how research questions can complement digital mapping methods. We conclude with three case studies of spatial questions in art history and discuss the Fellows' use of GIS to explore examples from Qing Dynasty China, medieval Gotland, and contemporary New York City.

Résumé

En histoire de l'art, la plupart des projets numériques séparent le processus de recherche de l'étape de visualisation. Ce fut la question centrale d'une école d'été organisée aux Etats-Unis à Middlebury College avec le soutien de la Fondation Samuel H. Kress. Les organisateurs, Paul Jaskot et Anne Kelly Knowles, font ici le bilan du *Summer Institute*. Ils proposent d'élaborer la démarche de cartographie numérique de manière plus complète en partant des questions de la recherche elles-mêmes. Trois études spatiales d'histoire de l'art concluent l'article. Elles présentent comment les participants à la session ont pu utiliser eux-mêmes les techniques des systèmes d'information géographiques (SIG) pour explorer leurs domaines de recherches, de la dynastie Qing en Chine, via le Gotland médiéval, jusqu'au New York contemporain.

** See authors' biographies at the end of the article.*

Digital mapping has become central to what constitutes Digital Humanities in art history. Perhaps this is a result of the inherent emphasis at the core of mapping on the visualization of evidence, or it could be due to the essential physical and hence spatial condition of the objects of art history that makes mapping such an interesting concept to our discipline. Typical in this regard may be Jacqueline Marie Musacchio's recent article in *Nineteenth-Century Art Worldwide*. This journal has been known to publish innovative scholarship in digital art history, particularly due to its functional capabilities, funded by the Andrew W. Mellon Foundation. Musacchio's article on the European travels and experience of the American sculptor, Anne Whitney, offers a detailed analysis of the artist's significant archive of letters as well as a complementary mapping project highlighting the many places she visited and lived (using Omeka, a narrative presentation software, and Neatline, an add-on tool that produces maps and timelines¹). As a result, Musacchio argues, "my article and the associated maps and timeline illustrate the richness and variety of one woman's life abroad, providing a chronological, close-up view of Whitney's first sixteen months of travel, from March 1867 to July 1868."² Musacchio's use of the letters as primary source material as well as the visual possibilities of the map provide a deep context for the complexities of the sculptor's life. With the map's five thematic categories—travel, daily life, events, art, and sites—linked temporally and spatially to geo-rectified historical plans, the article is one example of how digital mapping can extend the traditional parameters of a scholarly argument.

And yet, as Musacchio herself indicates in the "Project Narrative," given the conditions that governed the writing of the article, textual analysis of the letters had to precede the creation of the map. The map was an illustration of the article—

an "exhibit"—rather than an integral part of the research process.³ For many digital art history projects, the map comes at the end, as an accompaniment to the argument driven primarily by the text. This may result from the nature of a collaborative in which the art historian seeks out "tech support" after the research is well underway, or from a funding model in which distinct phases of the project are financed separately, or merely from the difficulty of synchronizing the different workflow schedules of art historians and their mapping partners.⁴ Whatever the reason, it means that most digital mapping in art history today divides the research and visualization aspects of the project, and does not consider visualization to be part of the research process.

How can we address this divide, or should we? After all, mapping subsequent to the completion of research can produce new complications of the argument, an obvious scholarly virtue. And yet, mapping as an integrated part of the research agenda has yet to be thoroughly explored for its real potential in art history. Might the distance between research and mapping be lessened if art historians became more knowledgeable of and engaged in the visualization process themselves? This educational possibility too is fraught, given the time and intellectual commitment it takes to learn aspects of a new discipline such as geography. Art historians who try to engage the digital on their own often encounter a painful gap between what flagship Digital Humanities research projects tempt one to imagine is possible and the reality of what one can really accomplish after a brief exposure to digital methods, including what they cost (in time and money) and the challenges of working on one's own or forming new partnerships. How do you go from learning the basics of, say, Harvard University's WorldMap to the complexities of constructing a digital Roman

¹ For more information, see <http://omeka.org/> and <http://neatline.org/> (accessed 4 February 2015).

² Jacqueline Marie Musacchio, with Jenifer Bartle and David McClure, assisted by Kalyani Bhatt, "Mapping the 'White, Marmorean Flock': Anne Whitney Abroad, 1867-1868," *Nineteenth-Century Art Worldwide* 13, no. 2 (Autumn 2014): <http://www.19thc-artworldwide.org/index.php/autumn14/musacchio-anne-whitney-abroad>.

³ Jacqueline Marie Musacchio, with Jenifer Bartle and David McClure, assisted by Kalyani Bhatt, "Project Narrative," *Nineteenth-Century Art Worldwide* 13, no. 2 (Autumn 2014): <http://www.19thc-artworldwide.org/index.php/autumn14/musacchio-project-narrative>.

⁴ For an analogous discussion of the research/mapping process in Historical Geography, see J. Brian Harley, "Historical Geography and the Cartographic Illusion," *Journal of Historical Geography* 15, no. 1 (1989): 80-91.

Forum?⁵ Might scholars need a new kind of training that would bridge that gap specifically by focusing on problems most relevant to their research that, secondarily, call for particular kinds of digital methods?

This question became the crux of a conceptualization of a summer institute for art historians that Paul Jaskot and Anne Kelly Knowles proposed to the Samuel H. Kress Foundation in late 2013. The Kress, along with the Getty Foundation, two of the leading funders of art historical scholarship, had been considering the potential for art history-specific workshops in the context of important research venues including the College Art Association (CAA), the preeminent membership organization for artists and art historians in the United States.⁶ The idea was gaining some urgency as many of the new Digital Humanities centers were emphasizing textual over visual analysis, an emphasis that would preclude the full range of art historical research. Happily for us, the Kress agreed and funded the experimental program, which took place at Middlebury College in August 2014. What follows is both a report on the institute and an analysis of some of the scholarly areas and art historical problems we explored. The analysis points to ways in which research questions can lead the choice of digital methods, linking central art historical problems and ideas to complex formulations from specialists in the digital realm. In this regard, our goal was to use digital methods as part of art historical thinking, not to separate the two or have one “come first” in the research process.

Jaskot and Knowles’ initial ideas for an institute stemmed from our belief that a summer seminar based on a specific subset of art historical

problems – namely spatial questions – would provide a strong scholarly focus and make for an intellectually invigorating environment. We had modeled this more integrated approach, in which methodology is driven by research questions, in our work addressing the SS concentration camp system and the architectural environment of Auschwitz.⁷ While we wanted to highlight excellent art historical work in the Digital Humanities, such as the impressive Digital Roman Forum and Mapping Gothic France,⁸ we also believed that the materiality of many kinds of objects and buildings, so central to art history, could be profitably explored through mapping and other kinds of spatial visualization. Our call for applicants therefore required a statement of why spatial questions were important in the proposed research projects. While we expected some passing knowledge of Digital Humanities debates, no particular technical expertise or experience was required.

We had hoped for at least 30 applications for the 15 slots; instead, we received 129, an extraordinary number that indicates real interest in the field. Scholars applied from a wide variety of institutions, public to private, and were at different phases of their career, although the majority of applicants were assistant or new associate professors (i.e., recently tenured), followed by a healthy number of pre-doctoral students. Three geographical areas were most prominent in the applications: studies of Paris (movement through space, late medieval through the 19th Century); Rome (movement through space, ancient and modern), or Italy more generally; and the Netherlands (markets and space in particular, with an emphasis on the 14th through 17th centuries). While this is an unscientific sample, it indicates a concentration of digital mapping interest in European art history,

⁵ For more information on WorldMap, see <http://worldmap.harvard.edu/>. For the Digital Roman Forum, a project from UCLA, see <http://dlib.etc.ucla.edu/projects/Forum> (accessed 4 February 2015).

⁶ For a brief overview of all four institutes and other current digital initiatives of the College Art Association, see Anne Collins Goodyear and Paul B. Jaskot, “Digital Art History Takes Off,” *CAA News* (7 October 2014): <http://www.collegeart.org/news/2014/10/07/digital-art-history-takes-off/>. Indicative of the interest the camps have generated is also the latest issue of *Ars Orientalis* (vol. 44, 2014), which contains discussions of the four institutes as part of a new online feature section on Digital Initiatives. This section is used especially to mark the premier of the journal’s first entirely digital volume. See, in particular, Nancy Mickleright “Digital Art History Boot Camp,” <http://dx.doi.org/10.3998/ars.13441566.0044.014>; and Stephen Whiteman, “Digital Mapping and Art History,” <http://dx.doi.org/10.3998/ars.13441566.0044.015>.

⁷ See Anne Kelly Knowles and Paul B. Jaskot, with Benjamin Perry Blackshear, Michael De Groot, and Alexander Yule, “Mapping the SS Concentration Camps,” and Paul B. Jaskot, Anne Kelly Knowles, and Chester Harvey, with Benjamin Perry Blackshear, “Visualizing the Archive: Building at Auschwitz as a Geographic Problem” in Anne Kelly Knowles, Tim Cole, and Alberto Giordano, eds., *Geographies of the Holocaust* (Bloomington: Indiana University Press, 2014), 18-50 and 158-91, respectively. This book is the result of a 10-scholar collaborative formed in 2007 at a workshop bringing together geographers and historians interested in spatial evidence of the Holocaust, sponsored by the U.S. Holocaust Memorial Museum.

⁸ See <http://mappinggothic.org/> (accessed 4 February 2015).

especially early modern. Other notable fields included U.S. topics as well as a smattering of strong interest from scholars of West African and East/South Asian art. Surprisingly, given the presence of some high-profile digital projects like Mapping Gothic France, medieval proposals were few, as were projects that focused on Latin America, among other geographies. These seem to us to be important considerations given that Digital Humanities, for all of its emphasis on open access and the seemingly democratic space of the internet, also has the pitfall of forming art historical canons that will favor one set of questions and geographies over others. This dynamic of simultaneously expanding debates in new digital directions while necessarily focusing resources on specific case studies in the field is common in Digital Humanities, a symptom of which is the selective funding of Fellows for summer institutes like our own or the concentration of foundation money in particular areas of the discipline. Strengthening digital mapping in art history thus also necessitates dialectically a critique of the inevitable privilege that conditions the process of selection.⁹

The main goal of the two-week Kress Summer Institute on Digital Mapping and Art History was for each of the institute's fifteen Fellows (9 women and 6 men¹⁰) to build a prototype database that they would begin to explore visually in GIS while at Middlebury, thereby creating a foundation that they would be able to continue developing after returning to their home institutions. Our worst-case-scenario was that all Fellows would at least learn what the possibilities of spatial visualizations might be for their work. All readings, discussions, and software instruction would focus on concepts, issues, and methods that

were relevant to the Fellows' research. Jaskot and the Kress Foundation saw the summer workshop as a way to increase capacity for digital scholarship in art history. Knowles's background in using GIS for historical research, and the Middlebury College Geography Department's experience in hosting GIS training for faculty from various disciplines, provided the methodological and instructional focus.

Because many Fellows were new to mapping and database design, we asked them to submit samples of their source material, mapping ideas, and a draft database, which we discussed with each Fellow by phone three months before the Institute. Those calls helped us understand the Fellows' research goals and gave us a chance to suggest additional sources and help them refine their spatial questions. It also signaled to the Fellows that they would be asked to work seriously, not superficially, with their research data, which probably put a bit of fright into some of those who had never worked with a database. Reviewing the research projects and draft databases with our instructional staff at Middlebury (Bill Hegman and Katrina Schweikert, assisted by student Levi Westerveld) was crucial for tailoring the curriculum to meet Fellows' needs. Knowing their specific interests also helped the Institute's two guest speakers, art historian Pamela Fletcher (Bowdoin College) and historical geographer Ian Gregory (Lancaster University), highlight relevant issues in their research presentations. Fletcher is well known for her art historical work in mapping 19th-century London galleries as well as her recent appointment as the new Digital Humanities field editor for the on-line journal *caa.reviews*, while Gregory has long been a leader of historical GIS internationally.¹¹ Discussion readings included key texts related to representation of ritual in urban spaces, spatial visualizations of markets, the spatial analysis of sound environments, and

⁹ For an interesting take on both the possibilities and problems with the Digital Humanities in this area, see Amy E. Earhart, "Can Information be Unfettered? Race and the New Digital Humanities Canon," in Matthew K Gold, ed., *Debates in the Digital Humanities* (Minneapolis: University of Minnesota Press, 2012), 309-18.

¹⁰ While women had a dominant role in the institute, our three cases featured in this article are from male participants. This mainly results from the fact that Fellows have decided to "report out" their experiences in different ways and in varied venues, including on a panel on the Getty and Kress institutes at the 2015 CAA conference and a special art history panel at the 2015 Association of American Geographers conference. We have strong representation of our female Fellows as organizers and presenters in those fora, so decided to include additional voices not part of those exchanges here in order to maximize the exposure of all the various projects that came out of the institute.

¹¹ For exemplary articles, see Pamela Fletcher and Anne Helmreich, with David N. Israel and Seth Erickson, "Local/Global: Mapping Nineteenth-Century London's Art Market," *Nineteenth-Century Art Worldwide* 11, no. 3 (Autumn 2012): <http://www.19thc-artworldwide.org/index.php/autumn12/fletcher-helmreich-mapping-the-london-art-market>; David Cooper and Ian N. Gregory, "Mapping the English Lake District: A Literary GIS," *Transactions of the Institute of British Geographers* 36, no. 1 (2011): 89-108.

mapping textual sources, all themes that dovetailed with specific Fellows' interests.¹² In addition, we focused specific readings on mapping as a research process to model our goals as we moved into the GIS training component of the institute.¹³ At that point, the question became one of "proof of concept," as we sought to establish how effective the blending of digital methods, an introduction to geographic concepts, and a focus on art historical research could be.

Fellows' projects ranged widely in time, from the 13th century to the 1980s; in place, from West Africa to China, Europe, Greenland, and the United States; and in scale, from the study of royal women's processions through Medieval Paris, to the geographic sources of objects and their placement in the Metropolitan Museum of Art's Arab and Islamic world galleries, to the importance of analyzing sound as a feature of Renaissance Florentine urban spaces. Themes of movement, change over time, perception, and social networks generated fruitful discussion of problems, patterns, and representational strategies. Finding commonalities among the diversity of projects helped create a group culture of shared exploration that many of us were reluctant to see come to an end.

We were not sure what to expect from this new model. Nor could we predict whether our approach would successfully launch Fellows' research projects or equip them to complete what they started during the institute. However, the participants' growing excitement, the extra hours they stayed in the lab, and the palpable sense of accomplishment when they presented their work on the last day all suggest that we achieved not only our basic goal but much more than we had

expected. Everyone had done real digital scholarship. At a theoretic level, we had debated the basic issues involved in parsing humanistic sources into database structures, and then saw how those issues played out in each project. Fellows experienced the process of database construction as an intense form of close reading that informed the distant reading provided by their GIS maps. This language, adapted from Franco Moretti's work, references both the detailed analytic focus required to create the database and the broader synthetic work that may result from visualization strategies.¹⁴ It was fascinating to discover points of resonance between art historical methods, data visualization, and map design. Six full days of training and lab time for learning GIS as well as map-making, undergirded with geographical concepts, provided an intellectual grounding that point-and-click instruction often lacks. The results were serious drafts of digital mapping directly relevant to Fellows' work. In sum, the process of learning software in the context of specific research questions transformed digital tools into digital spatial methods.

Some examples will suffice to show how research interests drove the use and adaptation of GIS methods. Benjamin Zweig came to the institute as a recent Ph.D. medievalist who also had significant computer design skills in his background. Like all Fellows, however, he had no GIS experience. His project, "Mapping Medieval Gotland, c. 1150-1361," an extension of his previous research in medieval Scandinavia, proposed the seemingly straightforward goal of mapping medieval religious structures on the island of Gotland, an important cultural and economic crossroads of the medieval Baltic. Yet one does not need GIS to map churches, even if their numbers are significant. What made GIS necessary were Zweig's research questions, which asked whether there were temporal and spatial patterns or anomalies in the development of particular artistic and architectural features of the churches on the

¹² These readings included, for example, Yi-Fu Tuan, *Space and Place: The Perspectives of Experience* (Minneapolis: University of Minnesota Press, 1977); Diane Favro and Christopher Johanson, "Death in Motion: Funeral Processions in the Roman Forum," *Journal of the Society of Architectural Historians* 69, no. 1 (March 2010), 12-37; Sophie Raux, "Visualizing Spaces, Flows, Agents, and Networks of the Art Markets in the 18th Century: Some Methodological Challenges," *ARTL@S Bulletin* 2, no. 2 (Fall 2013): 27-37 [<http://docs.lib.purdue.edu/artlas/vol2/iss2/4/>]; and John N. Wall, "Transforming the Object of our Study: The Early Modern Sermon and the Virtual Paul's Cross Project," *Journal of Digital Humanities* 3, no. 1 (Spring 2014): <http://journalofdigitalhumanities.org/3-1/transforming-the-object-of-our-study-by-john-n-wall/>.

¹³ Fellows were particularly taken, for example, with Richard J. A. Talbert and Tom Elliott, "New Windows on the Peutinger Map of the Ancient World," in Anne Kelly Knowles, ed., *Placing History: How Maps, Spatial Data, and GIS Are Changing Historical Scholarship* (Redlands, California: ESRI Press, 2008), 199 - 218.

¹⁴ See, e.g., Franco Moretti, *Graphs, Maps, Trees: Abstract Models for Literary History* (New York: Verso, 2007).

island. As Zweig developed his map, other issues began to emerge. For example, a gap appeared in the development of northern and southern church construction that had previously not been evident from other maps or the study of the literature (Fig. 1).

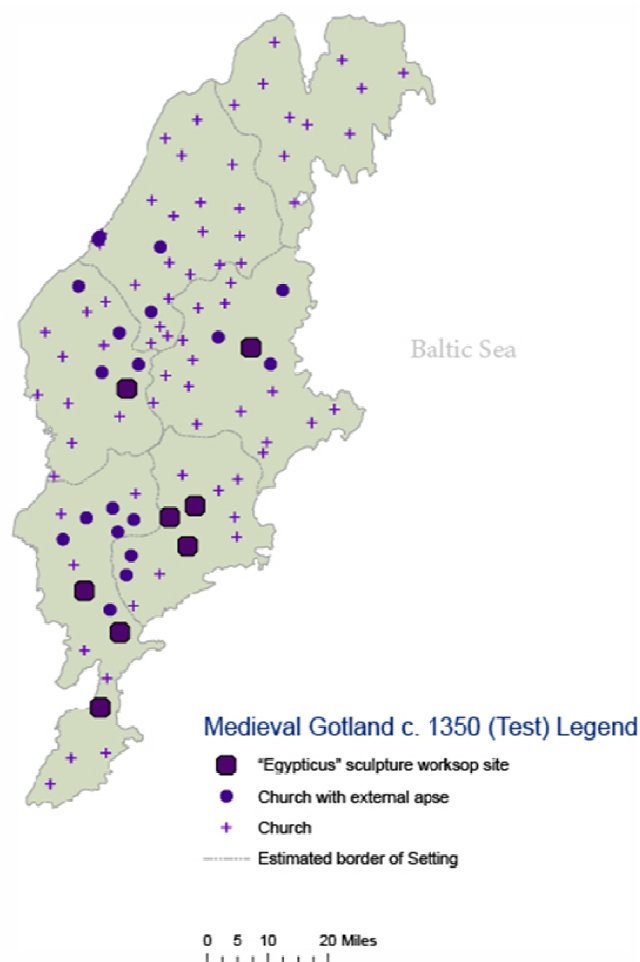


Figure 1. Benjamin Zweig, “Vector Image of Spatial Dissemination of Three Architectural Features on Gotland, c. 1350” part of the research project, “Mapping Medieval Gotland, c. 1150-1361,” 2014. The draft visualization was created at the 2-week Kress Digital Mapping and Art History Summer Institute, 2014. The different symbols indicate churches with distinct formal features. (Map courtesy of Benjamin Zweig; Image sources: Map created in ArcMap, using WGS-84 geodetic reference system. Exported to Adobe Illustrator to style points and create map legend. Historical and architectural information taken from *Gotlands Kyrkor* scholarly monograph series.)

For Zweig, this gap posed new questions about the development of structures on the island and their relationships over time. Was the gap a formal divide between diverse traditions, an historical divide marked by chronology of construction, or would some other factor explain it? Moreover, could unearthing such patterns lead to a critique

of the accepted historiography? Only by exploring his data with GIS and studying the patterns that are so much part of the querying of the map do such new spatially oriented art historical problems emerge. Since the institute, Zweig has continued to develop and refine his database and his maps for inclusion in a planned publicly accessible website.

Andrew Wasserman, a newly appointed assistant professor interested in public art, also wanted to explore change over time for his project, “Mapping Public Art in New York City,” part of his book project on networks of public art in New York City from the 1960s to the present. For him, though, the distribution of patterns of development of art production in relation to other factors became more important. Wasserman’s project mapped, among others, the City Walls, Inc. non-profit mural initiative in SoHo and Lower Manhattan in the late 1960s and 1970s. In addition to this layer of public art (much of which is now lost, contributing to the works’ omission from canonical accounts of the region’s emergence as a significant mid- and late-century art incubator), he added zoning maps that gave a sense of the neighborhood borders defined by commercial and manufacturing use as well as addresses of the new galleries, alternative exhibition spaces, and restaurants, bars, and amenities that began to open up in the same area (Fig. 2). The result was a mapping project that visualizes political, market and artistic interventions all in the same spaces. Where are the borders between these activities? Do they correspond, and if so, how, and to what degree? When they do not, then why? Working with an historical GIS of the evidence he had, Wasserman was able to advance his research on whether public art played a central role in defining neighborhood boundaries. This will inform his ongoing work on his next book project, a study of activist art titled “Bang! We’re All Dead! The Places of Nuclear Fear in 1980s America.”

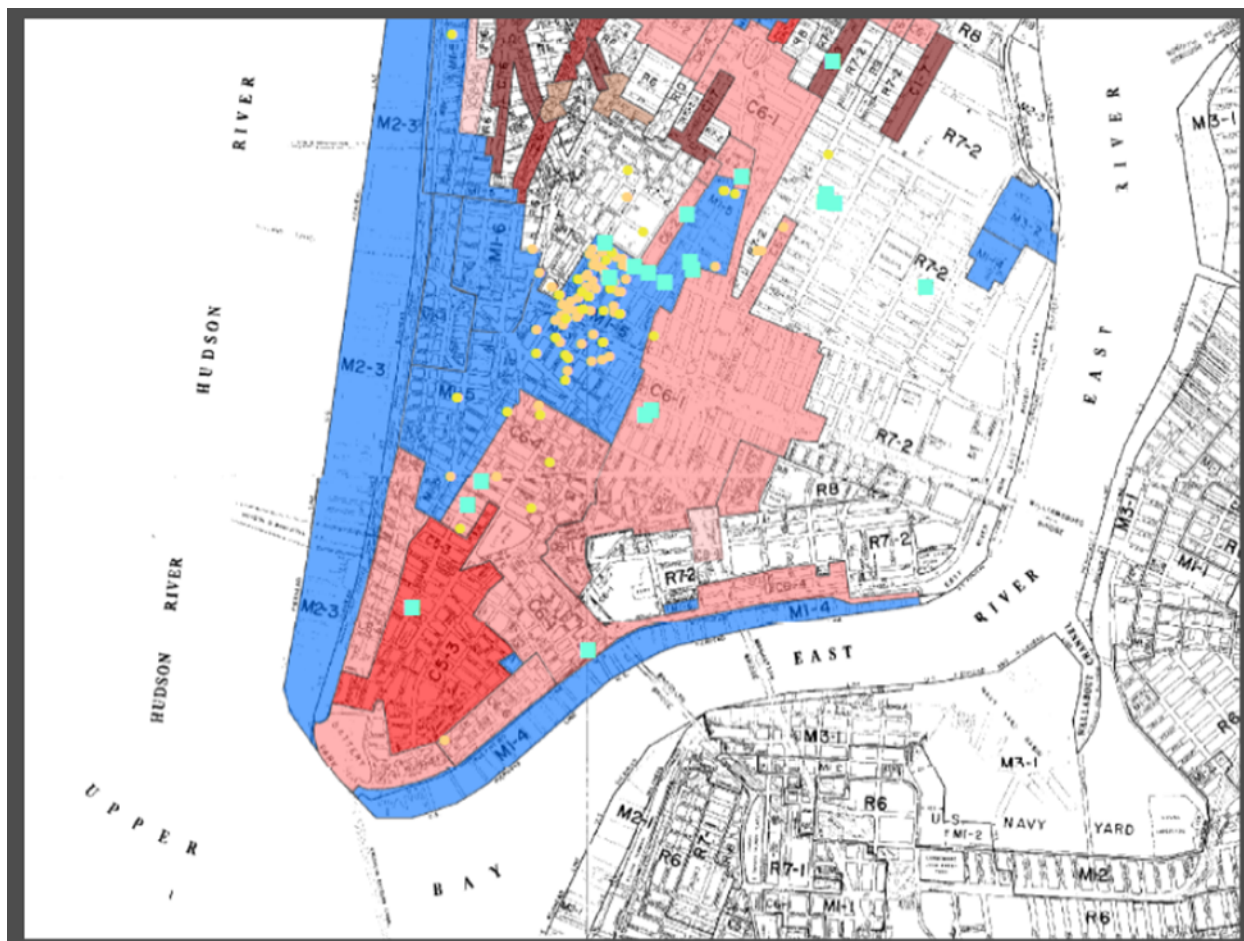


Figure 2. Andrew Wasserman, "City Walls Public Murals in Comparison to Developing Gallery Scene and Zoning Map of Lower Manhattan 1967-78," from the project "Mapping Public Art in New York City," 2014. The draft visualization was created at the 2-week Kress Digital Mapping and Art History Summer Institute, 2014. Murals are marked by light blue squares, galleries by yellow dots. (Map courtesy of Andrew Wasserman; Image sources: Base map from zoning maps 12a-12d in the City Planning Commission, Department of City Planning, *Zoning Maps and Resolution* (New York: City of New York, 1961), which was georeferenced to WGS 84 in ArcMap. Data points from issues of *The SoHo Weekly News* (1973-1977) and Anderson and Archer's *SoHo: The Essential Guide to Art and Life in Lower Manhattan* (New York: Simon and Schuster, 1979).)

Contemporary mapping projects, of course, can often draw on a plethora of spatial information, including zoning and real estate data as well as already existing databases. However, in many cases, these kinds of sources are not the most relevant for the art historical question at hand.

In the project "Mapping Space, Time and the Imperial Imaginary at the Mountain Estate to Escape the Heat," Stephen Whiteman's initial goal was to map textual sources describing the process of construction and experience of spaces within an important Qing Dynasty imperial garden. Whiteman, an advanced assistant professor, has already established himself as an expert in Qing court art and architecture but, like Wasserman, had little background in visualization methods, including GIS. Relying on a variety of textual

sources, including a first-person account of the site (1708) and a court-published record of its scenic views (1713), Whiteman wanted to investigate the tension between the actual site and its political or aesthetic representation. In addition to this, he initially proposed, time permitting, to think about visual representations as well, such as Leng Mei's undated view of the garden. Through experiments with Schweikert exploring the possibilities of viewshed analysis—a technique that shows what can be seen from a specific point of view in a 3-dimensional digital environment—his questions expanded in dramatic ways (Fig. 3).

While Chinese landscape painting is clearly defined in part by certain pictorial conventions, Whiteman realized that the rolling hills and distribution of specific natural and built features in

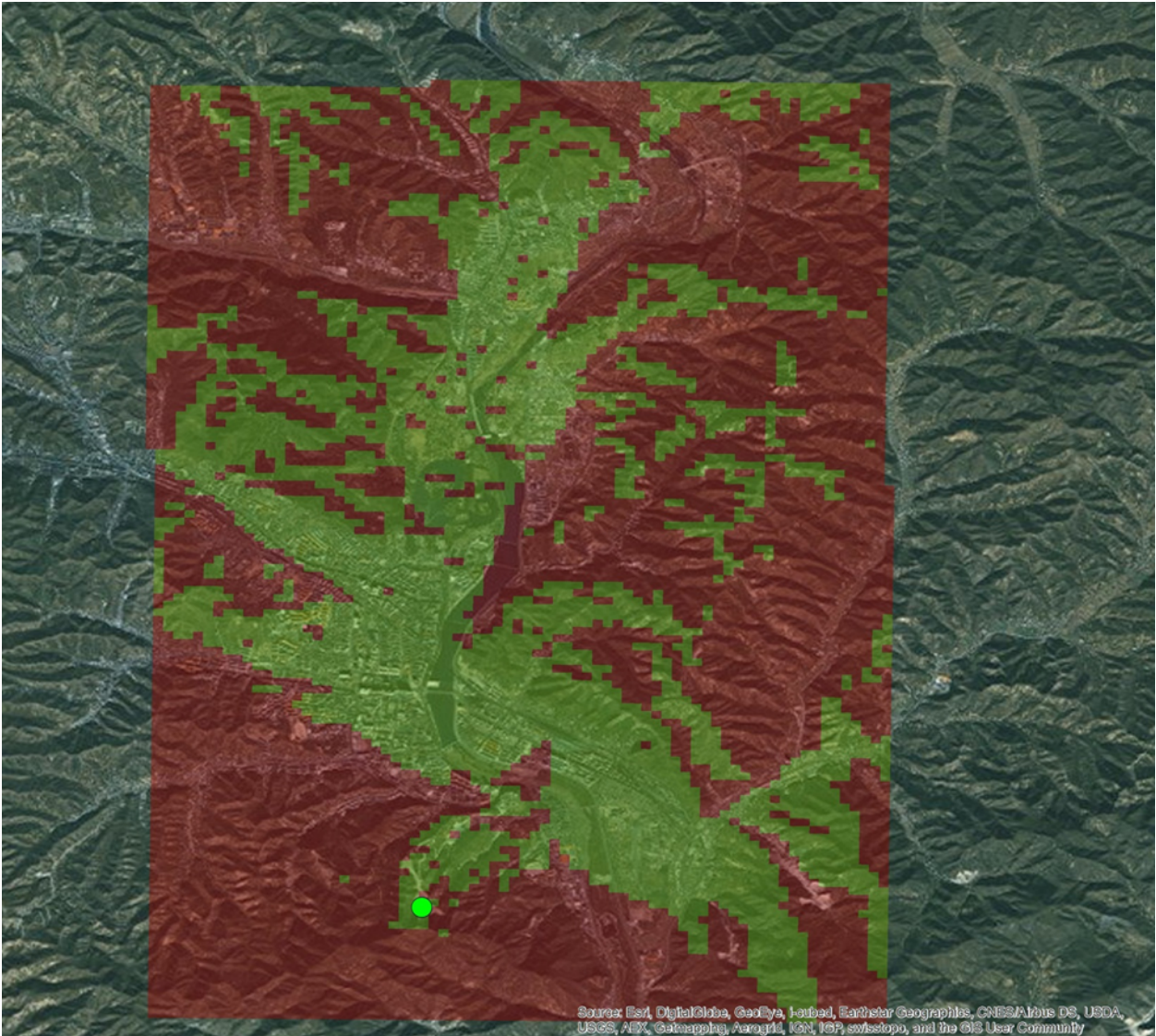


Figure 3. Stephen Whiteman, “A viewshed analysis of the Chengde valley, Hebei province,” part of the research project, “Mapping Space, Time and the Imperial Imaginary at the Mountain Estate to Escape the Heat,” 2014. The draft visualization was created at the 2-week Kress Digital Mapping and Art History Summer Institute, 2014. A GIS reading of the digital landscape estimated that the green areas would be visible from a given viewpoint, while the purple areas would not be visible. (Map courtesy of Stephen Whiteman; Image sources: georeferencing was done in ArcMap, while viewshed analysis was done in ArcScene. The Digital Elevation Model (DEM) is an SRTM 30m DEM, plate N40E117, which is georeferenced to WGS 1984 UTM Zone 50N and laid over World Imagery from ESRI Map Service.)

the painting corresponded much more dramatically than he had previously assumed to the position that the artist could have taken while viewing the landscape for his painting. This opens up new areas of exploration for understanding both the representational tradition of landscape painting in the period and the artist’s manipulation of the spaces of the garden. In this case, as in the others, the mapping process helped to clarify and expand the scholar’s fundamental research interests.

Spatial research has received less attention than other kinds of inquiry in the Digital Humanities, though it is implicit in any kind of mapping, network visualization, and arguably textual analysis, if one considers the sequence and context of key terms as spatial. We hope the Kress Summer Institute has encouraged the Fellows to continue exploring the spatial aspects of their research and incorporate spatial methods, maps, and other kinds of geographic information into their teaching and publishing. Certainly we believe that

a discipline-specific environment that emphasizes important research questions proved to be a necessary first step to the success of the Institute. More broadly, our experience suggests that aligning skill acquisition and conceptual learning with shared research goals could be a useful model for future training in the Digital Humanities.

Opportunities for faculty in the United States and elsewhere to learn about the Digital Humanities are proliferating. At this stage, digital training is usually at most an optional part of one's undergraduate and graduate education, although that promises to change in the U.S. as more experienced practitioners rise through the ranks. DH conferences, short workshops, longer summer institutes, and THATCamps (including at the CAA annual meetings) are bringing together scholars and students for presentations, discussions, on-the-fly experiments, and software instruction.¹⁵ One of the leitmotifs running through many of these gatherings is their intention to show humanists "what you can do" with digital tools. Hearing pioneers from various disciplines explain their projects is meant to inspire newcomers and persuade skeptics to give new methods a try. Introductory software instruction aims to help busy academics acquire basic skills while also enabling them to choose which tools might best suit their projects.

These efforts are stimulating a great deal of interest in digital approaches among humanists, including a burgeoning interest in mapping and spatial visualization in art history. That alone is an important goal for the colleges, universities, funding agencies, and foundations that are financing introductory and exploratory fora. The question now coming into view, however, is whether inspiration and short bouts of training are laying the foundation for long-term success, either for the Digital Humanities as a movement or for individuals weighing the potential of DH for their careers. These questions are particularly important for the great majority of graduate

students and teachers who are not at one of the handful of research universities with a large, well-endowed Digital Humanities center. Our focus on digital mapping and art historical research offered a new way to take advantage of an intensive seminar environment to foster and sustain Digital Humanities approaches in our discipline. We believe that supporting more such environments, both as extraordinary events like a summer institute and as integrated components in university and college curriculums across the art-historical spectrum, will draw out those art historians with the questions best suited for experimentation with digital methods. For the Kress Summer Institute Fellows, leading with the research question opened the way to fruitful engagement with the digital in art history and modeled what a successful synthesis of digital methods and art historical problems could be.

Authors' Biographies

Paul B. Jaskot is professor of Art History at DePaul University and the Andrew W. Mellon Professor at the Center for Advanced Study in the Visual Arts (2014-16). He is most recently the author of *The Nazi Perpetrator: Postwar German Art and the Politics of the Right* (2012) as well as a contributor to the *Geographies of the Holocaust* (2014).

Anne Kelly Knowles is professor of Geography and faculty co-director of the Digital Liberal Arts Initiative at Middlebury College. Her books employing historical GIS include *Geographies of the Holocaust* (2014), co-edited with Alberto Giordano and Tim Cole. Her research has been supported by NEH, ACLS, and NSF. In 2015 she received a Guggenheim Fellowship to work on her next project, *Telling the Spatial Story of the Holocaust*.

Andrew Wasserman is an Assistant Professor of Art and Architecture History in the School of Design at Louisiana Tech University. His writing has appeared in *PUBLIC*, *Public Art Dialogue*, and *Visual Resources*. He is a recent recipient of an Arts

¹⁵ THATCamps in particular have been very popular at the major professional conferences. For more about these innovative programs stemming from George Mason University, see <http://thatcamp.org/about/> (accessed 4 February 2015).

Writers Grant from the Creative Capital and Andy Warhol Foundations.

Stephen Whiteman is Lecturer in Asian Art at The University of Sydney. A specialist in late imperial Chinese art and architecture, he is the author of essays in *Studies in the History of Gardens and Designed Landscapes* and *Chinese History in Geographical Perspective*, and co-author of a forthcoming volume from Dumbarton Oaks, *Thirty-Six Views: The Kangxi Emperor's Mountain Estate in Poetry and Prints*.

Benjamin Zweig is the Robert H. Smith Post-Doctoral Research Associate at the Center for Advanced Study in the Visual Arts at the National Gallery of Art in Washington DC. His research interests include the art and architecture of the medieval Baltic, representations of suicide in medieval visual culture, and developing digital tools for art historical research.