Abstract:
This article on the history of collecting in the United States during the nineteenth century is divided in two parts. Part I uses novel quantitative data and econometric methods to examine the extent to which socioeconomic factors systematically influenced nineteenth-century American art collectors’ acquisitions. These statistical tests reveal that American artists were some of the most active collectors of contemporary American art during the nineteenth century. Part II explores the phenomenon of colleague collecting. It argues that nineteenth-century American artists collected one another’s work to help each other in an art world and market with inconsistent institutional and commercial support.
I am trained as both an art historian and an economic historian, and as such I hope to share with readers the perspective of someone who has written for and interacted with both social scientists and humanities scholars. I believe recounting elements of this interdisciplinary experience can provide valuable examples to art historians regarding how they might integrate quantitative and computational methods into their own scholarship. More specifically, I would like my experience to illuminate the benefits of two practices that the art history community can borrow from the economic history community: wider use of digital technology for quantitative analysis, and an embrace of co-authorship and outsourcing.

In a recent review of the field of digital art history, Anne Helmreich writes, “The driving force behind any research project should be the scholarly question, not a particular technology or tool. While new technologies can be alluring, the key point is to clarify the art-historical research questions at the core of the inquiry and then, once these are established, to determine if digital modes of analysis are well suited to pursuing these questions.”[1] I agree. Art historians have, occasionally, fallen prey to what a colleague of mine calls “random acts of digitization.” The young field of digital art history has been drawn to projects impressive in scale and technological complexity, but in some cases the research is executed without clear questions in mind. Scholars and institutions have sometimes decided to digitize first and ask “So what?” second. This order should be reversed. As Helmreich recommends, art historians must first identify a research question that could benefit from a digital or computational approach and then choose the approach that best addresses that question. That said, in order to choose the best method, art historians must be familiar with the analytical offerings of other disciplines—economics, sociology, data and computer sciences, etc.

Economic history, an adjacent historical discipline, can help in teaching art historians how to incorporate new analytical methods and technologies into their work. For decades, economic historians have knit together qualitative and quantitative analysis and successfully combined colorful historical detail with technical points referring to statistically driven analytical approaches. I believe art historians using digital tools should emulate these same methods of integrating quantitative evidence into a traditionally qualitative discipline. Importantly, economic history does not specifically identify as “digital,” nor is it drawn to digital features that are the end goal of a project. Instead, all computing technologies and statistical approaches are entirely subordinated to answer the principal research question being addressed. Economic historians are rarely at the cutting edge of the latest statistical and econometric analysis, and yet it does not matter if the methods themselves are particularly innovative within the field of econometrics because the primary goal of the
discipline is not to innovate with regards to technology for analysis but rather to illuminate historical phenomena with the help of quantitative research methods. The question leads the analytical technology, not the other way around. I believe this same approach could integrate into art history research in similar ways.

Economic historians have also developed a disciplinary familiarity with the advantages and—more importantly—significant limitations of computational approaches applied to a historical setting. Pragmatism, not technological flash, drives the discipline of economic history, and digital art history could benefit from this pragmatism. Research presented in “Colleague Collectors: A Statistical Analysis of the History of Collecting and Artists’ Networks in Nineteenth-Century New York,” the article that this project narrative accompanies, followed the lead of economic historians by using a standard and reliable regression—a cross-sectional Ordinary Least Squares (OLS) approach—in lieu of a more complicated econometric analysis. Using OLS helps not only organize the data but also interpret it.

I decided to use OLS for several reasons. First, the underlying assumptions made about the data, and the relationship between dependent and independent variables, are relatively straightforward. Another possible regression type that would be appropriate for this situation—Multinomial Logistic Regression, which models choices between different options—functions under the assumption that each of several possible options are “independent and irrelevant.” This means, roughly, that people have consistent ranked preference for options, regardless of how many options they can choose from. In short, this could mean the results would only be “valid” if I made the assumption that preference for one kind of art does not depend on the presence of other kinds of art available for acquisition. That scenario clearly does not mirror reality and would therefore not serve the purposes of my research.

Another benefit of using OLS analysis—and the reason I chose to feature only that method in this article—is that the results are easy to interpret. They are stated in terms of the dependent variable rather than a series of sometimes-abstract probabilities, as in the case of various types of logistic regressions. While I present only OLS results here, it is important to note that the use of another kind of regression does not preclude the use of OLS. In fact, in even the most statistically complicated economics articles, many economists will report the results of a simple OLS regression as a just starting point for their econometric analyses. Even then, however, sometimes more complicated econometrics do not reveal significantly more information than the original OLS analysis.

OLS also has the benefit of being relatively efficient. In economic history, so much time goes into gathering data and understanding the surrounding historical context that the extra work it takes to prepare for a series of more complicated regressions is not always worth the investment of time and energy. Often, a point can be made more efficiently with a simple statistical approach. There is no shame in choosing simplicity over complexity if the marginal benefit of the complex approach is small. With this in mind, I chose to complete only OLS regressions for this article. As I continue to work with this data, and perhaps write an article for an economic history venue, I may invest the time to find a logistic regression that can provide further quantitative information about collectors’ preferences in art.
When I began working on this article with the guidance of the Nineteenth-Century Art Worldwide editorial board, I struggled to translate the results of regressions into a format that would connect with an art history audience. While I have written peer-reviewed articles for art-historical venues before, the most complicated economic analyses I included either used words to describe a concept (for instance, how to understand what drives a nineteenth-century railroad’s profitability) or used simple line graphs and pie charts to represent original data. Before working with Nineteenth-Century Art Worldwide, my attempts to include regression results in articles for art history journals had been met with decidedly mixed results. About half of the peer reviewers found the work fascinating, if not a bit baffling, and the other half found the work deeply offensive. This experience, combined with feedback from the NCAW editors on drafts of this article, made it clear that most art history journal readers do not find traditional regression tables intuitive. I knew then that I needed to leverage NCAW’s web-based format to explain and present my statistical work. My first attempt to do this closely resembled a traditional regression table, but it was annotated with pop-up windows that explained how to interpret all of the variables and numbers. On its own, this regression table displayed the results of my analysis, but it did not demonstrate what those results meant, or how they translated in an art-historical context and related back to the interpretative claims I was making in my article’s text. The very structure of a regression table, which resembles a byzantine list of numbers and stars, would be inaccessible to someone who had not taken a statistics or econometrics class in college or graduate school. Therefore, on the advice of NCAW’s editors, I spent several months thinking about how I could translate regression results to resonate with an art history audience.

A moment of clarity came when the New York Times ran coverage about the 2017 Equifax data breach and linked back to an updated version of a 2015 interactive feature titled “How Many Times Has Your Personal Information Been Exposed to Hackers?”. Formatted as a quiz that produced different outcomes based on information input by an individual, this online tool inspired me to think of my regression data in a new way. For my purposes, I realized the “selections” my readers could make would be collectors’ attributes (birth place, social status, and so on, rather than the Times tool’s questions about a person’s various data-sensitive activities), and the outcome would be the kinds of artwork those collectors owned (rather than whether a user’s social security number had been exposed to hackers).

With the generous support of the Terra Foundation, the guidance of the Nineteenth-Century Art Worldwide editorial board, and the help of web developer Allan McLeod, I made the quiz feature a reality. Allan suggested we also present my original regression table alongside the quiz feature so readers interested in learning more about econometric analysis could see how results are typically presented. The result is that “Colleague Collectors” uses the flexibility of web-based publishing and interactive digital features to teach art historians how to understand and interpret statistical methods common to economic history.

I hope these features and explanations will empower readers to further explore and apply quantitative methods to research questions in their own work. Hopefully, in time, computational and quantitative methods will no longer need careful explanation and
presentation to be included in art-historical arguments, or depend on the support of specific funding or specially designated journals. Instead, statistical approaches can become simply another tool used in mainstream art history. For my part, I plan to continue to work as what I have termed an “economic historian of art.” I will integrate statistics and other elements of economics into my art-historical scholarship and— inversely—publish analyses of art historical topics in economic history venues.

I want to highlight two additional strategies used in economic history that can be relevant for the digital art history community: co-authorship and outsourcing certain elements of data work. Calling for co-authorship in the humanities, and specifically the digital humanities, is not new; a recent white paper about digital art history called it “crucial” to the future of a subfield that traditionally shies away from sharing credit for research and scholarship.[2] Economic history, by contrast, provides an instructive example of an interdisciplinary humanities field that has embraced co-authorship, offering encouragement that co-authorship can also become common and beneficial in art history. Though I have not yet co-authored an article in an art-historical context, I have worked on several collaborative projects in economic history and have profited from the breadth and depth of experience each participant brings to a co-authored project. As an example, I am involved in an ongoing examination of portraiture at the French Salon, in collaboration with economist Kim Oosterlinck. I have brought to our partnership the original data and a knowledge of the art-historical literature, while Kim, a prolific contributor to the study of art markets, brings significant knowledge of which economic arguments, research questions, and methods can be successfully applied to art-historical subject matter. We both contribute econometric expertise and a familiarity with the relevant economic history literature, and I am able to learn from her as a more senior scholar, as well as add a publication credit to my resumé. Neither of us has any hesitation about co-authoring this work.

Traditionally, art history has not encouraged co-authorship. Digital humanities scholarship published in Nineteenth-Century Art Worldwide, however, is one clear exception to this generalization. For NCAW articles, the editorial process is fundamentally collaborative, combining the efforts of lead authors, the journal’s editors, and web developers. It also encourages co-authorship of articles and is leading the way in demonstrating that sharing credit does not dilute academic achievement but instead allows scholars to make more contributions to the field by meaningfully participating in more projects—often interdisciplinary in nature. For this article, NCAW web developer Allan McLeod and I decided that he should be credited with the byline “with Allan McLeod.” As he wrote to me in an email, this extra preposition maintains the “traditional sense of author as the writer of the text.” Allan says he feels he has not “contributed to the conclusions” of the article, yet we both believe his work constitutes an invaluable translation of my analyses into a digital format that could help art historians understand my methods. Therefore, crediting him not as a full co-author but as a named member of the team seemed to be an appropriate solution.

Beyond co-authorship, I think digital and computational work in art history will make further progress as scholars increasingly decide to outsource certain elements of data work. For example, about half of all the data in the HAAExD was transcribed from hard-copy indices, and to accomplish this in a timely manner I outsourced approximately three-quarters of transcription duties to professional transcriptionists in the Philippines, whom I
found via an outsourcing platform called Upwork. At the beginning of my doctoral studies, I was transcribing data myself, and it quickly became clear I would not finish my dissertation in a reasonable amount of time if I did all the transcription on my own. Using fellowship grants I was awarded as a student at the University of Oxford, I followed my colleagues in economic history and paid others to transcribe the indices. The professional transcriptions were not only affordable and efficient, but the work was more accurate than mine. Art historians and other humanities scholars engaging in the digital humanities often want to heroically complete every task related to their projects, including dozens of hours of rote work such as transcription and manually coding variables in their datasets. In contrast, economists and social scientists feel no shame in outsourcing some of this work as a way of allowing them to focus on core analysis and learning the best ways a new dataset can address the range of research questions a project aims to tackle.

As digital art history grows, I am confident it will embrace both more complicated statistical methods and co-authorship. Further, it helps that younger generations of emerging art historians will be ever more comfortable with digital technologies as well as more data-literate than their older colleagues, simply by virtue of growing up surrounded by computers. As both the subdiscipline and the current generation of art historians mature, the use of computational methods in art history will become more common and accepted, and the scholarship will be better for it.

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