Shaping the Digital Dissertation

Knowledge Production in the Arts and Humanities
This chapter is a critical retrospective view of my experience as a PhD candidate in history, whose project made extensive use of digital practices. My argument focuses on MADSpace, a digital platform devoted to a spatial history of advertising in modern Shanghai (1905–49). Born as a digital companion to my dissertation, MADSpace eventually raised new issues and had unexpected effects on my writing process. Beyond my specific case, MADSpace points to the urgent need to establish academic standards for digital scholarship and calls for a better recognition of digital practices by academe.

A Tale of Digital Companionship

Origins of MADSpace

MADSpace was born in 2016 as a digital companion to my PhD project. My research tapped a wide array of primary sources, usually neglected by the existing scholarship in the field: not only newspaper advertisements, but also professional handbooks, business materials, municipal archives (including correspondence, regulations and technical sketches), street photographs and, to a lesser extent, original maps and videos. My primary concern was to create a permanent place to store, organize and connect these multiple sources once digitized or converted into a digital format. Moreover, the spatial approach that I
pursued in my dissertation required specific tools and methods. Indeed, a spatial history of advertising offered an opportunity to experiment with various digital technologies, which in turn could renew the study of advertising, largely dominated by cultural studies to date. Digital methods, I argue, provide new ways of exploring the spatial, social and historical dimensions of advertising. In my research, I relied on a wide range of techniques to produce digital materials aimed to better visualize, analyze and interpret my data. For instance, I used Excel and Fichoz/Actoz (a powerful relational database based on Filemaker) to build databases of advertising agencies and artifacts.\(^1\) I also relied on Geographical Information Systems (GIS) and more basic tools to map the distribution of advertisements in the press and streets\(^2\) of Shanghai, municipal zoning\(^3\) and taxing\(^4\) policies, the networks\(^5\) of advertising agencies and advertising agents’ circulations\(^6\) at various scales. I harnessed quantitative analysis tools (Excel) to measure the growth\(^7\) of professional agencies, the relative proportion of Chinese/foreign advertisers,\(^8\) or to measure the rhythmic patterns\(^9\) of advertising spaces. I designed interactive timelines to trace particular series and campaigns\(^10\) or to build a specific periodization\(^11\) for the history of advertising in modern China, embedded in various timescales.\(^12\) In addition, I experimented with intuitive visualizations as alternative ways of displaying my data. For instance, I appropriated mind mapping tools to design various kinds of ‘trees’ aimed at examining the relationships\(^13\) between multiple kinds of ‘trees’ aimed at examining the relationships\(^13\) between multiple actors (companies, municipal authorities, branded goods) and the structure of particular markets (cigarette\(^14\) or health\(^15\)

---

1. See https://madspace.org/cooked/Tables?ID=120
2. See https://madspace.org/cooked/Maps?ID=155
3. See https://madspace.org/cooked/Maps?ID=179
4. See https://madspace.org/cooked/Maps?ID=180
5. See https://madspace.org/cooked/Maps?ID=217
6. See https://madspace.org/cooked/Maps?ID=192
7. See https://madspace.org/cooked/Graphs?ID=316
8. See https://madspace.org/cooked/Graphs?ID=271
9. See https://madspace.org/cooked/Graphs?ID=279
10. See https://madspace.org/cooked/Timelines?ID=106
11. See https://madspace.org/cooked/Timelines?ID=104
12. See https://madspace.org/cooked/Timelines?ID=103
13. See https://madspace.org/cooked/Trees?ID=162
15. See https://madspace.org/cooked/Trees?ID=104
brandscape). I eventually relied on data sketching methods to create this visuality scale\(^\text{16}\) aimed at discussing the assumed ‘visual turn’ in modern advertising, or these cyclical diagrams aimed at exploring the seasonal effects\(^\text{17}\) on commercial images and commodities.

As I was about to start writing my dissertation, MADSpace emerged as a solution to the accumulation of multimedia materials. At the time, I felt the need for a permanent place to store, organize and connect these digitized and born-digital materials, to which I could refer in my dissertation as a mode of quoting primary evidence to support my argument.

**A Perfect Match for My PhD Project**

MADSpace is hosted by Huma-Num, a ‘very large research infrastructure’ (Très Grande Infrastructure de Recherche—TGIR) supported by the French National Center for Scientific Research (CNRS), with a European and international dimension. Huma-Num provides researchers a variety of tools and services for the processing, dissemination and preservation of digital research data, warranting the long-term sustainability of research projects. Thanks to Huma-Num, scholars do not need to possess the technical skills for developing digital platforms themselves. Therefore, I didn’t code myself, but instead, I actively collaborated with the CNRS engineer (Gérald Foliot) who is in charge of developing and maintaining MADSpace among other websites. More concretely, I communicated to him how I conceived of the subdivision into main sections and subsections, the connections between them and the fields contained in each section, and he handled the technical part so as to develop an interface that would match what I needed.

MADSpace is divided into five main sections, which I found the most appropriate way to organize my materials. The *Raw data* section contains my primary sources (archives, printed sources, press advertisements, photos and sketches, original maps and videos). The *Cooked data* section includes the analytical materials produced through digital tools (graphs, maps, trees, timelines and drawings). The *Narratives* section is designed to store the dissertation, research papers and multimedia

\(^{16}\) See https://madspace.org/cooked/Drawings?ID=116

\(^{17}\) See https://madspace.org/cooked/Drawings?ID=116
narratives. This section also serves as a research diary including intermediary notes and essays produced during the research process. More conventionally, the References section (also in progress) consists of bibliographical references, archival repositories and a bilingual glossary for technical terms. The Databases section is made up of four related tables, referring to the four major categories of actors involved in the advertising industry (professional agencies, manufacturing companies, brands and products). The main purpose of this database is to help identify professional actors and to analyze their relationships across space and time. In addition, the horizontal toolbar at the top provides a users’ guide that outlines the structure of the platform and specifies its major underlying concepts.

Afterlives

MADSpace has developed far beyond its initial goals. Born as a digital companion to my PhD dissertation, it has eventually become a sustainable platform designed for long-term research projects. In its current state, MADSpace offers three main functions. First, it serves as a digital repository aimed at storing, organizing and connecting primary and secondary materials in a cumulative and sustainable way, with a view to make them available for historical research any time. Second, it functions as a digital laboratory aimed at experimenting and making transparent every step in the research process, including methodological and technical issues. In contrast to conventional dissertations—that leave only limited room for documenting what I like to call the research protocol in order to emphasize the greater proximity between humanities and natural sciences—MADSpace opens a window onto the trial-and-error operations underlying the major findings presented in the final version of the dissertation. Third, it functions as a public interface open to sharing and collaboration. As such, it is fully accessible not only to scholars specialized in advertising or modern China, but more generally to anyone interested in urban social history, visual studies or digital practices.

While I initially welcomed MADSpace as a providential solution to the challenge of writing a multimedia-based dissertation, however, this solution in turn raised unexpected dilemmas.
The Traps and Promises of Digital Scholarship

The Curse of Writing

The first challenge was how to connect the platform with a dissertation that remains conventional in its format, based on the page/book model. This is not just a technical issue, but a more fundamental one that questions the very nature of scholarship. How to build a historical narrative directly from digital materials without turning them into mere illustrations? In order to avoid this pitfall, I chose not to include any figures in my dissertation, which would only be text. More exactly, it became a two-faced dissertation, with a digital platform on the one hand, and a rather conventional text, on the other hand, which connects to the platform through a simple system of hyperlinks. Concretely, each hyperlink refers to a unique URL corresponding to a particular piece of evidence that I used to support my argument as a citation. This solution, however, proved far from satisfactory, since it imposed on the reader a constant movement back and forth between the original text and the cited (digital) elements.

The second challenge addressed the possible side effects of digital practices on the writing process. As I was building MADSpace, I developed a penchant toward a ‘database’ style of writing—to paraphrase a member of my defense committee. Paradoxically, the more materials I accumulated on the platform, the more I tended to expand the core text of my dissertation. While it could have led to a shrinking of the textual content, MADSpace gave birth to a voluminous four-million-character dissertation. The platform opened an infinite space that freed the narrative from the physical constraints of the book format. While the behemoth manuscript may also reflect the lack of time and distance necessary to clean up the final dissertation, it more significantly suggests how digital practices may affect the very crafting of historical narratives.

These two issues eventually merged into this ultimate question: aside from conventional publications, can we design alternate narratives that would fully incorporate our digital experience? Ultimately, MADSpace did not solve the issue of writing dissertations in the digital age. On a practical level, PhD candidates have barely the time or the energy to invest in creating new forms of writing and publishing their findings—a time-consuming and painful task that may appear too risky and would
not be rewarded as such. While I truly believe that a PhD project offers the best opportunity for experimenting, my primary concern at the time was more modestly to complete my dissertation so as to obtain my doctoral degree. In order to go beyond conventional or even hybrid dissertations, however, one needs to imagine integrated media that would enable immediate access to digital materials. This is not just an issue of convenience or ergonomics, but more profoundly a way to acknowledge digital practices and their growing part in our research routine.

Beyond my personal story, MADSpace eventually raises the more general challenge of academic recognition for digital experience. How can young scholars in the digital age face the tension between compliance with current standards, and the necessity to cultivate new skills for which there are no defined standards yet? How can we rethink scholarly production in this era of transition in which digital practices receive only a vague and informal recognition, at least in France and Europe? In this respect, MADSpace is just one piece of the ever-growing body of scholarship that points to the urgent need to establish clear standards for better evaluating what these new requirements should be, and how we can integrate them into academic curricula.

Toward Academic Recognition

Promising initiatives like the American Historical Association (AHA)’s guidelines and the HASTAC’s conversations, Stanford University Press Digital Projects or Naomi Salmon’s Dissertation Form Proposal, have already paved the way. If we are to meet Virginia Kuhn’s call for rules that are ‘firm enough to ensure rigor yet flexible enough to allow for continued innovation’, however, we need to bridge the gap between ideal prescriptions and edifying showcases.¹⁸ New standards must arise from actual realizations. The first step may consist in building a systematic database of digital dissertations, inspired by the HASTAC’s cataloging enterprise. This database would not only record the author’s name, the title and abstract of the dissertation, the tools and methods used in the research process; it would also include the specific issues

---

they address, identify their assumptions and the model/s of digital dissertation they suggest. At last, one needs to better categorize and classify the increasing number of digital dissertations that have been produced since Christine Boese’s pioneering work,\textsuperscript{19} in order to make sense of their variety and their author’s creativity. As each dissertation is a unique digital proposal, it is vital to understand their uniqueness before attempting to define a standardized set of rules.

A Digital Laboratory

In order to better grasp the uniqueness of my own digital proposal, I will end by reconnecting my case with other digital dissertations and to broader issues related to digital scholarship. In what sense is MADSpace a ‘digital dissertation’? First, it is not primarily a digital publication, or put another way, it is not an \textit{e-dissertation}. It can stand as a PDF alone. It can be can read without any digital device. Some members of my committee even required a printed version. The ‘conventional’ reader, however, will lose access to the hyperlinks disseminated throughout the main text. While my PDF-dissertation is physically bounded and technically limited, MADSpace is unbounded and potentially unlimited. With the increasing variety of publishing media available to scholars today, the dissertation/book has eventually become only one possible option among many others, as Kuhn cogently put it.\textsuperscript{20} My primary concern, however, was not to create a visual argument or to address the issue of fair use, as in Kuhn’s case. My dissertation is not so much digital in the mode of writing and publishing, but rather in its particular way of harnessing historical materials in order to make them available and reusable for other stories and for further research. MADSpace is not so much a digital product, but rather a digital process. It is essentially a process because first, it remains open to accumulating and recycling primary and secondary resources. Second, it is sustainable yet flexible enough to evolve and adapt to my changing research needs and interests. Moreover, as it is open to sharing and collaboration with other scholars


\textsuperscript{20}Kuhn, ‘Embrace and Ambivalence’.
and the more general public, I happen to get feedback from colleagues, genealogists or curious readers outside academia, which encourages me to constantly question my earlier findings and deeper assumptions. In the end, MADSpace is neither an ordinary website nor a digital archive. It is not primarily a digital repository, but rather a digital laboratory. As such, MADSpace epitomizes the increasingly experimental and collaborative nature of humanities scholarship in the digital age.

Note on the Terminology

In this chapter, the term *conventional dissertation* (or just *dissertation*) refers to the manuscript I submitted to the defense committee, and *digital dissertation* refers to the print-website complex. This distinction may appear artificial and we must admit that there is no clear-cut dividing line between them. I use these terms for reasons of convenience only. The transitional phase we are experiencing favors hybrid forms of scholarship, and naming things becomes an issue in itself. As objects are changing, we need proper words to designate them. But it is neither my goal nor my ambition here to define what a *conventional vs. digital dissertation* is/should be.

Acknowledgements

This research is part of a doctoral project sponsored by the Chiang Ching-Kuo Foundation for International Scholarly Exchange. I am deeply grateful to the Foundation for its generous support for research. As I could not have conducted this digital project alone, I am also grateful to my PhD advisor Christian Henriot (who initially encouraged me to embark on this digital adventure) for his sustained support, to the research engineer Gérald Foliot for his invaluable technical assistance, and to the librarian-engineer Zhang Yu (Lyons for East Asian Studies) for the remarkable design of the platform.

Bibliography


Armand, Cécile, MADSpace (2016), https://madspace.org/


Centre National de la Recherche Scientifique (CNRS) (French National Center for Scientific Research), Home page (Cnrs.fr), http://www.cnrs.fr/index.php/en


Foliot, Gérald, Foliot.Name, http://foliot.name/


