



NATIONAL ENDOWMENT FOR THE

Humanities

OFFICE OF DIGITAL HUMANITIES

Narrative Section of a Successful Application

The attached document contains the grant narrative and selected portions of a previously funded grant application. It is not intended to serve as a model, but to give you a sense of how a successful application may be crafted. Every successful application is different, and each applicant is urged to prepare a proposal that reflects its unique project and aspirations. Program guidelines also change and the samples may not match exactly what is now required. Please use the current set of application instructions to prepare your application.

Prospective applicants should consult the current Office of Digital Humanities program application guidelines at <https://www.neh.gov/grants/odh/digital-humanities-advancement-grants> for instructions.

Applicants are also strongly encouraged to consult with the NEH Office of Digital Humanities staff well before a grant deadline.

Note: The attachment only contains the grant narrative and selected portions, not the entire funded application. In addition, certain portions may have been redacted to protect the privacy interests of an individual and/or to protect confidential commercial and financial information and/or to protect copyrighted materials.

Project Title: Circulating American Magazines: Making Lost Historical Data from the Audit Bureau of Circulations Publicly Available

Institution: James Madison University

Project Directors: Brooks Hefner and Edward Timke

Grant Program: Digital Humanities Advancement Grants, Level II

**Circulating American Magazines:
Making Lost Historical Data from the Audit Bureau of Circulations Publicly
Available**

Digital Humanities Advancement Level II Grant

1. Project Participants and Advisory Board	2
2. Abstract	3
3. Narrative	4
4. Biographies	10
5. Budget	11
6. Appendices	13
7. Data Management Plan	21
8. Letters of Support	23

**Circulating American Magazines:
Making Lost Historical Data from the Audit Bureau of Circulations Publicly
Available**

Digital Humanities Advancement Level II Grant

Project Participants

Brooks E. Hefner, Associate Professor of English, James Madison University (Project's Co-Director)

Kevin Hegg, Director of Digital Projects, James Madison University (Project's Website and Database Coordinator)

Yasmeen Shorish, Associate Professor and Data Services Coordinator Librarian, James Madison University (Project's Data Services Coordinator)

Edward E. Timke, Lecturer of Media Studies, University of California, Berkeley; associate editor, *Advertising & Society Quarterly* (Project's Co-Director)

Advisory Board

Jean Lee Cole, Professor of English and Faculty Director of Community-Engaged Learning and Scholarship, Loyola University Maryland; Co-editor, *American Periodicals* (committed)

Erika Doss, Professor of American Studies, University of Notre Dame (committed)

Jeffrey Drouin, Associate Professor of English, University of Tulsa; director, *Modernist Journals Project* (committed)

David M. Earle, Associate Professor of Transatlantic Modernism, University of West Florida (committed)

Donal Harris, Assistant Professor of English, University of Memphis (committed)

Carolyn Kitch, Chair and Professor of Journalism, Media & Communication, Temple University (committed)

Adam McKible, Associate Professor of English, John Jay College of Criminal Justice (committed)

Mark Noonan, Professor of English, New York City College of Technology; Vice-President/President-Elect, Research Society for American Periodicals (committed)

Sheila Webb, Professor of Journalism, Western Washington University (committed)

Clifford Wulfman, Library Digital Initiatives Coordinator and Digital Humanities Specialist, Princeton University (committed)

**Circulating American Magazines:
Making Lost Historical Data from the Audit Bureau of Circulations Publicly
Available**

Digital Humanities Advancement Level II Grant

Abstract

Although digitization has made more periodical content available to historians, literary critics, and print culture specialists, scholars remain largely in the dark about periodicals' reach. Circulating American Magazines offers tools to analyze and visualize circulation data for historically significant magazines between 1880 and 1972. Using detailed reports from the Audit Bureau of Circulations and the advertising firm N.W. Ayer & Son, this project provides complete access to circulation numbers by issue, in addition to each title's geographical circulation across the United States and abroad. The project offers web-based visualization tools that allow students and scholars to investigate the history of a magazine or compare multiple magazines' readership. The project's centralization of circulation data allows students and scholars to see American periodical history in radically new ways, describing periodicals' development with an accuracy that has not been possible before.

Proposal Narrative

Enhancing the Humanities

We are applying for a Level II Digital Humanities Advancement Grant for the 2017-2018 grant period. This funding allows us to bring our project, Circulating American Magazines (sites.jmu.edu/circulating), to a complete and stable stage, ready for access by students and scholars of the history of literature, media, and communication. During the grant period, we would (1) collect data from rare reports at the Library of Congress, (2) compile the data into an SQL database for output to JSON, and (3) design and offer interactive d3 visualizations of the data for researchers.

Circulation has always been a problem for anyone interested in periodicals.¹ From advertisers, who demanded accurate circulation information for commercial purposes, to scholars, who struggle to present accurate information about magazine history and influence, circulation data has remained difficult to obtain and verify. Scholars, for example, often rely on unreliable and anecdotal circulation numbers cited in letters or memoirs.² Tired of depending on magazines to self-disclose circulation information, early twentieth-century advertisers in the United States joined together to form the Audit Bureau of Circulations (A.B.C.), an organization that solicited reports and audited circulation numbers for major magazines starting in 1914.³ If a magazine sought to attract major advertisers, it joined the A.B.C. and provided detailed reports every six months. These reports included issue-by-issue circulation figures, as well as a host of demographic information, including newsstand and subscription sales broken down by state. These reports are the most detailed and granular information available on magazine circulation in the United States in the twentieth century.

Unfortunately, A.B.C. data remain difficult to access and, as a result, have received little scholarly attention. The A.B.C. issued a number of summary reports that reside in libraries across the country, but these reports synthesize and interpret data without presenting any original data sets. Copies of original reports (Appendix A, Figure 3) reside in thick, bound blue volumes

¹ For anyone studying mass media or mass circulated texts, the historical audience has often been elusive, as noted by Julie D'Acci, "Cultural Studies, Television Studies, and the Crisis in the Humanities," in Lynn Spiegel and Jan Olsson, eds. *Television after TV: Essays on a Medium in Transition* (Durham: Duke University Press, 2004), pp. 418-445; Roger Chartier and Lydia G. Cochrane, *Cultural History: Between Practices and Representations* (Cambridge: Polity Press, 1988); Robert Darnton, *The Kiss of Lamourette: Reflections on Cultural History* (New York: Norton, 1991); Susan J. Douglas, "Notes toward a history of media audiences," *Radical History Review* 1992, no. 54 (1992): 127-138; Paul Du Gay, *Doing Cultural Studies: The Story of the Sony Walkman* (London: Sage, 1997); Stuart Hall, ed., *Representation: Cultural Representations and Signifying Practices* (London and Thousand Oaks, CA: Sage, 1997); Stuart Hall, "Encoding/Decoding," in Paul Morris and Sue Thornton, eds., *Media Studies: A Reader*. 2nd ed. (New York: New York University Press, 2000), pp. 51-61.

² A prime example of the discussion of challenges in studying periodical circulation through anecdotal and often conflicting sources is James L. Baughman, "Who Read *Life*? The Circulation of America's Favorite Magazine," in Erika Doss, ed., *Looking at Life Magazine* (Washington, DC: Smithsonian Institution, 2001), pp. 40-51.

³ For more details on A.B.C.'s history see "Centennial," *Alliance for Audited Media*, 29 July 2016 <http://auditedmedia.com/centennial/>. An archived copy of this webpage is found through Archive.org: <https://web.archive.org/web/20160729161634/http://auditedmedia.com/centennial/>. See also Charles O'Bennett, *Facts without Opinion: The First Fifty Years of the Audit Bureau of Circulations* (Chicago: Audit Bureau of Circulations, 1965); Charles O'Bennett, *Integrity in a Changing World: Seventy-Five Years of Industry Self-Regulation through the Audit Bureau of Circulations* (Chicago: Audit Bureau of Circulations, 1989).

at the Library of Congress, but have remained virtually invisible to scholars because they are largely held off site and catalogued in a cryptic fashion. Our project, Circulating American Magazines, addresses the critical absence of reliable circulation information by digitizing data from the A.B.C., building a robust database of Audit Bureau of Circulations data covering the period 1925-1972 (the range of volumes held at the Library of Congress), and combining it with the Ayer & Son's summary data from the period 1880-1924.⁴ This data would consist of issue-by-issue circulation of major national magazines — middlebrow standards like *The Saturday Evening Post*, *Collier's*, and *Life*; pulp magazines and pulp publishing combinations such as *Black Mask*, *Adventure*, Street & Smith, Munsey, and Popular Publications; “quality” magazines and reviews like *Harper's*, *Scribner's*, *The New Yorker*, and the *American Mercury*; and comic book publishing combinations (see Appendix B for a full title list) — as well as geographical distribution when reported.

The project site would offer a host of visualizations with immense value for scholarly inquiry. The visualization interface will be dynamic and interactive, allowing users to call up titles for comparison or to toggle between longitudinal charts and geographic ones. Time series charts will render the circulation of a single magazine (or multiple magazines) over time. Appendix A, Figure 1, for example, depicts the rise and fall of the legendary pulp magazine *Black Mask*. This simple time series offers a wealth of information on the magazine's history: its peak circulation (the winter of 1929-1930, when the magazine was serializing Dashiell Hammett's detective novel *The Maltese Falcon*), its precipitous fall during the Great Depression, the impact of a reduction in cover price in 1934, and the seasonal dynamics of the magazine marketplace (higher circulation in winters, lower in summers, which was true across most magazines).

Choropleths chart magazine sales across the United States in real and proportional numbers, allowing scholars to understand the cycles of distribution and the expansion of magazines across the country. Appendix A, Figure 4 documents the circulation of *Black Mask* in early 1928 as a percentage of total population; it shows how concentrated this title was in Western states, which may have influenced content in any number of ways. Users will also have opportunities to examine more granular data: the geographical distribution of subscriptions versus newsstand sales. Where possible, data points will be linked to magazine covers and tables of contents to allow scholars to study the intersection between content and sales.

As the team is able to explore the possibilities of d3 as a visualization tool, more complex, experimental visualizations will be made available in a collaborative “Circulation Data Lab.” Because we are committed to making this rare data freely accessible, Circulating American Magazines will partner with the Center for Open Science (COS), a non-profit organization based in Charlottesville, Virginia, that supports research transparency and hosts project data from a variety of disciplines. In addition to being able to manipulate visualizations on the Circulating American Magazines site, users will be able to download original data files in a number of formats from the COS Open Science Framework, encouraging scholars to experiment with the data on their own, for use in their own research or in pedagogical contexts.

Environmental Scan

⁴ N.W. Ayer & Son's American Newspaper Annual provided circulation figures for American periodicals between 1880 and 1924, especially newspapers. Much, but not all, of Ayer & Son's data is available online through the Library of Congress: <http://memory.loc.gov/diglib/vols/loc.gdc.sr.sn91012091/default.html> (1880-1909) and <http://memory.loc.gov/diglib/vols/loc.gdc.sr.sn91012092/default.html> (1910-1922). Our project would find all N.W. & Ayer Son report data and make it more readily available in chart form on our website.

Circulating American Magazines seeks to capitalize on the productive synergy between a new wave of periodical studies scholarship and the rise of the digital humanities. Among these new methodologies in literary and cultural study is the influential “distance reading” approach of Franco Moretti, whose statistical analysis of the emergence of the novel and of novelistic genres in *Graphs, Maps, Trees: Abstract Models for Literary History* (2005) and other works suggests a new way for understanding the breadth and influence of cultural productions through quantitative analysis.⁵ Additionally, the emergence of digital resources like Brown University and the University of Tulsa’s *Modernist Journals Project* (modjourn.org) and the University of Pittsburgh’s *Pulp Magazines Project* (pulpmags.org), along with other digitization projects like Cornell University’s *Making of America* site (ebooks.library.cornell.edu/m/moa/), have demonstrated the value of digital humanities to the study of periodicals. Magazines are notoriously difficult to study, in large part because they offer an unusually large amount of material for scholars of history, literature, and the media; at present, large data projects offer opportunities to analyze these vast corpuses in new and productive ways. In making historical magazines publically available, fully searchable, and fully downloadable, these projects have facilitated scholarship and teaching on the form and content of any number of influential magazines in American cultural history. Circulating American Magazines would offer a valuable, unique addition to these existing resources by presenting the most reliable circulation data available, allowing for a broader and more complex history of American periodicals to emerge.

The digital project would offer scholars limitless possibility for inquiry, and would root this research in verified circulation numbers. The possibilities for research and visualization — temporal, geographical, comparative — are astounding. Who were periodicals’ historical reading audiences? Where were certain magazines more popular? How did pulp magazine circulation rival that of slick magazines?⁶ What kinds of influence did the presence of a certain writer or artist have on the sales of a particular magazine at the newsstand? How did circulation in a given state compare to the state’s overall population? Which magazines trended urban, and which trended rural? What impact did the onset of the Great Depression have on magazines of different kinds, of different prices? How did coping strategies — like lowering the cover price — help a magazine’s circulation during the Depression? What were American periodicals’ reach outside of the United States? Large scale projects might chart the rise and fall of pulp magazines or the impact of the Great Depression or World War II on the magazine market. Smaller projects could

⁵ Franco Moretti, *Graphs, Maps, Trees: Abstract Models for Literary History* (New York: Verso, 2005). See also Moretti’s other work, including *Distant Reading* (New York: Verso, 2013).

⁶ Classification and what Pierre Bourdieu would call “distinction” were central to the magazine marketplace of the early twentieth century. Pulp magazines—so named because they were printed on cheap, pulpwod paper—featured mostly fiction and used colorful and garish covers in marketing themselves to working-class readers, who bought these at newsstands. Slick magazines like the *Saturday Evening Post*, known for glossy, higher-quality paper, were emblematic of what Joan Shelley Rubin has described as “middlebrow” culture, often targeted at a middle-class readership. So-called “quality” reviews could include anything from political and intellectual journals like the *New Republic* or the *American Mercury* to more established and “highbrow” literary reviews like *Scribner’s Magazine*. See Pierre Bourdieu, *Distinction: A Social Critique of the Judgment of Taste*, trans. Richard Nice (Cambridge: Harvard University Press, 1987). On distinctions between pulp and slick magazines, see Erin A. Smith, *Hard-Boiled: Working-Class Readers and Pulp Magazines* (Philadelphia: Temple University Press, 2000) and David M. Earle, *Re-Covering Modernism: Pulps, Paperbacks, and the Prejudice of Form* (Burlington, VT: Ashgate, 2009). On middlebrow culture, see Joan Shelley Rubin, *The Making of Middlebrow Culture* (Chapel Hill: University of North Carolina Press, 1992).

correlate cover images with spikes in circulation or track the Iowa circulation of a magazine like *The New Yorker* (which famously claimed in its 1925 prospectus that it was “not for the little old lady in Dubuque”). Whether framed in terms large or small, the kinds of scholarship that are likely to grow out of this project would radically alter the landscape of twentieth-century American periodical studies.

This project is designed as a resource for scholars and students in American Studies, Anthropology, Communication/Mass Media, English, History, and Sociology. The kind of scholarship it will enable includes the study of literary modernism and popular literary genres, American publishing history, the sociology and history of popular reading in the United States, and historical media audiences, among many other topics. Given the extensive digital resources for the study of periodicals already available online, we hope to create productive collaborations with other projects: creating links from Circulating American Magazines to digitized content on the Modernist Journals Project and the Pulp Magazines Project, to contents and cover images on sites like the FictionMags Index (<http://www.philsp.com/homeville/fmi/0start.htm>), and to other projects hosted on portals like ModNets (<http://www.luc.edu/ctsdh/researchprojects/modernistnetworks/>).

History and Duration of the Project

The idea for Circulating American Magazines initially emerged in Brooks Hefner’s 2010 encounter with the A.B.C. *Blue Book* volumes containing publishers’ statements. At this point, Hefner took a few hundred photographs of reports from the late 1920s and early 1930s. The project reemerged as an interest during the National Endowment for the Humanities 2015 summer institute “Beyond Newspaper Row,” which tracked the history and influence of New York on American periodical history.⁷ In light of the institute’s emphasis, the creation of an online database of A.B.C. data seemed of vital importance, and conversations with other participants and faculty — an interdisciplinary collection of scholars working in periodical studies — confirmed the need for such a resource. In the ensuing year, Hefner made two visits to the Library of Congress, taking 4228 photographs and capturing data for select magazines through the early 1950s. Hefner also invited fellow “Beyond Newspaper Row” participant Edward Timke to join as co-director of the project after discovering that he was working on a project on audit bureaus in the United States and Europe after World War II into the 1970s. Timke has recently presented research at conferences on audit bureaus in the United States and around the world and has experience in working with audit bureau archives. Given Timke’s similar interest in mapping circulation figures over time through audit bureau data, Hefner invited Timke to be co-director.

To this point, the project has been supported by programming work coordinated by Kevin Hegg of James Madison University’s Center for Instructional Technology. Hefner, Hegg, Timke, and a handful of students at James Madison University and the University of California, Berkeley, have entered preliminary data for a handful of representative magazines: the middlebrow slick magazine the *Saturday Evening Post*, the hard-boiled pulp magazine *Black Mask*, the quality literary magazine *The New Yorker*, and the pulp publishing combination Street & Smith. After experimenting with proprietary software like Tableau and Carto, project members have decided that working with open source visualization tools like d3 will provide the most flexibility and sustainability for a project that has potential for long-standing influence in

⁷ For more details, see the City of Print’s website (<http://cityofprint.net/>) and blog (<https://cityofprint.wordpress.com/blog/>).

periodical studies. An alpha version of the project — including d3 visualization samples of select data — can be accessed at <http://sites.jmu.edu/circulating>.

Work Plan

With the project only in a rough prototype stage, the 2017-18 award year would offer the opportunity to complete the collection and digitization of circulation data, the implementation of a host of data visualization tools, and an enhancement to the site’s design. To receive peer review while the project is carried out, Hefner and Timke have confirmed the availability of a ten-member advisory board consisting of leading periodical and digital humanities experts across the country. Work would be structured in the following fashion:

Before grant period	Student research apprentices (supervised by Timke) at the University of California, Berkeley, input data for the first four titles for the proof of concept phase.
Early October 2017 (estimated 4 day trip)	Hefner and Timke contact advisory board with tentative list of titles and seek suggestions for additional titles to add to the project. With this list, they travel to the Library of Congress to photograph remaining data from years 1944-1972 (58 volumes).
Late October 2017	Team members and student workers rename image files for data entry. Advisory board is surveyed on desirable visualization aspects for scholarly projects.
October 2017- September 2018 (ongoing)	<ul style="list-style-type: none"> • Site developer explores javascript visualization tools (i.e. d3, an open-source repository) to develop and polish visualization for user interface (see Figures 1, 2, and 4 in Appendix A). • Student workers enter data from existing and newly captured images (Appendix A, Figure 3). We expect to digitize an average of 50 titles per year from the approximately 96 volumes of A.B.C. reports. Tests with team members and students have resulted in an average of 8 minutes per entry. Total time of data entry would be approximately 700 hours. • Co-directors contact advisory board on a monthly basis with queries regarding categorization, visualization, site formatting and design.
December 2017- September 2018 (ongoing)	Team members Hefner and Timke locate N.W. Ayer & Son volumes covering 1880-1924: many are online but not wholly complete, so copies through interlibrary loan will be requested. Relevant titles indexed in the Ayer & Son volumes are identified and data is collected and entered for these earlier years.
February- September 2018	<ul style="list-style-type: none"> • Based on ongoing feedback from the advisory board, the team will collaborate with internal and/or external designers to maximize site design and functionality. • With his public relations and media contacts, Timke will develop (February-August) and execute (September) an online marketing plan to promote the project among scholars, students, and practitioners.
September 2018	Website is launched in its full capacity phase.

Staff

Name, Title, Affiliation	Role	Description of Duties
--------------------------	------	-----------------------

Brooks E. Hefner <i>Associate Professor of English</i> <i>James Madison University</i>	Co-Director	With a background in literary criticism, periodical studies, and popular culture studies, Brooks oversees the selection, collection, and digitization of archival data, while working closely with Hegg, Timke, and student programmers to imagine and improve visualization tools for students and researchers. Additionally, he collaborates with Shorish and the Center for Open Science on data management and long-term project sustainability.
Kevin Hegg <i>Director of Digital Projects</i> <i>James Madison University</i>	Website and Database Coordinator	With his 20 years of academic technology experience, Kevin will manage the project's database and website. He will be responsible for the training of students for access and data entry. He will also develop and oversee code automating procedures, maintaining the database, and visualizing data.
Yasmeen Shorish <i>Associate Professor and Data Services Coordinator Librarian</i> <i>James Madison University</i>	Data Services Coordinator	Given her expertise as the Data Services Coordinator at James Madison University, Yasmeen will advise on data management procedures and protocols and serve as a liaison with the Center for Open Science, which will house a stable, downloadable dataset on its Open Science Framework.
Edward E. Timke <i>Lecturer of Media Studies</i> <i>University of California, Berkeley</i>	Co-Director	Based on his Ph.D. training in historical audience research at the University of Michigan and his use of circulation data for his current book, Timke will work closely with Hefner on archival research at the Library of Congress. He will build the website's bibliographic and informational pages. Having overseen three research assistant teams in the past, he will oversee the daily data entry and background research at Berkeley. With his professional experience in strategic communication and public relations and media contacts, Timke will develop and execute a marketing plan to promote the project among scholars, students, and practitioners.

Final Product and Dissemination

Circulating American Magazines' data collection and website launch will be complete by September 2018. The site will be publically available for testing in spring 2018, as the team invites scholars and students to see what kinds of tools will best facilitate research. The site will offer free access and will make all data downloadable.

From February to August 2018, Timke will develop and execute an online marketing plan to promote the project and site among periodical scholars, students, and practitioners. Further, Timke will consult with his contacts in the advertising and public relations industry to obtain major press coverage about the project and website.

Biographies

Brooks E. Hefner (Co-Director) is associate professor of English at James Madison University, where he teaches English, American Studies, and Film Studies. His work on literary modernism, popular literary and filmic genres, and periodical studies has appeared in the journals *PMLA*, *MELUS*, *Modern Fiction Studies*, *Clues*, *The Journal of Film and Video*, and *The Journal of Popular Film and Television*. His book manuscript, *The Word on the Streets: The American Language of Vernacular Modernism*, is under advance contract at the University of Virginia Press.

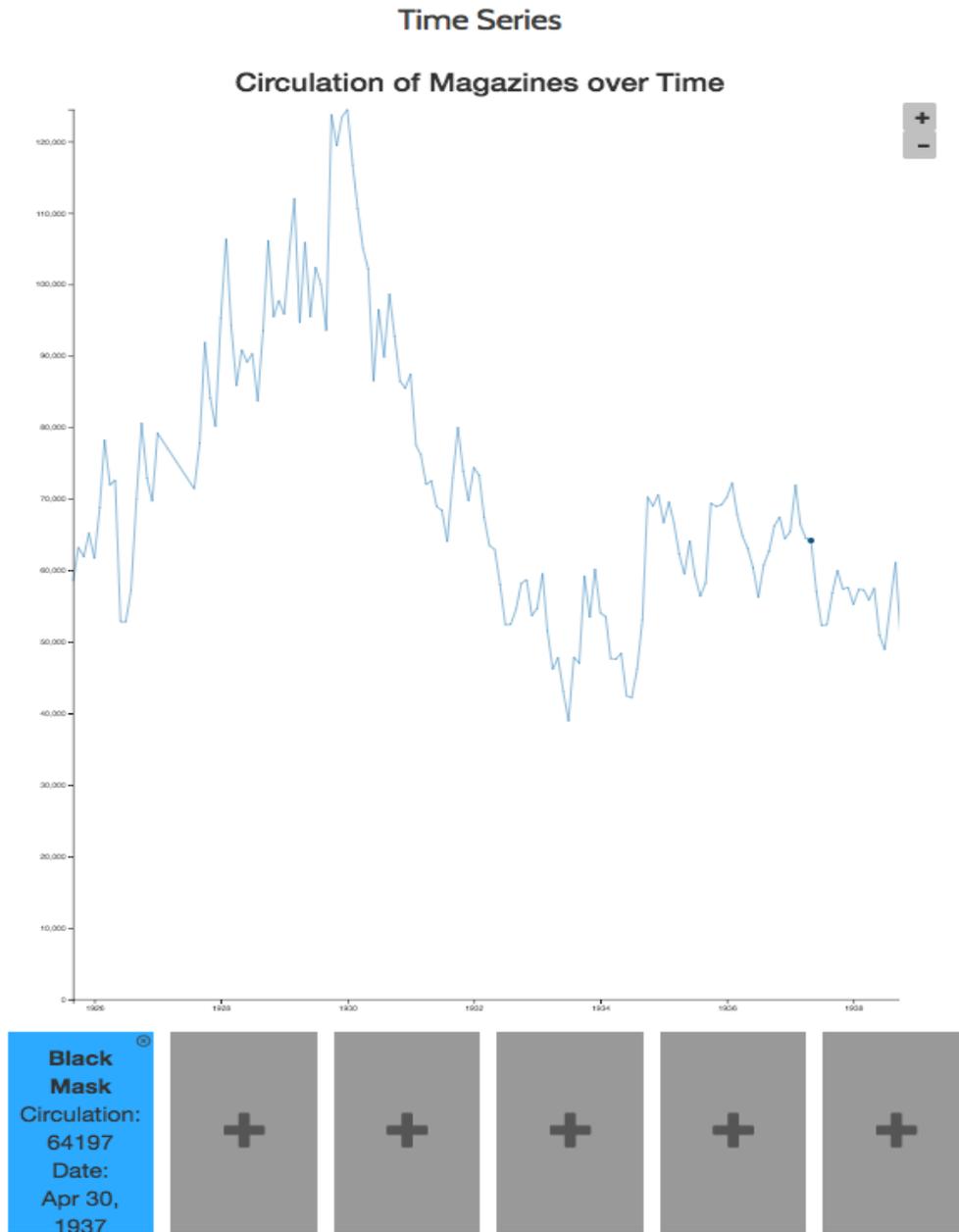
Edward E. Timke (Co-Director) is lecturer of Media Studies at the University of California, Berkeley, where he teaches advertising history, international media, media theory, and media research. Edward is also associate editor of *Advertising & Society Quarterly* (formerly *Advertising & Society Review*), which is a journal focused on the role of advertising in society, culture, history, and the economy. His research on the place of popular media, especially magazines, in international relations has appeared in *Media Fields Journal*, *Cahiers ReMix*, *eCRINI*, and *H-Net Journalism*. His book manuscript, *Cherchez la femme: Franco-American Relations through Popular Media's Representations of French and American Women, 1945-1965*, is under pre-contract discussions with a major university press.

Kevin Hegg (Website and Database Coordinator) has worked at James Madison University (JMU) for over 20 years in various academic technology positions within JMU's Libraries & Educational Technologies organization. His experience spans a wide variety of technology work, from managing computer labs and server hardware to developing a large open source software project used by hundreds of universities. In his most recent position, Kevin managed a small group of programmers and IT professionals who provisioned and managed the campus LMS, WordPress, Omeka, and other instructional systems. This group was also responsible for administering two large database servers and for integrating managed systems with central IT services, such as JMU's user directory and student administration system. In his current position, Kevin collaborates with faculty and students on a variety of innovative and cutting-edge digital projects, especially in the Digital Humanities. Throughout his career at JMU Kevin has partnered with faculty and students in their use of technology in teaching, scholarship, and research. Kevin regularly presents his work at professional conferences across the United States.

Yasmeen Shorish (Data Services Coordinator) is an Associate Professor and the Data Services Coordinator at James Madison University. She seeks to enhance the knowledge and awareness of data information literacy on campus, which includes the discovery, management, and curation of data, as well as instruction in the methodologies for such. Research interests are in data management education, changes in scholarly communication, data curation, and issues related to representation and social justice in librarianship.

Appendix A: Sample Database and Visualization Images

Figure 1: Time Series

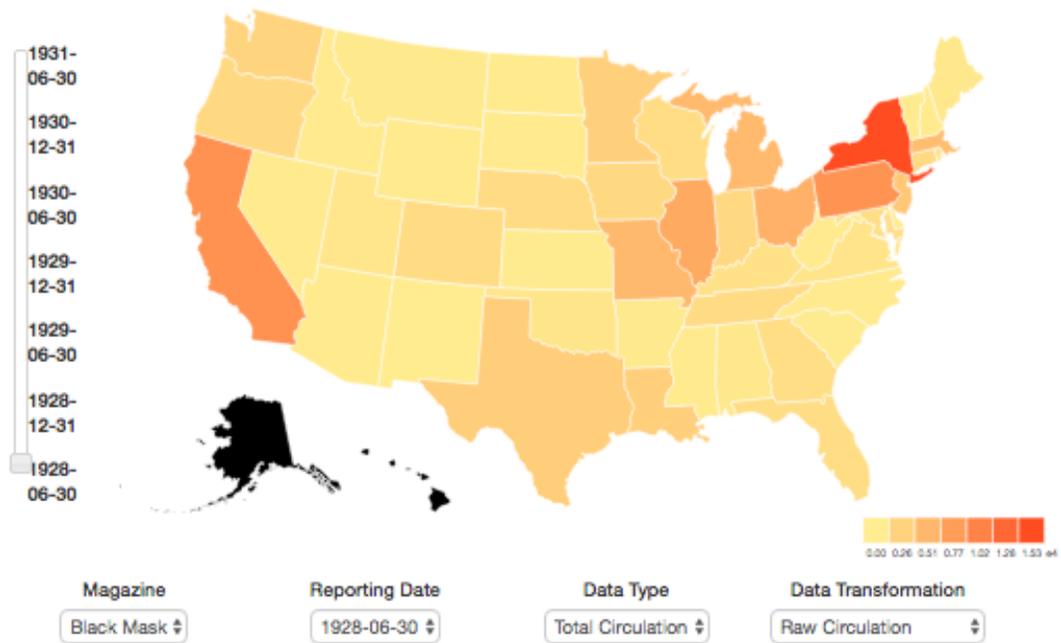


This image shows a simple time series of issue-by-issue circulation for the pulp magazine *Black Mask*, an influential crime fiction magazine that published writers like Dashiell Hammett, Raymond Chandler, and Erle Stanley Gardner.

Figure 2: Chloropleth

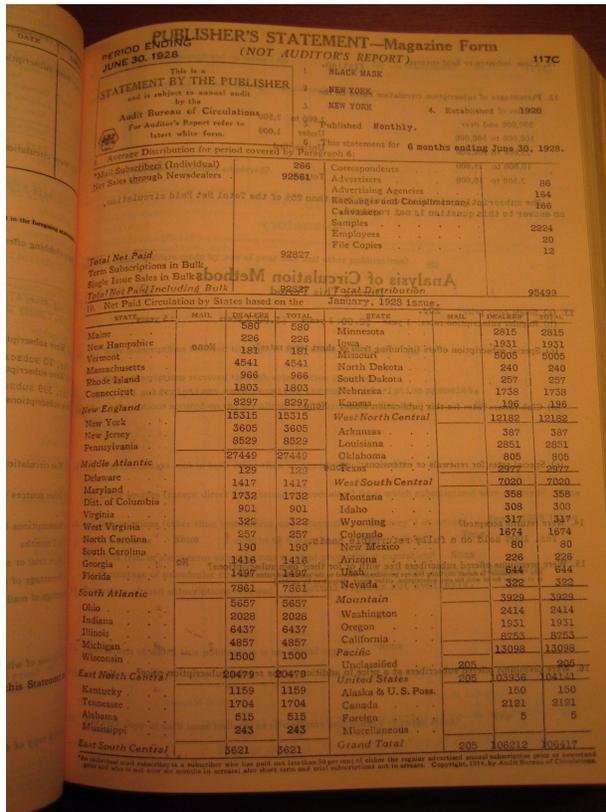
Chloropleth - US Circulation

Black Mask Total Circulation Sales for 1928-06-30



This image shows the raw circulation figures by state for *Black Mask* for the reporting period ending on June 30, 1928. These figures unsurprisingly show higher circulation in densely populated states like New York and Illinois, but also give a glimpse of the magazine's popularity in the Midwest and on the West Coast. Other "Data Type" options include "Subscriptions" and "Newsstand Sales."

Figure 3: Sample A.B.C. Data Converted into Database Data



State/Region	Mail Subscriptions	Single Copy Sales	Total
Maine			580
New Hampshire			226
Vermont			181
Massachusetts			4541
Rhode Island			966
Connecticut			1803
New England	0		8297
New York			15315
New Jersey			3605
Pennsylvania			8529
Middle Atlantic	0		27449
Delaware			129
Maryland			1417
District of Columbia			1732
Virginia			901
West Virginia			322
North Carolina			257
South Carolina			190
Georgia			1416
Florida			1497
South Atlantic	0		7861
Ohio			5657
Indiana			2028
Illinois			6437
Michigan			4857
Wisconsin			1500
East North Central	0		20479
Kentucky			1159
Tennessee			1704
Alabama			515

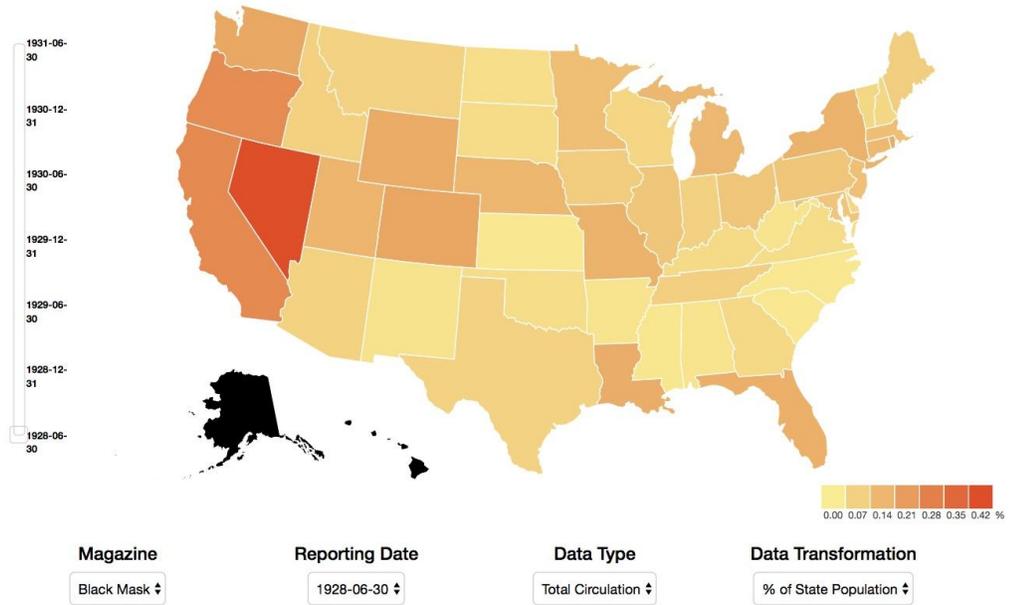
The images above show the original A.B.C. Publisher's Statement for *Black Mask* (period ending June 30, 1928) and a partial image of the Google Sheets file used for data entry, which was uploaded to our relational database for our project site.

Figure 4: Sample A.B.C. Data Converted into Visual Geographic Data

11/27/2016

Chloropeth – US Circulation Circulating American Magazines

Black Mask Total Circulation (% of State Pop) Sales for 1928-06-30



<http://sites.jmu.edu/circulating/chloropeth-us-circulation/>

2/3

This image shows the circulation of *Black Mask* (period ending June 30, 1928) as a percentage of total state population using estimates from the Federal Reserve. (For Census years, actual Census figures are used.) This shows the intensity of circulation in the West, particularly in Nevada.

Appendix B: Titles and Publishing Groups Included in the Project

The following magazine titles and publishing groups will be included in Circulating American Magazines data. Project managers have only consulted volumes extending from 1925-1955, so titles added after 1955 are not included here. Consultation of Ayer & Son volumes will extend data for some magazines back as far as 1880.

Ace Fiction Group (1936-1949)
Adventure (1925-1935)
Adventure Men's Group (?-1955+)
Annual Detective Stories of Women in Crime (1938)
Action Stories (1935-1946)
All American Comics Group (1941-?)
American Comic Group (1948-1950+)
American Fiction Group (1937-1944)
American Magazine (1925-1955+)
American Mercury (1925-1949)
Archie Comics Group (1946-1950+)
Argosy (1925-1926, 1945-1955+)
Atlantic Monthly (1925-1955+)
Batman (1945-1947+)
Best Detective Group (?-1950+)
Bill Barnes Air Trails/Air Trails (1936-1941+)
Blue Book Magazine (1925-1941+)
Buse Detective Group (1947)
Buse Women's Group (1947)
Century Magazine (1925-1929)
Clayton Magazines (1931-1933)
College Humor (1925-1933)
Collier's (1925-1955+)
Crime Confessions (1941-?)
Crime Detective (1941-?)
Dell Publications (1926-1928, 1934, 1941+)
Dell Comics Group (1937-1941+)
Dell Detective (1937-1946)
Dell Men's Group (1929-1930, 1935-1955+)
Dell Modern Group (1946-1955+)
Dell Super Comic Group (1941-?)
Dell Women's Group (1929-1930)
Detective Comics Group (?1940-1944)
Down Beat (1945-1955+)
Dream World (1925-1934)
Dynamic Detective (1938-?)
Ebony (1947-1955+)
Esquire (1934-1955+)

Everybody's Magazine (1925-1929)
Famous Funnies (?1940-1950+)
Famous Story Magazine (1926)
 Fawcett Comics Group (1943-1955+)
Fawcett Detective (1935-1938+)
 Fawcett Men's Group (?1940-1955+)
 Fawcett Women's Group (?1940-1955+)
 Fiction House (1928-1931)
 Fiction House Comics Group (?-1950+)
Field & Stream (1925-1955+)
Flying Aces (1934-1946)
Forum
 4-Most Comics (?-1949+)
 Fox Comic Group (-1941+)
Front Page Detective (?-1955+)
Good Housekeeping (1925-1955+)
Harper's Bazaar (1925-1955+)
Harper's Magazine (1925-1955+)
 Harvey Comics Group (1947-1955+)
Headquarters Detective (?-1941+)
Hearst's International combined with Cosmopolitan/Cosmopolitan (1925-1955+)
 Hillman Detective Group (?1949+)
 Hillman Romance Group (1946-1949+)
 Hillman Women's Group (1946-1949+)
Jet (?-1955+)
Judge (1925)
Ladies' Home Journal (1925-1955+)
Lariat Story (1935-1944)
 Lev Gleason Comic Group (1946-1955+)
Liberty (1925-1949)
 Fiction Lovers (1925)
Life (1925-1955+)
Look (1937-1955+)
Love & Romance (1934-1938+)
 Marvel Comic Group (1948-1955+)
Master Detective (1932-1947)
 Macfadden Men's Group (1949-1955+)
 Macfadden Women's Group/*True Story* Women's Group (1940?-1955+)
Modern Romances (1932-1950+)
 Munsey Combination (1925-1942)
 National Comics Group (1943-1955+)
National Geographic (1925-1955+)
New Yorker (1925-1955+)
Official Detective (1935-1949)
Playboy (1955+)
 Popular Publications/Popular Fiction Group (1935-1953)

Quality Comic Group (?1940-1955+)
 Quality Romance Group (?-1955+)
Ace High (1925-1926)
 Newsstand Group (*Ace High/Ranch Romances/Cowboy Stories*) (1927-1930)
Black Mask (1925-1940)
 Newsstand Group (*Action Stories/Lariat Stories/Northwest Stories*) (1925-1928)
 Newsstand Group (*Clues/Danger Trail/Five Novels*) (1926-1931)
Ranch Romances (1925-1955+)
Western Adventure (1930)
Western Love Stories (1930)
Love Romances (1926)
Three Star (1928)
Telling Tales (1925)
Time (1925-1955+)
 Newsstand Group (*Young's Magazine, Breezy Stories, Droll Stories*) (1925-1937)
Photoplay (1925-1955+)
Real Detective (1931-1941+)
Real Romances (1943-1949+)
Red Book Magazine (1925-1955+)
Romantic Movie Stories (1935-1936)
Romantic Stories/Romantic Magazine (1935-1941+)
Saturday Evening Post (1925-1955+)
Science and Invention
Scientific American (1925-1955+)
Screen Romances (1929-1947)
Scribner's (1925-1939)
Secrets/Secrets Romance Group (?1940-1955+)
Short Stories (1925-1950+)
Smart Set (1925-1930)
 Speed Fiction Group (1946-1947)
 Street & Smith (1925-1947)
Superman (1945-1947+)
Sweetheart Stories (1934-1938+)
 Teck Publications (1935-1937)
 Thrilling Comics Group (1946-1949)
 Thrilling Fiction Group (1935-1955+)
 Tip Top Comics (1937-1939+)
Time (1925-1955+)
 Tower Magazine Group (1930-1935)
Triple X (1925-1926)
 True Comics (?1940-1948)
True Confessions (1925)
True Confessions (1933-1946)
True Detective Stories/True Detective Mysteries (1925-1955+)
True Experiences (1926-1955+)
True Love Stories/True Love & Romance Stories (?1940-1949+)

True Romances/True Romance (1925-1955+)
True Story (1925-1955+)
United Feature Comic Group (?1940-1950+)
Vanity Fair (1925-1936)
Vogue (1925-1955+)
Weird Tales (1940-1950+)
Woman's Home Companion (1873-1957)
Whiz Comics (1944-1946)
Ziff-Davis fiction Group (?1940-1950+)

Data Management Plan

People: Brooks Hefner, Edward Timke, Kevin Hegg, and James Madison University and University of California, Berkeley student research assistants (to be determined).

Kevin Hegg, with Libraries and Educational Technologies (LET) at James Madison University, will be responsible for the training of students for access and data entry.

Yasmeen Shorish (Data Services Librarian) at James Madison University will advise on data management protocols and procedures.

Brooks Hefner will be ultimately responsible for the stewardship of the data.

The Center for Open Science's Open Science Framework (OSF) will be responsible for dissemination. James Madison University's IT will maintain a dark archive copy as well.

Expected data

The project will generate tabular data in spreadsheet format (CSV), digitized from print copies of reports submitted to the Audit Bureau of Circulations, and held at the Library of Congress. The data will be transcribed into spreadsheets via the GoogleSheets interface. Spreadsheet data will be transformed to a SQL database on a LET server via Python scripts, undergo quality assurance (QA), and then be outputted to JSON. JSON data will underlie the visualization tools hosted on the project website.

LET servers undergo weekly back-up to tape. QA and JSON will be stored on the OSF. Data stored on the OSF is backed by a \$250,000 preservation fund that will provide for persistence of your data, even if the Center for Open Science runs out of funding.

Period of data retention

Upon conclusion of the grant period, all data detailed above (CSV, SQL, JSON, associated scripts and metadata) will be fully available and accessible via the Open Science Framework for an indefinite period of time.

Data formats and dissemination

Data will exist in CSV, SQL, Python, and JSON formats. We will utilize MySQLdump and ReproZip to make SQL data available in a shareable format. Metadata information will be captured in ReadMe files, and a data dictionary will accompany the spreadsheet data. This information will define variable names and units, and will follow spreadsheet best practices (e.g., atomized unit-level information per column).

Data - including scripts, ReadMe files, and procedural information - will be available via the Open Science Framework without embargo or restriction at the conclusion of the grant period. A DOI will be generated for the project space.

Data storage and preservation of access

Data will be available at the Open Science Framework project space. A backup copy will be housed on JMU central servers, where the project data will be stored, backed up, preserved (replicated to one offsite location), and made accessible for no less than ten years. Data stored on the OSF is backed by a \$250,000 preservation fund that will provide for persistence of your data, even if the Center for Open Science runs out of funding.