

DIGITAL STUDIES AND NEW MEDIA ACROSS THE ARTS AND SCIENCES

The Final Report of the Emory College Committee

Submitted to Dean Robin Forman on April 15, 2014

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EXECUTIVE SUMMARY

Formed at the behest of Dean Robin Forman, the Digital Studies and New Media Committee was charged with the task of recommending future hires in these vibrant areas of creativity and scholarship. In order to arrive at those hiring recommendations, the committee members first investigated the current state of digital studies and new media (DS & NM) on Emory's campus, noting its challenges and strengths. That investigation, in turn, prompted the committee members to make a series of recommendations regarding curriculum, digital infrastructure, DS & NM faculty recruitment, and evaluation of DS & NM scholarship at Emory College of the Arts and Sciences (ECAS).

In the pages that follow, we elaborate on the sixteen recommendations that we make. By addressing the context in which future DS & NM hires will occur, the committee members believe that these recommendations offer a holistic approach that treats these eventual hires, not as the *only* steps to bolstering DS & NM at Emory college, but as key steps among others in that venture. The recommendations are as follows:

Undergraduate Curriculum:

#1: We recommend that ECAS majors of all types emphasize relevant “tools” related to DS & NM.

#2: We recommend that “new media literacy” be incorporated into the curriculum so that our undergraduates develop the skills to evaluate critically the information they encounter online.

#3: We uniformly recommend that, in pushing forward with ways to enhance the DS & NM aspects of the ECAS curriculum, it would be wise to retain classes that already have brought about such enhancement—by that, we mean Journalism classes.

Graduate Curriculum:

#4: To counter the possibility of a gap in instruction regarding new media skills, we recommend that all graduate programs make systematic use of their subject librarians.

#5: We recommend that the first stage of the TATTO program (i.e., the summer course) include a component addressing the use of digital tools in teaching.

#6: We recommend that Emory graduate students augment their skills in digital pedagogy by participating in at least one training session within or beyond their graduate program.

#7: We recommend that such efforts in gaining skills in digital pedagogy figure in the annual evaluation of graduate students who apply for the Dean's Teaching Fellowship—thereby making systematic the occasional attention given to DTF applicants who propose to offer technology enhanced classes.

#8: We recommend that the Emory Laney Graduate School examine the possibility of requiring all of its graduate students to take one workshop or seminar devoted to the research tools of DS & NM.

Digital Infrastructure:

#9: We recommend that ECAS maintain the caliber of “support personnel” who support and make possible DS & NM (particularly what we call “digital navigators”) while also adding to their numbers.

Recruitment and Evaluation of DS & NM Faculty:

#10: Given the sprawling nature of digital studies and new media, we recommend that each DS & NM search be organized by substantive topics, with an interdisciplinary committee of Emory faculty overseeing each search rather than an individual department or program doing so.

#11: We recommend that all new DS & NM hires should begin their time at Emory with a semester of training while housed at the Emory Center for Digital Scholarship.

#12: We recommend that this training of new DS & NM faculty at the Assistant Professor level should also involve the stoppage of their tenure clocks for either the semester in which they receive this training or for the entirety of that first year.

#13: We recommend that DS & NM hires who arrived at Emory in the last several years as Assistant Professors be granted the option of having this semester of intensive training.

#14: We recommend that the Deans' Office and ECAS develop standards that move beyond traditional metrics for evaluating research and, in particular, amend tenure and promotion standards so that the full range of DS & NM scholarship can be assessed in a thoughtful and systematic manner.

#15: We recommend that, if a DS & NM scholar is in a department that has relatively little expertise in that domain, then other Emory faculty from outside that department, and possessing the relevant expertise, should help with the departmental review of the DS & NM scholar.

Hiring Areas for DS & NM Faculty at ECAS

#16: We recommend that five DS & NM hires be made in the following topic areas: (a) Digital Creativity; (b) New Media Analysis; (c) Digital Cultures; (d) Computational Linguistics; and (e) Spatial and Temporal Visualization.

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1. INTRODUCTION

1.1. The Formation of the Digital Studies & New Media Committee

The Digital Studies and New Media (“DS & NM”) Committee was one of several committees created at the behest of Dean Robin Forman in August of 2012. Along with committees focusing on matters like Contemporary China or Neuroscience, the DS & NM Committee had as its general goal the development of “strategies for strengthening the ECAS [Emory College of Arts and Sciences] over the next 5-7 years.”¹ As Dean Forman relayed to the committee chair (Timothy J. Dowd) on 28 August 2012, that general goal would result in the committee making recommendations for faculty hires in the immediate and near future; those recommendations would take into account the resources and expertise currently found at ECAS, as well as trends and developments in broader academia.

The rationale for the formation of the DS & NM Committee was given as follows in an official press release:

As our global society becomes networked through new media, Emory has several departments on campus investing in the study of the impact of technology on the human condition. This committee will ask how to best create a coordinated effort that will have impact across Emory College’s curriculum. The committee will explore how to embrace and explore the role of digital media as a platform for artistic expression, as well as the growing role of social media in political and social dynamics.²

As it so happens, this rationale resonates with curricular developments at other academic institutions around the nation and abroad. The University of Wisconsin-Madison, for

¹ Seidman, Nancy. 2012. “Emory College Appoints Faculty Committees on New and Emerging Growth Areas.” Emory News Center, September 14.

<http://news.emory.edu/stories/2012/09/ECASNewCommittees/campus.html>.

² Seidman, Nancy. 2012. “Emory College Appoints Faculty Committees on New and Emerging Growth Areas.” Emory News Center, September 14.

<http://news.emory.edu/stories/2012/09/ECASNewCommittees/campus.html>.

instance, now offers undergraduates a certificate in digital studies. Its online description notes that, “Digital Studies is situated at the intersection of the arts, humanities, social sciences, and information and computer sciences. The certificate appears on a student's transcript, giving them credit for seeking out these courses and preparing students for the careers of the 21st century.”³ This emergent curricular emphasis on digital studies has taken various forms at other institutions—such as becoming an undergraduate minor (e.g., University of Southern California),⁴ a “customized” major created on an individualized basis (e.g., Dartmouth),⁵ and a regular major (e.g., University of Rochester).⁶

While new interdisciplinary majors and the like are perhaps the most visible signs of growing interest in digital studies and new media, similar pushes *within* disciplines should not be overlooked. Indeed, the emphasis on DS & NM is taking shape in the curricula of such disciplines as English (e.g., University of Maryland),⁷ Journalism and Media Studies (e.g., Rutgers)⁸ and Music (e.g., Stanford).⁹ Not surprisingly, then, terms

³ University of Wisconsin-Madison 2013. “Digital Studies Certificate.”
<http://digitalstudies.wisc.edu>.

⁴ University of Southern California. 2013. “Digital Studies Minor.”
<http://cinema.usc.edu/degrees/minor/digital.cfm>.

⁵ Dartmouth College 2013. “Digital Studies Major.”
<http://www.dartmouth.edu/~digitalstudies/degrees/>.

⁶ University of Rochester. 2013. “Multidisciplinary Studies Center.”
<http://www.rochester.edu/college/msc/digitalmedia.html>.

⁷ University of Maryland. 2013. “Department of English – Textual and Digital Studies.”
<http://www.english.umd.edu/people/areagroups/textual>.

⁸ Rutgers University 2013. “Journalism and Media Studies Department.”
<http://comminfo.rutgers.edu/journalism-and-media-studies/journalism-and-media-studies-department.html>.

⁹ Stanford University. 2013. “Undergraduate Studies in Music.”
<http://music.stanford.edu/Academics/ugradStudies.html>.

such as “Digital Anthropology,” “Digital Creativity,” “Digital Religion,” “Digital Sociology” and, of course, “Digital Humanities” have entered the academic lexicon.¹⁰

Given the sprawling nature of digital studies and new media, Emory’s DS & NM Committee is comprised of individuals drawn from diverse backgrounds. Its members are as follows: Eugene Agichtein (Mathematics & Computer Science), Matthew Bernstein (Film & Media Studies), Timothy J. Dowd (Sociology), James B. Hoesterey (Religion), Hank Klibanoff (Journalism), Shannon O’Daniel (Faculty Services), Leslie Taylor (Theater & Dance), Allen Tullos (History and Co-Director of the Emory Center for Digital Scholarship), and Steve Everett (formerly of Music before departing for the University of Illinois Chicago as its Dean of the College of Architecture, Design and the Arts).

1.2. The Efforts and Approach of the DS & NM Committee

Formed in the early part of the Fall 2012 semester, this committee met regularly throughout that academic year; it continued with occasional meetings thereafter, as well as relied upon email correspondence.

These meetings and correspondence enabled the committee to meet the goal set before it; so too did the information-gathering that occurred as committee members met with individuals on campus who share a concern with and passion for DS & NM, as well as met with campus groups (e.g., the Visual Scholarship Initiative of Emory Graduate

¹⁰ See, for example, (a) Campbell, Heidi A., Editor. 2012. *Digital Religion: Understanding Religious Practice in New Media Worlds*. New York: Routledge. (b) *Digital Creativity*. 2013. Taylor & Francis Online Journal (established 1997). <http://www.tandfonline.com/toc/ndcr20/current#.Up4fP6V5nwI>. (c) Horst, Heather A. and Daniel Miller, Editors. 2012. *Digital Anthropology*. London: Berg. (d) Orton-Johnson, Kate and Nick Prior. 2013. *Digital Sociology: Critical Perspectives*. London: Palgrave.

Students, the Critical Media Literacy Group comprised of Emory faculty and staff, The Emory Writing Program) and even the occasional department (e.g., Spanish & Portuguese). This information gathering culminated with the committee conducting an informal census of DS & NM efforts on the part of college faculty and hosting an all-day forum that brought together interested parties.¹¹ This forum included faculty and / or students from Anthropology, Art History, Classics, Emory College Language Center, Emory Writing Program, English, Environmental Sciences, Film and Media Studies, French and Italian, German Studies, History, ILA, Journalism, Mathematics and Computer Science, Religion, Russian and East Languages and Culture, Sociology, *Southern Spaces*, Spanish and Portuguese, Visual Arts and the Visual Scholarship Initiative.

Two things became obvious during the course of the committee's information gathering. First, the terms "digital studies" and "new media" are simultaneously intuitive and malleable: people can share some sense of what these terms entail, but people can also vary greatly in how they approach those terms. For some, DS & NM entail a "big data" approach that relies upon algorithms and programs to analyze vast amounts of digitized texts in a quantitative fashion.¹² For others, DS & NM provide exciting ways to examine qualitatively aspects of everyday life via "digital storytelling," including how people construct identity and build connections with others.¹³ Yet, for others, DS & NM

¹¹ For a recording of this forum, go to <http://playback.service.emory.edu/ess/portal/section/23ade3c4-0cae-453c-8550-31d3380aad3a>.

¹² For example, see Mohr, John and Petko Bogdanov, Editors. 2013. *Topic Models and the Cultural Sciences*. Special Issue of *Poetics: Journal of Empirical Research on Culture, the Media and the Arts* 41 (6): 545-769.

¹³ For example, see Lambert, Joe, Editor. 2013. *Digital Storytelling: Capturing Lives, Creating Community*. Fourth edition. London: Routledge.

offer the means to reimagine and reinvigorate classroom instruction.¹⁴ In fact, at Emory College, the committee found that DS & NM efforts are occurring in the four broad domains of creativity, pedagogy, publishing and research—with sometimes considerable variety within and across those domains (see below). In the face of such variety, we on the committee decided not to grapple with a singular definition of either “digitals studies” or “new media” but, instead, employed working definitions that tapped the intuitive aspects while also heeding the malleability of these terms. Simply put, we treated “digital studies” as being devoted to ways of knowledge-building afforded by (emergent) digital technologies and techniques, and we treated “new media” as emergent means of information and content conveyance (e.g., iPads, Facebook) that have altered traditional flows and / or uses of content and information.

Second, it became readily apparent to the committee that, while there is much potential for exchange and collaboration across departments, programs and disciplines on Emory’s campus, the reality is that DS & NM efforts at Emory are oftentimes “siloed” and separated—with people unaware of others engaged in similar efforts who are but a few buildings over. To give one but one example that emerged at the all-day forum: a fair number of Emory College faculty are engaged in drawing upon digitized data to offer spatial representation of various phenomena, sometimes doing so by way of Geographic Information System (GIS).¹⁵ These faculty are located in such departments as Art History, Classics, Environmental Sciences, History, ILA, Math and Computer Science, and

¹⁴ For example, see Blake, Robert J. 2013. *Brave New Digital Classroom: Technology and Foreign Language Learning*. Second edition. Washington DC: Georgetown University Press.

¹⁵ Maguire, David J., Michael F. Goodchild and Micheal Batty, Editors. 2005. *GIS, Spatial Analysis, and Modeling*. New York: ESRI Press.

Sociology. While there has been some cross-department exchange among these faculty (particularly those in Art History and Classics), the forum revealed to us that this exchange is far less than what it could be. This need not be the case: for instance, a recent special issue published on “big data” in *Poetics: Journal of Empirical Research on Culture the Media and the Arts* moved beyond such silos and brought together scholars from Computing Science, Demography, Education, Languages (East Asian), Linguistics, Library Sciences, Literature (Danish), Political Science, and Sociology.¹⁶ Hence, while DS & NM have enlivened various disciplines (which is already evident on Emory’s campus), they also have the potential for creating dialogue and collaboration across disciplines and intellectual communities (which they are poised to do in the Emory College of Arts and Sciences). Such exchange would not only benefit faculty, it would also benefit the ECAS curriculum.

1.3. The Organization of the DS & NM Committee Report

In the pages that follow, we of the DS & NM Committee respond to the goals laid before us in the Fall of 2012. On the one hand, we ultimately make recommendations regarding the types of faculty hires to pursue in the near future. The recommendations are offered with the intention of both bolstering what is already found at Emory and creating synergies that span the “siloesd” nature of ECAS and, in the process, help spark the eminence in DS & NM that Emory College is capable of attaining. On the other hand,

¹⁶ Mohr, John and Petko Bogdanov, Editors. 2013. *Topic Models and the Cultural Sciences*. Special Issue of *Poetics: Journal of Empirical Research on Culture, the Media and the Arts* 41 (6): 545-769.

before getting to those ultimate recommendations, we first situate them by attending to current issues of curriculum, infrastructure and faculty evaluation.

2. THE ECAS CURRICULUM IN A CHANGING WORLD

2.1. The Broader Context

For those who have taught over the past twenty-five years or so, changes associated with DS & NM have been evident in the day-to-day aspects of classroom instruction. Card catalogs that students once used for locating scholarly sources have been replaced by online databases (such as EUCLID). Statistical analyses formerly done on mainframes located in separate buildings are now done on computers sitting in front of students. Photocopied course packets have given way to online reserves. Chalkboards and overhead transparencies that were once the staple of lectures are increasingly rare given online systems like Blackboard and PowerPoint Slides. Even handwritten notes made by students in class may become things of the past, as laptops and tablets (if not smart-phones) are increasingly becoming their favored media for note taking.¹⁷

Although it might be tempting to label such changes as “anecdotal,” the reality is that they are symptomatic of a broader trend: new media are not only helping to alter leisure pursuits and social connections—as indicated by neologisms like “Web 2.0” and “prosumption” that get at the blurring of media production and consumption, whereby many individuals engage in both¹⁸—they are also helping to usher changes into the

¹⁷ See “iPads Take Teaching and Learning in New Directions at Emory.” *Emory Report* November 6, 2012. <https://blogs.emory.edu/techteach/2012/11/06/ipads-take-teaching-and-learning-in-new-directions-at-emory/>.

¹⁸ (a) Ritzer, George and Nathan Jurgenson. 2010. “Production, Consumption, Prosumption.” *Journal of Consumer Culture* 10: 13-36. (b) Young, Sherman and Steve Collins. 2010. “A View from The Trenches of Music 2.0.” *Popular Music & Society* 33: 339-355.

classroom.¹⁹ That is, Emory is not alone in grappling with these changes as it seeks how to balance traditional classroom instruction with instruction associated with small and intimate online instruction, as was being done with Emory Semester Online, and with massive open online courses, such as Coursera.²⁰

The changes associated with new media in the classroom have also found their way into the curricula of colleges and universities (as noted in Section 1.1). That is, new media not only provide new pedagogical tools, they are also worthy of inspection themselves. Emory College could emphasize DS & NM in its curriculum because many, if not most, peer institutions are doing so. However, imitation for the sake of imitation is hardly a compelling reason for expanding the curriculum. Consider, instead, the following broad reasons for doing so. On the one hand, the curricula of higher education have a rich and beneficial history of expanding to include what were once-new media and their attendant forms and genres. Note the courses, majors and departments that resulted from devoting attention, say, to the novel (e.g., Comparative Literature), to the motion picture (e.g., Film Studies) or to the television (e.g., Media Studies)—all of which were once forms of communication associated with “new” media (with television becoming “new media” again with the tremendous growth of cable TV after the 1970s and again since its conversion to digital broadcasting in 2009).²¹ ECAS should be mindful of such

¹⁹ See, for example, Blake, Robert J. 2013. *Brave New Digital Classroom: Technology and Foreign Language Learning*. Second edition. Washington DC: Georgetown University Press.

²⁰ (a) Williams, Kimber. 2013. “Emory and Coursera: Benefits Beyond the Numbers.” *Emory Report* May 20th. http://news.emory.edu/stories/2013/05/er_coursera_update/campus.html.

(b) Williams, Kimber. 2013. “Emory Launches Inaugural Semester Online Courses.” *Emory Report* September 13th.

http://news.emory.edu/stories/2013/09/er_inaugural_semester_online/campus.html.

²¹ (a) Baumann, Shyon. 2007. *Hollywood Highbrow: From Entertainment to Art*. Princeton, NJ: Princeton University Press. (b) Chung, Jinwon. 2013. *Policy and Competition: The Development of the Cable Television Industry in the United States*. Doctoral dissertation; Department of

curricular changes in the present, not because of mere imitation, but because they represent the latest chapters in a long history of curricular expansion—one in which attention to novels, motion pictures and television is now joined by attention to such things as video games and Internet usage.²² Emory College has been proactive with the creation of new courses such as Digital Media and Culture (FILM 208) and Video Games (FILM 380). Filmmaking is now taught at Emory within a fully digital paradigm—as evidenced by Introduction to Digital Video (FILM 107), Narrative Fiction Filmmaking I and II (FILM 376-377), Documentary Filmmaking I (FILM 385), and Imaging Bodies, Screening Lives (IDS 385). These courses cultivate an applied intermedia fluency through the development of digital media texts and also through engagement with Emory Theater productions. To remain a vital institution, the College must continue to engage and support these recent developments in a proactive fashion.

On the other hand, curricular change is necessary given the students themselves. While it might be tempting to assume that students are adept at using new media given that they have grown up with them—which has prompted some to label young adults as “digital natives”—the scholarly literature suggests a very different reality. For example, where talk about online media usage once revolved around a particular notion of the “digital divide”—whereby some have access to computers and the Internet, and others do not—a new divide is becoming increasingly evident in terms of how students (and others) differ in their *capabilities* rather than access. Despite glowing rhetoric about how getting

Sociology, Emory University. (c) Federal Communications Commission. 2014. “Digital Television.” <http://www.fcc.gov/digital-television>. (d) Lynch, Deidre and William B. Warner, Editors. 1996. *Cultural Institutions of the Novel*. Durham, NC: Duke University Press.

²² (a) DiMaggio, Paul and Bart Bonikowski. 2008. “Make Money Surfing the Web? The Impact of Internet Use on the Earnings of U.S. Workers.” *American Sociological Review* 73: 227-250. (b) Wolf, Mark J.P. and Bernard Perron. 2013. *The Routledge Companion to Video Game Studies*. London: Routledge.

online helps to ameliorate inequality, the reality is that traditional inequities (such as those associated with class, race/ethnicity, and gender) have found their way online—with some groups and individuals more likely than others to blog, to search for information online, and to be circumspect about sharing too much personal information online.²³ Such divides in capabilities are not inconsequential, particularly as savvy Internet usage results in higher earnings in the labor market.²⁴ In addition to being explored in such long-running classes as Mass Media and Social Influences (SOC 343), these issues are also explored in the new course, Children and the Media (FILM 390), where a central question is “How do children and youth interact with and learn from new media?” As so-called “digital natives,” students are encouraged to consider their own mediated childhoods, along with current trends, within the context of ongoing public debates surrounding the role of media in childhood. This can also extend to the study of how parents take responsibility for their children’s interaction with media.²⁵

In a related vein, new media competence does not automatically lead to “literacy” when approaching the content those new media make available.²⁶ While classroom instruction has long emphasized how students should locate reputable sources of

²³ (a) Hargittai, Eszter. 2010. “Digital Na(t)ives? Variations in Internet Skills and Uses among Members of the ‘Net Generation.’” *Sociological Inquiry* 80: 92-113. (b) Litt, Eden and Eszter Hargittai. 2014. “Smile, Snap and Share? A Nuanced Approach to Privacy and Online Photo-Sharing.” *Poetics: Journal of Empirical Research on Culture, the Media and the Arts* 42: 1-23. (c) Schradie, Jen. 2011. “The Digital Production Gap: The Digital Divide and Web 2.0 Collide.” *Poetics: Journal of Empirical Research on Culture, the Media and the Arts* 39: 145-168. (d) Tepper, Steven and Eszter Hargittai. 2009. “Pathways to Music Exploration in a Digital Age.” *Poetics: Journal of Empirical Research on Culture, the Media and the Arts* 37: 227-249.

²⁴ DiMaggio, Paul and Bart Bonikowski. 2008. “Make Money Surfing the Web? The Impact of Internet Use on the Earnings of U.S. Workers.” *American Sociological Review* 73: 227-250.

²⁵ For example, see Jenny S. Radesky, et al. 2014. “Patterns of Mobile Device Use by Caregivers and Children During Meals in Fast Food Restaurants,” *Pediatrics*.
<http://pediatrics.aappublications.org/content/early/2014/03/05/peds.2013-3703.full.pdf+html>.

²⁶ See Kellner, Douglas and Jeff Share. 2007. “Critical Media Literacy Is Not an Option.”
<http://dx.doi.org/10.1007/s11519-007-0004-2>.

information and how they should read sources of all type in critical fashion, the flood of information made possible by prosumption (e.g., blogging, Wikipedia) makes such skills all the more pressing. “If it’s on the Internet, it must be true” is not just a humorous quip, but a view that faculty must counter in the classroom.²⁷ Consequently, Emory College needs to serve its students by helping them skillfully employ the new media that have come to shape many aspects of their daily lives.

2.2. ECAS Curriculum: Current Aspects

Many departments / programs at ECAS currently have elements of their majors addressing aspects of DS & NM, as the committee members discovered in our informal census and at our one-day forum. Some faculty in the Languages have impressively drawn upon new media in pedagogical fashion. In Russian and East Asian Languages and Culture (REALC), for example, Professors Bumyong Choi, Hong Li, Aya McDaniel, and Noriko Takeda have devised online and interactive ways to assist students with mastering the intricacies of a new language (e.g., pronunciation, conversation)—making use of iTunesU, Wimba, SoundCloud, Twitter, Google+, HangOut, BlackBoard, etc. in integrated fashion.²⁸ In French and Italian, Professor Judy Raggi Moore has devised an impressive online and interdisciplinary textbook (as part of her “Italian Virtual Class”) that allows for, in her words, “language immersion through cultural immersion, utilizing a cohesive, chronologically sequential content development, where technology offers

²⁷ Gillmore, Dan. 2008. *Principles for a New Media Literacy*. Berkman Center for Internet and Society at Harvard University. http://cyber.law.harvard.edu/sites/cyber.law.harvard.edu/files/Principles%20for%20a%20New%20Media%20Literacy_MR.pdf.

²⁸ See also Emory College Language Center, Emory Colleges of Arts and Sciences. 2013. “Technology Spotlight.” http://languagecenter.emory.edu/news_events/technology_spotlight.html.

systematic forays into the authentic without ever replacing the main structure of the course or becoming the course itself.”²⁹ The pedagogical push is not limited to the Languages, of course. In Religion, for example, Professor Bobbi Patterson has her students create blogs that integrate media components, while in his class on Islam and popular culture, Professor Jim Hoesterey has his students launch a blog campaign to recast American patriotism to include Muslim histories. In Sociology, Professors Tracy Scott and Irene Browne have incorporated into the required methods course, for some five years now, an ongoing and representative survey of Emory undergraduates and their usage of Facebook and other social media, with students in the course executing and analyzing the survey.

A number of programs and departments have likewise developed courses that address DS & NM in substantive terms—thereby complementing and augmenting the pedagogical approach. Perhaps the best example of this is found in the Media Studies Minor and the newly proposed Media Studies Major. As noted in the proposal for the new major:

We cannot deny the pervasiveness of mass media, from print, photography, film, radio and broadcast television to Twitter, Facebook and the many other forms of constantly shifting Internet culture in the contemporary landscape, shaping the course of global history as well as the daily routines of individual lives. Our students interact with these platforms multiple times a day; unless they have taken courses in the minor, they have not been taught to think systematically about the workings and meanings of these systems and their manifold cultural impact across the globe.³⁰

Both the Media Studies Minor and Major address such teaching of critical skills by way of extant courses that span multiple departments—courses that address theory and history

²⁹ See also Judy Raggi Moore. 2013. *I.V.C. Chiavi di Lettura: Viaggio Attraverso la Cultura e la Lingua Italiana*. <http://www.italianvirtualclass.com/index.php>.

³⁰ “Proposal for a Major in Media Studies in Emory College.” October 10, 2013. Submitted by Matthew H. Bernstein, Chair and DUS, Department of Film and Media Studies.

relevant to DS & NM, the socio-cultural aspects of DS & NM, as well as creative efforts involving DS & NM (i.e., “media making”). The Media Studies Major and Minor are primarily associated with the Film & Media Studies Department—where courses on the history of entertainment media (film, TV, global media, as in FILM 403, *The Biz*), diverse approaches to media studies (FILM/IDS 204, *Introduction to Media Studies*), national cinemas, genres, and the *History of American Television* (FILM 356) have been joined by courses created by new hires, such as Professors Amy Aidman (FILM 390, *Children and the Media*), Dan Reynolds (FILM 408, *Media, Time and Space*) and Tanine Allison (FILM 208, *Digital Media and Culture*; FILM 380, *Video Games*). Yet, both the minor and major also draw on relevant courses in American Studies, Anthropology (ANT 341, *Communication, Technology and Culture*; ANT 342, *Media and Culture*), German (GER 340, *German Cinema*), Interdisciplinary Studies (IDS 216, *Visual Culture*; IDS 385, *Imaging Bodies, Screening Lives*), Japanese (JPN 378WR, *Postwar Japan through Its Media*), Journalism (JRNL 201, *News Reporting and Writing*; JRNL 260, *News Literacy in a Digital Age*; JRNL 311, *Digital Media*; JRNL 450, *News Video*), Political Science (POLS 386, *Guerilla Political Videography*; POLS 490, *Political Communication*), Religion (REL 369, *Religion and Film*; REL 370, *Special Topics: Islam, Media & Pop Culture*), Russian (RUSS 373, *Russian Avant-Garde*), and Sociology (SOC 190, *Advertising—The Magic System*; SOC 325, *Sociology of Film*; SOC 327, *Language and Symbols of Media*; SOC 343, *Mass Media and Social Influences*; SOC 443s, *Sociology of Music*). Hence, the Media Studies Minor / Major clearly tap into the burgeoning number of courses dealing with DS & NM, showing that a critical mass has already been reached at ECAS.

The Media Studies Major / Minor point to the current curricular emphasis on DS & NM found at Emory College, and they are complemented significantly by other efforts across the College. These efforts include the classes and research by those faculty mentioned before who are engaged in digital approaches to spatialization—such as Professors Sandra Blakely (Classics), Sharon Strocchia, Thomas Rogers, Allen Tullos (History), Bonna Wescoat, Sarah McPhee (Art History), Anthony Martin and Tracy Yandle (Environmental Sciences). They also include efforts in the sciences—such as data mining of user generated content and topic modeling emphasized by Professor Eugene Agichtein of Math and Computer Science. While Film and Media Studies offers courses in digital filmmaking (both fiction and documentary), those offerings are likewise complemented by other efforts in the performing arts that make use of digital technology—such as those by Professors Gregory Catellier, Brent Glenn, Lisa Paulsen, and Leslie Taylor (Dance and Theater). Finally, while Film and Media Studies has begun offering graduate seminars on digital media (such as Professor Dan Reynolds’ Platforms and Apparatuses and Problems of Media Authorship), these are not yet integrated into relevant graduate programs existing now: the Laney Graduate School’s Certificate in Digital Scholarship and Media Studies and the Emory Writing Program’s³¹ “A Domain of One’s Own” (both of which we discuss below). In short, the critical mass of DS & NM courses and efforts is even larger than casual observation would likely suggest—with the Media Studies Major and Minor including much of this mass but by no means all of it.

³¹ “A Domain of One’s Own” is affiliated with the Emory Writing Program (see <http://domain.emory.edu/Faculty/domain-basics/anatomy-of-a-domain.html>). Its new Project Manager is David Morgen (see <http://davidmorgen.org>).

2.3. ECAS Curriculum: Recommendations

The committee believes there are several ways to give coherence to the critical mass of DS & NM curriculum at Emory. We start first with the undergraduate curriculum.

2.3.1 The Undergraduate Curriculum

Recommendation #1: We recommend that ECAS majors of all types emphasize relevant “tools” related to DS & NM. On the one hand, such an emphasis could involve a requirement that students in all majors develop familiarity with particular software. That type of emphasis is already happening to a certain extent. For example, some of the social sciences require that their majors develop proficiency with statistical software packages (such as SPSS or STATA)—a requirement that the new Quantitative Social Science major endorses as well with its use of R Software.³² Likewise, those involved in more humanities-oriented majors or minors likewise have the opportunity to become adept at software used in creative endeavors, such as Adobe Premiere—digital editing software for filmmakers being incorporated in courses offered by Film & Media Studies, IDS / ILA, and Journalism, among others.³³ Of course, given the emphasis on “Digital Humanities,” in general,³⁴ and at Emory,³⁵ there are likely a number of software options

³² Emory, Institute for Quantitative Theory and Methods, Emory Colleges of Arts and Sciences. 2013. “R Software.” <http://quantitative.emory.edu/resources/r-resources.html>.

³³ See Whitaker, Emily. 2011. “Emory to Offer Film Editing Resource.” *Emory Wheel* February 10. <http://www.emorywheel.com/archive/detail.php?n=29327>.

³⁴ See (a) Gold, Matthew K., Editor. 2012. *Debates in the Digital Humanities*. Minneapolis, MN: University of Minnesota Press. (b) Jockers, Matthew L. and David Mimno. 2013. “Significant Themes in 19th-Century Literature.” *Poetics: Journal of Empirical Research on Culture, the Media and the Arts* 41: 750-659. (c) Tangherlini, Timothy R. and Peter Leonard. 2013. “Trawling in the Sea of the Great Unread: Sub-Corpus Topic Modeling and Humanities Research.” *Poetics: Journal of Empirical Research on Culture, the Media and the Arts* 41: 725-749.

³⁵ Emory Robert Woodruff Library. 2013. Digital Humanities. http://guides.main.library.emory.edu/digital_humanities.

available for majors in those areas—including the already mentioned GIS, as addressed by Michael Page’s long-running course, Cartography and GIS (ENVS 250). On the other hand, we also think that an emphasis on code writing / programming itself is valuable. That skill would, for instance, allow students to create their own Digital Apps—which, in turn, would prepare them for an emergent and dynamic field of work that, while having its own challenges, is also conducive to entrepreneurialism and freelance employment.³⁶ The Mathematics & Computer Science Department currently does not have the capacity to offer the specialty/applied courses for non-Computer Science majors that would most benefit DS & NM goals. In particular, Computer Science would like to offer a sequence of courses in Video Game Design (which requires basic programming skills, as well as specialized skills for 3D modeling, agent programming, physics simulation, and story-telling). Additionally, Math & CS would like to offer courses in computational text analysis and digital humanities, specialized for the humanities majors (not graduate Computer Science students). These courses would dovetail with DS & NM expertise elsewhere in ECAS, but they would require sufficient CS faculty to be able to offer these electives/service courses.

A systematic emphasis on DS & NM tools would likely not be difficult to implement in the ECAS curriculum. For the many majors / minors already having such an emphasis (e.g., required familiarity and competency with particular software), all that would remain for them is acknowledgement and promotion of this aspect of their programmatic element(s). For those majors / minors lacking such an emphasis, they could consult with the Dean’s Office in identifying and crafting such an emphasis. This should

³⁶ Bergvall-Kåreborn, Birgitta and Debra Howcraft. 2013. “‘The Future’s Bright, the Future’s Mobile’: A Study of Apple and Google Mobile Application Developers.” *Work, Employment and Society* 27: 964-981.

not be challenging at all, particularly given the bodies on campus that could serve as resources in this process of consultation—such as the new Emory Center for Digital Scholarship, the Emory College Language Center, the Emory Writing Program, Robert Woodruff Library, and University Technology Services (UTS). Once each major has established its own emphasis on DS & NM tools, this emphasis could, in turn, be addressed and evaluated in annual reports, as well as in the external reviews of departments and programs.

In short, this first recommendation takes into account a basic shift facing our undergraduates: Whereas resumes were once enriched by listing expertise in such things as Microsoft Office, resumes of the present and near future will be enriched by listing expertise in DS & NM. That point was already made in Section 1.1, when quoting the Digital Studies Program at the University of Wisconsin at Madison, where it linked digital studies and 21st century careers. That point was likewise made in a recent *Forbes* publication, when quoting the president of a staffing agency:

As a digital creative talent agency, we're fortunate to have visibility across every industry when it comes to creative and marketing functions, which means we've watched technology evolve over the past 25 years in business and we anticipate a continuation of that rapid evolution over the next decade. Some specific skills that seem likely to increase in popularity are HTML5, responsive design, user experience, and anything related to mobile, as we become more and more attached to our mobile devices. As PCs merge into tablets and smartphones, the ability to create content, design and develop for a wide variety of screens will be critical for jobseekers. Candidates with strong technical skills and equally strong communication skills will rise above the pack and have the best shot at new opportunities as they arise.³⁷

³⁷ Henderson, J. Maureen. 2012. "The Critical Skills You Need to Succeed in the Job Market of 2020." *Forbes* September 12th. <http://www.forbes.com/sites/jmaureenhenderson/2012/09/12/here-are-the-skills-you-need-to-succeed-in-the-job-market-of-the-future/>.

Explicitly making such tools a part of majors and minors (and publicly touting this emphasis) would bring some coherence to the flurry of activity currently found in the ECAS curriculum.

Recommendation #2: Given the extent to which students in all majors are turning to online sources, we recommend that “new media literacy” be incorporated into the curriculum so that our undergraduates develop the skills to evaluate critically the information they encounter online.³⁸ A simple way to do so would be via many, if not most, freshman seminars—both with seminars devoted specifically to the topic, as well as those seminars that include a new media literacy component. Regarding the latter option, such efforts could “piggyback” on what the Quality Enhancement Plan (QEP) Committee is proposing.³⁹ In particular, in addressing the nature of “evidence,” that committee has laid out three components targeting incoming freshman: (1) an online orientation to the nature of evidence using six short videos, which address general foundational issues, as well as particular issues of evidence, in the humanities, social sciences, natural sciences, and interdisciplinary approaches; (2) enhanced classroom discussion of evidence in freshman seminars, supported by a QEP rubric that can be adapted by each faculty member leading seminars; and (3) the extracurricular Passport to Evidence in Action program for hands-on experience with evidence. Given that the QEP Committee is also concerned with good and bad evidence found online, there should be a natural synergy between the components they propose and our push for new media literacy. To that end, in addition to drawing upon QEP components, we expect that faculty conducting

³⁸ See, for example, Lim, Sook. 2009. “How and Why Do College Students Use Wikipedia?” *Journal of the American Society for Information Science and Technology* 60: 2189-2202.

³⁹ Emory Office of Institutional Research, Planning and Effectiveness. 2013. Quality Enhancement Plan. <http://www.oirpe.emory.edu/QEP/index.html>.

freshman seminars of all types could also turn to subject librarians when formulating a new media literacy component. Moreover, they could participate in the meetings of the ongoing faculty / staff / graduate student group devoted to Critical Media Literacy, which provides a place to discuss and formulate changing standards of media literacy in the light of new technologies.

We also suggest that regular courses (i.e., non-freshman seminars) emphasizing new media literacy be incorporated into the General Education Requirements. We are hesitant to recommend that all undergraduates be required to take such a course—particularly as that would place enormous burdens on the departments / programs that offer those courses. Instead, we see such media literacy courses as entailing one of several ways to fulfill a designated area within the General Education Requirements (GER). Such courses could be part of the Humanities, Arts and Performance (HAP) area or the History, Society and Culture (HSC) area—but given the multidisciplinary nature of DS & NM, we would not be surprised if some departments / programs pitched a new media literacy course for other designated areas in the GER. Note that a number of such courses are already on the books—including Introduction to Media Studies (FILM 204), Digital Media and Culture (FILM 208), News Literacy in a Digital Age (JRNL 260), Children and the Media (FILM 390), and Media and Culture (ANT 385). Note also that, by incorporating such courses into the GER in such a fashion, this curricular change only requires that a given course be approved by the Educational Policy Committee as counting towards a fulfillment of a designated area in the GER. Finally, note that the previously mentioned group—the Critical Media Literacy Group—could serve as an intellectual resource for faculty seeking to construct a course that emphasizes “new media

literacy.” The Critical Media Literacy Group—an interdisciplinary group of faculty, staff, and graduate students—has for the past five years been a focal point for seminars and events related to this topic, as well as a consistent voice since 2009 regarding the pressing need for integration of media literacy into the undergraduate curriculum, as part of fostering the kind of engaged citizenship that is envisioned within Emory's mission statement.⁴⁰

By way of both freshmen seminars and regular courses, the exposure of Emory undergraduates to issues related to new media literacy would equip them not only in a scholarly sense (e.g., development of evidentiary standards), it would also help them become well-informed and critically sophisticated citizens. Indeed, the Critical Media Literacy Group at Emory once summarized the need as follows:

Critical Media Literacy has been described by Kellner and Share (2007) as “one of the many literacies that students need in the twenty-first century to participate more effectively in the democratic process.” Critical Media Literacy skills include the skills for analyzing, evaluating, and critically reflecting on both (a) the politics of communication and representation and (b) the implications of media environments and media use on our lives and our worlds. Following debates around critical media literacy at the national and international levels, the CML group at Emory takes a two-pronged approach, holding that to effectively contribute to the cultivation of engaged citizenship, critical media literacy should be taught as both a specialist subject and integrated within the context of existing subjects.

Recommendation #3: In making the above curricular recommendations regarding digital tools and new media literacy, the DS & NM Committee also spent considerable time discussing the curricular changes brought about by the closing of

⁴⁰ Examples of this work include participation in two Knowledge Futures symposia (2010 and 2011) and a CFDE FIT Grant for developing curriculum materials and speaker events on “Navigating Media Environments and Media Futures” (co-authored and awarded jointly in 2010 to Debra Vidali, Amy Aidman, Sheila Tefft, Sissel McCarthy, and Eddy Von Mueller). See also www.emory.edu/ACAD_EXCHANGE/2011/spring/lead.html http://www.emory.edu/ACAD_EXCHANGE/2011/spring/aidman.html (*The Academic Exchange*, Spring 2011).

several departments as well as the Journalism Program.⁴¹ *In particular, the committee uniformly recommends that, in pushing forward with ways to enhance the DS & NM aspects of the ECAS curriculum, it would be wise to retain classes that already have brought about such enhancement—by that, we mean Journalism classes.*

Because this report, regrettably, is being submitted several months late, the committee lost the opportunity to provide timely advice to the Dean and pertinent leadership to the College regarding the future of Journalism courses in both the short and long run. In that vacuum, faculty have been forced to make random and disconnected decisions about future Journalism courses, the effect of which has been to reduce Journalism's presence much more severely than the committee had agreed to recommend, to eliminate for the foreseeable future all but one of the digital journalism courses the committee favored the most, and to atomize the courses in ways the committee felt would be detrimental to students interested in Journalism.

That being said, we still feel it important to put forth in this report the case for Journalism that the committee was prepared to make before these changes took place, and to highlight the utility and contribution the Journalism courses offer. This is because we have found that the Journalism Program, in addition to requiring that students take its ever-evolving Digital Media course, has steadily and fully woven digital awareness, practice (and, appropriately, both enthusiasm and wariness) throughout its curriculum.

From the program's introductory writing course all the way through its 400-level required and elective courses, classroom instruction and assignments have been adapted to include, for example, teaching computational journalism through data mining and

⁴¹ Forman, Robin. 2012. Letter to the Emory College Community. <http://news.emory.edu/special/EmoryCollegePlan/ECASDeanLetter.pdf>.

analysis; multi-track digital audio recording, editing and podcast production; video creation for multi-platform presentations; news literacy in the digital age; Twitter, website and Facebook creation; reporting and writing spot news and long-form nonfiction on the iPad; the evolution and survival of long-form journalism in an increasingly nano world, and the escalating ethical challenges posed by all of these, especially when propelled by social media.

In these courses, Journalism students are taught not merely how to be reactive to news but, more importantly, how to be reflective about the reporting and writing of it. The program brings to the classroom a profound emphasis on the unmatched importance of journalism's genome, primary evidence. Among the required courses, the introductory reporting/research and writing course leads to the advanced reporting/research and writing course, which quickly leads to the specialized Digital Media course, a Journalism History & Ethics course, Communication Law and the internship course. The course on News Literacy in the Digital Age, as well as the popular freshman seminars that Journalism faculty members have created, work in tandem with the required and elective courses to immerse students in understanding the role and responsibility of journalism today.

After the introductory course, the doors open to elective courses aligned in a sensible and unified fashion: magazine writing, news video, investigative reporting and computational journalism, science writing, religion writing, arts writing, business writing and the Civil Rights Cold Case course. These are essential and vital (and inexpensive) courses that we believe Emory College should continue to offer students in a consistent, connected plan. They should remain bound together.

In our committee, which was formed in the aftermath of the Dean's decision to close the Journalism Program after the 2013-14 academic year, there was discussion about moving Journalism courses into the Department of Film & Media Studies as that department applied to upgrade the Media Studies Minor to a Major. That idea has some appeal so long as it builds in core reporting and writing courses, the news literacy course (as a key part of media literacy), the investigative reporting and computational journalism course (in connection with documentary filmmaking and, elsewhere, courses on research methods), the journalism ethics course, news video and other Journalism offerings. It is the committee's recommendation that many (if not most) of the courses currently taught in the Journalism Program remain as part of an academic whole that can preserve the high quality of instruction that grows from their cohesiveness—particularly those dealing with news literacy, investigative and computational journalism, the Civil Rights cold cases, and journalism ethics. Such courses clearly address the digital tools and new media literacy that we emphasize in our other recommendations above.

Our committee chair informed the Dean last Summer that we were prepared to make the above observations and recommendations to him upon completion of our final report. But with delays in the this committee's final report, and with deadlines pressing for teaching plans for Fall 2014, faculty from Journalism, ILA/IDS, Film & Media Studies and Creative Writing were forced in the early part of this year to hastily develop plans for Journalism that unfortunately provide none of the cohesion in Journalism that the committee had thought was so essential.

The two professors whose contracts extend two years past the closing of the Journalism Program this Spring will move to different departments: one to the Institute

for Liberal Arts/Interdisciplinary Studies, the other to the Creative Writing Program.

Over the next two years, two Journalism courses will be taught with reduced frequency in Film and Media Studies (News Reporting and Writing, and Journalism History and Ethics); one Journalism course will be taught in IDS (Health and Science Writing), along with a freshman seminar that originated in Journalism; the Civil Rights Cold Case class will be housed in African-American Studies; and a variation of the Journalism Program's magazine writing course will be taught in Creative Writing.

The Journalism courses that the DS & NM Committee found most worthy of continuing at Emory after the Journalism Program closes are the following, because of their impressive use of digital media and/or their instruction in the role, the ethics, the standards and/or the applications of digital media in journalism: News Writing and Reporting (JRNL 201), News Literacy in a Digital Age (JRNL 260), Digital Media (JRNL 311), Journalism History and Ethics (JRNL 430), News Video (JRNL 450), Special Topics: Investigative Reporting and Computational Journalism / Emory Civil Rights Cold Case Project (both JRNL 488), and Internship in Journalism (JRNL 496). However, the College's current plan, beginning Fall 2014, represents a massive reduction in courses, from 17 or 18 to four or five courses taught less frequently than in the past. The College plan abandons the cohesion among Journalism courses that the committee liked so much and creates an atomization of courses that the committee strongly urged against. The College plan for the next two years, by eliminating courses in Digital Media, News Literacy, Investigative Reporting and Computational Journalism, and more, terminates all but two of the courses the Digital Studies and New Media Committee specifically cited among the College's greatest classroom assets.

As it became apparent that the Emory course in Investigative Reporting and Computational Journalism would not be supported in the future, four other area institutions of higher learning (Georgia State University, the University of Georgia, Morehouse College and Clark-Atlanta University) created a partnership with *The Atlanta Journal-Constitution* and WSB to create a very similar course that will be taught by our current senior lecturer, Prof. David Armstrong, whose Emory contract expires at the end of the 2013-14 academic year. This collaborative investigative reporting initiative, called the Georgia News Lab (GNL),⁴² which starts classes at Georgia State University in August 2014, will teach students to use the same wide mix of digital investigative tools and technologies that Emory students have received since our course began in 2011. Those include instruction in proprietary databases, open source and proprietary apps for data extraction, cleaning, analysis and visualization, content management and information sharing systems, security tools, and professional-grade software for audio and video editing. Georgia News Lab students will receive instruction in a full range of social media tools and platforms and will publish their work on the full array of technology platforms available through WSB and the *AJC*.⁴³ Emory students may seek to take the course. But priority will be given to students from the four founding institutions.

⁴² The Georgia News Lab recently secured a nationally-competitive grant from the Online News Association, which is the fastest growing and, perhaps, the largest news trade association in the US. See <http://tinyurl.com/ONAGrant>.

⁴³ GNL will also bring from each of its member institutions their own expertise in documentary reporting; videography; photojournalism; data journalism; multimedia storytelling; records access; digital reporting technologies; and writing for print, broadcast and online. The resulting course, which will involve a mix of classroom and online instruction, will be similar to Emory's original course—the first semester will offer intensive training in how to use documents, databases, digital tools and interviews; the second semester will apply those lessons to an investigative project in which students will be working with *AJC* and WSB reporters.

2.3.2. The Graduate Curriculum

We also recommend that ECAS consult with Emory Laney Graduate School (LGS) to ensure the graduate curriculum can be both agile and attuned to developments wrought by digital studies and new media. Our specific recommendations here somewhat parallel those made above for the undergraduate curriculum.

Recommendation #4: Although we expect that all Emory doctoral programs will impart critical skills to their graduate students in the course of everyday instruction—such as those evaluative skills associated with new media literacy—there is no guarantee this instruction will also provide graduate students with the particular skills of locating and navigating the voluminous resources available online.⁴⁴ To counter the possibility of a gap in instruction regarding new media skills, we recommend that all graduate programs make systematic use of their subject librarians. These highly skilled individuals are well equipped for introducing graduate students to search engines and databases pertinent to their respective disciplines, as well as for instructing them on how to evaluate the centrality and reputation of various sources (e.g., academic journals). This would be a straightforward and efficient way to equip all graduate students. Furthermore, if done for new graduate students in settings like orientation sessions or required first-year courses, then this will also show these students that they can later draw on the expertise and resources of the subject librarians in targeted and specific fashion, as when graduate students are developing specific projects of their own. The implementation of

⁴⁴ See, for example, Kingsley, Karl, Gillian M. Galbraith, Matthew Herring, Eva Stowers, Tanis Stewart and Karla V. Kingsley. 2011. “Why Not Just Google It? An Assessment of Information Literacy Skills in a Biomedical Science Curriculum.” *BMC Education* 11 17. <http://www.biomedcentral.com/1472-6920/11/17>.

this could be reported in both the end-of-the-year reports by graduate programs, as well as in departmental reports for external review.

Recommendation #5: Emory has a tradition of training its graduate students to be teachers. This is evident, for instance, in the ongoing Teacher Assistant Training and Teaching Opportunity (TATTO) program offered by the LGS, as well as by graduate program courses devoted to graduate students and their teaching abilities.⁴⁵ Yet, given the accelerated push towards digital classrooms and digital pedagogy, the ground is shifting under the feet of our graduate students.⁴⁶ This matters because, in the tight academic market of the present, those possessing cutting-edge skills in terms of teaching may have a competitive advantage. *We thus recommend that the first stage of the TATTO program (i.e., the summer course) include a component addressing the use of digital tools in teaching.* Emory Center for Digital Scholarship would likely be an important resource in devising this component—particularly given its initiative in Technology, Pedagogy and Curriculum. This (formerly ECIT) initiative is “designed to empower Emory's graduate students with the knowledge of how to effectively use technologies such as wikis, blogs, digital video, iTunes and more in their own teaching.”⁴⁷ This recommendation would involve more than a single informational session (as was the case in Summer 2013) but, instead, would directly address digital pedagogy in some applied fashion.

⁴⁵ Emory Laney Graduate School. 2013. “Teacher Assistant and Training Opportunity (TATTO).” http://www.gs.emory.edu/professional_development/tatto.html.

⁴⁶ See, for example, (a) Beetham, Helen and Rhona Sharpe. 2013. “Forward to the Second Edition.” Pages xvi-xviii in *Rethinking Pedagogy for a Digital Age: Designing for a 21st Century*. London: Routledge. (b) Raschke, Carl A. 2003. *The Digital Revolution and the Coming of the Postmodern University*. London: RoutledgeFalmer.

⁴⁷ Emory's Center for Interactive Teaching (ECIT), Office of Information Technology. 2013. “Technology, Pedagogy and Curriculum (TPC).” <http://ecit.emory.edu/programs/tpc/index.html>. With the reorganization described below in Section 3.2, ECIT is now part of Emory Center for Digital Scholarship.

Recommendation #6. While we would hope that all graduate programs add a digital component to their respective teaching courses for graduate students, we understand that some would find this a challenging to implement immediately. *Consequently, we also recommend that Emory graduate students augment their skills in digital pedagogy by participating in at least one training session within or beyond their graduate program.* The former could be offered by graduate programs that possess faculty who are well versed in the topic, the latter could flow from the bounty of options currently available at Emory. These latter options include the numerous seminars offered by Emory’s Center for Interactive Teaching during the academic year (e.g., online learning and teaching, podcasting, the iPad as a teaching tool)⁴⁸—which will now be housed in the new Emory Center for Digital Scholarship⁴⁹—as well as the Emory Writing Program’s “Domain of One’s Own”—which has as its goals equipping graduate students and faculty to teach writing in the undergraduate classroom while also imparting to their undergraduate students those skills associated with online / digital formats and resources.⁵⁰ As noted in the Program’s 2014 Call for Proposals: “To teach as part of Domain of One’s Own you do not need to have any prior experience with web design or digital authoring, nor does your course have to be entirely devoted to multimodal skills or content. All that is required for a class to qualify as a part of Domain is the completion of at least one unique multimedia-composing project designed for web publication. Participation is not limited by discipline or course level.”

⁴⁸ Emory’s Center for Interactive Teaching, Office of Information Technology. 2013. “Technology.” <http://ecit.emory.edu/programs/tpc/technology.html>.

⁴⁹ Emory Center for Digital Scholarship. 2013. “About the Emory Center for Digital Scholarship.” <http://digitalscholarship.emory.edu/about/index.html>.

⁵⁰ Department of English, Emory College of Arts and Sciences. 2013. “Domain of One’s Own.” http://english.emory.edu/writing_program/domain/.

Recommendation #7. We also recommend that such efforts in gaining skills in digital pedagogy figure in the annual evaluation of graduate students who apply for the Dean’s Teaching Fellowship—thereby making systematic the occasional attention given to DTF applicants who propose to offer technology enhanced classes.⁵¹ We also hope these efforts would make their way into the teaching statements / portfolios that graduate students prepare for the job market. Finally, in line with the results of a recent study, we expect that an emphasis on digital pedagogy for our graduate students would not detract from their (digital) research efforts but, instead, would enhance them.⁵²

Recommendation #8: DS & NM are acquiring increasing prominence and importance, both within and beyond academia. A recent book by Matthew Jockers, *Macroanalysis: Digital Methods and Literary History*, gives but one example of this academic trend.⁵³ An Assistant Professor in the English Department at University of Nebraska-Lincoln, Jockers moves beyond “close reading” of a few texts or passages by wedding a new type of literary analysis with the computationally driven investigation of large corpuses of digitized texts, thereby offering new and exciting ways to plumb patterns and questions associated with literary genres and canons and with authorial careers. His approach obviously does not negate or replace traditional models of

⁵¹ Emory Laney Graduate School. 2013. *Dean’s Teaching Fellowship Guidelines for the 2014-2015 Fellowship Year*. http://www.gs.emory.edu/uploads/Fellowships/DTF-Guidelines_Oct-20131.pdf.

⁵² Feldon, David F., James Peugh, Briana E. Timmerman, Michelle A. Maher, Melissa Hurst, Denise Strickland, Joanna A. Gilmore, Cindy Stieglmeyer. 2011. “Graduate Students’ Teaching Experiences Improve Their Methodological Research Skills.” *Science* 333: 1037-1039.

⁵³ Jockers, Matthew. 2013. *Macroanalysis: Digital Methods and Literary History*. Urbana, IL: University of Illinois Press.

scholarship in English, but it does show the expansion of what is possible in that discipline (and in related disciplines, as well).⁵⁴

Beyond academia, applied research is oriented increasingly to such things as “informatics” (which allow tracking of healthcare delivery and outcomes, for instance⁵⁵) and “big data” (which allow tracking of consumer preferences and behaviors, for example⁵⁶). While various observers have critically noted the downsides to this shift in orientation,⁵⁷ we note here that it has created additional job opportunities for newly minted PhDs. Some of these jobs are situated closely to academia,⁵⁸ whereas other jobs are located in applied settings like Google and the like.⁵⁹ This matters in at least two ways. First, a recent commission report finds that half of all new PhDs secure jobs in business settings.⁶⁰ Thus, applied jobs in DS & NM could prove to be attractive destinations. Second, new PhDs in the humanities are the least likely to take such applied jobs (when compared to the natural sciences and social sciences), but they also face an

⁵⁴ See also (a) Gold, Matthew K., Editor. 2012. *Debates in the Digital Humanities*. Minneapolis, MN: University of Minnesota Press. (b) Schreibman, Susan, Ray Siemens and John Unsworth, Editors. 2004. *A Companion to Digital Humanities*. Malden, MA: Blackwell.

⁵⁵ See, for example, Berner, Eta S., Editor. 2014. *Informatics Education in Healthcare*. Springer.

⁵⁶ See, for example, Brown, Brad, Michael Chui and James Manyika. 2011. *Are You Ready for the Era of “Big Data?”* *McKinsley Quarterly* October.

<http://unm2020.unm.edu/knowledgebase/technology-2020/14-are-you-ready-for-the-era-of-big-data-mckinsey-quarterly-11-10.pdf>.

⁵⁷ (a) Scholz, Trebor, Editor. *Digital Labor: The Internet as Playground and Factory*. New York: Routledge. (b) Vaidhyanathan, Siva. *The Googlization of Everything (and Why We Should Worry)*. Berkeley, CA: University of California Press.

⁵⁸ Flanders, Julia. 2012. “Time, Labor and ‘Alternate Careers’ in Digital Humanities Knowledge Work.” Pages 202-308 in *Debates in the Digital Humanities*, edited by Matthew K. Gold. Minneapolis, MN: University of Minnesota Press.

⁵⁹ A casual search of internship and job listings at Google revealed opportunities for those with PhDs in the natural sciences (e.g., computer science, physics) and the social sciences (e.g., psychology, sociology), as well as for those possessing expertise in software development and usage (e.g., R, SAS, GIS).

⁶⁰ Commission on Pathways through Graduate School and Careers. 2012. *Executive Summary*. Educational Testing Services and Council of Graduate Schools.

oversupply of humanities PhDs in the academic marketplace.⁶¹ Consequently, those in the humanities adept at DS & NM may enjoy expanded options beyond academia. As Johanna Drucker has written, “The Google-ization of knowledge is already a reality. Humanists have a huge stake in understanding how this process is occurring and participating in its outcome.”⁶²

Given such developments, Emory graduate students should be equipped with research tools associated with DS & NM. As in our undergraduate recommendation (see Section 2.3.1), we see such “tools” as fairly broad in nature—which could, among other things, include familiarity with statistical software commonly used in a given discipline. Some graduate programs currently are well suited for equipping graduate students with such digital tools. Math & Computer Science is arguably the best example of this, particularly given its faculty members with expertise and ongoing efforts in such things as data mining, information retrieval and text topic modeling—which, among other things, allow them to track and demonstrate important trends via tweets and other social media. Furthermore, there are signs that certain graduate programs in the social sciences are well suited for this equipping. For instance, in History, there are graduate courses dealing with quantitative techniques for data visualization (HIST582A taught by Professor Mark Ravina), digital scholarship and media studies (HIST585-003 taught by Professor Allen Tullos), and there are individuals also involved in digital text analysis and visualization (Sarita Ines Alami, Doctoral Candidate) and GIS and spatialization (Professor Thomas Rogers). Yet, even for such graduate programs, the fast-evolving

⁶¹ (a) Ayers, Edward L. 2009. “Where the Humanities Live.” *Daedalus* Winter: 24-34. (b) Commission on Pathways through Graduate School and Careers. 2012. *Executive Summary*. Educational Testing Services and Council of Graduate Schools.

⁶² Drucker, Johanna. 2005. “Humanities Games and the Market in Digital Futures.” *Criticism* 47: 241-247.

nature of digital studies and new media can make it difficult to remain abreast of current developments. To that end, the Institute for Quantitative Theory and Methods (QTM) can be especially helpful: in addition to offering pre-doctoral fellowships and statistical consultation,⁶³ its annual speaker series excels at bringing to campus scholars who are at the cutting-edge of substantive and methodological developments. For instance, the aforementioned Matthew Jockers presented at QTM in April, as part of the speaker series on “Quantitative Humanities.”⁶⁴

Of course, equipping graduate students with DS & NM research skills need not be limited to one end of the continuum marked by number-crunching and the like. It can extend towards the other end of the continuum, to highly qualitative approaches. This shift toward the more qualitative can be seen, for instance, in the graduate seminar co-taught by Professors Bonna Wescoat and Sarah McPhee “Maps and Modeling: 21st Century Ways of Seeing Ancient Greece and Baroque Rome” (HART593),⁶⁵ the Professor Tullos course mentioned above (HIST585-003, also know as DSNM700), and most especially, it can be seen in Emory faculty who are engaged in research on the experiential aspects of new media—such as Professors Jenny Chio and Debra Vidali in Anthropology, Professors Tanine Allison and Dan Reynolds in Film and Media Studies, and Professor James Hoesterey in Religion. For graduate students with more of a qualitative-leaning, the Graduate Certificate in Digital Scholarship and Media Studies

⁶³ Institute for Quantitative Theory and Methods, Emory Colleges of Arts and Sciences. 2013. “Programs and Academics.” <http://quantitative.emory.edu/programs/index.html>.

⁶⁴ Institute for Quantitative Theory and Methods, Emory Colleges of Arts and Sciences. 2013. “2013-14 Speaker Series: Quantitative Humanities.” <http://quantitative.emory.edu/events/humanities/index.html>.

⁶⁵ For instructive examples of such mapping and analyses, see the website, *SamoThrace: Framing the Mysteries in the Sanctuary of the Great Gods*, which stems from an interdisciplinary research project led by principal investigators Bonna Wescoat, Vicki Hertzberg, Elizabeth Hornor, and Michael Page. <http://samothrace.emory.edu/>.

provides them with a way to develop their expertise in DS & NM, even if their home graduate programs do not emphasize the tools and knowledge base associated with these emergent domains. Indeed, the certificate itself can be earned when students take the foundational seminar in DS & NM (DSMS 700), an internship in digital scholarship, and two approved courses that could be in Anthropology, Comparative Literature, English, Film & Media Studies, Linguistics, Music, Religion, Sociology, and / or Women's and Gender and Sexuality Studies.⁶⁶ Moreover, just as QTM serves as an important resource for quantitative-leaning graduate students and graduate programs, we expect that services and workshops offered by the new Emory Center for Digital Scholarship will bolster the qualitative side of the continuum (e.g., video documentaries) while also offering resources for the quantitative side (e.g., electronic data management).⁶⁷ Indeed, the Center for Digital Scholarship offers a regular schedule of workshops—including some devoted to GIS.⁶⁸

In sum, the critical mass of DS & NM evident at the undergraduate level is also evident at the graduate level. Graduate students adept in digital tools for research will likely be better equipped for both the academic and applied job markets. *We thus recommend that the LGS examine the possibility of requiring all of its graduate students to take one workshop or seminar devoted to the research tools of DS & NM.* Such an effort could be either quantitative or qualitative in nature and could draw on the existing graduate curriculum or could draw upon workshops devised specifically for this

⁶⁶ Emory Laney Graduate School Certificate in Digital Scholarship and Media Studies. 2013. <http://ila.emory.edu/home/assets/documents/DigitalCertificateSummaryElectives2013.pdf>.

⁶⁷ Emory Center for Digital Scholarship. 2013. "Research and Publishing." <http://digitalscholarship.emory.edu/research/index.html>.

⁶⁸ Emory Center for Digital Scholarship. 2014. "Training and Workshops." <http://digitalscholarship.emory.edu/about/training-workshops/>.

requirement—be they workshops by departments / programs or by centers (e.g., Emory Center for Digital Scholarship). This minimal requirement for graduate students, then, would somewhat be similar to the Program for Scholarly Inquiry (PSI) launched by the LGS (which requires work beyond the usual curriculum of a particular department), but it would not be as extensive, as one unit would suffice (rather than the three substantive elements associated with PSI).⁶⁹ While such workshops can be one-time events—and would satisfy our recommendation—we would, of course, see semester-long seminars addressing directly DS & NM tools as likewise satisfying this recommendation.

3. DIGITAL COSTS AND INFRASTRUCTURE AT ECAS

3.1. The Digital Costs

An emphasis on digital studies and new media brings its own costs and needs. Some of these costs are relatively obvious. On the one hand, DS & NM requires hardware of various types—including the desktop and laptops used in scholarship, the smart classrooms that facilitate digital pedagogy, and the iPads at Woodruff Library used by students in such classes as “From Archives to iPads: Investigating the Discourse of Sexuality at Emory” (AMST/IDS 385) and “Advanced News Writing and Reporting (JRNL 301).⁷⁰ On the other hand, DS & NM efforts often rely on proprietary software requiring purchase and / or ongoing licensing payments. Such software on Emory’s campus includes that used for analysis (e.g., MAXQDA, which helps researchers

⁶⁹ Emory Laney Graduate School. 2013. “Program for Scholarly Inquiry.” http://www.gs.emory.edu/professional_development/scholarly_integrity/.

⁷⁰ See (a) Ferrington, Chris, Wayne Morse and Donna Troka. 2013. “Teaching with iPads: Expanding the Classroom One Tablet at a Time.” *Academic Exchange* Supplementary Interactive Edition (Winter). (b) McCarthy, Sissel. 2013. “The iPad and the Listening Post.” *Academic Exchange* Supplementary Interactive Edition (Winter).

structure their analysis of interviews and other qualitative material) and that used for creation (e.g., LogicPro X, which provides musicians with the means for recording and editing their work).

Other costs associated with DS & NM are less obvious but nonetheless as important and pressing. For example, those analyzing text in a fashion comparable to Matthew Jockers require texts that are digitized—which can sometimes be an expensive proposition given the type and quantity of the particular texts. Fortunately, the Lewis H. Beck Center for Electronic Collections—which will now be housed in the Emory Center for Digital Scholarship—has been engaged in targeted digitization efforts for a decade;⁷¹ and as recently reported by the Emory Digital Scholarship Task Force (which is distinct from the DS & NM Committee): “The Library is committed to increasing the amount of digital content that it makes available for reuse, whether for teaching, research, or publication. Annually, \$100K is earmarked for the digitization of library materials through vendor services. In addition, investments in hardware, software, and training will increase the capabilities and output of the Library's digitization staff.”⁷² Nonetheless, the particularities of faculty research efforts (e.g., those interested in content other than that being digitized by the Beck Center) could very well result in the need for digitization of specific texts that outpaces the funds available. Consider, for instance, the costs (and effort) associated with such Emory digitization efforts as *Voyages: The Trans-Atlantic*

⁷¹ See (a) The Beck Center, Emory University <http://beck.library.emory.edu/index.php> and (b) Emory Center for Digital Scholarship. 2013. “About the Emory Center for Digital Scholarship.” <http://digitalscholarship.emory.edu/about/index.html>.

⁷² See Digital Scholarship Task Force Recommendations, Emory University. 2013. <https://wiki.as.emory.edu/display/DSTF/Digital+Scholarship+Task+Force+Recommendations>.

*Slave Trade Database*⁷³ or the ongoing *Lynchings in Georgia Database* project,⁷⁴ and then multiply those costs and efforts by the number of faculty with such needs.

Other costs—which, again, are not always obvious to outsiders—have emerged for those Emory faculty involved in ePublishing. The costs here involve both those at the commencement of such efforts (i.e., start-up) and for any ongoing efforts. The latter are especially important for online journals or magazines⁷⁵ that produce content in sequential fashion (e.g., monthly / quarterly issues, daily postings). *Southern Spaces* is one such journal at Emory. It is like a traditional academic journal in terms of relying upon an editorial board and a rigorous peer-review process, but it stands apart from its print counterparts in terms of its ability to present scholarly work in a multimedia, if not interactive, fashion—a capability that is especially valuable for its substantive foci (e.g., music in the South, evolving geographies).⁷⁶ Less concerned with multimedia presentation and more concerned with providing an alternative to rigid intellectual dogma, *nonsite.org* is another online journal at Emory—a rigorous, peer-reviewed journal addressing cutting edge issues and concerns in the humanities.⁷⁷ As its Contributing Editor (Professor Todd Cronan, Art History) notes, “A key advantage of digital publication is the quick turnaround time. While there is still an asynchrony between when

⁷³ Voyages: The Trans-Atlantic Slave Trade Database. 2013.

<http://www.slavevoyages.org/tast/index.faces>.

⁷⁴ Lynchings in Georgia, Emory Center for Digital Scholarship. 2013.

<http://digitalscholarship.emory.edu/projects/project-lynchings-georgia.html>.

⁷⁵ *Religion Dispatches* is one such online magazine. Co-founded by Gary Laderman in Religion, and partly funded by Emory and the Ford Foundation, this magazine is now housed at the USC Annenberg. See (a) Justice, Elaine. 2010. “*Religion Dispatches* Online Magazine Announces Enhanced Site.” Emory University News Release.

<http://shared.web.emory.edu/emory/news/releases/2010/06/religion-dispatches-online-magazine-announces-enhanced-site.html#.UvJtW3lYX1p>; and (b) *Religion Dispatches* 2013.

<http://www.religiondispatches.org>.

⁷⁶ See *Southern Spaces*, Emory University <http://www.southernspaces.org/about>.

⁷⁷ See *nonsite.org* <http://nonsite.org/about-nonsite>.

we receive a finalized submission and when we publish it, that temporal delay is far less than for any print journal. Once we receive a submission, we can have it reviewed, distributed to the board for comment, proofed, formatted, coded and online within two weeks. Moreover, the digital format affords specific capabilities and freedoms not available to print media: we include streaming video, sound files, hyperlinks, 3D imaging, high quality and zoomable reproductions that are impossible with either print journals or articles accessed via jstor.” Support—technical and financial—for *nonsite.org* has come entirely outside the limits of the institutional setting. All of the coding and maintenance of the site is done by the editors. In the Fall of 2013, *nonsite.org* was recognized by the Mellon Foundation with a multi-year \$92,000 grant to continue its work and outreach in support of two major conferences and online events related to archival materials both at Emory and at the Los Angeles County Museum of Art.⁷⁸

Of course, ongoing costs in ePublishing also stem from revisions and new editions of various eBooks and online texts, such as the frequent updating done to Judy Raggi Moore’s online textbook for the *Italian Virtual Class*.⁷⁹ Fortunately, the Emory Digital Task Force Committee Report is cognizant of these costs, recommending that

⁷⁸ Professor Cronan also reports: “The fifteen members of our editorial board comprise artists, art historians, political scientists, historians of science, philosophers, musicologists, and literary critics. Our board is split down between scholars at the beginning of their careers and senior colleagues. Since its inception in February of 2011, *nonsite.org* has received well over half a million hits. And our numbers are climbing. As of today, the site receives about 1,000 hits a day. Our readership has well exceeded the bounds of any peer-reviewed print journal in the humanities. For perspective on this, consider that the most accessed article—Michel Foucault’s “The Subject and Power” of 1982—at one of the most accessed peer-reviewed journals in the humanities—*Critical Inquiry*—has received about 20,000 views over the past three years. The next most accessed article is around 6,000 views. Similarly, at *Representations*, the most accessed article in their history has received about 9,000 views and the second most around 4,000. One article on *nonsite* has received over 35,000 views in about six months, and five others have surpassed 10,000 views in a year.

⁷⁹ See Judy Raggi Moore. 2013. *I.V.C. Chiavi di Lettura: Viaggio Attraverso la Cultura e la Lingua Italiana*. <http://www.italianvirtualclass.com/index.php>.

Library and UTS support be made available for the start-up costs of certain innovative projects and consultation be made available for addressing and budgeting the ongoing costs. This committee writes, “Part of the planning process should include working with leadership in the relevant unit(s) to include operating costs of the service in their budget proposal, including staffing for frontline support, small ongoing development (patching, e.g.), hardware, and software licensing.”⁸⁰ Such support is especially welcomed given that, with the move towards open access and the like, online journals may become increasingly common.⁸¹ Equally welcomed, then, is the Center for Digital Scholarship. As its Co-Director, Professor Allen Tullos, reports, the Center is part of a larger movement associated with open access, and part of its mission involves helping Emory faculty to launch online journals in fields appropriate to Emory’s intellectual strengths.⁸² Thanks to the cooperation of and support from the Emory Center for Digital Scholarship, Professor Gary Laderman (along with a University of Alabama professor) most recently launched a new online religion magazine, *Sacred Matters*⁸³.

3.2. The Digital Infrastructure

The various costs associated with DS & NM will not disappear, but they can be approached in productive fashion—particularly when support is given to assess, manage

⁸⁰ See Digital Scholarship Task Force Recommendations, Emory University. 2013. <https://wiki.as.emory.edu/display/DSTF/Digital+Scholarship+Task+Force+Recommendations>.

⁸¹ For example, see *The Economist*, 2013. “Free-for-all: Open-Access Scientific Publishing is Gaining Ground.” May 4. <http://www.economist.com/news/science-and-technology/21577035-open-access-scientific-publishing-gaining-ground-free-all>.

⁸² Professor Tullos reports that another aspect of the Center’s mission is to teach graduate students about ePublishing.

⁸³ See (a) Sacred Matters. 2014. “About.” <https://scholarblogs.emory.edu/sacredmatters/about/> (b) Justice, Elaine. 2014. “‘Sacred Matters’ Designed with ‘Nones’ in Mind.” <https://blogs.emory.edu/spiritedthinking/2014/02/03/sacred-matters-designed-with-nones-in-mind/>.

and negotiate those costs. It is particularly heartening, then, to see the DS & NM infrastructure that is coming together at Emory. The recent steps by Senior Vice Provost Richard Mendola to re-organize and coordinate digital support offered by both the Library and University Technology Services—which prompted the formation of the aforementioned Digital Scholarship Task Force—will likely yield a number of dividends. Indeed, the recommendations offered by that task force should make accessing digital support intuitive and inviting—both for faculty and students—while covering the spectrum from research and pedagogy to ePublishing and digital creativity.⁸⁴ The recent establishment of the Emory Center for Digital Scholarship is likewise a laudable development. Offering both an umbrella for and coordination of extent support of DS & NM at Emory (e.g., the Beck Center, the Digital Scholarship Commons, the Electronic Data Center, ECIT),⁸⁵ it also provides much needed research and pedagogical support and serves as a node for a host of recent DS & NM projects (e.g., *Networking the Belfast Group*,⁸⁶ *The Virtual Rome Project*,⁸⁷ *The Battle of Atlanta Project*,⁸⁸ and *The Lynchings in Georgia Database*⁸⁹), while also leading the way in ePublishing as the home of *Southern Spaces*. Another important resource is The Institute for Quantitative Methods (QTM). In addition to its undergraduate curriculum, QTM provides faculty and graduate

⁸⁴ See Digital Scholarship Task Force Recommendations, Emory University. 2013.

<https://wiki.as.emory.edu/display/DSTF/Digital+Scholarship+Task+Force+Recommendations>.

⁸⁵ Emory Center for Digital Scholarship. 2013. “About the Emory Center for Digital Scholarship.” <http://digitalscholarship.emory.edu/about/index.html>.

⁸⁶ *Networking the Belfast Group* Emory Center for Digital Scholarship. 2014. <http://digitalscholarship.emory.edu/projects/project-networking-belfast.html>.

⁸⁷ *Virtual Rome*, Emory Center for Digital Scholarship. 2013. <http://digitalscholarship.emory.edu/projects/project-virtual-rome.html>.

⁸⁸ *The Battle of Atlanta*, Emory Center for Digital Scholarship. 2013. <http://digitalscholarship.emory.edu/projects/project-digital-atlanta-mapping-battle.html>.

⁸⁹ *Lynchings in Georgia*, Emory Center for Digital Scholarship. 2013. <http://digitalscholarship.emory.edu/projects/project-lynchings-georgia.html>.

students with methodological training and workshops that address, not only statistics, but also some of the “big data” techniques associated with digital studies; such support sometimes comes in the form of pre- and post-doctoral fellowships and “skill-building” faculty leaves.⁹⁰ In April 2014, QTM also organized a daylong workshop on “Large Scale Text Analysis Using Topic Modeling,” offered by Professor David Mimno of Cornell University; more workshops such as these are needed. Meanwhile, support for digital pedagogy is to be found at the Emory College Language Center⁹¹—such as its 2013 “Summer Workshop on Geolocative Learning,” which helped bring together spatial technology and apps and place-based instruction—and at the Emory Writing Program via the aforementioned “A Domain’s of One’s Own.”⁹² As for digital creativity, the ECAS Center for Creativity & Arts is well situated to offer support via its CCA Project Grants.⁹³

3.3. The Role of Support Personnel and “Digital Navigators”

We on the DS & NM Committee are pleased with this infrastructure that has cohered at Emory: it has greatly benefitted DS & NM efforts at Emory, and it will continue to do so. As Professor Aya McDaniel (REALC) wrote to the DS & NM Committee, “I wouldn’t be able to use the variety of technology without help from ECIT. And I learned so much from Instructional Summer Institute, which Emory College Language Center organized last summer.” That being said, we also emphasize that is the *people* amidst this infrastructure that ultimately have an impact.

⁹⁰ Institute for Quantitative Methods. 2013. <http://www.quantitative.emory.edu>.

⁹¹ Emory College Language Center. 2013. “About the Emory College Language Center.” http://languagecenter.emory.edu/about_us/index.html.

⁹² Emory Writing Program, Department of English. 2013. “Domain of One’s Own.” http://www.english.emory.edu/writing_program/domain/index.html.

⁹³ Emory Center for Creativity & Arts. 2013. “Grants and Awards.” <http://creativity.emory.edu/grants-awards/project-grants/grant-recipients.html>.

In talking with ECAS faculty and students, DS & NM Committee members have heard that these support personnel are especially important given how highly intensive DS & NM efforts can be. This intensiveness stems from a number of reasons. For instance, the “cutting edge” nature of digital studies and emerging media means that faculty / students who likewise desire to remain cutting edge need often to re-tool their skills and to adapt to new media. Meanwhile, those who are not yet cutting edge, but want to be given notable shifts towards DS & NM in their own disciplines, face the challenge of mastering new materials. Finally, the extensiveness of some DS & NM projects requires grant and funding applications to cover costs not addressed by the Emory infrastructure.

Given such intensiveness, it is not surprising that faculty members mentioned their repeated, if not ongoing, contact with specific support personnel. Consider but a few of the many possible examples: Stephen Bransford (PhD) and Shannon O’Daniel (JD), both of Faculty Services, have played pivotal roles in preparing online courses for Coursera. They also played instrumental roles working with Gary Laderman and Jim Hoesterey to organize and edit a studio interview with Dr. Shaun Casey, Special Advisor to Secretary of State John Kerry. This interview was recently posted on Gary Laderman’s new online religion magazine *Sacred Matters*⁹⁴ (also made possible by Emory Center for Digital Scholarship) and included as a hyperlink in Jim Hoesterey’s related blog essay for *The Immanent Frame*.⁹⁵ Dr. Rob O’Reilly (Coordinator of the Numeric Data Services, Emory Center for Digital Scholarship) has become the “go-to” person for those in the

⁹⁴ “An Interview with Shaun Casey: Religion and Presidential Politics.” *Sacred Matters* <https://scholarblogs.emory.edu/sacredmatters/2014/03/25/an-interview-with-shaun-casey-1/>.

⁹⁵ Hoesterey, James B. 2014. “Faith in Diplomacy.” *The Immanent Frame* <http://blogs.ssrc.org/tif/2014/04/03/faith-in-diplomacy/>.

social sciences who seek access to publicly available datasets and who need assistance in preparing those digital files for analysis. Dr. James Steffen (Woodruff Library) has recently proven adept in helping with video games as it pertains to pedagogy and research. Dr. Michael Page (Emory Center for Digital Scholarship) has provided invaluable assistance and training for GIS and for geo-spatial analysis. By way of ongoing digitization efforts, Frank Jackson (MFA; Art History) has provided needed access to an expanding database of images and their attendant metadata.

This reliance by faculty and students on the numerous support personnel makes sense given a number of reasons, of which we mention four. First, the individuals operating in Emory's digital infrastructure collectively possess a broad range of DS & NM expertise that spans creativity, ePublishing, pedagogy and research. Besides working on Coursera (digital pedagogy), for instance, Dr. Stephen Bransford also assists the Emory community in terms of digital publishing (e.g., support for the creation of eBooks) and digital creativity (e.g., instruction in software for music and film production). Second, they play fundamental roles in the usefulness of certain spaces. For example, the Computing Center at Cox Hall has begun a capital project to renovate and accommodate a wide range of new technology spaces. The new Media Commons at Cox Hall will enable and encourage exploration by centralizing new and emerging technology services and tools in one facility, which also has classrooms. Early planning includes audio recording booth, a gaming suite/instructional lab, a maker space and production spaces. These spaces will be a resource for DS & NM with expert on-site consultation and education, thereby facilitating student access to support personnel. These spaces will also complement others devoted to digital concerns, such as the Emory Center for Digital

Scholarship's small lab in 310 Woodruff Library containing some 8 workstations for students working on long-term projects, with the lab's foci being on such things as digital production and collaboration. GIS, Remote Sensing, 3D, graphic design, and web development.

Third, the term "support personnel" may be somewhat of a misnomer, particularly as some of these individuals engage in their own research and also teach classes—as is the case for Dr. James Steffen, who is the author of the recently published *The Cinema of Sergei Parajanov* (2013, University of Wisconsin Press) and who has taught such Emory courses as Postwar Soviet Cinema (FILM 503). Such blurring of the lines between support personnel and faculty is not unusual: Michael Page (PhD) of the Emory Center for Digital Scholarship is also a joint appointment Lecturer in Environmental Sciences; Brian Croxall (PhD) of Emory Center for Digital Scholarship is a Lecturer in English; Lee Clontz (MS) of Faculty Services has long taught Digital Media (JRNL 311); and Stephen Bransford (PhD) of Faculty Services serves as Adjunct Faculty in Film & Media Studies. While consultation with Emory faculty and students is the norm for these personnel—albeit with such consultation sometimes being extremely involved—these individuals have the potential to serve as collaborators. One such example of this was Dr. involvement of Carole Meyers (who is now at Dartmouth College) in the Graduate Certificate in Digital Scholarship and Media Studies. Thus, these individuals not only enable DS & NM efforts at Emory, they also can offer their own efforts that push forward digital scholarship.

Finally, units at Emory are recognizing the important of hiring Instructional Designers (IDs) to guide and assist faculty. Currently, Goizeuta Business School,

University Technology Services and Candler School of Theology have hired IDs. “What *Instructional Design* has everything to do with is translating pedagogical research and practice into instructional curriculum specifically crafted to produce desired learning outcomes. That said—here’s an important sidebar: Though technology may be helpful in many cases, implementing technology is not the goal of instructional design—good instruction is.”⁹⁶ Our hope is that this Instruction Design community will continue to be seen as a priority and the community will grow, will continue to flourish, and will become an engrained part of the curriculum at ECAS.

Recommendation #9. Our informal conversations with ECAS faculty members also revealed that they would welcome more individuals active in the DS & NM infrastructure; furthermore, while most of these conversations emphasized the need for consultation, some also emphasized the potential for collaboration (both in classrooms and in research). In our committee deliberations, we eventually employed the term “digital navigators” to get at the dualistic character of consultation and collaboration. Although the term is ungainly, it does point to real trend in broader academia towards collaboration between tenure-track faculty and such individuals—something discussed, for instance, by Julie Flanders in reference to digital humanities.⁹⁷ *We thus recommend that ECAS maintain the caliber of “support personnel” who support and make possible DS & NM (particularly “digital navigators”) while also adding to their numbers.* Doing so strikes us as a wise investment that allowing the Emory community to negotiate and mitigate costs associated with DS & NM. Given that a number of these individuals have

⁹⁶ Chapman, Sandy and Patty Cantrell. 2014. “What is an Industrial Designer?” <http://teaching.colostate.edu/tips/tip.cfm?tipid=70>.

⁹⁷ Flanders, Julia. 2012. “Time, Labor and ‘Alternate Careers’ in Digital Humanities Knowledge Work.” Pages 202-308 in *Debates in the Digital Humanities*, edited by Matthew K. Gold. Minneapolis, MN: University of Minnesota Press.

been, and will continue to be, housed within University Technology Services and the Library, it would be prudent for ECAS to consult and coordinate with Vice Provost Richard Mendola in terms of benefitting from these personnel. Beyond that, we note that current and future digital navigators could continue to be housed in existing / emerging ECAS centers and programs—such as the Emory Center for Digital Scholarship, QTM, the Emory Writing Program, and the Emory College Language Center. Finally, we note the possibility that digital navigators could be added to ECAS by way of lecture track positions; indeed, this could provide another type of dualistic individual—not only those experts conversant in digital pedagogy and research, but also those conversant in digital creativity and pedagogy.

4. PRAGMATIC AND LOGISTICAL ISSUES IN DS & NM HIRES

Before turning to the hires themselves, we first feel it necessary to address pragmatic and logistical issues surrounding those hires and, in the process, to make additional recommendations.

4.1. The Search Process

Recommendation # 10. Given the sprawling nature of digital studies and new media, we recommend that each DS & NM search be organized by substantive topics, with an interdisciplinary committee of Emory faculty overseeing each search rather than an individual department or program doing so. Our model here comes from the Mellon funded search for Arts, Science and Technology that occurred during the 2011-2012 academic year. In that search, a committee comprised of Emory faculty from Film and

Media Studies, Mathematics and Computer Science, Music, Psychology and Sociology (1) read carefully through all the applications for this Assistant Professor position; (2) ranked the top applicants; and (3) then consulted with relevant Emory departments regarding their interests in the top-ranked applicants. This resulted in three candidates being brought to campus for interviews—who represented interest from and potential fit with Classics, Film and Media Studies, German Studies, and Theater and Dance—with the eventual hire of Professor Dan Reynolds in Film and Media Studies.

Given that no discipline holds a monopoly on topics related to DS & NM, this type of search process is well suited for capturing a intellectually diverse pool of applicants—a diversity that could be lost if searches were to target only specific departments or programs on campus. That being said, we do suggest that the Dean specify a single department to take the lead in each of the five searches. This will ensure that a number of logistical issues will be addressed—such as ensuring the coordination of campus visits for the leading applicants. The members of the DS & NM Committee are willing to consult with the Dean on both the composition of each search committee and on a viable department leader on each search.

4.2. The Situating and Training of New DS & NM Faculty

The interdisciplinary nature of DS & NM, while stimulating and invigorating, nonetheless raises concerns regarding new hires at Emory, particularly for those individuals who are the early stages of their academic careers. First, there is the real possibility that DS & NM hires could have more in common (substantively and/or methodologically) with like-minded faculty outside of their departments than with their

department colleagues—for instance, if their colleagues remain focused on traditional media rather than new ones. Not only could such a situation complicate the tenure and promotion process, it could also lead to feelings of isolation. Second, while interdisciplinarity is laudable, it still is often the case that young scholars are trained within specific disciplines (if not one discipline) during their doctoral training. Thus, although potentially sharing interests in DS & NM with Emory faculty outside of their own departments (and disciplines), these new hires may face barriers in terms of the specific vocabularies and approaches that mark the various disciplines.

The members of the DS & NM Committee spent much time discussing these particular concerns. Fortunately, recent developments in Emory's DS & NM infrastructure have greatly mitigated the first concern: the newly-created Emory Center for Digital Scholarship can and should serve as a gathering place (both physically and virtually) for DS & NM enthusiasts at Emory. By virtue of its “generalism”—whereby the Center deals with digital creativity, digital publishing, digital pedagogy, and digital research—and by virtue of its ability to bring faculty and students into close contact with the support staff it houses (e.g., ECIT, Numeric Data Services), the Center for Digital Scholarship will foster a community that can offset any isolation that comes from a lack of DS & NM colleagues in one's own department. Furthermore, the Center will also build such a community by serving as a general “hub” or “node” that connects new hires and others to the equally important “specialists” centers and programs—such as the Emory Writing Program and the Emory College Language Center (digital pedagogy) and the Fox Center for Humanistic Inquiry and the Institute for Quantitative Theory and Methods (digital research).

Recommendation # 11. Emory’s digital infrastructure clearly addresses the first concern raised above, but it only addresses the second concern in an informal fashion rather than a systematic one. That is, new hires in DS & NM would still be required to work their way past disciplinary boundaries by way of conversations and meetings. *Thus, the members of the DS & NM Committee recommend the following: All new DS & NM hires should begin their time at Emory with a semester of training while housed at the Emory Center for Digital Scholarship.* This training would target the augmenting of the current DS & NM skills of new hires by exposing them to skills beyond their current purview.

This would be similar to the training that previously occurred for post-doctoral fellows associated with the Digital Scholarship Commons (DiSC)—which was formerly associated with Woodruff Library, but is now folded into the Center for Digital Scholarship.⁹⁸ As noted at its inception: “The goal was to discover what makes a digital humanities program vibrant, interdisciplinary, and financially sustainable; to determine how scholars from all disciplines can be brought into the library; to explore a hybrid organizational model for sustaining DiSC; to explore new ways of leveraging the library’s collections; and to devise a plan to build librarians’ skills so that they keep pace with the evolving research needs of the twenty-first century scholar.”⁹⁹ Yet, as Vice Provost Richard Mendola noted in one conversation, that training sometimes equipped post-doctoral fellows with a host of skills that they could take with them upon their departure from Emory. In contrast, the training of new hires in DS & NM would be an

⁹⁸ Williams, Kimber. 2013. “Digital Scholarship Under New Umbrella.” http://news.emory.edu/stories/2013/06/er_digital_scholarship_library/campus.html.

⁹⁹ Smith, Joan A. and Rick Luce. 2011. “DiSC: A Digital Scholarship Commons.” <http://www.cni.org/topics/scholarly-communication/disc/>.

investment that would likely remain at Emory—provided that the new hires negotiate the tenure process (which, hopefully, this training would facilitate in some capacity)—and this training would benefit from the experts already in place at the Center for Digital Scholarship, many of whom also worked with the DiSC postdoctoral fellows.

In sum, several advantages would easily follow from this digital training of new hires. First, it would provide them with an interdisciplinary repertoire of skills and capabilities in DS & NM. Second, that repertoire, in turn, would make more fluid (if not eliminate) disciplinary boundaries that could stand in the way of conversing, consulting and collaborating with Emory faculty in other departments and programs. Third, these new hires would thus be in a position to be especially “synergistic” on Emory’s campus, serving as go-betweens and connections that bypass the silos that too often work against a DS & NM community on Emory’s campus.

Recommendation #12. To bolster the effectiveness of the previous recommendation, we also make the following one: *This training of new DS & NM faculty at the Assistant Professor level should also involve the stoppage of their tenure clocks for either the semester in which they receive this training or for the entirety of that first year.* Doing so would avoid penalizing these new faculty for taking time away from the specific research programs so as to master new regimes of information, and it could prove useful in drawing “top-choice” candidates to Emory.

Recommendation #13. *Finally, we recommend that DS & NM hires who arrived at Emory in the last several years as Assistant Professors be granted the option of having this semester of intensive training.* Although there is the possibility of them doing so during the “pre-tenure leave” enjoyed by many Emory Assistant Professors during their

fifth year, we hope that the training would involve a semester that complements, rather than comprises, that fifth-year leave—especially as that training, as mentioned above, involves work beyond these scholars’ research program.

In emphasizing this early training of DS & NM faculty, we on the committee also want to emphasize that “early” does not mean “final.” In fact, we view this early training as more effective and productive when later followed up by additional training—such as that found at workshops and programs offered by, say, ECIT (now the Emory Center for Digital Scholarship)¹⁰⁰ and QTM¹⁰¹ and that made possible by the faculty leaves offered by QTM (skill-building course release)¹⁰² and the Fox Center (research grants in humanistic inquiry).¹⁰³ This later training allows faculty at all career stages to refine and update their DS & NM capabilities.

4.3. The Evaluation of DS & NM Faculty for Tenure and Promotion

This last set of pragmatic recommendations shifts attention from the arrival of new DS & NM faculty at Emory to their subsequent evaluation years later, both for tenure and for promotion to Full Professor.

Standards used in this evaluation are understandably cast in general terms in the ECAS’s “Principles and Procedures for Promotion and Tenure,” given the range and

¹⁰⁰ Emory’s Center for Interactive Teaching. 2013. “ECIT Programs and Workshops.” <http://ecit.emory.edu/programs/>.

¹⁰¹ See (a) Institute for Quantitative Theory and Methods. 2013. “Workshops.” <http://www.quantitative.emory.edu/events/workshops1/workshops2.html> and (b) Institute for Quantitative Theory and Methods. 2013. “Speaker Series.” <http://www.quantitative.emory.edu/events/humanities/index.html>.

¹⁰² Institute for Quantitative Theory and Methods. 2013. “Skill Building Course Release.” <http://www.quantitative.emory.edu/programs/faculty/courserelease.html>.

¹⁰³ The Bill and Carol Fox Center for Humanistic Inquiry. 2013. “Programs.” <http://www.chi.emory.edu/programs/index.html#2>.

variety of scholarship (and attendant disciplinary standards) found on our campus. For example, in terms of research standards, Appendix A of that document speaks of “peer reviewed journal articles, edited volumes, books and other pertinent publication types for the discipline,” as well as the “impact of completed research.”¹⁰⁴ Those general standards, in practice, are often translated into several “metrics” of evaluation—particularly, the number of articles published in top-tier journals, the publication of books with leading academic presses, and a high impact score in terms of scholarly citations (such as scores that can be gleaned from GoogleScholar).

As previous scholarship shows, evaluation metrics are attractive because they allow comparisons among disparate cases (as in evaluating the number of top articles published by an chemist versus those by an anthropologist); however, such “commensurability” can also divert attention away from other types of quality while glossing over underlying variety (e.g., chemistry is different, in a number of ways, from anthropology).¹⁰⁵ Our point is this: the three metrics mentioned above speak to traditional media (print books and journals) but can be silent about research published in new media—the very stock and trade of DS & NM scholars. For example, eBooks can do things that traditional print books cannot—such as offering active links to blogs, articles, and YouTube videos, as found in Professor Gary Laderman’s *American Civil Religion* (2012, Fortress Press). Indeed, as one member of the DS & NM Committee has noted, the capabilities associated with eBooks will make them a way of future publications in the

¹⁰⁴ Emory College of Arts and Sciences. 2011. *Principles and Procedures for Tenure and Promotion*. <http://college.emory.edu/home/assets/documents/faculty/tenure-and-promotion-principles-and-procedures.pdf>.

¹⁰⁵ See, for example, Espeland, Wendy Nelson and Michael Sauder. 2007. “Rankings and Reactivity: How Public Measures Recreate Social Worlds.” *American Journal of Sociology* 113: 1-40.

humanities. The appeal of new media and their capabilities for scholarship are apparent when authors and presses involved in traditional publications (e.g., the UNC Southern Studies series) are turning to *Southern Spaces* for multimedia-enhanced versions of their works made available online. Thus, to rely on metrics that focus on university presses and journals not involved in digital publications will increasingly run the risk of ignoring scholarship that, by virtue of its medium of delivery, is *not* in traditional print forms. Relatedly, while traditional citation impact scores are an important metric for evaluation, they should not be emphasized to the exclusion of other types of impact. For instance, a well placed, 800-word, online article in *Religion Dispatches*¹⁰⁶ or *Foreign Policy*¹⁰⁷ is viewed by thousands of people, and perhaps, has a greater chance of impacting the world of public policy than some articles in traditional, print journals.

Finally, what the three, traditional evaluation metrics miss are those digital projects that, on the one hand, require tremendous amounts of time and resources to construct and, on the other hand, are not ever intended for the printed page. To be sure, recognition of “non-print” projects involving creativity (e.g., dance, poetry) has preceded the era of DS & NM. For example, in its principals and procedures, ECAS acknowledges, “When a faculty member's duties include the teaching of creative writing, sculpting, painting, dance, choreography, music performance or music composition, original works and performances will be evaluated as equivalent to research.”¹⁰⁸ Given this, evaluation and recognition of *digital* creativity should follow easily. However, certain types of digital projects represent more a rupture with the past than do digital creativity projects,

¹⁰⁶ *Religion Dispatches*, 2013. <http://www.religiondispatches.org/>.

¹⁰⁷ *Foreign Policy*. 2013. <http://www.foreignpolicy.com/>.

¹⁰⁸ Emory College of Arts and Sciences. 2011. *Principles and Procedures for Tenure and Promotion*. <http://college.emory.edu/home/assets/documents/faculty/tenure-and-promotion-principles-and-procedures.pdf>.

thereby complicating their evaluation. Perhaps the best examples are those digital projects involving visualization. Recent visualization projects include the *Virtual Rome Project* at Emory,¹⁰⁹ which uses a seventeenth century map of Rome to recreate selected features of the city; *Virtual Williamsburg*,¹¹⁰ a digital recreation of the colonial cityscape of Williamsburg on the eve of the American Revolution; and the *Shaping the West Project* at Stanford's Center for Spatial and Textual Analysis,¹¹¹ which depicts the growth and influence of railroads in the western United States. While such projects can provide “data” that can, in turn, lead to research published in traditional books and journals, the creation of these visualization projects themselves is a worthy endeavor in their own right. Yet, the traditional metrics listed above (e.g., published books, articles) provide little purchase for evaluating either the quality or impact of these visualization projects. Indeed, the traditional metrics are built into Emory’s Online Faculty Activity Reports System at the expense of other relevant works—with Emory faculty listing under “Scholarship” activities related to the publishing of books and articles (as well as “Artistic Works”), but with no place to list visualization projects and other DS & NM endeavors. In fact, troubling to the members of the DS & NM Committee were those senior scholars who commented that they would not embark upon such digital projects as Assistant or Associate Professors, as credit for them is not especially certain in evaluative reviews. After all, it would be a shame to hire young DS & NM faculty, only to watch them shelve their distinctly digital efforts until after tenure and / or promotion because of concerns about how ECAS may evaluate them.

¹⁰⁹ Emory Center for Digital Scholarship. 2013. <http://digitalscholarship.emory.edu/>.

¹¹⁰ Virtual Williamsburg 1776. 2013. <http://research.history.org/vw1776/>.

¹¹¹ The Spatial History Project. 2013. <http://www.stanford.edu/group/spatialhistory/cgi-bin/site/project.php?id=997>.

Recommendation #14. *We thus recommend that the Deans' Office and ECAS develop standards that move beyond traditional metrics for evaluating research and, in particular, amend tenure and promotion standards so that the full range of DS & NM scholarship can be assessed in a thoughtful and systematic manner.* This “full range” includes (but is not limited to) types mentioned above—such as the creation of music, literature, games in digital / online forms; the publication of works in non-traditional forms (e.g., eBooks, multimedia articles published online); and the construction of visualization projects—and this full range can receive attention and renown in ways not always captured by traditional citation counts. As suggested by a review of evaluative systems in Europe and elsewhere,¹¹² it seems to be the case that tenure and promotion review committees must take seriously the fact that media projects themselves can make theoretical arguments and contributions. Just as films count toward tenure in film departments, the DS & NM Committee members believe that criteria should be applicable to other departments in which scholars work in and with digital technologies and new media. We thus share with both Professor Shelia Cavanagh¹¹³ and the Emory College Humanities Council the view that standards should be updated for the evaluation of digital scholarship. “Emory College has a history of evaluating new, emerging, and interdisciplinary forms of scholarship with both rigor and fairness, and the Humanities Council believes that the College’s existing practices of review can accommodate new

¹¹² Crawford, Peter I. 2010. “Recognition of Audio-Visual Products/Publications: A Brief Report.” <http://commissiononvisualanthropology.blogspot.com/p/recognition-of-audio-visual.html>.

¹¹³ Cavanagh, Sheila. 2010. “Living in a Digital World: Rethinking Peer Review, Collaboration, and Open Access.” *Journal of Digital Humanities* 1(4). <http://journalofdigitalhumanities.org/1-4/living-in-a-digital-world-by-sheila-cavanagh/>.

forms of digital scholarship as well.”¹¹⁴

Recommendation #15. Given our discussion in Section 4.2, the DS & NM Committee members have a final, pragmatic recommendation. *We recommend that, if a DS & NM scholar is in a department that has relatively little expertise in that domain, then other Emory faculty from outside that department, and possessing the relevant expertise, should help with the departmental review of the DS & NM scholar.*

5. SUBSTANTIVE TOPICS AND NEW HIRES IN DS & NM

This portion of the report deals with the general goal set before the committee: the recommendation of DS & NM hires for the immediate and near future. Yet, before proceeding with these recommendations, three points should be made. First, we have spent a considerable number of pages to document the current situation of DS & NM at Emory College of Arts and Sciences and to suggest changes that should be made. This was done because the recommended hires are not the sole steps to be taken in order to move Emory’s DS & NM to the next level, but rather, they are key steps among the many. Hence, we have used this report to embed these hiring recommendations in their broader context. Second, we on the committee carefully considered which types of DS & NM hires would be optimal for ECAS—hires that would build on its current strengths and that would address some pressing needs. Finally, as suggested above, we view each of the recommended hires as being multidisciplinary in nature; in other words, scholars from

¹¹⁴ Emory College Humanities Council. 2013. “Memorandum from the Emory College Humanities Council Regarding the Evaluation of Digital Scholarship.” <http://college.emory.edu/home/assets/documents/faculty/Digital-Scholarship-Memo-Nov2013.pdf>.

the humanities, the natural sciences or the humanities could be in the running for most, if not all, of the five positions that we recommend.

Recommendation #16. *We recommend that the five DS & NM hires be made in the following topic areas: (a) Digital Creativity; (b) New Media Analysis; (c) Digital Cultures; (d) Computational Linguistics; and (e) Spatial and Temporal Visualization.* All of these hires would be valuable contributors to scholarship at ECAS, and all would be valuable resources for addressing the curricular recommendations made above (see Section 2).

We should also note that given the overarching emphasis on DS & NM for each position, the eventual faculty hired would likely be possible candidates for participating in a Coursera (or other MOOC-like platform) course—touching on topics of creative / digital pedagogy and how-to technical application—available to Emory faculty and students and to a broader, global audience. Such participation could be a revenue stream for the faculty member, to be funneled back into the program.¹¹⁵

5.1. Digital Creativity

Creativity has long been part of the ECAS curriculum and community—be it creativity involving the written page, the performance stage, the screen, etc. Digital creativity both builds upon traditional forms while also taking creativity in (dramatically)

¹¹⁵ Coursera’s largest class is from University of Maryland, College Park on “Programming Mobile Apps for Android Handheld Systems.” Seventy-thousand people completed the full course, and 8,000 took the signature track course for a fee (Daphne Kohler, Coursera CEO; Comments during visit to Emory in March of 2014). Imagine a DS & NM faculty hire teaching a course on best practices for using a certain digital technology in the classroom.

new directions, as is the case for interactive fiction created in online communities.¹¹⁶

Indeed, digital platforms have brought media theory and the practice of media production into close contact with one another. The tools that these platforms provide allow for new forms of experimentation and collaboration and call for scholarly understanding informed by praxis.

This hire in Digital Creativity should use contemporary media platforms to facilitate the creation of new art forms and research practices. Thus, this new faculty member would be a digital media artist who could teach both production courses (which could include digital video, digital performance, video game design or digital writing) and the critical study of digital creativity and culture. These courses could explore multi-faceted nature of animation (and hybrid animation), game design and apps (in social media, business practices) in contemporary media, the links between media production and gallery exhibition/installations, theatrical performance, and /or experimental media and digital art. If the new faculty member is primarily oriented towards digital creativity of a visual kind, then he or she would complement current faculty and courses dealing with digital photography (Visual Arts, currently taught by Adjunct Faculty), digital documentary filmmaking (Film & Media Studies, currently taught by Adjunct Faculty), digital video filmmaking (Film & Media Studies), video games (Film & Media Studies) and digital news (Journalism), among others. Moreover, this hire would especially find ready colleagues in Professors Anna Grimshaw¹¹⁷ (Institute of Liberal Arts) and Jason Francisco (Visual Arts). They are key figures guiding visual scholarship at the College

¹¹⁶ See van Dijk, Yra. 2014. "Amateurs Online: Creativity in a Community." *Poetics: Journal of Empirical Research on Culture, the Media and the Arts* 43 (forthcoming).

¹¹⁷ As one observer noted to the committee chair: Professor Grimshaw's "two-track course of ethnographic film history into an ethnographic production class is a gem and could serve as a model to others on campus about how to thoughtfully develop visual scholarship."

and Graduate School, and they have the dualistic character of fostering both theory / history and media production / creativity. If this new faculty member is primarily oriented towards performance, then he or she would find colleagues in such areas as Theater and Dance Studies (e.g., Professor Gregory Catellier, who integrates dance with digital video) and could possibly address the loss of Professor Steve Everett in Music, whose sound design course is sorely missed. If this person is primarily oriented towards digital texts of various types, then he or she would find ready colleagues in the Emory Writing Program and Journalism, where attention to digital writing is already established (see above). Regardless of this hire's creative orientation, he or she would likely be able to supervise and curate student productions.

While creators of any type of are typically associated with the arts and humanities, we note that some from the social sciences and natural sciences may also be adept at Digital Creativity and, hence, be eligible for this position. For example, the coding and computing involved in interactive fiction or digital musical composition has expanded the range of those involved in Digital Creativity.¹¹⁸

5.2. New Media Analysis

The study of “texts” that result from creative efforts has likewise been a mainstay at ECAS for years. Such texts include the aesthetic (e.g., plays, literature, paintings, film, music), the political (e.g., court rulings, legislation), and the sacred (e.g., scripture, exegesis); and such texts have been analyzed by colleagues in departments ranging from

¹¹⁸ For example, see (a) Born, Georgina. 1995. *Rationalizing Culture: IRCAM, Boulez, and the Institutionalization of the Musical Avant-Garde*. Berkeley: University of California Press. (b) van Dijk, Yra. 2014. “Amateurs Online: Creativity in a Community.” *Poetics: Journal of Empirical Research on Culture, the Media and the Arts* 43 (forthcoming).

Art History, Comparative Literature, Film and Media Studies, and Music to Political Science, Religion, and Women's, Gender and Sexuality Studies. However, digital platforms have ushered in new approaches to textual analysis. On the one hand, they have provided new ways by which to apprehend "traditional" texts—as illustrated by Professor Harry Rusche's online resource, "Shakespeare's World"¹¹⁹ and Professor Sheila Cavanagh's interactive resource, "Word Shakespeare Project."¹²⁰ Another example would be Lev Manovich's quantitative studies of traditional media—scanning and analyzing the content and design of decades of *Time* magazine covers or of every frame from a film by Soviet documentary director Dziga Vertov—which he presented in a talk at Emory in Fall 2011.¹²¹ On the other hand, these digital platforms have spawned new types of "digital texts," such as blogs, online chats, and ringtones¹²²—some of the types emphasized by Professor José Luis Boigues in his class, "CyberSpanish: Language and Discourse in the Web" (SPAN 410 / LING 485).

This hire in New Media Analysis should bring the capabilities and resources associated with DS & NM to the study of "texts" and the content that they contain. This could mean that this person studies traditional texts (e.g., ancient plays, printed books, radio broadcasts) with new techniques and approaches afforded by digital platforms and

¹¹⁹ Shakespeare's World at Emory University. 2013. <http://shakespeare.emory.edu/>.

¹²⁰ World Shakespeare Project: A Model for Live Shakespeare Interaction in the New Media World. <http://www.worldshakespeareproject.org>.

¹²¹ Manovich, Lev. 2011. "Data Mining as Cultural Criticism or How We Read 1,000,000 Manga Pages with Computers." March 28, Emory University; <http://tinyurl.com/KF-Manovich> http://gbs.emory.edu/cgi-bin/generate/video_player.pl?play=Konsynski/Manovich3.11.

¹²² For example, see (a) Gopinath, Sumanth. 2013. *The Ringtone Dialectic: Economy and Cultural Form*. Cambridge, MA: MIT Press. (b) Ostertag, Stephen F. and David G. Ortiz. 2013. "The Battle over Meanings: Digitally Mediated Processes of Cultural Trauma and Repair in the Wake of Hurricane Katrina." *American Journal of Cultural Sociology* 1: 186-220 (which deals with blogging); and (c) Williams, J. Patrick. 2006. "Authentic Identities: Straightedge Subculture, Music and the Internet." *Journal of Contemporary Ethnography* 35: 173-200 (which deals with online forums).

technologies. To give but one example, Professor Roberto Franzosi's *Lynchings in Georgia* project draws upon analysis of journalistic coverage from the late 1800s and early 1900s, but does so in a digital fashion that allows both for interactive presentation and for the application of network models to capture linkages between the various actors (e.g., types of perpetrators) involved in these tragic events.¹²³ A new hire who combines such traditional content with digital capabilities, in turn, would have a host of ready colleagues at ECAS who likewise pursue such content analysis in “non-digital” fashion. Yet, on the other hand, this hire in New Media Analysis could instead deal explicitly with content found in new media (e.g., video games, blogs, forums, ringtones). This person, then, would address an important topic that is beginning to involve a group of ECAS faculty—including Professors Tanine Allison and Dan Reynolds (video games), José Luis Boigues (online discourse), and James Hoesterey (postings on social media), among others. Either type of hire in New Media Analysis (analysis of traditional content versus digital content) should be capable of teaching undergraduate and graduate courses dealing with content analysis in some form and, of course, in supervising theses and dissertations on that topic—all of which have a demonstrated track record of demand at Emory.

In recommending this hire in New Media Analysis, we distinguish this position from the one below (Computational Linguistics) in that the former is much more concerned with a “close reading” of texts and the latter is more concerned with research made possible by analysis of huge numbers of texts (e.g., a “big data” approach). This “close reading” is typically the domain of those in the arts and humanities, but we also

¹²³ *Lynchings in Georgia*, Emory Center for Digital Scholarship. 2013. <http://digitalscholarship.emory.edu/projects/project-lynchings-georgia.html>.

acknowledge some in the social sciences or natural sciences may likewise be relevant for this New Media Analysis position. For instance, music scholarship that focuses on patterns among compositions' sonic elements (e.g., the notes themselves) has attracted attention from those in Mathematics and Computer Science, Psychology and Sociology.¹²⁴

5.3. Digital Cultures

The study of culture (in its various manifestations) is yet another scholarly domain with a rich history at ECAS. For instance, professors in the humanities and social sciences have devoted considerable attention to “pre-digital” forms known as “media cultures.” As Douglas Kellner has noted, “Radio, television, film and the other products of *media culture* provide materials out of which we forge our very identities; our sense of selfhood; our notion of which means to be male or female; our sense of class, of ethnicity and race, of nationality, of sexuality; and of ‘us’ and ‘them.’”¹²⁵ Not surprisingly, Emory faculty (and others) have recently turned their attention to “digital cultures” that involve the emergent media content made possible by new digital technologies (e.g., the Internet, blogs, online music). Their line of scholarship is distinct from that mentioned in Section 5.2. (New Media Analysis) in that its focus is not on digital content per se but rather on

¹²⁴ For example, see (a) Lena, Jennifer C. and Mark C. Pachucki. 2013. “The Sincerest Form of Flattery: Innovation, Repetition and Status in an Art Movement.” *Poetics: Journal of Empirical Research on Culture, the Media and the Arts* 41: 236-264. (b) León, Teresa and Vicente Liern. 2012. “Mathematics and Soft Computing in Music.” Pages 451-565 in *Soft Computing in Humanities and Social Sciences*, edited by Rodolf Seising and Veronica Sanz. Berlin: Springer-Verlag. (c) Simonton, Dean. 1980. “Thematic Fame, Melodic Originality, and Musical Zeitgeist: A Biographical and Transhistorical Content Analysis.” *Journal of Personality and Social Psychology* 38: 972-983.

¹²⁵ Kellner, Douglas. 2011. “Cultural Studies, Multiculturalism, and Media Culture.” Pages 7-18 in *Gender, Race, and Class in Media: A Critical Reader* (Third edition), edited by Gail Dines and Jean M. Humez. Thousand Oaks, CA: Sage. The quote is taken from page 9, with emphasis added.

the identities, worldviews and efforts of groups that engage with that content. Meanwhile, digital cultures are distinct from traditional media cultures in that the distance between “producer” and “consumer” can be greatly reduced, if not eliminated, for the former (thereby prompting some to speak of “prosumers”¹²⁶). For example, in the pre-digital world of music recordings, the expense of the recording process meant that most musicians could not afford their own studios (thereby giving power to record companies who owned studios) and expenses associated with manufacturing and distribution meant that most consumers had to turn to recording companies, radio broadcasters and “brick-and-mortar” stores for access to these musical recordings. In the world of recent digital music, however, musicians now have access to inexpensive but highly effective home recording software and hardware, and they can easily circulate their recordings directly to listeners via websites and MP3s while bypassing record companies, record stores and radio stations—leading to the cohering of “virtual scenes” in which musicians and fans converse, and sometimes collaborate, online.¹²⁷

An analogous process can be seen in the shift to digital television from analog television and, especially, to digital film from celluloid—the advent of digital formats for filmmaking has brought down the costs of production but has also transformed the area of special effects with computer generated imagery and new levels of compositing

¹²⁶ See (a) Ritzer, George and Nathan Jurgenson. 2010. “Production, Consumption, Prosumption.” *Journal of Consumer Culture* 10: 13-36. (b) Young, Sherman and Steve Collins. 2010. “A View from The Trenches of Music 2.0.” *Popular Music & Society* 33: 339-355.

¹²⁷ For example, see (a) Cole, Steven James. 2011. “The Prosumer and the Project Studio: The Battle for Distinction in the Field of Music Recording.” *Sociology* 45: 447-463. (b) Dowd, Timothy J. Forthcoming. “Music Festivals as Transnational Scenes: The Case of Progressive Rock in the Late Twentieth and Early Twenty-First Centuries.” In *The Festivalization of Culture*, edited by A. Bennett, J. Taylor, and I. Woodward. Farnham, UK: Ashgate. (c) Merrill, Bryce. 2010. “Music to Remember Me By: Technologies of Memory in Home Recording.” *Symbolic Interaction* 33: 456-474.

(combining live action and animated or computer generated imagery). Digital technology, as mentioned above, has also transformed the nature of the labor of filmmaking (reducing or eliminating altogether particular types of work). Digital distribution has wide-ranging cultural implications: increased access to rare materials, increased ease of pirating copyrighted materials, and increased opportunities for distribution of amateur work, as well as new kinds of producers-distributors, as exemplified by Netflix series production such as *House of Cards*.

This hire would be for someone whose research is focused primarily on digital cultures in some fashion—heeding the activities that go on around digital content. This person could focus on the “production” side, such as research involving settings like Linden Labs¹²⁸ and other Silicon Valley-type establishments,¹²⁹ online newspapers,¹³⁰ or the role of digital media in fostering civic engagement, development, or democracy.¹³¹ Such a vantage would provide crucial detail on the decision-making, the efforts and the valuation that shape the digital content that consumers / audiences encounter, casting light on the “real-world” sites in which digital culture is produced. This production vantage could also allow for an interrogation of the (shrinking) distance between producers and consumers, as when music software companies rely upon users in online

¹²⁸ See Malaby, Thomas, M. 2009. *Making Virtual Worlds: Linden Lab and Second Life*. Ithaca, NY: Cornell University Press.

¹²⁹ For example, see English-Leuck, J. 2002. *Cultures@SiliconValley*. Palo Alto, CA: Stanford University Press.

¹³⁰ See (a) Boczkowski, Pablo J. 2009. “Technology, Monitoring, and Imitation in Contemporary News Work.” *Communication, Culture & Critique* 2: 39-59. (b) Boczkowski, Pablo J. and Martin De Santos. 2007. “When More Media Equals Less News: Patterns of Content Homogenization in Argentina’s Print and Online Newspapers.” *Political Communication* 24: 167-180.

¹³¹ For example, see Debra Spitulnik Vidali and Thomas Tufte, Editors. 2014. Special Issue on *Civic Mediations*. *Ethnography* 15(1). <http://eth.sagepub.com/content/current>.

forums to evaluate and upgrade their recording software.¹³² Moreover, the new developments in digital technology have implications for skilled labor within these industries. To give just one example, Eddy von Mueller's research focuses on how the advent of digital technology for special effects in films eliminates the work of extras (e.g., the hordes of armies clashing in the *Lord of the Rings* trilogy were generated by computer software, whereas the masses of men shown in the 1960 film *Spartacus* were created by live human beings) and more skilled, vocationally trained and unionized labor (draughtsmen, ink and paint professionals, miniature makers and stunt men, who are replaced by college educated, non-union "no collar" workers). More broadly, this hire in Digital Cultures could engage with what is called "Industry Studies," the examination of business practices (corporate, advertising and others) and industry structures and policies—and how these shape media texts. For example, *The Biz* (FILM 403), which examines American screen entertainment history, requires students to undertake White Papers on the media industries' conceptualization and response to binge viewing, the new telecom megamerger involving Comcast, Netflix's move into original programming, and the FCC's recent "Three Screens" report. Likewise, *Mass Media and Social Influences* (SOC 343) places media industry dynamics at the fore, addressing factors that push and shape these dynamics and examining their implications for creators, content and consumers. Study of media industries has a long history and is only growing in importance in light of recent digital developments.

This hire in Digital Cultures could also focus on the "reception" side of digital cultures. This vantage could address how individuals and groups draw upon digital

¹³² Jeppensen, Lars Bo and Lars Frederiksen. 2006. "Why Do Users Contribute to Firm-Hosted Communities? The Case of Computer-Controlled Musical Instruments." *Organization Science* 17: 45-63.

content and platforms to construct identity and to draw symbolic boundaries between “insiders” and “outsiders,” thereby extending the themes mentioned above by Kellner from traditional media to digital media. This reception vantage could also provide insight into the capabilities that individuals and groups have when engaging the digital, such as patterns of usage¹³³ (for example, binge viewing of digitally distributed series) and patterns of inequities found across groups (for example, in contexts of cross-cultural communication, development, democratization, or social inequality).¹³⁴ Insights about usage and inequities are particularly relevant with the advent of interactive technologies—video games, and even DVDs—and the phenomenon of the “second screen,” where one screen (usually the TV) is less interactive and the other (often a tablet computer) *is* interactive and is synchronized with what is happening on the main screen in any number of ways. In this vantage as well, then, the focus would be on the “real-world:” investigating what people individually and collectively do with digital content and platforms.

Whatever the vantage (production or reception), this new hire in Digital Cultures would have a host of Emory Colleagues who investigate similar issues—including, but not limited to, Professors Amy Aidman, Tanine Allison, Jenny Chio, Timothy Dowd, Anna Grimshaw, James Hoesterey, Dan Reynolds, Allen Tullos, and Debra Vidali.

¹³³ For example, see (a) Hargittai, Eszter. 2010. “Digital Na(t)ives? Variations in Internet Skills and Uses among Members of the ‘Net Generation.’” *Sociological Inquiry* 80: 92-113. (b) Litt, Eden and Eszter Hargittai. 2014. “Smile, Snap and Share? A Nuanced Approach to Privacy and Online Photo-Sharing.” *Poetics: Journal of Empirical Research on Culture, the Media and the Arts* 42: 1-23. (c) Prior, Nick. 2014. “The Plural iPod: A Study of Technology in Action.” *Poetics: Journal of Empirical Research on Culture, the Media and the Arts* 42 (in press).

¹³⁴ For example, see (a) Debra Spitulnik Vidali and Thomas Tufte, Editors. 2014. Special Issue on *Civic Mediations*. *Ethnography* 15(1). <http://eth.sagepub.com/content/current>. (b) Semetko, Holli A. and Margaret Scammell, Editors. 2012. *The Sage Handbook of Political Communication*. Thousand Oaks, CA: Sage.

Furthermore, this Digital Cultures hire would offer courses that are easily integrated into the current curriculum, particularly with the Media Studies Minor and Major.

Scholarship on Digital Cultures is found primarily in the humanities and social sciences. Furthermore, it is often based on qualitative methodologies (e.g., ethnography, intensive interviewing).¹³⁵ However, we would not want to eliminate from consideration those scholars who approach Digital Cultures via quantitative methods (e.g., surveys), particularly as they have been adept at assessing patterns of inequities among users (e.g., the various “digital divides” that mark Internet use).¹³⁶ Likewise, we would not rule out applicants from the natural sciences—such as those investigating the impact of digital content / platforms on brain development.¹³⁷

5.4. Computational Linguistics

This area of scholarship is rapidly evolving,¹³⁸ but it already has a strong basis at Emory College of Arts and Sciences—particularly given that it occurs at the intersection of computing, language and technology. “Computational linguistics is the scientific study of language from a computational perspective ...interested in providing computational models of various kinds of linguistic phenomena. These models may be ‘knowledge-

¹³⁵ See Coleman, E. Gabriella. 2010. “Ethnographic Approaches to Digital Media.” *Annual Review of Anthropology* 39: 487-505.

¹³⁶ For example, see (a) Hargittai, Eszter. 2010. “Digital Na(t)ives? Variations in Internet Skills and Uses among Members of the ‘Net Generation.’” *Sociological Inquiry* 80: 92-113. (b) Litt, Eden and Eszter Hargittai. 2014. “Smile, Snap and Share? A Nuanced Approach to Privacy and Online Photo-Sharing.” *Poetics: Journal of Empirical Research on Culture, the Media and the Arts* 42: 1-23. (c) Schradie, Jen. 2011. “The Digital Production Gap: The Digital Divide and Web 2.0 Collide.” *Poetics: Journal of Empirical Research on Culture, the Media and the Arts* 39: 145-168.

¹³⁷ For example, see Small, Gary and Gigi Vorgan. 2008. *iBrain: Surviving the Technological Alteration of the Modern Mind*. New York: Harper.

¹³⁸ See Chapter 1 of Jurafsky, Daniel and James H. Martin. 2009. *Speech and Language Processing: An Introduction to Natural Language Processing, Computational Linguistics, and Speech Recognition* (Second edition). Upper Saddle River, NJ: Pearson.

based’ (‘hand-crafted’) or ‘data-driven’ (‘statistical’ or empirical’)...”¹³⁹ The attraction of such intellectual concerns on Emory’s campus was apparent when Dr. Nello Cristianini of the University of Bristol presented “Automatic Discovery of Patterns in Media Content” at a 2013 Emory MiniConference co-sponsored by the Program in Linguistics, the Digital Scholarship Commons, the Emory Writing Center, The Fox Center, the Institute of Quantitative Theory and Methods, Math and Computer Science, and Sociology. In that presentation, he described ongoing projects that track and analyze the instantaneous coverage of thousands of newspapers—allowing, for instance, of the discernment of patterns in journalistic reporting of political candidates in the run-up to elections—and projects tracking and analyzing tweets in the UK, which enables the documenting of aggregate emotional states and the geographic diffusion of illness. Such projects are possible because of the combination of “big data” (e.g., millions of newspapers articles or tweets) and the means by which to analyze and make sense of the language used amidst such data (e.g., pattern recognition).

This hire in Computational Linguistics would be involved in, and ideally would develop new methods for, analysis of “big data” that are in the language of digital “texts” found online and in social media or the big data that are in the language of analog “texts” that have since been digitized as part of a large corpus. This emphasis on analytical approach is not to suggest that theory is unimportant for this position. In fact, scholars working in this vein of research have drawn upon a number of theories to address such diverse topics as the impact of news coverage on public opinion, banditry and crime in China from the 1700s to the early 1900s, the evolving debate regarding government

¹³⁹ Association for Computational Linguistics, 2013. “What is Computational Linguistics?” <https://www.aclweb.org/what-is-cl>.

funding of the arts, cross-national differences in the evolution of an intellectual discipline, and the development of literary traditions.¹⁴⁰ The person hired for this position would find at Emory like-minded and supportive colleagues who span the humanities, natural sciences and social sciences—as evidenced by those who co-sponsored the Mini-Conference mentioned in the previous paragraph. The courses that this person teaches, moreover, would be crucial to those undergraduates and graduates seeking skills by which to find employment in a “Google-ized” world (see Section 2).

This recommended position would be decidedly quantitative in nature. It would involve a “data driven” approach rather than a “hand crafted” one, to use wording from above, and its focus on massive amounts of text would make it distinct from (yet complementary to) the New Media Analysis position (see Section 5.2). Given this, this hire would likely be drawn from the natural sciences (particularly Mathematics and Computer Science) or the social sciences. If that is the case, there is a hope that leading candidates for this position would be eager to collaborate with scholars in the Humanities, resulting in advances in both computer science methodologies and new insights in the substantive domains. However, there is also a chance that leading candidates for this position could be drawn from the humanities—resembling the example of Matthew Jockers mentioned above.

5.5. Spatial and Temporal Visualization

Among the most exciting and generative applications of digital approaches to research, archiving, and publication is the dynamic visual display of information, such as

¹⁴⁰ Mohr, John and Petko Bogdanov, Editors. 2013. *Topic Models and the Cultural Sciences*. Special Issue of *Poetics: Journal of Empirical Research on Culture, the Media and the Arts* 41 (6): 545-769.

spatial and temporal knowledge. Visualization projects depend upon creative thinking and collaborative effort across scholarly fields to raise questions, gather and organize large amounts of data in dimensions of geography and time, and to produce visual representations of patterns and tendencies that would be extremely difficult if not impossible to discover without computational assistance. Scholars can ask questions of data that are not possible in analog approaches. In the humanities, for instance, the use of historical geographic information systems (HGIS) enables scholars to research and observe spatial and social change, to reveal heretofore-unseen relationships, and to engage students in original, online publication projects. This was evident when Zephyr Frank reviewed the work of the Stanford Spatial History Project for the Atlanta Studies Symposium at Emory University on April 26, 2013. He examined possibilities and challenges of spatial depictions using HGIS and offered examples of visualizations produced for research in Rio de Janeiro, Brazil.¹⁴¹

This hire in Spatial and Temporal Visualization would be involved in this visual display of spatial and / or temporal patterns, thereby extending knowledge in new directions. In Section 3.2, we alluded to the presence of such scholarship already on Emory's campus when mentioning *Networking the Belfast Group* (Rebecca Sutton Koeser and colleagues, Emory Center for Digital Scholarship),¹⁴² *The Virtual Rome Project* (Sarah McPhee, Art History),¹⁴³ *The Battle of Atlanta Project* (Allen Tullos,

¹⁴¹ Zephyr Frank. 2013. "Visualizing Spatial History: The Example of Rio de Janeiro." *Southern Spaces*.

<http://southernspaces.org/2013/visualizing-spatial-history-example-rio-de-janeiro>.

¹⁴² *Networking the Belfast Group*, Emory Center for Digital Scholarship. 2014.

<http://digitalscholarship.emory.edu/projects/project-networking-belfast.html>.

¹⁴³ *Virtual Rome*, Emory Center for Digital Scholarship. 2013.

<http://digitalscholarship.emory.edu/projects/project-virtual-rome.html>.

History, Daniel Pollock, and colleagues),¹⁴⁴ and *The Lynchings in Georgia Database* (Roberto Franzosi, Sociology).¹⁴⁵ (The spatial aspect of *The Battle of Atlanta Project* is not limited to its substantive focus; that aspect is also part of its affiliation with the Atlanta Studies Network, a broader effort based at Emory that is devoted to visualizing aspects of Atlanta and that connects researchers active in colleges and universities across the metropolitan area).¹⁴⁶ Additional visualization efforts at ECAS include, among others, documenting the Mediterranean social networks created through participation in the mystery cult of the Great Gods of Samothrace (Sandra Blakely, Classics), mapping spatial and non-spatial data in Atlanta from the 1920s to 1950s, allowing for, among other things, both visualization and inspection of segregation patterns during the Jim Crow era (Michael Page, Center for Digital Scholarship and Department of Environmental Sciences),¹⁴⁷ the Samothrace.emory.edu recreation of the pilgrim's passage through the Sanctuary of the Great Gods, Samothrace (Bonna Wescoat of Art History and colleagues—a project originally supported by a Collaborative Research in the Humanities Grant from the Provost's Office), analyzing the distribution of commercial fishing rights over time in New Zealand (Tracy Yandle, Environmental Sciences), constructing a geo-spatial archive of sixteenth-century Florence (Sharon Strocchia, History), researching the transformation wrought by the two booms in sugarcane ethanol production in Brazil (Thomas Rogers, History), mapping West African

¹⁴⁴ The Battle of Atlanta, Emory Center for Digital Scholarship. 2013.

<http://digitalscholarship.emory.edu/projects/project-digital-atlanta-mapping-battle.html>.

¹⁴⁵ Lynchings in Georgia, Emory Center for Digital Scholarship. 2013.

<http://digitalscholarship.emory.edu/projects/project-lynchings-georgia.html>.

¹⁴⁶ The Atlanta Studies Network. 2014. "Projects" <http://atlantastudies.org/projects/>.

¹⁴⁷ There are several Emory projects that fall under the umbrella of "Digital Atlanta." These include the previously mentioned, *The Battle of Atlanta Project*, as well as *The Atlanta Explorer*, which is a 3D viewer for historic Atlanta. These projects provide "tools" by which researchers can explore various topics and concerns related to Atlanta.

art known as “Senufo” across both time and space, as well as among peoples and languages (Susan Elizabeth Gagliardi, *Art History*¹⁴⁸), and of course, the scholarship published in *Southern Spaces*. This new hire, then, could help make Emory a distinctive locale for scholarship on visualization, adding to the considerable flurry of scholarship already occurring here. Meanwhile, instruction in spatial and temporal visualization provides valuable skills for students as they work collaboratively in locating and assessing data, choosing the appropriate visualizations (heat maps, timelines, layerings), and creating digital projects that can include narratives as well as interactive exhibits. Especially attractive would be scholars who not only can use existing visualization technologies, but who also develop new ones (or creatively adapt and mix multiple tools), to come up with unique and innovative visualizations for the substantive domains. The added benefit is that such a scholar would also be able to teach a new generation of information scientists and scholars across the humanities, natural and social sciences.

The partial listing of Emory faculty involved in visualization projects reveals that this scholarship easily crosses the humanities, natural sciences and social sciences. As a result, we expect that the pool of applicants for this position would be both multidisciplinary as well as interdisciplinary.

¹⁴⁸ The case of Professor Gagliardi also demonstrates the importance of the digital infrastructure and interdisciplinarity for DS & NM. For her Mapping Senufo project, she was recently awarded a fellowship for the Kress Summer Institute on Digital Mapping and Art History. The support of the Emory Center for Digital Scholarship was critical to the development of her project and, thus, the fellowship award. In addition, her application to the Kress Summer Institute was for her and a PhD candidate in French and Italian (Robyn Banton), and they both were named fellows.

6. CONCLUSIONS

We have devoted many pages to documenting the state of Digital Studies and New Media at Emory College of Arts and Sciences. This has been necessary given the somewhat siloed nature of DS & NM occurring on campus: First, specialization in digital technologies and new media often occurs across the broad (if not disconnected) domains of creativity, ePublishing, pedagogy and research. Consequently, individuals sharing similar skills and interests may not connect given what seems to be, at least on the surface, very different concerns (e.g., theatrical stage design in the digital realm versus quantitative analysis of digitized texts). Second, despite the mantra of interdisciplinarity, DS & NM scholars in various disciplines may have little contact with each other, partly because of such innocuous reasons as being located in different buildings or different parts of campus. Hence, those interested in researching how religious leaders rely upon social media may know nothing about those using social media in pedagogic fashion to inform lay-people about environmental issues. Yet, despite this siloed nature of DS & NM on Emory's campus, the digital infrastructure emerging of late provides one such way to close the gaps between all interested parties—particularly with the Emory Center for Digital Scholarship serving as a figurative and literal gathering place. Likewise, the 21st century challenges facing our undergraduate and graduate curricula require actions that will help DS & NM enthusiasts connect, particularly when collectively dealing with such fundamental issues as new media literacy and digital pedagogy and digital research tools.

The numerous pages were also necessary for the DS and NM Committee to deal thoroughly with a number of pressing issues—not only regarding the curriculum, but also

regarding key aspects of the Emory digital infrastructure (“support” personnel who go far beyond support and make possible collaborations of various kinds), as well as the recruitment and evaluation of DS & NM faculty at Emory College of Arts and Sciences. While such issues are indeed pressing, we hope our recommendations for improving them strike a resonant chord with ECAS deans, faculty, staff and students. Indeed, many (but not all) of these recommendations are easily adopted and, hopefully, immediately beneficial. That said, the recommendations about the fate of Journalism classes and tenure and promotion standards will likely require extended but necessary discussions.

Many pages of discussion preceded the recommendation at the heart of the DS & NM Committee’s mandate: the recommendation regarding future hires in digital studies and new media. We on the committee felt strongly that it was necessary to first address the context in which those hires will occur before turning to the specifics of the hires themselves. This is because, in our view, harnessing the strengths and capabilities that are already present at Emory will, in turn, allow those new hires to thrive and to contribute in synergistic (rather than isolated) fashion to the burgeoning of DS & NM efforts that are now underway and will continue in the coming years and decades. Put another way, inattention to the broader context would place too much burden on the five hires we recommend—mistakenly making those individuals responsible for enlivening DS & NM efforts at Emory, when we can enliven efforts before their arrival.

Finally, the numerous pages of this report reflect the animated and lively discussions that the DS & NM Committee members shared among themselves and with others on Emory’s campus. We thank all those faculty, staff, and students who made time

for such discussion and shared their insights with us. It has been our honor and pleasure to represent them and to offer this final report.