

## **The Digital Scholar: Embracing New Media in the Pursuit of Scholarly Excellence**

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### **Abstract**

What does “digital scholarship” mean? Can new media improve the way we conduct research and publish our work? As Kathleen Fitzpatrick has pointed out, the principal change wrought by new media is not so much technological, but social. Digital media can fulfill our long-elusive goal of making our research more relevant, not only within our scholarly communities but also within the society we aim to serve. The question is particularly significant since most academic institutions—particularly institutions of higher learning—remain largely indifferent towards digital modalities. This article explores how today's scholars can engage with their peers and with society at large by embracing a range of new media technologies, including e-books, social media and Web-based video.

**Key Words:** Digital Scholarship, Electronic Publishing, Electronic Peer Review, Digital Academia

## Introduction: The Digital Humanities

One of the most important publications of the early Renaissance was *I Quattro Libri dell'Architettura*, “The Four Books of Architecture,” by the Italian architect Andrea Palladio (1508-1580). The book was published in Venice in 1570 by the renowned house of Dominico de’ Franceschi, just 70 years after printing press technology had become widespread in Europe. What’s special about it is that it was one of the first printed books to combine movable-type printed text with detailed illustrations, carved and reproduced by way of woodcuts. As such, books like *I Quattro Libri* set a standard for academic publishing in the humanities that, by and large, has remained valid until today. True, in the intervening centuries woodcut technology changed to copper, and then steel engraving, followed by photographic plates, but the basic concept of narrative text, illustrated with printed visuals, is still the norm by which most of us publish our articles, monographs or books.

In 1996, the New London Group attacked that age-old paradigm by issuing a manifesto entitled “The Pedagogy of Multiliteracies,” first published in the *Harvard Educational Review*. It passionately advocated a move beyond standard forms of written rhetoric towards a new pedagogy and scholarly practice, a *multiliterate* paradigm that must now account for the burgeoning variety of text forms associated with information and multimedia technologies, as well as the culturally and linguistically diverse and increasingly globalized societies brought together by these new media (Cope & Kalantzis, 2000).

Sixteen years later, the catchphrase “digital humanities” is as ubiquitous as ever. Just over the last 18 months, we have seen an explosion of articles and even books on the subject. Few of these publications, however, actually try to come to grips with the “nuts and bolts,” the “hands-on” possibilities created by the digital media revolution. How will—or should—multiliteracy affect our practice as scholars in the social sciences? What have the “digital humanities” changed, and what remains the same?

The answer is nothing and everything. The essential questions that we as scientists try to answer about the enduring role of human creativity remain the same, as do the rigor and clarity with which we are expected to answer these questions. What has changed, however, is *how* we go about these things. As Kathleen Fitzpatrick has pointed out, the principal change is not technological, but social. It goes to the heart of the long-elusive goal of making our research more relevant, more *resonant* within our scholarly community and the society we aim to serve. In short, it is about identifying “new ways of thinking about how academic work might be done in the coming years” (Fitzpatrick, 2012).

In many ways, the true beginning of the digital humanities era was the 1982 release of Herbert von Karajan conducting the Berlin Philharmonic in a performance of Beethoven’s *Ninth Symphony*. What made this recording different is that it replicated the performance in virtually the same pristine quality with which it was mastered—thanks to a new digital encoding/compression process called PCM, or Pulse Code Modulation. Though it is little understood today, virtually all other digital media that emerged in subsequent decades evolved from that first but highly significant leap from the analog into the digital world: the Compact Disc. Indeed, just two years after the introduction of the music CD came CD-ROM, which for the first time gave researchers access to vast databases, years before the rise of the Internet. This was followed in 1992 by a digital standard for images (known as JPEG, today the mainstay of imagery on the Web), followed in turn by a similar standard for digital *video* a year later (MPEG); today, virtually all television signals, including HD, are broadcast using MPEG compression.

### **Background: The Resistance to Digital Scholarship**

With the explosion of all these digital resources, it is difficult to imagine that anyone would resist the use of such a wealth of information. But while primary and secondary education has become increasingly receptive to the concept of a digital classroom (Ohler, 2008), traditional institutes of higher learning have maintained a stubborn resistance to new media (Weller, 2011).

The reasons are complex. Age is certainly a key factor. Usually, older scholars are not, to borrow Marc Prensky's term, "digital natives" and thus lack the natural fluency with digital devices of younger people; they face a steep learning curve when trying to master a software or hardware platform (Prensky, 2001). This learning curve is further complicated by the fact that digital media are changing at a breakneck pace, so that a newly acquired skill must be updated frequently. Some educators in graduate learning fear a loss of control by allowing digital modalities in their classrooms. Others again are concerned about the possibility of plagiarism, or the theft of their ideas, by distributing their research over the Web. And lastly, some scholars emphasize the great durability of the printed book, and wonder whether the storage media of today will still be around tomorrow. They have a point; we only have to remember what happened to VHS, data storage on tape, or the floppy disk—all ubiquitous devices of the 1990's. And how many times have we not run into "broken" URL's, when a Web search abruptly ends with the legend, "page not found?"

Deborah Andersen, writing at the birth of the digital revolution, already recognized that of all the sciences, the social sciences, and particularly the humanities – the oldest of human scientific endeavors—have been "the most resistant" to digital media. The reason, she believes, is that until recently, the organic stuff that humanists are interested in—paintings, sculptures, music scores, Shakespeare quartos—did not lend itself to data quantification as easily as the formulae and calculations of the "hard" sciences. Scientists, psychologists and sociologists, she argues, tend to create their own numeric data, whereas humanists "look at the creation of others" (Andersen, 2004).

Lastly, as Andersen points out, scholars like us do not operate in a vacuum; we function within institutions that judge the effectiveness of our academic performance based on the traditional triad of teaching, research and publishing. A 2016 survey by Gallup and *Inside Higher Ed* found continuing resistance to adopting online technology among faculty in higher education (Jaschik & Lederman, 2016). Indeed, only a small number of universities consider research and publishing in the digital domain as credible and authoritative as print-based rhetoric. This may well reflect the conservative attitude in the trustee rooms of American academe—people who decide on our employment and tenure—because Trustees, Provosts and Deans tend to be senior in age to younger scholars, for whom digital media are a natural extension of their practice.

### **Methods of Research: A Survey of Digital Publishing**

As in any other discipline, change is usually initiated by pioneering individuals who are prepared to ignore established standards and break new ground, to lead by example. This leads to our research question: to what extent are traditional forms of academic publishing moving beyond the peer-reviewed print paradigm into the brave new world of digital media?

Our focus on the publishing aspect of modern scholarship is deliberate. If there is one area of scholarly endeavor that is experiencing an acute crisis, it is academic publishing. The reason is twofold. While universities—including non-traditional, distributed universities—are pumping out PhDs like never before, access to scholarly publishing venues is narrowing at an alarming rate. As early as 1996, Odlyzko warned that this bottleneck reflects the growing

“gatekeeping” role of editorial peer communities, who feel challenged by the *hausse* of new scholarly talent and tend to favor established scholars over aspiring ones (Odlyzko, 1996). The shift by many academic journals from print to PDF, or to on-line publication, has not significantly altered this trend, because the control mechanisms of editorial boards have largely remained the same.

There is also the factor of time. Once an article is submitted to a journal for consideration, it can take many months for the editorial review to actually take place, even though in most cases the author is under “embargo” during this time, prohibited from submitting the same article to other journals. In 2012, *The New York Times* estimated that a journal article submitted for review in Spring 2012 might not be published until sometime in 2014, prompting Luckhurst to quip that some books and journals take longer to complete than large cargo ships (Luckhurst, 2012). At a time when academic research is increasingly competitive, and the originality of an idea can be measured in months if not weeks, such publishing models are clearly no longer in sync with the needs of the modern scholar. In sum, there is a growing disconnect between the publishing needs of the growing scholarly community and traditional practices of academic publishing.

Another reason why it is difficult for newly minted PhDs to be published is that print publishing, including academic publishing, has entered a period of precipitous decline. Printing, stocking, and distribution costs have risen dramatically, whereas print subscriptions and purchases have dropped, and are dropping still. According to the American Association of University Presses, print runs and sales on core academic monographs have dropped from around 800 copies ten years ago to 300, or even 150 (Nicholson, 2016). This trend has affected the entire publishing industry, of course, but particularly scholarly books and journals—including monographs, the favored vehicle of the humanities—since humanities publications typically require a high number of illustrations, preferably in color. Indeed, the high cost of printing has made university presses increasingly reluctant to publish books in non-mainstream subject matter with relatively small audiences, and only with the implied guarantee that the university will purchase such publications as textbooks in sufficient quantities.

Essentially, the book world is following the same downward spiral that first affected the music industry and then the film and video industry. Whether we like it or not, the business model of material scarcity is disintegrating under pressure of the Web, and that includes scholarly books and journals. Yet, most scholar-practitioners, including humanists, need to publish as a vital condition of their academic employment. How, then, to resolve this dilemma?

### **Findings: Academic Publishing using e-Books**

At first glance, e-books would solve much of what is plaguing the academic publishing industry. Books produced in digital format, either directly by the author, online publishers, or traditional publishers, eliminate the high costs associated with the production, stocking, distribution, and retail marketing of printed books. In 2015, ebook sales accounted for 20% of overall trade book revenue (Milliot, 2016). The success of e-books has enabled some authors to forego the traditional business model altogether and decide to publish their works themselves, using book distributors such as Lulu.com, Smashwords.com, or Amazon’s CreateSpace.com, in either electronic or printed form. As an additional incentive, these on-line distributors offer authors a far greater share of the profits, as much as 65%, compared to traditional publishers, who typically offer their authors royalties of 5 to 10%.

The appeal of digital publishing for the academic market becomes even more irresistible when we consider that at Amazon, which is the market leader for electronic books, e-book sales now exceed the sales of printed books. The reason is price: e-books typically sell for half of the cost of a printed version or less, in part because of Amazon's use of a benchmark price of \$9.99 for its Kindle books. Because of Amazon's leadership, many academic e-books are now priced substantially below the level they would have commanded in print.

In addition, e-book technology has given vast amounts of public-domain literature a new lease on life. Project Gutenberg ([www.gutenberg.org](http://www.gutenberg.org)), for example, offers over 53,000 free e-books, from Aristotle to Shakespeare, that can be downloaded at no cost.

The main objection to self-publishing in academic circles, however, is that such e-books have not undergone any peer review, either by a review board or by a reputable academic publisher. But there are indications that the peer review concept itself is beginning to shift. The first step in that direction was taken by Yale University's Yale Books Unbounded initiative, which made books available on a wiki platform, so as to enable students and faculty to annotate comments in the text (Warren, 2009). In April of 2012, Harvard issued a public statement urging faculty and students to "move prestige to open access." The university acknowledged that the escalating costs of published journals were financially untenable; in 2011 alone, the university paid \$3.75 million for library subscriptions. The open letter urged faculty members to pursue publishing through non-traditional venues, including open-access journals or journals with a reasonable pay-per-use schema (Harvard Library Faculty Advisory Council, 2012).

The movement for free, open-access publishing gained additional impetus when *The Economist* disclosed that the largest academic journal publisher, Elsevier, made a profit of \$1.2 billion at the depths of the Great Recession in 2011, with profit margins of 37%, even as scores of academic institutions are laying off faculty and limiting enrollment in order to cope with the recession (Bohannon, 2014). Elsevier is now being boycotted by more than 9,000 academics, who either provide their research results to publishers for free or choose to publish themselves. They, of course, are a minority—most scholars are still keen to be published by large, respectable academic publishers—but the momentum of open access or individual publishing is growing. In 2013, the Obama Administration ordered Federal agencies with more than \$100 million in annual R&D expenditures to make the published results of federally funded research freely available to the public within one year of publication (Stebbins, 2013). In May of 2016, the European Union announced a new EU policy whereby all scientific articles in Europe must be freely accessible as of 2020 (Hendrikx, 2016).

Nevertheless, there is still considerable resistance to the idea of academics self-publishing their work. Indeed, one challenge is that, as we saw, many institutions do not include self-published monographs or books in their research ratings. While some institutions are slowly changing their attitudes to digital self-publishing, others feel that it undermines academic standards and are set against it. But there are other ways to invite a review by one's peers, by using the collaborative power of today's social media. On the one hand, an author can collaborate with scholars at other institutions to validate his or her findings. Using wikis like the one deployed by Yale, or author pages in Facebook, e-books can also invite a vigorous exchange between the author and his peers, including readers outside the academy. Whereas traditionally, peer reviews occurred *before* the publication, social media empower the scholarly community to render its verdict on the merits of a scholarly work after the publication, and do so far more democratically than the process involving small editorial boards. Joseph Esposito has coined the term "process book" (as distinct from the traditional printed work, the "primal book") to describe

a narrative as part of a networked knowledge base that readers can use as both a portal and a platform for further discussions on the subject (Esposito, 2003). This may sound rather daunting, but in practice, this type of “narrative networking” is already happening.

### **Discussion: Argumentation in Video**

But scholarly argumentation need not be restricted to written rhetoric. Much of the discussion on social media involves the sharing of videos, posted on YouTube, Vimeo or other video sharing services. Indeed, YouTube now ranks as the second largest search engine in the world after Google. The reason is that increasingly, knowledge is not shared in text, but in mediated form. This offers a tremendous opportunity for scholars to share their research on a global basis, which is particularly important in an era that expects its scholars to become more relevant to their immediate community, and society as a whole. The catchphrase in graduate education these days is “scholar-practitioners,” which reflects a desire to ensure that modern researchers not limit themselves to pure research in their field. Rather than acting as mere observers, scholars increasingly feel an obligation to be relevant to their community, and work for the public good.

In that sense, it is virtually impossible to imagine any meaningful human expression in the 21<sup>st</sup> century that does not involve one or more media forms, rather than the 19<sup>th</sup> century paradigms of text to which our academic institutions are so deeply beholden. It follows that a newly graduated humanities or sociology scholar must acquire the digital literacy skills to not only understand but also operate with these new media, and thus remain a vital component of the society that he or she is expected to investigate.

A key example is the work of Dr. Gordon Goodman, who published his groundbreaking dissertation on actors’ stage fright in both PDF form via ProQuest, and in video form on YouTube. Whereas the ProQuest site generated only a small number of downloads, his 20-minute YouTube documentary has been seen by thousands (Goodman, 2013).

### **Conclusion**

What this tells us is that scholarship that limits itself exclusively to traditional academic journals will become increasingly marginalized in a world where boundaries between academic theory and modern practice have begun to dissolve. The reason is that scholar/practitioners are called upon to not only investigate but also participate in the quest to improve the human condition. The best way to do that is to use the global media platforms that are available to all of us.

That we live on the cusp of a radical transformation in the way we publish our scholarly research is certain. In Kathleen Fitzpatrick’s words, “the publisher-derived imprimatur declaring selectivity has gradually become less important online than the imprimatur that is conferred by the community” (Fitzpatrick, 2012). It may therefore be only a matter of time before the academic community embraces a digital model for publishing research equitably, accessibly, and globally.

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## References

- Andersen, D. & Trinkle, D. (2004). Valuing digital scholarship in the tenure, promotion, and review process: A survey of academic historians. In D. L. Anderson (Ed.), *Digital Scholarship in the Tenure, Promotion, and Review Process* (pp. 63-70). Armonk, NY: M.E. Sharpe.
- Bohannon, J. (2014). Secret bundles of profit. *Science*, 344, p. 6190.
- Cope, B. and Kalantzis, M. (2000). *Multiliteracies: Literacy learning and the design of social futures*. London/New York: Routledge.
- Esposito, J. (2003). The processed book. *First Monday*, 8 (3).
- Fitzpatrick, K. (2011). *Planned Obsolescence: Technology and the Future of the Academy*. New York: New York University Press.
- Fitzpatrick, K. (2012). Beyond metrics: Community authorization and open peer review. In M. K. Gold (Ed.), *Debates in the digital humanities* (pp 452-459). Minneapolis: University of Minnesota Press.
- French, A. (2012). *On public access to peer-reviewed scholar publications*. Retrieved from <http://amandafrench.net/blog/2011/01/07/twitter-facebook-article>.
- Goodman, G. (2011). *Actors and fear: The role of stage fright*. Retrieved from [http://www.youtube.com/watch?v=y5FWwc\\_MwTg](http://www.youtube.com/watch?v=y5FWwc_MwTg)
- Greenberg, O. (2010). More colleges, more colleges: YouTube EDU turns one. Retrieved from <http://youtube-global.blogspot.com/2010/03/more-courses-and-more-colleges-youtube.html>
- Harvard Library Faculty Advisory Council. (2012). *Memorandum on journal pricing: Major periodical subscriptions cannot be sustained*. Retrieved from <http://isites.harvard.edu/icb/icb.do?keyword=k77982&tabgroupid=icb.tabgroup143448>
- Hendriks, M. (2016). *All European scientific articles to be freely accessible by 2020*" (Press release). The Netherlands: Ministry of Education, Culture and Science.
- Jaschik, S. & Lederman, D. (2016). The 2016 Inside Higher Ed survey of faculty attitudes on technology. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/system/files/media/2016%20IHE%20Faculty%20Tech%20Survey.pdf>
- Luckhurst, T. (2012). Feel the Rush. In *Times Higher Education*.
- Milliot, J. (2016). As E-book sales decline, digital fatigue grows. In: *Publishers Weekly*. Retrieved from <http://www.publishersweekly.com/pw/by-topic/digital/retailing/article/70696-as-e-book-sales-decline-digital-fatigue-grows.html>
- Nicholson, C. (2016). Academic imprints advance in higher ed. In: *University Business*. Retrieved from <https://www.universitybusiness.com/>
- Ohler, J. (2008). *Digital Storytelling in the Classroom: New Media Pathways to Literacy, Learning and Creativity*. Thousand Oaks, CA: Corwin Press.
- Odlyzko, A.M. (1996). Tragic loss or good riddance? The impending demise of traditional scholarly journals. In *International Journal of Human-Computer Studies*, 42.
- Prensky, M. (2001). Digital natives, digital immigrants. In *The Horizon*, 9 (5).
- Stebbins, M. (2013). Expanding public access to the results of federally funded research. *The White House*. Retrieved from <https://obamawhitehouse.archives.gov/blog/2013/02/22/expanding-public-access-results-federally-funded-research>
- Weller, M. (2011). The digital scholar: How technology is transforming scholarly practice. *Bloomsburg Academic*. doi:org/10.5040/9781849666275.