



CONVERGENCE



MEDIA



HISTORY



EDITED BY
Janet Staiger and Sabine Hake



Convergence Media History

Convergence Media History explores the ways that digital convergence has radically changed the field of media history. Writing media history is no longer a matter of charting the historical development of an individual medium such as film or television. Instead, now that various media from blockbuster films to everyday computer use intersect regularly via convergence, scholars must find new ways to write media history across multiple media formats.

This collection of eighteen new essays by leading media historians and scholars examines the issues today in writing media history and histories. Each essay addresses a single medium—including film, television, advertising, sound recording, new media, and more—and connects that specific medium's history to larger issues for the field in writing multimedia or convergent histories. Among the volume's topics are new media technologies and their impact on traditional approaches to media history; alternative accounts of film production and exhibition, with a special emphasis on film across multiple media platforms; the changing relationships between audiences, fans, and consumers within media culture; and the globalization of our media culture.

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Chapter 18

Historicizing Web Design

Software, Style, and the Look of the Web

Megan Sapnar Ankerson

Most Internet histories typically trace key inventors, institutions, and technologies through the network's Cold War roots as ARPAnet to its final incarnation as the World Wide Web, developed at CERN by Tim Berners-Lee in the early 1990s. Rarely mentioned are the business and culture of making websites. Indeed, too often economists and Internet scholars alike have dismissed the volatile times of the dot-com boom as a moment that we would do best to recover from and not as a period worthy of further inquiry where we might take more seriously the cultural artifacts that emerged from the web's first decade. As the value of Internet stocks continued their exorbitant climb, the design and production of commercial websites became a specialized endeavor entrusted to creative workers at the core of a rapidly growing new media cultural industry. But the dynamics of this industry, and the reciprocal links between aesthetics and modes of production, have yet to be fully explored.

Why is there surprisingly little work that connects the social and economic context of the dot-com boom to an historical understanding of web style, production practices, and industrial logic? Similar questions have been occupying media historians for decades now. As a number of film and broadcast historians have noted, aesthetic decisions, narrative structures, and conceptual approaches are all intimately related to the organization of media industries, the relations of creative workers, the deployment of new technologies, and the numerous strategies employed to help manage the uncertainties of an industry marked by constant changes in popular taste.¹ One of the first and most influential projects to connect film style to the motion picture industry is *The Classical Hollywood Cinema*, which systematically demonstrates how aesthetic and narrative conventions were formalized and standardized between 1917 and 1960 (Bordwell et al. 1985). Likewise, Robert Allen and Douglas Gomery's reformulation of aesthetic film history eschews the "masterpiece tradition" and asks instead:

How and why have the elements of film form (lighting, editing, camera movement) been used in particular films at particular points in film

history? How and why have some styles become normative for long periods of film history (the Hollywood “style,” for example), while others have flourished for only brief periods?

(1985, 79)

Broadcast historians, meanwhile, have explored the various ways in which industry structures and network economics (along with other factors) have helped shape the types of programs that were made, their formal structures, and the formatting and scheduling practices employed (Gitlin 1984; Boddy 1990; Anderson 1994; Caldwell 1995). These histories help alert us to the multiple ways in which American media might be organized differently, reminding us repeatedly that it is by no means “natural” or “obvious” for television, radio, or film to work or look the ways they do.²

But new media historians have yet to tackle similar questions. Perhaps this is the result of the web’s relative newness; barely fifteen years have passed since the Mosaic browser first introduced a larger audience to the web. But these gaps in scholarship also point to some of the problems of web historiography, an undertaking made particularly challenging given the difficulty of doing research in a realm where texts are evanescent. How can we study the web of the recent past when so much of what was produced was subsequently deleted, disabled, or amended? Dot-coms were born and buried in a matter of months. Domain names were vacated and resold, leaving little evidence of first-generation websites. These problems, of course, are familiar to media historians trying to investigate the cultural roots of film and broadcasting, who know all too well the difficulties in piecing together the past when so many films have been lost, damaged, and destroyed, and much of what was sent over the airwaves was broadcast live and unrecorded.

However, many new media scholars and computer historians have resisted comparing new media to old media texts and technologies. Lev Manovich, for example, points out that while new media have numerous historical precedents in earlier media, comparing computable cultural forms with old media “cannot address the fundamental quality of new media that has no historical precedent—programmability” (2001, 47). He advocates a shift from “media studies” to what he calls “software studies,” which would examine “the new terms, categories, and operations that characterize media that has become programmable” (48). Since software is what is unique to new media, Manovich argues, comparing new media to print, photography, or television will never tell the whole story. But what kinds of stories might “old media” historians help new media historians tell? And how might software studies contribute in return to a critical web historiography? With these questions in mind, this chapter evaluates the problems and possibilities of applying methods developed

for writing cultural histories of old media to the task of recovering and writing web histories.

The Rise of Software Studies

The gaps and erasures that media historians contend with have helped bring post-structural historiographical methods to the forefront of cultural histories of mass media. Rejecting “master narratives” about the past by recognizing multiple, overlapping histories, this approach acknowledges the ways in which preserved traces of the past help shape the stories we purport to tell. But recognizing the multiplicity of histories and the often-contradictory nature of truth has not been a dominant tradition in the history-of-computing field. Paul Ceruzzi, for example, describes how the first generation of computer historians worked to “reconcile” the convergent stories of the stored-program digital computer in order to come up with a coherent narrative about computing and the past, and he urges historians to apply this same narrative cohesion to the history of the personal computer (PC) (2001, 54–55). The problem with such cohesion, however, is that it tends to privilege “great men” or otherwise becomes occupied with the task of allocating credit where credit is due. This may help explain how computers are bound up in a complex of engineering decisions and industry constraints, but as Paul Edwards puts it, “There is little place in such accounts for the influence of ideologies, intersections with popular culture, or political power” (1996, xii).

Recent interest in the study of software and software histories is helping to make some of these intersections more palpable for scholars concerned with media and culture.³ Matthew Fuller argues that software has been a “blind spot” in the cultural theorization of computational and networked digital media: “Software is seen as a tool, something that you do something with. It is neutral, grey, or optimistically blue . . . This ostensive neutrality can be taken as its ideological layer, as deserving of critique as any such myth” (2008, 3).⁴ So often elided in accounts of digital culture, software has become the “repressed” of new media studies. Its mutability and multidimensionality have caused some to mistakenly emphasize software’s “immateriality,” a contention that has been widely refuted (Mackenzie 2006, 2; Fuller 2008, 4; Kirschenbaum 2003). Software is “a seemingly amorphous object,” notes software historian Michael Mahoney, “yet [it] produces visible and tangible effects in the world” (2000, 277). For Fuller, the materiality of software is operative at many scales: from the underlying code and interaction with hardware to the operational constraints of the interface and its thorough integration into patterns of work, play, and communication (2008, 4).

In this way, software extends outside the computer into social worlds; in return, cultural processes and discourses find their way back into code. Web-

sites may come and go, but software leaves its mark on web practices (a set of widely held stylistic norms that constitute assumptions about how a website should behave, look, and function; how users should interact with it, and so on), and in modes of production (the economic organization, division of labor, and overall ways of conceiving the work of web production).⁵ Software leaves traces when individual websites may not. As Matthew Kirschenbaum pointedly remarks:

Software is the product of white papers, engineering specs, marketing reports, conversations and collaborations, intuitive insights and professionalized expertise, venture capital (in other words, money), late nights (in other words, labor) . . . These are material circumstances that leave material traces—in corporate archives, in email folders, on whiteboards and legal pads, in countless iterations of alpha versions and beta versions and patches and upgrades, in focus groups and user communities, in expense accounts, in licensing agreements, in stock options and IPOs.

(2003, 149)

The historical materialist studies of new media that Kirschenbaum advocates can also be a way to reflect on the process and consequences of writing histories based on the selective evidence and biased traces left behind. Is there not something about the very malleability of software that seems pertinent to an insistence on the partiality of truth?

Approaching web historiography through the lens of software studies, I offer the following brief history of the web animation software, Flash, as an example of how new media historians might engage the culture of software in constructing histories of the web.⁶ This very partial account presents the discourses surrounding Flash as one entry point into some of the conflicting ways cyberspace was imagined and produced at the zenith of the dot-com bubble and in the aftermath of its collapse.

What is Flash?

Now an industry-standard multimedia authoring application used to create web content and applications, motion graphics, and games, Flash was first launched by FutureWave Software in the summer of 1996 as a simple animation program called FutureSplash. Soon after its release, the software received a huge boost when Microsoft deployed it in their MSN website in an attempt to create “the most television-like experience possible on the Internet” (Gay 2001, 4). Fox used FutureSplash in their 1996 website for *The Simpsons*, and Disney used it in their subscription-based online service, *Disney’s Daily Blast*.

By December 1996, FutureSplash had generated so much attention that Macromedia acquired FutureWave and relaunched it as Macromedia Flash 1.0 in early 1997.

However, the ability to add animation to the web was only one of the draws of Flash. For web designers working in the heat of the Browser Wars, the competition between Netscape and Explorer meant that it was not unusual to create up to four different versions of the same website. Both companies were releasing browsers that incorporated their own proprietary tags for generating “dynamic” websites with multimedia elements. This opened the door to a radical shift in web aesthetics. As Jeffrey Zeldman (2000) explains

No more static, print-like Web layouts! Images could move, buttons could beep, whole chunks of text could appear and disappear at the twitch of a hapless visitor’s mouse. The problem . . . [was that] if it worked in Navigator, it would fail in Explorer, and vice versa.

(2000)

Flash offered developers a way to solve the problem of “cross-browser compatibility” by creating a single website that displayed uniformly across multiple browser versions. Not only did this substantially reduce the cost of development, it also provided designers with a new skill-set they could use to negotiate higher salaries. Furthermore, Flash’s vector format made fullscreen high-resolution graphics possible for a fraction of the filesize as a bitmapped image. But perhaps more than anything, Flash appealed to a whole new vision of the web, one that was vastly different from the static, silent, textual form that imitated the aesthetics of print. These possibilities captured the imaginations of independent designers who were navigating the huge industrial shifts impacting the organizational structure and creative work of web production by 1998.

Growth of the Web Media Industry

The first wave of “web service providers” (as web design start-ups were then called) exploded on the scene in 1995 amidst a huge demand for web design talent. Since ad agencies found it difficult to turn interactive projects into a major revenue stream, they were more than happy to subcontract the work to these startups (Wilder 1995), but only two years later, these once tight partnerships were becoming strained. Animosity between interactive shops and traditional ad agencies grew as agencies realized online media billings were growing faster at independent upstarts than at traditional media departments (Hodges 1997). In response, agencies bought stakes in web companies or

started their own in-house interactive units. Many mid-size web shops, meanwhile, positioned themselves as marketing and branding consultants; they no longer wanted to be seen as web designers but as full-service interactive advertising agencies that specialized in Internet strategy (Voight 1997, IQ20).

As sites became more elaborate and required significant backend technical expertise to handle the demands of e-commerce, these industry restructurings culminated in a wave of mergers and acquisitions in 1998 that gave rise to mega-agencies (Butcher 1999).⁷ However, while industry consolidation meant more consulting expertise and backend support, a pressing concern was that the mergers took a toll on creativity. Although e-commerce attracted significant buzz, shopping carts and secure servers did little to convey the sexiness and excitement that new media evoked. Small, specialized design firms thrived partly because they represented independent talent untouched by the corporatization of web design. Hip San Francisco boutiques and New York design shops were highly sought after due to the edgy, avant-garde, creative images they conveyed (Williamson 1999).

In this industrial climate, freelancers and boutique shops saw Flash as one way to gain an edge through creative technical expertise. In her study of web design workers in the 1990s, Nalini Kotamraju observes that the job insecurity of contract-based service work propagates a system in which workers must always be ready to update their skill-sets as soon as new software is introduced. This pressure of “keeping up” underlies key structures of the workplace, she argues, most notably in terms of pay, promotion, and hierarchy (2002, 2). Indeed, some of the first Flash websites were those of freelance designers using their personal studio sites to showcase their skills. These sites spoke directly of a “new era of web design,” one that emphasized creativity, expression, and impact; websites were to no longer be used, but experienced.⁸

David Gary Studio’s Flash website “Full Throttle” (launched in April 1999) is one such example. Full Throttle opens with a dedication (“For Lala”) as howling winds and a barking dog give way to slick chrome graphics and the headline “an experiment in expression.” Motion graphics mimic garage-style mechanics and a heavy soundtrack kicks in after the interface loads. Engine-revving sound effects and a lifelike exhaust flame are all designed to “wow” users with a memorable experience. The site received tremendous word-of-mouth attention within the web design community and was selected in 2006 as one of the Favourite Website Award’s (FWA) most influential Flash sites of the decade. Personal studio sites like this served as calling cards for independent designers who presented Flash as a specialized skill to help clients deliver websites that “cut through the clutter.” Because Flash websites looked so different from the web most users were accustomed to seeing, clients began



Figure 18.1 David Gary Studio's website, "Full Throttle," was built entirely in Flash and generated quite a stir among web designers when it was launched in 1999.

demanding Flash integration into commercial websites as a way to achieve "stickiness," another buzzword of the late 1990s that emphasized content compelling users to "stick around."

By 2000, Flash had become a multi-million dollar industry of not just software sales, but numerous Flash-related products: training videos, workshops, magazines, books for inspiration, books for learning code, and even books by design studios that analyze (in painstaking detail) the process of conceiving, building, and coding their websites. Popular events such as the semi-annual "Flash Forward" conference and Film Festival generated a massive interest in the software and in the practice of web design. As dot-com speculation moved to euphoria, the "hottest" designers and agencies became sought-after brand names commanding extraordinary sums for their involvement in a project.

But it was not long after the stock market reached its tipping point in March 2000 that the discourse surrounding Flash registered a noticeable chill. Critics like usability expert Jakob Nielsen lambasted Flash as "99% Bad" in October 2000 for "encouraging design abuse" and "breaking with Web fundamentals,"

charges that expressed a biting exasperation with the bells, whistles, and lengthy animated intro sequences that were seen as part of the “look what I can do” bravado of the Flash aesthetic. After the crash, the mythos of the hot-shot designer and its visual expression in Flash came to signify everything that was wrong with irrational exuberance: the greed, the hubris, the renovated lofts, foosball tables, and twenty-something-year-old millionaires that would soon be regarded as extravagant relics of the dot-com bubble. As commentators reflected on the state of the industry after the bust, the links between web design and the indulgences of dot-com IPOs were framed as a “boys’ club” atmosphere of “tech fetishism, aggression, and adolescent image-consciousness that quickly became the dominant culture of web media agencies” (Mahoney 2003). Flash was just one expression of this image, but it came to stand in for a host of critiques surrounding the hype and ego of the e-culture industry.

Once fashionable Flash introduction sequences soon became denigrated. A popular parody of the “skip intro” style, named after the obligatory button added to sites should users want to skip the animation and enter the website, was created in 1998 by Yacco Vijn; it circulated with viral ferocity after the bust. In it, viewers are forced to watch an endless array of orange balls while



Figure 18.2 Yacco Vijn’s parody of Flash introductory sequences became a viral sensation after the dot-com bubble burst.

the site loads; underneath a message explains, “this may take forever, but hey it’s an intro!” Once loaded, the site reveals fullscreen rotating spheres and welcome messages, accompanied by a score of “over-the-top science fiction sound samples . . . [reminiscent of] the Gaborcop.com envy that was all the rage at the time” (Vijn 2008).

To combat the software’s reputation for gratuitous animation, Macromedia went on damage control by heavily promoting the notion of “Flash usability,” which involved educating the Flash community about the importance of “user-friendly” experiences. “Skip intro” became a lesson that designers were taught to avoid. Macromedia hired flash nemesis Nielsen to develop “best practice guidelines for creating usable rich Internet applications with Flash,” and the software was revamped further in Macromedia MX, adding features designed to help Flash developers “to be more productive while ensuring their work is both usable and accessible” (Macromedia 2002).

Today, Flash is just as ubiquitous as it was at the height of the dot-com boom, but most casual web surfers are probably not even aware that the software mutated from an animation tool to an application-building program. Popular “Web 2.0” sites like YouTube and Flickr are built on Flash. Google’s finance pages use Flash to generate stock graphs. Newspapers use it to illustrate maps and timelines. Far from the grandiose sound effects and “skip intro” buttons that were once a staple of Flash websites, the software has become so ordinary it is almost invisible. Indeed, it is this “everyday” aspect of software that intensifies the desire to make the study of it more visible, to challenge its peripheral status in the study of digital objects. But the story of Flash—its embrace by designers who wanted to see the web as a form of creative expression, its disparagement by those tired of dot-com exuberance, and its revamping by Macromedia (and later Adobe which bought it)—helps to illuminate a discursive web connecting aesthetics, ideologies, economies, and industries.

The challenge for a web historiography of Flash is that despite the abundance of commentary about the software’s popularity (and notoriety), finding remains of early Flash websites now is like looking for dinosaur bones. Some are out there, but in pieces, and they are hard to find and hard to recover. Web archive sites like the WayBack Machine have received much attention for their ability to recover the past and pull up old versions of now dead websites.⁹ But unlike HTML pages—which allow viewers to “Save Page As”—the Flash sites that once commanded so much attention, admiration, and scorn remain mostly inaccessible. A critical web historiography must acknowledge how the traces left behind shape the stories we tell about the past. But here, it is precisely the erasure of so many Flash sites that is equally worth noting.¹⁰ Many of the most extravagant Flash sites produced between 1998 and 2001 have been removed or modified precisely because the dominant web practice

underwent a massive revision after the bubble burst. The post-crash pursuit of “user-friendly” design should not be seen as a simple case of web designers “coming to their senses” at long last. Instead, it is a register of a new dominant discourse that gained momentum in response to shifts in the larger socio-economic context. Software is remade again and again, and the new upgrades, tutorials, and help files reveal ideologies as well as bug-fixes. If we hope to track cultural histories of the web, we should recognize the ways in which software can reveal contested sites of web practice where dominant discourses find their way into material and symbolic forms.

Notes

1. See e.g. Schatz (1993) and Wyatt (1994) on the connections between economics and aesthetics in post-classical cinema.
2. Comparing the British and American broadcasting models, Raymond Williams (1974) challenged Marshall McLuhan’s dictum “the media is the message” as a case of technological determinism which neglects the social, political, and economic choices that have shaped the experience of television in different national contexts.
3. See e.g. Fuller 2003, 2008; Mackenzie 2006; Manovich 2001; Lovink 2003; Kirschenbaum 2003.
4. Gillespie (2003) offers one such critique of Macromedia Dreamweaver.
5. This notion of a web practice owes much to Bordwell, Staiger, and Thompson’s description of classical Hollywood film practice (1985).
6. Kirschenbaum offers another example with his account of VRML but does not engage with the stylistic questions that interest me here.
7. For example, interactive group Modem Media merged with ad agency Poppe Tyson; Internet technology firm USWeb merged with interactive marketing agency CKS; Razorfish acquired six other interactive agencies in the USA and made substantial acquisitions overseas.
8. The first website to receive significant attention for this was Gabo Mendoza’s site Gaborcorp.com www.thefwa.com/flash10/gabo.html (30 July 2008).
9. Available online at www.archive.org.
10. See Trouillot (1995) for a reflection on the role of silences and erasures in the writing of history.

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