

raphy. This is especially true here, since the multivolume *Historical Atlas of Canada* is widely acknowledged as one of the best historical atlases ever produced, and it is an important precedent for this collection's approach to scale and landscape hybridity. Historical GIS would only be strengthened—both intellectually and institutionally—by seeing it as the successor to a long tradition of non-digital mapping and spatial research.

Overall, this book will be a good source for those in the digital humanities looking for inspiration and nuts-and-bolts advice—especially since it is freely available as an Open Access ebook. But it also should provoke historians to be always on the lookout for GIS-savvy librarians and researchers in other fields who might be able to unlock new information from difficult spatial sources.

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### **The Emergence of Video Processing Tools: Television Becoming Unglued. 2 vols.**

Edited by Kathy High, Sherry Miller Hocking, and Mona Jimenez.  
Bristol and Portland, OR: Intellect Books, 2014. Pp. xxv+638. \$86.

As artists gained access to the technologies of television production in the 1960s and 1970s, many began to build their own tools for electronically processing analog video signals to produce novel visual effects. For many artists, the construction and use of mixers, keyers, colorizers, and scan processors became the basis for aesthetic and critical engagements with electronic technologies, as well as collaboration with engineers. This expansive book consists of forty-three chapters by thirty-one authors—most of them artists or curators, many of them also participants in this history—on the people and machines that made up video processing in the United States.

There is a growing interest among both art historians and historians of technology—exemplified in the recent work of Zabet Patterson and Matthew Wisnioski, to name only two scholars—in relationships between art and technology. This collection of essays, interviews, and primary source documents further demonstrates that the history of artists appropriating technologies is a valuable resource for understanding both how users take advantage of the interpretive flexibility of a technology, and how users become technologists themselves, innovating in order to transcend a technology's limitations.

In a chapter comparing the motivations behind 1960s “media art” and

contemporary “new media art,” for example, Christiane Paul and Jack Toolin draw a distinction between “artists using industry-developed technologies” in order to investigate the aesthetic possibilities contained within them, and those “creating their own tools” as a means of “exploring new forms of creation” (p. 61). In another chapter, Kathy High draws on an extensive collection of interviews to describe the range of relationships between artists and engineers, from collaborations in the design of new machines to conflict when artists modified equipment that engineers were responsible for maintaining.

Reflecting the practices of tinkering involved in video processing itself, *The Emergence of Video Processing Tools* presents the reader with a collage of disciplinary and experiential perspectives rather than a common argument or shared understanding. “The stories of the proliferation of new video tools in the late 1960s to mid 1980s do not fit neatly into a single narrative,” writes Mona Jimenez; “rather, one finds an amalgam of people who were moved to innovate in numerous institutional sites across the country” (p. 105).

Nonetheless, some authors attempt synthesis. In her own contribution, for example, Jimenez surveys these sites in order to argue that across the contexts of universities, public television stations, and independent media arts centers, the development of electronic video instruments depended on funding from the Rockefeller Foundation and state agencies, especially the State University of New York and the New York State Council on the Arts. This is one of several essays that emphasizes the roles of institutions in the development of video art; others include profiles of the laboratories for artists maintained by public television stations in New York, Boston, and San Francisco.

In another synthetic and historiographical contribution, Timothy Murray places the development of independent video collectives in a genealogy of “the fantasy of the open” in the arts (p. 234). Citing Christopher Kelty, Lev Manovich, and Manuel Castells, Murray suggests that this set of discourses and practices, in which artists collaborated in networks rather than “as author-genius,” provides continuity between the video art of the 1970s and the digital art and open source movement of the 1990s and 2000s (p. 226).

The book includes particularly strong documentation of the Experimental Television Center in Oswego, New York, where coeditor Sherry Miller Hocking is assistant director, and of the technical features—including signal processing, raster manipulation, and voltage control using digital computers—of the studio that ETC maintained for artists from 1972 to 2011. It concludes with four chapters on preserving video tools, like a Rutt/Etra Video Synthesizer, and the recordings produced using them.

*The Emergence of Video Processing Tools* is a rich resource—if an eclectic one that is somewhat difficult to navigate—for historians interested in

how artists use and modify technology, in collaborations between artists and engineers, and in the many forms taken by television in the final third of the twentieth century.

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**Video Revolutions. On the History of a Medium.**

By Michael Z. Newman: New York: Columbia University Press, 2014. Pp. 160. \$10.

In *Video Revolutions*, Michael Newman argues that video is not one thing but many, and therefore the history of video as a medium should be regarded as a history of changing technologies and cultural uses. In this view, video is a dynamic medium created, manipulated, stored, transmitted, and viewed via multiple technologies. Newman's video "revolutions" take place over several decades and are understood in relation to cultural practices as well as to television, film, and the internet. Departing from research approaches that either discuss the appropriation and modification of video and electronic technologies in the arts or give accounts of the technical steps in their development, from television to video to computers, Newman instead focuses on the history of "video" as a term. For him, "video" is a cultural keyword, and the changes in what video meant mark revolutions in technology and meaning.

In his cultural analysis of video revolutions, Newman adapts Raymond Williams's well-known analysis of the importance of technology in shaping the cultural form of television. Newman describes three different phases that each express a different meaning of the term "video." The first phase covers the time frame from early television to the 1960s when video was another word for television and their meaning was interchangeable. The second phase goes hand in hand with the development of portable video technology, Portapak cameras, and videotape. It shows a differentiation from and an emerging adversarial relationship between television as a mass medium and video as part of alternative culture. This phase, not the advent of the digital, is the most important one to Newman, because with the introduction of the video-recorder to the home consumer market in the seventies, video became a medium of its own, distinct from film and television. Newman emphasizes that this step was a far-reaching video revolution that changed every aspect of entertainment culture. As the author states, this video revolution "redefined categories of leisure experience by revising prevailing conceptions of television and cinema as mass media" (p. 44).