
James Schwoch
A great strength of *Punched-Card Systems* is Heide’s thorough and wide-ranging research. Following the notes, he includes an insightful essay on his sources, assessing and highlighting the various practical and theoretical difficulties he encountered among the various corporate, government, museum, patent and private archives.

If there is a weakness to this book, it is found in Heide’s overall structure and approach. The choice to study punched cards through the lens of social shaping was a deliberate one, and the author makes excellent and readily apparent use of it as an analytical framework, detailing the closures and re-openings of the technology. His dedication is commendable and highly recommendable for students of social shaping, but it also leads to a few problems. One minor difficulty can be found in the overlapping time-lines of the individual studies. Occasional references to events, artifacts or organizations to be explored in later sections or chapters were confusing and distracting, doubly so for a reader unfamiliar with the material. A second, related problem is that Heide’s overall analysis of punched card systems lacks a strong narrative to draw the reader through the text. It is, in some ways, too neutral. Hollerith provides a charismatic figure in the opening chapters, and Heide’s investigations of public registers in France and Germany in the seventh chapter are intriguing, but much of the middle ground, despite its analytical strengths, lacks a compelling story. This strikes me as an unfortunate limitation of the social shaping perspective.

Finally, readers of Scientia Canadensis should note that Canada is mentioned just once, and as a passive recipient of punched card technology. I don’t see this as a flaw, but rather an opportunity for another scholar to fill the gap, using Heide as a model and comparative source. Furthermore, the second half of the book provides a provoking discussion of the role of international subsidiaries and raises the issue of national styles of technology, both topics of frequent interest to Canadian scholars.

**SCOTT M. CAMPBELL**  
*University of Waterloo*


What kind of life has television experienced since its genesis? Casual observers may argue when it comes to the life story of television, television represents The Life of Reilly, It’s A Wonderful Life, or for the most enthusiastic TV viewers, The Life of the Party. However, Alex
Magoun would be more likely to respond to such witticisms with a different set of titles and adages: I Led Three Lives, You Only Live Twice, or Life is What You Make of It. Magoun presents the life story of the technology of television in a lively narrative that captures the complexities of technological trajectories, and does so with a global view. In a highly accessible narrative, he also reveals that the life of television was, is, and will continue to be rather well, rather unsettled. The life of television from inception to the present is subject to interpretation, seemingly appearing in different manifestations from different perspectives and angles, thus presenting the possibility of multiple narratives for itself. Those tempted toward dystopian visions of the idiot box may argue that the life story of television smacks of the dissociative (multiple) identity disorder of Sybil, but even for the snobs and skeptics of television Magoun would probably offer a different dystopia, that of Pandora’s Box for Hope may still emerge after all. Magoun presents a life story of television that has something for every reader—both the fans and the skeptics, both the Heathkit techno-nerds and La-Z-Boy couch potatoes and clichés aside both the beginning and experienced scholar of television, media studies, and history of science and technology.

The Table of Contents, in a clever way, offers up a sort of “lifespan” of television with chapters on themes of conception, birth, parenthood, working life, children, and the new digital generation as a concluding narrative chapter threatening to bring an “end” to the life of television as we know it. The “Conception” chapter sorts out the tangled skeins of basic scientific research, proto-entrepreneurial actors, dreamers and visionaries, and both the scientific and popular press regarding the potential for something in the imminent future that would be akin to “television” during the period from the 1870s up to the cusp of the First World War. The “Birth” or invention chapter immediately follows, discussing events from 1912-29, and then a “Parenthood” or innovation chapter up to the early years of the Second World War (1941.)

Magoun then offers the next two chapters with some chronological overlap, first covering the commercialization of television from 1941-1966 (“Working for a Living”), then presenting a chapter on the panoply of new electronic audiovisual media technologies emergent in the latter half of the twentieth century (running from 1947-1987, this chapter is “Children of the Revolution.”) This strategy of chronological overlap presents the reader with a central paradox of the life story of television: just as television had reached “adulthood” or the technological stability to become an everyday mass medium based on traditional socio-broadcast industrial practices (in other words, just as television was finally able to massify), an array of new audiovisual media technologies emerged from tangled skeins of basic scientific research, proto-entrepreneurial actors,
dreamers and visionaries, and both the scientific and popular press regarding the potential for something in the imminent future that would be akin to “television but not television as you have come to know it.” One of the most curious stages in the life story of television is the simultaneity of television’s extraordinarily successful anchorage, via traditional socio-industrial practices, into a mass medium, concurrent with the invention, innovation, and social emergence of the very technologies and practices that would in fact erode the traditional socio-industrial manifestations of television: videotape, satellites, cable systems, home video cameras and videocassette recorders, and solid-state and semiconductor technologies leading to such exotica (at the time of invention) as CCDs (charge-coupled devices) and LCDs (liquid crystal displays) former exotica we now have completely subsumed into our everyday lives. I found the narrative overlap of these two chapters compelling and persuasive in telling the life story of television in the latter half of the twentieth century.

Magoun concludes his narrative with a well-crafted chapter on recent digital developments and the possible “end” of television. Magoun makes clear that the life story of television as we once thought we knew it is for all intents and purposes over: television as a mass medium socially shaped and with the socio-industrial characteristics of a small number of national networks, terrestrial-based transmission and networking technologies, limited channel capacity or program selection, a lack of any other consumer technology for program consumption, and a rather large, possibly wood-encased, tube-filled electronic box in the living room or other high-use family-gathering room of the home is fading into oblivion. As Magoun concludes, while manufacturers, regulators, researchers, entrepreneurs, critics, and optimists now and in the years to come pursue future developments in electronically distributed audiovisual technologies, “consumers and users will make their prosaic choices on which technologies to adopt and engage” in their pursuit of the electronic audiovisual experience (p.181).

Television: The Life Story of a Technology is not alone in the fields of media studies, or history of technology, in offering such a view of the years ahead when it comes to television, but is in good company with a host of other scholars and critics who are reaching similar conclusions in the first decade of the 21st century. As such, this book is both an excellent overview of television history in the rubric of technology and culture, and also a fine companion to a wide range of recent books and articles concerned with media studies. This book is recommended for all libraries.

JAMES SCHWOCH
Northwestern University in Qatar