

Everyday Objects

The Portable Radio in American Life. MICHAEL BRIAN SCHIFFER. University of Arizona Press, Tucson, 1992. xx, 259 pp., illus. \$45. Culture and Technology Series.

This book is a little more than four times the size of the object that is its main focus: the shirt-pocket-sized portable radio. This suggests a marketing concept: chop off one-fourth of the book and package it in the shape of a shirt-pocket radio, just as those radios themselves were at various times in their surprisingly long history marketed in the shape of everything from a cathedral to a tobacco tin.

The quartering would be possible because the author has actually written four books: first, the story of the shirt-pocket portable; second, a general history of radio; third, a blast against what he labels "cryptohistory" and defines as product history written by corporations to serve their present-day needs; and, fourth, a proposal for a new national industrial policy. The last item is not unusual these days, but this

is perhaps the first put forward by an archeologist.

A great merit of the first of those books is in sorting fact from fiction among the myths that have surrounded the small portable radio. Fortunately the author confirms the truth of the most appealing of the myths. It really happened that when Sony engineers failed in their effort to fit their first transistor radio into their shirt pockets, someone came up with a brilliant solution: issue to each salesman a shirt with a slightly oversized pocket.

The shirt-pocket portable was not, however, invented by Sony. Nor did it really await the transistor. The I.D.E.A./Texas Instruments/Regency, the first small transistor radio, had been preceded by the tobacco-tin shirt-pocket portable based on the type of vacuum tubes pioneered for proximity fuses in World War II. That in turn was preceded by shirt-pocket crystal sets. In their case the term "portable" was a bit of a misnomer. Listening required a stop to set up ground and antenna. Allowing for this, however, the author reminds us that radio receivers were portable before they were plug-in and simple before they were com-

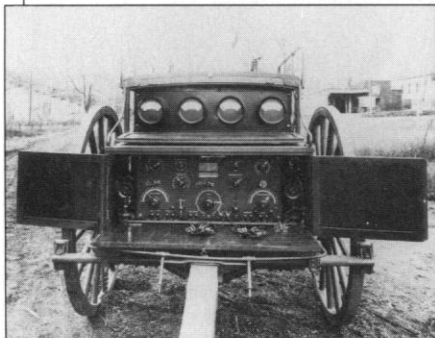
plex. Time after time the pocket portable flopped in the marketplace. What made it eventually successful was not mainly new technology but the arrival of rock music and teenagers' desire to be alone while listening to it. The author insightfully details the evolution of the portable from Nikola Tesla's 1904 dream of "a cheap and simple device to be carried in one's pocket" down to the closing of the last U.S. portable radio plant in 1980.

The second of the books is a history of radio, expanded to draw in science and technology ranging from Einstein to the ice pick. It is generally accurate, although showing confusion between polyphase and single-phase electric power (p. 17) and the printed circuit and the integrated circuit (p. 142).

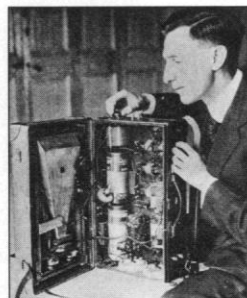
On the indictment of cryptohistory, the tendency of corporations to place their achievements in the "vast void of past time" in order to earn a "favored place in the consumer's heart," this reviewer, an unrepentant cryptohistorian, will remain silent. The author's industrial policy is a more serious matter. He points out that the determining factor in the migration of the

RADIO HISTORY

1917. Marconi "Cart Set," a U.S. Signal Corps portable radio. "In warfare, portable communication devices were a long-standing cultural imperative. Some military historians believe that the Civil War would have ended in six months with much less bloodshed had the location of opposing troops been known in a timely manner. It should come as no surprise, then, that even before the turn of the century, wireless would be drafted by the military. . . . In the first years of the new century . . . the [U.S.] military provided a sizable market for wireless apparatus . . . and helped to sustain the efforts of the independent inventors."

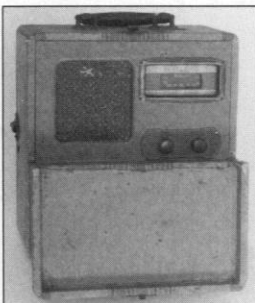


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About 1921. Engineer Francis Dunmore with demonstration portable radio set made by the National Bureau of Standards. "The most important portable of this era was a one-of-a-kind set that was used by its makers for technological display." Dunmore, "one day in the spring of 1922, . . . was waiting in line to register at the Drake Hotel in Chicago. Suddenly, other patrons in the lobby heard the sounds of music from a source unseen. Finally, a few people noticed that Dunmore's suitcase was not quite normal; a crowd gathered, wanting to know if it was haunted. He got somewhat different questions when he demonstrated the 'singing valise' at a meeting of the American Institute of Electrical Engineers."

1939. RCA and Packard Bell portables (width, about 12 inches). "Nearly every house in America had a radio by the time Germany invaded Poland." At that point "Broadcasting studios moved suddenly into 24-hour . . . schedules . . . and such a stream of war-and-peace confusion poured into living rooms that Americans were left almost as tense or groggy as a people awaiting an air raid," according to a *Newsweek* article of the time. Nevertheless, "though manufacturers may have been spurred to produce portables in the belief that Americans would never want to be far from a functioning radio, few ads stressed that the sets were ideal for receiving bad news from abroad. The emphasis, instead, was on the leisure activities that the portable could accompany."



1948. RCA Globetrotter 8BX6 (width, 13 inches). "Because the post-war portables were based essentially on pre-war technology, and played no better than the earlier sets, designers went to work creating a variety of gimmicks and distinctive features that could be touted in ads and in the showroom. Philco concealed the dials and station indicator of several models behind a wooden roll-top cover . . . , continuing the antique-desk look of its pre-war set." The RCA Globetrotters "had aluminum cases with a sliding panel that served the same function as Philco's roll-top cover—whatever that was!"



From *The Portable Radio in American Life*

radio business overseas was low-cost labor. His solution is a tariff on technology clones: a U.S. company (though not a multinational) that puts a new product on the market gets 15 years of protection from foreign imitations.

The real strength of this book is not, however, its policy lessons. It is the detailed tracing of an idea from dream to realization to commonplace. The abundant illustra-

tions go a long way toward justifying the book's coffee-table size. We can watch as radios shrink by fits and starts from suitcase to lunchbox to pocket size. As much as the well-written text, the pictures establish the small radio as even more a cultural than a technological artifact.

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chemist and sociologist L. J. Henderson indicate both the diverse opportunities Harvard offered to scientists and the major change that took place in the institution's interest in individuality. Wyman, a caricature of the ascetic specialist, was able to prosper at Harvard in the mid-19th century owing to the support and protection of friends who admired his modest scientific character. Between 1910 and 1940 Henderson strove to reestablish intellectual community among increasingly disparate specialists, first by promoting systems concepts and then by establishing the elite Society of Fellows; interdisciplinary interchange required that the institution cultivate strong personalities.



Genteel Enterprises

Science at Harvard University. Historical Perspectives. CLARK A. ELLIOTT and MARGARET W. ROSSITER, Eds. Lehigh University Press, Bethlehem, PA, 1992 (distributor, Associated University Presses, Cranbury, NJ). 380 pp., illus. \$35.

In the lithograph from the 1840s that appears at the right a state-of-the-art scientific instrument links an obscure bit of nature to a gentlemanly observer. The activity is protected and ennobled by the realistically rendered institutional building and artist-supplied neo-Renaissance spandrels. The dominant feature in the composition, however, is support—provided literally by the monolithic telescope pier, rooting science in Cambridge, and figuratively by the stone tablet at the right, reminding viewers that the enterprise exists thanks to voluntary benefactions of public spirited citizens.

This illustration neatly symbolizes the elements of science at Harvard during the period covered by this book, a collection of historical essays commemorating the 350th anniversary of the university. Although the book covers events from the founding of Harvard College in 1636 up to the end of World War II, its focus is on the century when modern university science developed—from the 1840s to the 1940s. Clark Elliott, associate curator of Harvard's archives, has gathered contributions from scholars who have used that important collection. The resulting volume is selective rather than comprehensive, analytical rather than celebratory, and focused on institutional activities rather than on scientific ideas. The 11 essays (accompanied by Margaret Rossiter's introduction and Elliott's bibliographical and chronological appendixes) can be divided into studies of individuals, programs, and relations between the university and the outside world.

Toby Appel's portrait of the obscure anatomist Jeffries Wyman and John Parascandola's sketch of the career of the bio-



Harvard College's "Great Refractor," financed by "cometary enthusiasts" in 1843. [From *Science at Harvard University*; courtesy of the Adler Planetarium].