When we tell the story of the computer, we usually focus on the major centers of industry in the US. We look at Philadelphia, the original home of the nation’s electrical equipment industry and an early locale for computer development. We turn to Boston and the companies that grew up around the Massachusetts Institute of Technology. Finally, we think of Silicon Valley and the southern end of San Francisco Bay. Rarely do we think of the Great Plains or the intermountain basin region but this area is a source of innovation for the early computer industry. Many of the early electrical engineers came from the towns along the Union Pacific railroad line or the eastern slope of the Rockies or even the sweeping potato fields of Idaho. Jack Kilby, the only electrical engineer to win a Nobel Prize, came from this region. So did Robert Noyce, who shared with Kilby the credit for inventing the integrated circuit.

Life on western farms gave the children of the 1920s and 1930s an early exposure to machinery. Even town dwellers were familiar with trains or airplanes, which had to stop every few hundred miles in their journey across the continent. Because of this exposure and perhaps because of the rugged nature of rural life, the western US produced a substantial number of technical leaders for the first computer firms.

It is fitting that our cover should recognize a western computer museum, the American Computer Museum of Bozeman, Montana. Located near the northern entrance to Yellowstone Park, the museum tells the story of the computer with a distinctly western viewpoint. Rather than focus on the traditional story of development—the story of a difficult problem mastered by hard effort, teamwork, and inspiration—this museum compares the development of the computer to the settling of the western states. It looks at communication and commerce, the themes most relevant to a western audience. Its collection is remarkably complete, with a good sampling of machines from the modern era and an interesting sample of artifacts from the pre-electronic age. It has a few pieces that cannot be seen elsewhere, including a Burroughs B-200 and a 1950s’ era commercial analog computer. It is certainly worth the visit, should you be in the area.

The stories that we tell within the covers of this issue of the Annals, looks more to the east, to Europe, than to the American west. First we have an article on the development of computers within Switzerland. The Swiss have made a substantial contribution to computing, including the Web browsers from CERN, the Pascal language from Nicholas Wirth, and the research of Eidgenössische Technische Hochschule in Zürich (ETH, or Federal Institute of Technology). In this issue, we take a new look at Swiss contributions in an article by Hans Neukom about the ERMETH, an early Swiss computer.

In addition to a piece on Switzerland, we feature an article on the early Swedish computer industry by Tom Petersson. The Swedes, of course, were early developers of computing technology. They developed the first working difference engine in the 19th century, adopted punched card technology, and built differential analyzers. The issue also contains the second of Ernest Keet’s memoirs on the software industry, Jonathan Grudin’s article on human–computer interaction, and another of our articles on precomputer technology, a piece by Bruce Williams and Roger Johnson on commercial multiplying devices.

Taken together, our five articles and our cover give us a picture of the computer that is far richer and far more geographically dispersed than the usual story of Eckert...
Our five articles and our cover give us a picture of the computer that is far richer and far more geographically dispersed than the usual story of the rise of Intel and Silicon Valley.

and Mauchly building the ENIAC in Philadelphia or the rise of Intel and Silicon Valley.

With this issue, we will also be saying Godspeed to one of our long-term editorial board members, Arthur Norberg. Arthur is retiring from the Charles Babbage Institute, where he has had a long and successful career as director. At the same time, he is stepping down from our board. We thank him for his help and leadership, and wish him well for the future.

Making Silicon Valley
Innovation and the Growth of High Tech, 1930-1970
Christophe Lécuyer
A history of the innovative practices in the San Francisco-area electronics industry that paved the way for the rise of the computer industry in Silicon Valley.

“Silicon Valley wannabes search for the Valley’s secrets of success. Lécuyer’s impressively informed response reminds them that God is in the manufacturing details.”
— Thomas P. Hughes, author of Human-Built World: How to Think about Technology and Culture

“Lécuyer’s book is the most scrupulous scholarly exploration so far of the cluster of innovative firms that has come to be called Silicon Valley. It is a book that should be read by anyone curious about the emergence of the high-tech electronics firms that have created this remarkable concentration of innovative talent.”
— Nathan Rosenberg, Professor of Economics (Emeritus), Stanford University

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