Some 20 years ago, I traveled to Japan as my first trip out of the US. My wife and I were exploring the central business district when a rainstorm sent us running to the lobby of the nearest office building, a building that housed the *Asahi Shimbun*, a large Japanese newspaper. While we were trying to dry ourselves, we were approached by a man who was from the newspaper’s public relations office. When we showed some interest in learning about the paper, he offered to take us on a tour of the building. After passing through press rooms and giant rolls of paper, we entered the compositors’ office, which contained a large IBM mainframe.

The machine was connected to a pair of keyboards unlike any I had ever seen. The central part of the board was a 10 × 10 array of keys. On the left-hand side were 20 shift keys. Each keyboard was staffed by two workers. One worker read a manuscript aloud. The other worker vigorously punched buttons. Arms flew. Hands spiraled through the air to land on sets of buttons.

Throughout our trip, I saw several different computers: mainframes, desktops, and ATMs. Each of these was organized in a slightly different fashion from those in the US. Cursors cycled down columns rather than across rows. Text appeared in three, or sometimes four, character sets. Yet, underneath the unfamiliar interfaces there seemed to lurk the less than universal roman alphabet. Error messages appeared in English. Some machines asked for input in *romanji*—roman characters used to phonetically spell Japanese words.

**New editorial board members**

With this issue, I’d like to introduce three new members of our editorial board. First, we have a new editor of the Events and Sightings column, Chigusa Kita. Kita is a professor at Kansai University in Japan and a former producer at NHK Television. A little more than a year ago, she published an article in this journal on J.R. Licklider (vol. 25, no. 3, pp. 62-77). Next, I am pleased to welcome Jeffrey Yost, who is assistant director of the Charles Babbage Institute and Atsushi Akera of Rennselear Polytechnic Institute. Yost recently published *A Bibliographic Guide to Resources in Scientific Computing, 1945–1975* (Greenwood Press, 2002), while Akera wrote an article on the ENIAC for *Annals* in 1996 (vol. 18, no. 1, pp. 17-24). The two of them will assist me in reviewing articles for publication. In this work, they will be joined by two current board members, Anne Fitzpatrick and Janet Abate. I am, of course, grateful for their willingness to serve.

**In this issue**

Here we explore some of the issues that needed to be addressed in adapting the computer to Japan. Three articles, by Kurt Hensch and his colleagues, discuss the technical problems that had to be solved to allow IBM computers to handle Japanese characters. There was no easy solution, as the Japanese language could not be captured in a simple character set such as ASCII.

Before jumping into the details of Japanese character sets, this issue begins with an article on plug-compatible computers by Shigeru Takahashi. Japanese companies were leaders in developing computers that used instruction sets from existing designs. These machines let users run software written for other brands of computers, an activity that raised many new problems over software rights. Takahashi discusses a key incident that influenced the development of three firms—IBM, Hitachi, and Fujitsu.

Completing this issue, we have an article by Friedrich W. Kisternann about the Hollerith punched card machines of the 1900s. This is not an article about Japan, but it does deal with problems that are similar to those described in the other articles in this issue. Kisternann shows how Hollerith learned to encode numbers on his punched cards. In solving this problem, Hollerith opened a large new market for his machines. His first punched card machines, which could only count, were aimed at census offices. His second generation of machines, those described by Kisternann, were designed for business offices.
Welcome to the Editorial Board

Please welcome Chigusa Kita, Jeffrey Yost, and Atsushi Akera to the editorial board.

Chigusa Ishikawa Kita is an associate professor of informatics at Kansei University, Japan. Her research interests include the formation of technological vision and research agenda, the social impact of computing technology, and the process of institutionalization in the field of computer science. Recently, she has been collecting oral histories of Japanese computer pioneers and became interested in the comparative history of computing between Japan and the US. Part of her dissertation on the early history of the Information Processing Techniques Office was published as a book, *J.C.R. Licklider and His Age* by Seido-sha in Japan. She received the Nikkei BP Biztech book award in 2003. Kita has a PhD in 20th century studies from Kyoto University.

Jeffrey Yost is associate director of the Charles Babbage Institute (CBI). He served as project director and principal investigator for the recently completed four-year National Science Foundation-sponsored CBI project “Building a Future for Software History.” His research interests include the history of medical informatics and privacy, the history and historiography of software, scientific computing, and other areas of the business, social, and cultural history of information technology. His most recent scholarship includes “Computers and the Internet: Braiding Irony, Paradox, and Possibility,” in C. Pursell, ed., *Companion to American Technology* (Blackwell Publishers, 2005) and *The Computer Industry* (Greenwood Press, 2005). Yost received a PhD in the history of technology and science from Case Western Reserve University.

Atsushi Akera is an assistant professor in the Science and Technology Studies Department at Rensselaer Polytechnic Institute. His primary research focus is on the social and institutional history of the Cold War. His publications include “IBM’s Adaptation to Cold War Markets,” *Business History Review*, vol. 76, 2002, pp. 767-802 and “Voluntarism and the Fruits of Collaboration: The IBM User Group, Share,” *Technology and Culture*, vol. 42, 2002, pp. 710-736. In his current project, he is using the history of computing as a metonymic device by which to describe broad-based changes in the US infrastructure for scientific and engineering research. Akera received a PhD in history and sociology at the University of Pennsylvania.

Letter to the Editor

On page 3 of your last issue (vol. 26, no. 4), there are two typos in the APL one-liner. The comma should be a dot and the subscript 1 near the end should be an inline iota. The correct code should be

Primes: ( ∼ R ∈ × ← ↓ R ) / R ← 1↓ R

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