iety-based," and "paranoid") and "as a ritual attempt to force nature and the divine . . . to conform to human will" (p. 19). And the irrationality does not end when war ends. The twisted epistemology of warmaking distorts the search for peace as well, as is detailed in Diane Nelson's *Reckoning: The Ends of War in Guatemala* (2009). We won't be able to solve the nightmare of war until we answer Nelson's ultimate question, "What makes someone believe?" (p. 323).

This book contributes significant and useful answers to that crucial mystery. Other war scholars might quibble with certain assumptions (for example, that modern war continues today despite the technological limits on total war and decisive battle) and analytics (some "stories" from continental philosophers really are nonsense), but the overall usefulness of this anthropological (in-person ethnography) perspective cannot be denied. Not enough cross-disciplinary scholarship is being practiced today. Anyone seeking to understand war would benefit from this rich volume.

The unified bibliography is a great asset. The images are effective. The writing is always clear and is often gripping (not something one can say about most academic books). It is a fine tribute to Neil Whitehead, whose insights on why we kill each other will be sorely missed.

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Delete: A Design History of Computer Vapourware.

By Paul Atkinson. London: Bloomsbury, 2013.
Pp. x+240. $94.50.

Most followers of recent computing history are familiar with the term "vaporware," defined as software that is announced but is delivered late, incomplete, or unusable, or never delivered at all. (I will use the American spelling in this review.) In this book, Paul Atkinson extends the definition to include computer hardware of various types, including machines that were delivered and "almost" successful, but that failed for a variety of reasons. His definition extends back in time all the way to Charles Babbage, whose inability to deliver his proposed Difference Engine or the more ambitious Analytical Engine is forever attached to his name.

In the book's preface, the author places the term in the historical context of how inventions and innovations occur, noting that failed products reveal as much about the evolution of technology as the successful milestones. This is familiar material to readers of this journal. However, Atkinson notes that computer practitioners may state publicly how important it is to fail and recover from failure, but they are nevertheless uncomfortable

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with the term if applied to their own work. It is no surprise that "one contact I interviewed refused permission to reproduce images of his work in this book because it had the word 'vapourware' in the title" (p. iix). The term carries a lot of emotional baggage.

The extension of the definition to include hardware, especially machines that predate the personal computer era, at first seemed unusual, but the results are well worth reading. The book is handsomely produced and full of fascinating color images, many of them quite rare. The author, a professor of design and design history at Sheffield Hallam University in the United Kingdom, has chosen to focus on a number of examples of vaporware from the United Kingdom and continental Europe—a refreshing alternative to the Silicon Valley/IBM focus found in most histories written by Americans. I was especially happy to see descriptions of early Swedish computers from the 1950s: the BARK and the BESK, the innards of which I had studied for my dissertation research years ago. And it is not surprising that the author places great emphasis on the look and feel of the failed products—this is especially evident in the numerous examples of tablet, notebook, and handheld computers that failed, some with touch screens, others with pullout or folding keyboards, detachable screens, projectors, etc.—all before the design stabilized on the Zen brick of the iPhone. This section alone would make an excellent case study of the social construction of technology, showing the myriad attempts to solve the problem of a computer interface for a small device, before Apple's designers closed the black box.

Predating the portable devices was the famous Honeywell "Kitchen Computer," advertised in the 1969 Neiman Marcus catalog for a mere $10,600, for the housewife to store her recipes. Was it vaporware? It is not clear if any were sold, but Neiman Marcus got its money's worth for the free publicity the advertisement generated. The Kitchen Computer was based on a Honeywell minicomputer that, in a less-flashy package, was used as the switching node for the ARPANET, the predecessor of today's internet. Today's kitchens are full of microprocessors, and a few computers, but alas, not for storing recipes.

One minor nitpick is that the author does not include what I call the "mother of all vaporware" products: the IBM System 360 Model 90, a supercomputer announced in 1964. IBM's rival, Control Data Corporation (CDC), had just announced its own supercomputer, the CDC 6600, designed by the legendary Seymour Cray. In December 1968, CDC sued IBM, arguing that IBM was marketing "paper machines and phantom computers" intended to divert customers away from the relatively small Control Data Corporation (Katherine Fishman, *The Computer Establishment* [1981, p. 204]). IBM did ship Model 90 machines eventually, which were well-received by its customers although sold in far fewer numbers than the CDC 6600. Tom Misa tells part of this story in his history of the Twin Cities computer industry, *Digital State* (2013); the full history is better left for another

day.

In sum, I highly recommend this book not only to historians of computing, but also to anyone who wishes to unpack the complex and subtle themes that surround the notion of failure in technology.

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