

surprised, those who are not will find a rare fusion of analytical clarity and illustrative readability both for the expert and for the layman. There are some redundancies among the chapters that are largely a

result of some of them having been published before. However, take it as an asset, since it is possible to read individual chapters that are in themselves well structured, stand-alone products.

Work practices made visible, connections to history invisible

Ana Viseu

Everyday Engineering: an Ethnography of Design and Innovation edited by Dominique Vinck

The MIT Press, Cambridge MA, 2003, 247 pages, US\$45/£19.95, ISBN 0-262-22065-2

Everyday Engineering is about the practices of those individuals who engage, day in and day out, in the construction of our technologically mediated world. Its goal is not to glorify or rebuke the work of engineers, but rather to critically examine and describe the processes of design and innovation. It attempts to demystify the neatness and rationality in which engineering practices are often imagined or portrayed, especially by engineers-to-be, the target audience of this book.

Moreover, its authors argue that this critical examination should not be conducted from the outside. Rather, it requires the use of interdisciplinary, ethnographic methods through which the researcher becomes actively involved with the work being conducted. *Everyday Engineering* illustrates this point through the presentation of nine 'real life' studies that bring to the fore the heterogeneity and situated character of technical activities.

Edited by Dominique Vinck, and previously published in French in 1999, *Everyday Engineering* is testimony to the need for interdisciplinarity in analyzing the activities of innovators, designers and engineers. The volume comprises contributions by eight scholars with diverse backgrounds, ranging from engineering to sociology, all affiliated with the University of Grenoble.

The first part introduces the reader to the contingent and situated character of engineering practices and products. The second part examines the tensions

and complementarity among different schools of thought and action, dispelling the notion that there is only one (right) way to design and create artifacts. The third part analyzes the role played by textual and graphical representations in the processes of design and innovation, as well as the practices that surround their production. Finally, the epilogue summarizes and offers an explanation of the theoretical framework that binds the contributions together and for which the book stands.

Everyday Engineering is an ambitious project, set up as both a collection of academic essays and a student textbook for future engineers. As an academic publication, it is an interesting, if unorthodox, book. Many of the conventions that guide academic publishing are absent: the table of contents does not specify chapter authors; references are few and dated and, despite the book's ethnographic foundations, quotations from subjects rarely appear.

More problematic, however, is the lack of reference to the larger, and well-established, tradition of science and technology studies (STS) upon which this book builds. This cannot be attributed to lack of awareness, for some of the key STS texts and scholars are mentioned throughout the book. Moreover, the kind of vocabulary and descriptions used in many of the chapters resonates strongly with that used in social studies of technology.

While we can only speculate about the reasons for this purposeful omission, its results are clear. The failure to acknowledge the connections between the research being produced at the University of Grenoble and the larger academic world not only makes it difficult for the reader, especially students, to situate this research within an established field, it also decontextualizes science, hence feeding one of the myths the book's authors set out against.

Nevertheless *Everyday Engineering* provides worthwhile examinations of a variety of design projects. For instance, chapter three (Bovy and Vinck) tells the story of a container, designed by an agricultural engineer, for the selective sorting of household waste. The story is one of "objects and human groups and their respective identities" (page 53). Readers are told a tale of adventures, surprises,

Ana Viseu is in the Department of Human Development and Applied Psychology, University of Toronto/OISE, 252 Bloor St West, 9th Floor, Toronto, ON; M5S 1V6 Canada; E-mail: ana.viseu@utoronto.ca; Website: <http://fcis.oise.utoronto.ca/~aviseu>.

misbehaviors, and betrayals by technical and human actors as they try to lock others in place, and align them with their individual goals.

For instance, when the containers were installed outside each household, a number of unexpected actors made themselves visible transforming the course of action. “[T]ourists”, the authors say, “find [the containers] handy for disposing of remains from fast food meals Secondary residents, in order to avoid taxes, do not register their addresses They use the containers of registered inhabitants to dispose of unsorted waste” (page 61). A project that, at first sight, seemed straightforward turns out to be a complex process of negotiations and mediations.

As a textbook for engineering students, *Everyday Engineering* offers a number of examples of how the socio-technical practices involved in designing a new artifact involve negotiated, political, mundane and messy strategies. In chapter one, for example, the author (Vinck) follows an engineering student’s internship in a research laboratory. His job is to design one specific, fairly peripheral part of a larger machine. The student believes his job is simply to study the requirements, find the best solution, and then sit at the computer to design the piece. However,

he quickly finds out that the bulk of his time will be spent arguing his case and negotiating with those in charge of designing neighboring parts.

A helpful feature of the text for students is the operational summary at the end of each chapter that extrapolates general rules from the chapter’s main points. The authors also dedicate a large amount of time to describing the technologies and artifacts being designed, a feature that will certainly appeal to engineering students.

My reactions to this book were mixed. *Everyday Engineering* is evocative in its descriptions of the meandering character of engineering practices. The stories it recounts of the real life practices of engineers are captivating and illustrative. As such, *Everyday Engineering* is a part of a much needed kind of book that makes work practices visible and acknowledgeable, and science and technology accessible to all. However, the lack of the connections to the larger field is hindering, for it makes invisible the history and development of many of the ideas exposed here. Still, *Everyday Engineering* goes beyond many of the tales of engineering in pointing out the complexities of designing for an equally complex world.

Battles for the mind, images at war

Scott L Montgomery

***Iconoclash: Beyond the Image Wars in Science, Religion, and Art* edited by Bruno Latour and Peter Weibel**

MIT Press, Cambridge MA, 2002, 701 pages, £30.50, ISBN 0-262-62172-X

Plato feared the artists, hated the poets. “Cursed are the image makers”, said he, “for theirs is the power to distract, seduce, re-orient, incite”. Yet how grandly has his own idol-like figure stood, century upon century, icon of bearded genius, casting all of modern philosophy (in one well-known, idolatrous claim) to the shade of a mere footnote. The despiser of one icon becomes the creator or sanctifier or (more pointedly) the subject of another. An irony that finds

much welcome in this monumental anthology on the topic of “iconoclash.”

This is no ordinary exhibit catalog, no tweedy collection of articles or capsule reflections on a particular theme, defined and delimited. It is instead a wild and baggy monster, a Gargantua that stretches in physical bulk and intellectual content the very idea of a ‘book’ or ‘anthology.’ *Iconoclash: Beyond the Image Wars in Science, Religion, and Art* is described as a “project” — of what sort, we must dig hard to find out (there is no introductory mention of whether or not a museum exhibit was ever directly involved, where and when it might have occurred, and so on).

What we have for certain is this volume, in which a great deal seems hurled and glued together: hundreds, even thousands of images, the contributions of over 60 individual writers, from perhaps a dozen or more nations, in styles that range from the scholarly and meditative to the teasingly suggestive, literary, and discursive. A collage, a casserole, a cacophony; indeed, a “clash” in every sense of the word. But to what end?

Bruno Latour, in his introduction to the book, claims that the main aim is “an archeology of hatred

Scott L Montgomery is an independent scholar, currently at work on a book about science and art from the late medieval period to the 19th century. His address is 1511 18th Avenue East, Seattle WA, USA 98112; Tel: +1 206 322 2862; Fax: +1 206 322 8597; E-mail: scott.montgomery@prodigy.net.