

Furthermore, he argues one cannot treat technologies in isolation; there is always cross-over and interdependence. In this he echoes the dilemma of museum administrators seeking to assign areas of curatorial responsibility in a time of shrinking resources.

Chapters in the book cover rural and urban industries as well as the coalfields and the exploitation of other minerals, textiles and transportation. Dr Trinder evidently hopes that this work will be an organizational blueprint for others engaged in similar research in other parts of the United Kingdom. If so, they will not go far wrong in using his format. Every site and photograph throughout the text is map-referenced; there are no fewer than twelve pages of additional references and eleven of bibliography. These are supplemented by three appendices. One, of great interest to molinologists, lists all the rivers, streams and water power sites, again with map references. The second covers the development of the turnpike network with the location of the tollhouses (many of which remain) and the third lists organizations in the United Kingdom with interests in industrial archaeology. The last pages are devoted to a three-part index that covers the contents by name, place and subject matter. Would that all publishers of similar works were so meticulous!

Faced with such a carefully edited work and a refreshing absence of typos, any criticisms

are minor. For the overseas reader, particularly one whose knowledge of English geography might be sketchy, a map positioning the county in relation to the United Kingdom cities mentioned in the text would have been useful. There is also the occasional intriguing reference deserving of amplification: at one time barrels of blood were collected from butchers to assist in the evaporation process in the production of salt. As a non-chemist contemplating what must have been a gloriously messy procedure, one wonders about the why and how. The addition of a short glossary of the more industry-specific terms that are strewn about the text would also have been an asset for the average reader. This reviewer considers himself to be fairly IA-literate but had to resort to Oxford and Webster for *frankpledge*, *posset pot* and *huckaback*; neither authority lists *lucams*.

As a quality publication in hardcover, this book is not inexpensive and will naturally have its greatest appeal to those resident in or visiting the United Kingdom. Despite this, any student of industrial history will find much of interest and value within its covers since Dr Trinder's lucid prose is complemented by over 200 excellent black-and-white photographs. For others contemplating authorship on similar topics, it creates a benchmark to which they can aspire.

Stephen Fenichell, *Plastic: The Making of a Synthetic Century*

JACQUES R. GIARD

Fenichell, Stephen. *Plastic: The Making of a Synthetic Century*. New York: HarperCollins, 1996. 356 pp., 24 illus., index, cloth, US\$25, ISBN 0-88730-732-9.

In his book *Plastic: The Making of a Synthetic Century*, pop-culture enthusiast Stephen Fenichell delves into the fascinating world of plastic — the “Rasputin of modern materials ... [that] stubbornly refuses to die” (p. 3). Fenichell's premise is that, as a society, we are not what we eat; we are what we make. And what do we make? We make plastic objects. Fenichell stakes out his position unequivocally very early on in the book:

In the five decades since the end of World War II, plastic has crept unceasingly, and often invisibly, into our homes, cars, offices and

even our bodies. Some of us have plastic hearts, joints, valves, limbs.

Plastic has become the defining medium of our Synthetic Century precisely because it combines the ultimate twentieth-century characteristics — artificiality, disposability, and synthesis — all rolled into one. The ultimate triumph of plastic has been a victory of package over product, of style over substance, of surface over essence. (p. 5)

In eleven highly readable chapters, Fenichell chronicles the evolution of polymers and plastics. More importantly, he situates their evolution in socio-political and cultural context. In order to accomplish this, it is clear that Fenichell has conducted considerable research. For example, Chapter 7, “The Vinyl Solution,” is a riveting and persuasive account of how the Allies’

application of plastics technology tilted the balance of power in their favour in the latter stages of the Second World War. I also refer readers to Fenichell's discussion of Ezio Manzini, postwar Italy's philosopher of plastic, who, almost single-handedly, spawned the "Olivetti era." Having said this, I am baffled by one glaring oversight: Fenichell ignores the increasing use of plastics in today's aerospace industry, specifically in the design and construction of "stealth aircraft," a not insignificant omission.

The author has a great feel for his subject. Fenichell recognizes, and, even more importantly, he enables his readers to recognize that plastics are more than the product of careful science. In some cases, plastics have been developed to provide unique solutions to unique problems; but more often than not, they have been the unanticipated result of experiments gone awry. By way of example, after having accidentally left a beaker of isoprene in the sunlight, British chemist William Tilden managed to turn isoprene gum into a polymer. Fenichell also cites the case of two young organic chemists, E. W. Fawcett and R. O. Gibson, whose failed experiment yielded a waxy solid that would eventually lead to the discovery of vinyl. In these and other colourful examples, Fenichell shows that the objective world of science is loaded with personality. It is in his role as anecdotalist that the author's talents really shine.

During most of his narrative, Fenichell is able to attribute a specific discovery — or a significant development towards a discovery — to a specific scientist or inventor. In the early days of the evolution of polymers and plastics, there was clearly an intimate link between the material and an individual. Research committees and project teams within multinational corporations had not yet appeared on the scene. This is reflected in the straightforward and value-neutral titles of his first few chapters. It would seem that for Fenichell, the evolution of plastics started out as a very linear, albeit serendipitous, process — a progression from celluloid, to Bakelite, to cellophane, to nylon, and so on.

But somewhere along the way, the world of plastics loses its simplicity, its innocence, its controllability. Just past the mid-point of the book, the tenor of Fenichell's narrative changes. The evocative titles of his later chapters reflect this change: "Plast-O-Rama," "Pop Plastic," "The Seat of the Plague," and "Sympathy for the Devil." Without flinching, Fenichell assesses the cultural and environmental consequences of the pervasiveness of plastic in our everyday lives. It makes for a gripping read.

To my mind, the only major shortcoming of *Plastic: The Making of a Synthetic Century* is its lack of strong visuals. The scant few that exist only beg for more. Fenichell's central argument is that plastics moulded the twentieth century by the objects we moulded from plastic. So where are the images of these objects? One case in point: Fenichell goes to great lengths to explain John Wesley Hyatt's "stuffing machine." He describes cylinders, tapered nozzles, and an oil-filtered jacket. An illustration would have greatly enhanced the readers' understanding of this ground-breaking product. Another early example is Bakelite. Given the visual potency that Bakelite handed over to the designers and manufacturers of the day, where are the illustrations of the products that would go on to shape our new aesthetic? And later, given the importance of the work of Charles Eames and Eero Saarinen, where are the illustrations of their designs? The list goes on.

Plastic: The Making of a Synthetic Century falls somewhere between two extremes: Ronald Beck's *Plastic Product Design* (1970), a technical textbook used in the teaching of plastics technology, and Sylvia Katz's *Plastics: Designs and Materials* (1978), one of the better illustrated histories of plastic. Somehow, authors who approach this complex topic seem to be stuck in a mindset that stipulates that a book about plastic must either be word-bound and therefore meant for the classroom, or picture-bound and therefore meant for the coffee table. With more visuals, *Plastic: The Making of a Synthetic Century* could have been a real breakthrough.

Lawrence Weschler, *Mr. Wilson's Cabinet of Curiosities*

ROBIN INGLIS

Weschler, Lawrence. *Mr. Wilson's Cabinet of Curiosities*. New York: Pantheon Books, 1995. 165 pp., 43 illus., cloth, \$28.95, ISBN 0-679-43998-6.

This delightful little book describes American journalist Lawrence Weschler's discovery of a nondescript, 1500-square-foot, storefront operation in Los Angeles — the Museum of