

# A MARKETING HISTORY OF AMERICAN PEWTER AND ITS COMPETITORS

Terrence H. Witkowski  
California State University, Long Beach

## ABSTRACT

This paper presents a marketing history of American pewter and the rival materials with which it once competed. Popular in colonial times, pewter sales peaked in the early 1800s, but then commenced a sharp decline until, by 1880, the industry had virtually disappeared. The paper describes how and explains why this occurred and offers some implications for marketing thought.

## INTRODUCTION

This paper investigates the product life cycle of American pewter household goods. The time frame spans the colonial era to the present, but the focus is on the period from 1780-1880 when the industry matured and then declined. Once nearly as visible as are plastic or styrofoam today, pewter objects played an important role in everyday life at virtually every level of society. Pewterers fabricated and sold millions upon millions of items for eating, drinking, lighting, and other uses until the second half of the nineteenth century when demand inexorably fell, causing the material to all but disappear from the market. The circumstances behind the industry's collapse, including the competitive threat from items made of silver, silverplate, brass, glass, and porcelain, and some lessons about technological change, consumer response, and marketing strategy constitute the thrust of this research.

## DATA SOURCES AND METHODS

The author has consulted both written and pictorial advertisements and business records, has analyzed period works of art that depict the making and use of pewter, and has examined pewter artifacts in museums, at antique shows, and, most intimately, in private collections. It is assumed that material objects reveal technological ideas as well as cultural values. In an attempt to replicate past consumer experiences, original pewter items or close replicas have been used in the home, a methodology elaborated in Prown (1982) and Witkowski (1989b).

The research also incorporates findings from prior studies, especially from the related fields of material culture and decorative arts. Research in these areas traditionally has concentrated on objects and how, where, and by whom they were made. Museum specialists have rediscovered and preserved past crafts and their techniques. More recent scholarship has begun to relate objects to their society and culture (Ames 1985), including their evolving marketing strategies and distribution channels (Miller 1984). Because of the great number and depth of existing studies on pewter, rival materials, and their making, marketing and domestic use, this secondary literature figures more prominently than does the primary data.

The results of the investigation are presented as a narrative of pewter technological development, product history, competitive innovations, and consumer acceptance and rejection. Most historians use a similar structure (Lavin and Archdeacon 1989). As Savitt (1980) puts it: "Historical research and writing are basically descriptive; they begin with the narration of events in a time sequence" (p. 53). However, like most recountings of the past, this one introduces a good deal of explanation along the way (Megill 1989) with particular emphasis given to explaining the causes of change in consumer behavior (Smith and Lux 1993). Thus, the intent is not only to write a short history of a product and technology life cycle, but also to advance marketing thought.

## PEWTER TECHNOLOGY

Pewter is an alloy of tin. Since tin is a soft, brittle substance, varying proportions of lead, copper, antimony, and bismuth are added to improve durability and malleability. Pewter has a lower melting point than harder metals like brass, bronze, silver, and gold. It is easily cut and soldered and resists oxidation and the action of almost all acids. Artifacts found in ancient tombs indicate that the Egyptians worked pewter as early as 1300 B.C. (Barkin 1988). The metal was popular in Roman times and, after an apparent long hiatus in production, it reemerged in the eleventh and twelfth centuries and flourished for the next 800 years. Pewter was made in different grades, some of which, like Roman pewter, having an unhealthy lead content. Eighteenth- and early nineteenth-century consumers regarded London pewter the best in the world, and colonial newspaper ads distinguish between "London hard metal" and "common pewter" (Dow 1967).

Traditionally, most pewter was made by gravity die casting, the pouring of molten metal into molds. Parts were then soldered or fused together, skimmed of excess metal, and polished on a lathe. Almost always made from brass or bronze, casting molds were very expensive capital equipment. Pewterers economized by having the same component parts, such as a lid or handle, on two different items. Molds were used for years and passed from one generation of pewterers to another. Some pewter continued to be made by casting methods well into the nineteenth century.

Around 1770, English pewterers invented a new alloy of tin they patriotically named "britannia" metal. With antimony as its primary hardening agent, britannia was harder, lighter, and shinier than even the best ordinary pewter, and also less subject to the effects of tarnish (Goynes 1965). This improvement enabled the product to better compete with the lustrous surfaces of silver and silver plate. Innovation diffusion was slow, however, and it took 50 years before britannia became the industry standard. New manufacturing processes, especially die stamping and spinning (forcing metal sheets over a chuck turning on a lathe), accompanied the introduction of britannia. This technology affected product design by giving nineteenth century britannia objects their own characteristic silhouettes. Britannia spoons were reinforced with iron wire and produced in great quantity as late as the 1860s (Montgomery 1978).

In the eighteenth century the making of pewter was still the small-scale craft operation it had been for centuries. Pewterers learned their trade as apprentices to master craftsmen. After the typical seven years of training, and provided he could make, borrow, or purchase the all-important molds, a journeyman could establish his own business. Pewterers set up shop in the American colonies as early as the seventeenth century, but their production was limited because of a lack of native ore and the Trade Lords' decision to ban exports of English tin to protect the home industry. Thus, colonial pewterers mostly did repair work, melted down and recast worn out items, and retailed large quantities of English imports. References to English pewter repeatedly appeared in newspaper ads from the 1750s and 1760s as in the following item from the Boston Gazette, September 26, 1757:

William Molineaux, at his warehouse opposite the East End of Faneuil-Hall, sells very cheap for Cash, or short Credit, best London Pewter, at one Shilling and five Pence per pound (cited in Dow 1927, p. 77).

By 1800, however, Americans were manufacturing large quantities of their own pewter and were competing vigorously with the British. Britannia production commenced about 1810 and by 1825 had become the industry standard.

Nineteenth-century manufacture moved toward larger and more mechanized factory operations. Gradually, master pewterers replaced their highly trained journeymen with more modestly skilled laborers who worked for lower wages. Enormous amounts of britannia were produced: "In 1831, the Taunton Britannia Manufacturing Company received a single order for 10,000 sperm-oil lamps . . . the

1836 inventory of one New York Merchant recorded almost 90,000 items" (Montgomery 1978, p. 41). Although the industry was centered in the northeast, pewterers worked throughout the U.S., some making spoons and perhaps other simple items on an itinerant basis.

### PRODUCT FORMS, BRANDING, AND MARKETING

American pewterers made a wide variety of products, drawing upon both English and European prototypes, but also introducing their own designs. Tablewares included several sizes of plates, deep dishes, and basins; a variety of pitchers and porringers (small bowls with flat handles); many spoons and ladles; drinking cups, mugs, and tankards; and, especially in the nineteenth century, tea and coffeepots. Pewterers fabricated lighting devices in the form of candlesticks, sconces, and whale oil lamps and made sundry household paraphernalia such as inkstands, baby bottles, funnels, bedpans, commodes, and spittoons. Pewter also was used for component parts in glass syrup jugs, oil lamps, and many other objects.

Churches bought pewter baptismal basins, beakers, chalices, flagons (tall, tankard-like vessels), and communion tokens (an admission ticket for the worthy). Apparently, pewterers did not produce very many specialized items used for business purposes and manufacturing outside the home or, if they did, these items have not been preserved by collectors. However, colonial newspaper ads do refer to "barber pots" and "worms" for stills (Dow 1927, Gottesmann 1938).

During the heyday of pewter, modern brand names were just beginning to appear. As early as the 1770s, for example, the forward-looking English potter, Josiah Wedgwood, had coined the term "Queensware" to better sell his brand of creamware (McKendrick, Brewer and Plumb 1982). American pewter was identified by simple stamped marks called touches or touchmarks. Usually limited to the maker's name or initials, some marks included town names and an American eagle, a motif widely reproduced during the nationalistic federal era, circa 1790-1830. Other early symbols include anchors, animals (especially lions), flags, hearts, roses, shields, ships, stars and swords (Laughlin 1981). In the mid 1800s pewterers abandoned these embellishments and simply incised their names. Throughout the eighteenth and nineteenth centuries nearly one-third of all American pewter left the shop unmarked (Pewter Collectors Club of America, Inc. 1984). Such items may have been intended for resale or, perhaps, part of larger sets that included marked pieces.

Colonial pewterers, who were often merchants as well as manufacturers, printed broadsides and placed newspaper advertisements to promote their business. They encouraged both wholesale and retail trade and offered to buy used pewter for cash or goods. The following ad, from the Pennsylvania Journal of April 25, 1765, illustrates these activities.

To be sold by Cornelius Bradford, Pewterer, At the sign of the dish in Second street opposite the sign of the George, wholesale or retail at the most reasonable rates. All sorts of pewter ware, viz. dishes and plates of all sizes, basons, tankards, quarts and pint mugs, porringers tea-pots and sugar pots, cullenders, bed pans, stool pans, half pint and gill tumblers, wine measures, salt sellers, spoons, milk pots, pint and half pint dram bottles, slop bowls, and all sorts of other pewter.

Said Bradford makes the best of pewter or block tin worms of all sizes for distilling, as shall be ordered, as also cranes for hogs-heads or bottles, candle moulds of different sizes. All persons may have pewter mended at a reasonable price and ready money given for old pewter, or exchanged for new (cited in Prime 1929, p. 108).

Plates, dishes, and basins were sold by the pound (Montgomery 1978) and, in general, the cost of the material exceeded the cost of labor. Since no account or letter books from the eighteenth century have been located (Montgomery 1978), relatively little is known about other aspects of early pewter

marketing. Better records survive from the 1800s. By mid century, britannia makers were distributing illustrated price lists and retailers were advertising their pewter inventories in newspapers and city directories.

## COMPETING TECHNOLOGIES

Historically, pewter competed with a number of rival materials. For example, various woods could be fashioned into dining plates, bowls, and eating utensils. Although softer and less durable than pewter, wood in North America was cheap, plentiful, and easily worked by settlers. This section discusses the metal, ceramic, and glass technologies that eventually provided the pewter industry with more serious challenges.

### Silver and Silver Plate

Silver took many of the same forms as pewter and, had silver been more common and less expensive, the pewter industry would never have existed. A lovelier and more durable metal, silver was also more skillfully and imaginatively wrought. Most silver prior to 1800 was cast or worked by hand, literally by beating the metal into the desired form. Colonial American silver generally followed the English sterling standard (92.5 percent silver, 7.5 percent copper). Objects made of silver cost ten times as much as those made from pewter. The silversmith was typically a highly esteemed craftsman and often a figure active in political affairs, the most notable example being Paul Revere. Like pewterers, colonial silversmiths did repair work, retailed English imports, and advertised their businesses in newspapers. Silversmiths usually marked what they made with their name or initials in a cartouche.

In the nineteenth century the "coin" standard (90 percent silver, 10 percent copper) became the norm until after the Civil War when most makers reverted to sterling. Silver manufacturing of the period paralleled that of pewter since silver also could be die stamped and spun and this could be done on an industrial, rather than craft, scale. Despite the mechanization of production, silver objects remained luxuries because of the intrinsic value of the material and a design tradition that emphasized fashionable and often ornate styles. As the century progressed, silver was more likely to be sold through a retailer rather than directly from the maker.

In 1743, an English cutler named Thomas Boulsover invented a process called fused plating where a veneer of solid silver was permanently attached to a base of copper. Looking just like sterling at one-fourth the price (Davis 1989), this technology sired a thriving industry in Birmingham and Sheffield. Americans started importing these wares in the 1760s, but did not establish an industry of their own. After its discovery in the 1840s, the much cheaper and less demanding process of electroplating quickly supplanted fused plating. A new industry arose on both sides of the Atlantic and, by the late 1800s, the American business had assumed major proportions (Fennimore 1984). Nevertheless, electroplated products were still comparatively expensive. A Meridan Britannia Company catalogue from 1867 priced its silverplate nearly twice as high as its britannia pewter.

### Ceramics

Porcelain and pottery objects in the form of plates, bowls, cups, mugs, and tea and coffee pots also competed with pewter. The Chinese invented porcelain over 1000 years ago and Europeans first produced it at the Meissen factory near Dresden circa 1710 (Patterson 1979). Porcelain was a superior material in several respects. Very strong and durable, its beautiful white surface took a variety of decoration, resisted knife scratches, and was easier to clean. However, porcelain manufacturing was difficult to control and the product tended to be quite expensive. Only the most affluent early American homes could afford to import it from England, China, or, after the Revolution, from France. In the

early nineteenth century Josiah Spode II perfected "bone china" which became the standard for English porcelain and sold well in the U.S., reaching ever-broader markets. Aside from a couple of short-lived factories, American porcelain production did not become established until about 1890, after the pewter industry had already failed.

Pewter plates, bowls, and cups could hold their own against early, low-fired pottery such as delft, a tin-glazed earthenware, or crude redware. Goods made from these materials were cheaper than pewter, but were easily chipped or broken. Nevertheless, such pottery continued to be made well into the nineteenth century. Beginning in the latter 1700s, Wedgwood and other Staffordshire potters regularly introduced and aggressively promoted improved white earthenwares they called creamware and pearlware. Although still subject to breakage, these well-made objects were durable and very decorative. Mechanized production led to such competitive prices that American potters in this field found it difficult to make a profit until the 1880s (Ketchum 1983). While pewter technology stalled after the introduction of britannia, ceramic technology and product design continually improved, leading to many new product variations.

### Glass

Glass blowers competed with pewterers in the market for lighting devices, drinking vessels, serving containers, and sundry other goods. Colonial Americans generally obtained their finer quality glass items from England, sometimes by direct importation and sometimes from specialist retailers (Schwind 1983). The American glass industry experienced manufacturing and financial difficulties in the eighteenth and early nineteenth centuries and, except for producers of common bottle glass, did not become well-established until about 1820 (Foley 1964; Huey 1980; Lanmon and Palmer 1976; Wilson 1963). Afterwards it progressed nicely, gradually improving the quality of the material while adopting more efficient methods such as the pressing machine which tripled production (Spillman 1982). Some glass factories even made plates and bowls and several produced great quantities of oil lamps. Aside from breakage, glass was durable, easily cleaned, and did not impart any appreciable taste to foods or beverages. It could be made clear or colored and decorated with engravings or bright enamels. Glass objects, unlike pewter, silver, silverplate, and ceramics, were rarely marked by the manufacturer.

### Brass

Brass, an alloy of copper and zinc, rivaled pewter as a substance for making candlesticks, oil lamps, and a few other household goods. Brass is a hard, durable, and attractive metal, but its technology evolved slowly (Burks 1986). Since the middle ages, candlesticks had been cast as a solid form. From the 1720s until about 1800, they were made in two hollow halves welded together, a process that economizes on metal. Subsequently, candlesticks were made in one hollow piece through a technique known as core-casting. Braziers also introduced clever mechanisms for ejecting candle stubs. Despite such improvements, brass products were still relatively costly and, throughout the first half of the nineteenth century, pewter dominated the market for lighting devices. The American brass industry developed slowly and most early brass was imported from Britain. Brass technology generally paralleled that of pewter since both materials were relatively soft, metallic alloys. Less malleable and amenable to decoration than silver, ceramics, and glass, brass posed the least competitive threat to pewter.

## PRODUCT MATURITY AND DECLINE

From the end of the middle ages until the late eighteenth century, pewter became increasingly common and was the material most suitable for daily use. "It ousted wood and pottery in people's homes. And as table manners became more polished, pewterers extended the range of items they made to satisfy demand for greater elegance" (Brett 1983, p. 20). With its simple forms and typically undecorated

surfaces, pewter complemented the plain style of living esteemed in early America (Shi 1985). It also appealed to American frugality since worn out objects could be melted down and recast at nominal cost to the owner.

At the height of its popularity in the latter 1700s, pewter had become something of a status symbol. Families often displayed their wares on open cupboards and housewives carefully scrubbed them until they were nearly as bright as silver. Pewter was specifically bequeathed by will and often engraved with owner's initials, coats of arms, or commemorative legends and dates (Ebert 1973). Pewter was sometimes stolen as this ad from the Charleston City Gazette of May 16, 1795 indicates:

Stolen. On Wednesday night, from the subscriber on Daniel's Island -- one dozen remarkable Pewter Plates scoloped edges with a face thereon, together with some sheeting linen, with the owners name at length. It is therefore requested that should the above articles be offered for sale, they should be stopped, and information given to the subscribers, who will pay a generous reward. Martha Glenn (cited in Prime 1932, p. 144).

Although ownership of pewter was widespread during the colonial period, many Americans still could not afford to purchase more than a few basic items and continued to use homemade wooden utensils. Things like dishes, tankards, or flagons cost as much or more than a skilled craftsman earned in a day (Montgomery 1978). This problem gradually diminished as people's incomes grew and mass production eventually satisfied demand. Since pewter began to lose its special cachet at about the same time, one might speculate that this product's prestige was inversely related to its affordability.

Plates, dishes, bowls, and porringers constituted a major part of the pewterer's trade until about 1825 when the improving material and manufacturing technologies of competing products enabled them to capture the market for these tablewares. English potters and bone china makers had learned how to make stronger and more handsome products and sell them at reasonable prices. Even the finest grades of pewter were not as resistant to knife scratches as the new ceramics. Similar advances in the glass and silverplate industries increased the competitiveness of their products and allowed them to gradually nibble away at pewter's market share.

Pewter spoons, tea and coffee pots, and lighting devices of britannia metal remained popular longer, but by the late 1860s, this business had also failed. The introduction of gas and, in particular, incandescent lighting made candlesticks and oil lamps obsolete. Pewterers seemed unable or unwilling to manufacture electric table lamps and, judging from the frequent appearance of examples in today's antiques market, brass manufacturers took over the residual candlestick business in the late 1800s. Pewter was sometimes used as a base metal for electroplating, but even here it was replaced by a harder and whiter alloy of copper, zinc, and nickel called German silver. A search through lists of pewter makers working before 1900 (Kovel and Kovel 1961; Montgomery 1978) showed only one manufacturer, Reed and Barton of Taunton, Massachusetts, in business after 1882.

## HISTORICAL EXPLANATIONS

Technological developments are an obvious and important cause, but not the only explanation for the rapid decline of pewter. After the break with Great Britain, many trade restrictions vanished, allowing more foreign consumer goods to compete with pewter. Americans began to trade directly with China in 1784 and throughout the nineteenth century imported huge quantities of colorful porcelain from Canton. The new republic also opened up direct channels of trade with Europe which led to imports of French porcelains and German and Bohemian glass. Foreign businessmen cultivated the American market. In the late colonial and early federal periods, for example, British merchants extended generous lines of credit to their American customers (Witkowski 1989a). Staffordshire potters in the 1820s and

1830s printed popular American scenes on lines of tablewares they made for export.

In retrospect, pewter makers may have made poor business decisions. In the latter half of the eighteenth century, when fashions began to change more quickly, the stylistic development of pewter lagged behind that of rival materials, especially silver and silver-plate. Pewterers either could not or would not make or pay for the molds to cast their wares in the latest rococo or neoclassical styles. This conservatism may have been reinforced by the practice of passing on the tools of the trade to sons and other male relatives. Pewterers introduced new designs in the britannia era, some of which achieved national or sectional recognition from trade associations (Goynes 1965), but they appear rather plain and staid when compared to other manufactured goods available at the time.

As a cost-cutting measure, pewterers cheapened their product by using thinner and thinner sheets of britannia metal. "Much of this ware . . . proved unserviceable. The producers were the blame, not the alloy" (Charron 1973, p. 12). In the process they may have alienated many of their customers, dissipating what remained of their luxury image. In itself, this may not have been fatal. Plastics experienced a similar loss of prestige after World War II (Katz 1984), but still found an increasing number of applications. However, the extensive studies of colonial newspapers by Dow (1967), Gottesman (1970), and Prime (1929) suggest that pewterers advertised less frequently than either silversmiths, glasshouses, or ceramics merchants. Over the long haul, comparatively sparse promotion may have contributed to pewter's declining image.

Rising affluence was still another factor in pewter's eventual demise. As soon as they could afford something better, many Americans switched from pewter to porcelain utensils. Probate inventories show that china replaced pewter first in the more public dining areas of homes large enough to have them (Ebert 1973). Porcelain had fascinated Europeans for centuries and it was deemed a more fashionable and elegant substance. Similarly, a growing middle class could purchase silver or silverplated tea and coffee sets, while better endowed churches upgraded their communion services.

Finally, several cultural trends worked against pewter. The Puritan and Quaker emphasis on frugality and plain consumption began to wane in importance as early as the 1760s (Witkowski 1989a). The upper classes became very concerned with gentility, a quest that spread through the middle levels of American society in the nineteenth century (Bushman 1992). For example, American table manners were became more refined. Consequently, pewter porringers may have disappeared not simply because of people's dissatisfaction with the material, but because they favored eating with knives and plates rather than with spoons and bowls. The American passion for ice-cold drinks (Atwan, McQuade and Wright 1979), as well as the growing penchant for drinking hot tea, coffee, and chocolate, favored glass and china cups because they insulated the beverage better than pewter. To make matters worse, the burgeoning temperance movement discouraged the consumption of alcoholic beverages, including those like beer and hard cider long associated with pewter drinking vessels. Finally, Americans of the Victorian era preferred colorful and highly decorated surfaces that pewter could not provide.

#### PEWTER TODAY

By the close of the nineteenth century, the pewter industry had collapsed, but it never disappeared entirely. Individual craftsmen continued to make pewter objects in art nouveau, art deco, and other twentieth century styles (Brett 1983). Today, a few companies like Kirk Stieff of Baltimore manufacture (often through overseas sourcing) pewter items made from high quality metal. Pewter sales in current dollars are probably much greater than in the past because of inflation. Sales measured in terms of units or weight might also be relatively strong simply because the economy is so much larger than it was a century ago.

While some artisans are currently exploring pewter's properties by designing new utilitarian wares (Fennimore 1984), most contemporary objects are reproductions or interpretations of forms

popular in the eighteenth and nineteenth centuries. Thus, pewter has been relegated to a largely decorative function meant to evoke the feel of the past, especially that of early America. As always, pewter has its own special warmth and quiet beauty. It is very suitable for purchase as a gift. Interestingly, people in this century seem to prefer a satiny finish on pewter, not the highly reflective silverlike surface popular in the past. Businesses with names like "Cohasset Colonials" and museums like Jefferson's Monticello, Colonial Williamsburg, and Winterthur sell pewter through their retail stores and direct mail catalogs.

## CONCLUSIONS AND IMPLICATIONS

The historical evidence generally supports notions of technological and product development, maturity, and obsolescence. The technologies of pewter, silver, silverplate, porcelain, pottery, glass, and brass all evolved in the eighteenth and nineteenth centuries, albeit for varying rates over different intervals. As predicted by theories of the technological life cycle (Ansoff 1985; Kotler 1990), new product forms emerged, gained in popularity, and, in some cases, disappeared. During the twentieth century, these technologies, especially ceramics, have continued to develop although some of the products they generated have been replaced, in turn, by still newer materials such as stainless steel and, above all, plastics. The remainder of this section discusses more specific conclusions and implications.

First, technologies can advance well before products are brought to market. Britannia was available for many years before most British and American pewterers adopted the material. Since American pewterers were especially slow in adopting britannia metal, this evidence suggests that new technologies do not automatically or quickly generate new products. Although the introduction of britannia metal, different manufacturing techniques, and new product forms took place over several decades, these changes might have seemed quite rapid to the pewterers rooted to the traditional techniques of their craft.

Second, an existing technology does not necessarily succumb quickly in the face of a superior one. Competing technologies can flourish side by side for many years, although the older ones can be forced into different applications and market niches. Pewter, silver, ceramics, and glass had competed for the tableware market for centuries. Yet, their most heated rivalry occurred in the nineteenth century when mechanization became a dominant factor. To meet the challenge from improved glass and ceramics, pewterers finally dropped their lines of plates, bowls, and drinking vessels and increasingly specialized in britannia lighting devices and tea and coffee pots.

Third, technologies *per se* do not necessarily "decline" in the wake of collapsing sales. The better grades of late twentieth-century pewter are as good as, if not better than, they have ever been.

Fourth, demand and technology are not one and the same; there are alternative business, macroeconomic, and cultural explanations for pewter's decline in addition to technological ones. For example, the pewter trade appears to have been unnecessarily conservative. Pewter and its rivals satisfied needs for cheap, convenient, and esthetically pleasing household products, but increasing ability to pay and changing tastes certainly influenced the commercial histories of these technologies. Thus, rising affluence expanded the market for porcelain, while the Victorian penchant for decoration increased demand for colorful tablewares. This suggests that researchers need to carefully consider how technology interacts with these and other exogenous variables and what might be their relative impact on the product life cycle.

Finally, historians of technology and marketing need to guard against presentism or "looking at the past as an anticipation of and preparation for the present day" (McCracken 1987, p. 142). The history of pewter might have taken a different path had other events occurred. For example, the pewter industry may have remained viable much longer had pewterers been more creative in marketing their



product and in finding new uses. Alternatively, this industry might have declined sooner had one or more gifted American entrepreneurs more quickly been able to harness the competing technologies. Since the actual marketing history of a technology is just one of several possible histories, marketing historians should not assume that the past can be extrapolated into the future.

#### REFERENCES

- Ames, Kenneth L. 1985. "The Stuff of Everyday Life: American Decorative Arts and Household Furnishings." in: Material Culture: A Research Guide. Thomas J. Schlereth, ed. Lawrence: The University Press of Kansas.
- Ansoff, H. Igor. 1984. Implanting Strategic Management. Englewood Cliffs, NJ: Prentice-Hall.
- Atwan, Robert, Donald McQuade, and John W. Wright. 1979. Edsels, Luckies, & Frigidaires: Advertising the American Way. New York: Dell Publishing Company.
- Barkin, Kenneth. 1988. "The Rise and Fall of European Pewter." In: European Pewter in Everyday Life (1600-1900). Kenneth Barkin, ed. Riverside: University of California.
- Brett, Vanessa. 1983. Phaidon Guide to Pewter. Englewood Cliffs, NJ: Prentice-Hall.
- Burks, Jean M. 1986. Birmingham Brass Candlesticks. Charlottesville: University of Virginia Press.
- Bushman, Richard L. 1992. The Refinement of America: Persons, Houses, Cities. New York: Alfred A. Knopf.
- Charron, Shirley. 1973. Modern Pewter: Design and Techniques. New York: Van Nostrand Reinhold Company.
- Davis, John D. 1989. "The Lowing Dale Kirby Collection of Old Sheffield Plate," Antiques 136 (October): 848-859.
- Dow, George Francis. 1927. The Arts & Crafts in New England, 1704-1775. New York: Da Capo Press (reprint, 1967).
- Ebert, Katherine. 1973. Collecting American Pewter. New York: Charles Scribner's Sons.
- Fennimore, Donald L. 1984. The Knopf Collectors' Guide to Silver and Pewter. New York: Alfred A. Knopf.
- Foley, Jasena Rappleye. 1964. "The Ontario Glass Manufacturing Company." Journal of Glass Studies 6: 136-147.
- Gottesman, Rita S. 1938. The Arts and Crafts of New York, 1726-1776. New York: Da Capo Press (reprint, 1970).
- Goyne, Nancy A. 1965. "Britannia in America: The Introduction of a New Alloy and a New Industry." Winterthur Portfolio 2: 160-196.
- Huey, Paul R. 1980. "The Albany Glassworks from 1790 to 1800: A Study of American Industry During the Federal Period." Journal of Glass Studies 22: 36-52.
- Jones, D.G. Brian and David D. Monieson. 1990. "Early Development of the Philosophy of Marketing

- Thought," Journal of Marketing 54 (January): 102-113.
- Ketchum, William C., Jr. 1983. The Knopf Collectors' Guide to Pottery and Porcelain. New York: Alfred A. Knopf.
- Kovel, Ralph M. and Terry H. Kovel. 1961. A Directory of American Silver, Pewter and Silver Plate. New York: Crown Publishers.
- Kotler, Philip. 1991. Marketing Management: Analysis, Planning, Implementation, and Control. 7th ed. Englewood Cliffs, NJ: Prentice-Hall.
- Lanmon, Dwight P. and Arlene M. Palmer. 1976. "John Frederick Amelung and the New Bremen Glass Manufactory." Journal of Glass Studies 18: 13-136.
- Laughlin, Ledlie I. 1940, 1970. Pewter in America: Its Makers & Their Marks. New York: Crown Publishers (reprint, 1981).
- Lavin, Marilyn and Thomas J. Archdeacon. 1989. "The Relevance of Historical Method for Marketing Research." In: Interpretive Consumer Research. Elizabeth C. Hirschman, ed. Provo, UT: Association for Consumer Research.
- McCracken, Grant. 1987. "The History of Consumption: A Literature Review and Consumer Guide." Journal of Consumer Policy 10 (June): 139-166.
- McKendrick, Neil, John Brewer, and J.H. Plumb. 1982. The Birth of a Consumer Society: The Commercialization of Eighteenth-Century Britain. Bloomington: Indiana University Press.
- Megill, Allan. 1989. "Recounting the Past: 'Description,' Explanation, and Narrative in Historiography." American Historical Review 94 (June): 627-653.
- Miller, George L. 1984. "Marketing Ceramics in North America: An Introduction." Winterthur Portfolio 19 (Spring): 37-49.
- Montgomery, Charles F. 1978. A History of American Pewter. New York: E.P. Dutton.
- Patterson, Jerry E. 1979. Porcelain. Washington, DC: The Smithsonian Institution.
- Pewter Collectors Club of America, Inc. 1984. Pewter in American Life. Providence, RI: Mowbray Company.
- Prime, Alfred Coxe. 1929, 1932. The Arts & Crafts in Philadelphia, Maryland and South Carolina, 1721-1785. Topsfield, MA: The Wayside Press.
- Prown, Jules David. 1982. "Mind in Matter: An Introduction to Material Culture Theory and Method." Winterthur Portfolio 17 (Spring): 1-19.
- Savitt, Ronald. 1980. "Historical Research in Marketing." Journal of Marketing. 44 (Fall): 52-58.
- \_\_\_\_\_. 1983. "A Note on the Varieties and Vagaries of Historical Data." In: First North American Workshop on Historical Research in Marketing. Stanley Hollander and Ronald Savitt, eds. East Lansing: Michigan State University.
- Schwind, Arlene Palmer 1983. "English Glass Imports in New York, 1770-1790." Journal of Glass Studies. 25: 179-185.

- Shi, David E. 1985. The Simple Life: Plain Living and High Thinking in American Culture. New York: Oxford University Press.
- Smith, Ruth Ann and David S. Lux. 1993. "Historical Method in Consumer Research: Developing Causal Explanations of Change." Journal of Consumer Research 19 (March): 595-610.
- Spillman, Jane Shadel. 1982. The Knopf Collectors' Guide to Glass Tableware, Bowls & Vases. New York: Alfred A. Knopf.
- Wilson, Kenneth M. 1963. "The Glastenbury Glass Factory Company." Journal of Glass Studies 5: 117-132.
- Witkowski, Terrence H. 1989a. "Colonial Consumers in Revolt: Buyer Values and Behavior During the Nonimportation Movement, 1764-1776." Journal of Consumer Research 16 (September): 216-226.
- \_\_\_\_\_. 1989b. "Probate and Property: Written and Material Data Sources for Consumption History." In: Marketing History: The Emerging Discipline. Terence Nevett, Kathleen R. Whitney, and Stanley C. Hollander, eds. East Lansing: Michigan State University.