Quality, Cost and Value: Key Concepts for an Interpretive Assemblage Analysis

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This paper draws on a critical review of the nature of quality, cost and value in nineteenth-century consumerism and the role these concepts may play in interpretive assemblage analysis. Quality was a much valued commodity in the nineteenth century and was an important factor in consumer choice, balanced against the cost or price of an item. Manufacturers worked hard to maintain quality standards, but found a ready market for customers willing to compromise 'best' prices for 'seconds'. Consequently, the study of quality promises to add another dimension to the existing price indices currently available to historical archaeologists, and initial testing suggests that it is readily adaptable to historical archaeological cataloguing and assemblage analysis.

INTRODUCTION

This paper presents several preliminary findings of an ongoing inquiry into the nature and interrelations of quality, cost and value in the nineteenth century and is being carried out in the doctoral program of La Trobe University. The primary goals of the project are to establish a set of archaeologically informed principles concerning the interrelationship of quality, cost and value; develop new analytical procedures to measure the differentiation of quality in the archaeological remains of consumption; and trial the application of these new procedures to select classes of artefacts from urban assemblages in Sydney and London.

This research program is the confluence of prior studies concerning: one, the role of shopping in historical archaeology (Crook 2000); two, the rise of the term 'quality' in nineteenth-century trade catalogues and on artefacts themselves; and three, the observation that so many of the artefacts in urban domestic assemblages are rubbish, in both the literal and figurative senses. Tea cups are scarred with kiln shatter, transfer prints slide off the edge of their vessels, wine glasses graced tables regardless of whether their pontils were ever polished and obtrusive mould seams run rings around what may otherwise be fine and dainty custard cups – to name just a few of the imperfections commonly encountered in archaeological assemblages.

The observation that the standard of production of common ceramic tablewares (and to a lesser extent glasswares) declined over the nineteenth century as 'mass'-production increased is well reported (e.g. Wilson 1996: 99–100). The quality of these products over shorter time periods or as used by different people at the same time are rarely considered (for exceptions see Wilson 1996:92–3, Bower 1996:9, 13, 15), unless particular items of unusually high quality are observed (e.g. Iacono 1996:73 – one of many other examples – or Wilson 1996:93). In these cases, the identification of a high-quality product is the result of specialist knowledge, and while specific justifications for the attribution of 'high-quality' are not always presented, it is clear that the finished joins, smooth surfaces and dense bodies of some pieces simply stand-out among the tens of thousands of artefacts they were buried with. If these generalisations about quality can be made at the broad scale, and if quality can be judged intuitively in both the exceptionally well-finished and the most poorly-finished goods, it follows that these characteristics may be ordered into a classification system to measure the relative quality of goods in artefact assemblages.

Developing this cataloguing system is challenging in itself; interpreting the significance of wavering quantities of manufacturing defects between assemblages requires a much greater effort, a very different kind of research, and an open mind. The presence of imperfections on so many vessels not only in the archaeological record but also on goods passed down through families or circulating in antiques markets is testament to the fact that nineteenth-century consumers were happy enough to have these goods in their homes. The question is, at what cost? Did they save a considerable amount of money or were these imperfections simply accepted as the standard by-products of affordable household goods? And how were the goods *valued* once they arrived home? Were high-quality goods so treasured in the way we often assume? Were the shoddy ones a satisfying reminder of a shilling saved for a few glitches that might not be noticed until there were pointed out? Were they a slight embarrassment, concealed by the careful arrangement of food on the table? Were they noticed at all?

This paper presents the methodologies I am pursuing to address these questions, and offers preliminary conclusions drawn to date. I begin with a review of present approaches to assemblage analysis and consumer studies, and the role played by quality, cost and to a lesser extent value among them. I then discuss some of the results of documentary research – particularly store and other trade catalogues – undertaken to contextualise the importance of quality in nineteenth-century consumerism. I then present my progress on the development of a system for measuring quality flaws in historical archaeological assemblages.

Before proceeding, I wish to clarify some terms that appear throughout the paper. By *quality*, I mean the general assessment of whether a product (and thereby its remains: the artefact) was well made, or poorly made, based on its physical characteristics. I define cost and value from the consumer's point of view. *Cost* is the price or monetary charge to the consumer to purchase the product. While this study focuses on general market transactions using money as the primary means of exchange, cost also includes the equivalent exchange value if an item is given as a gift, bartered or acquired by other means. *Value* summarises the reasons for which a consumer purchased, retained and used the item – in other words, what value they placed on that product. This latter category has proven to be, unsurprisingly, the most difficult to define, and encompasses the banal, the personal and much deeper values, including (but not limited to): functional utility, trivial pleasures, sentimental attachments, social ranking, cultural affiliation (e.g. Brooks 1999:60–63), 'identity construction' and ideological identification (e.g. as determined by Shackel 1998; see also Cook et al. 1996 and Buckham 1999: esp. pp. 201 & 212–3). While there is not sufficient space in this paper to discuss these issues in full, it is worth noting that any consumer product may be purchased or acquired to satisfy multiple values and these may change over time as the use of the item changes.

By 'interpretive assemblage analysis' I mean the systematic analysis of a specialised catalogue for the dedicated purpose of deriving new information at a comparative level. To put it simply: not a catalogue. It may seem redundant to include 'interpretive' in the phrase. After all, any analysis should be *interpreted* in some way. However the term 'analysis' is often (mis)used to describe the task of cataloguing, which is the first, identification stage of the analysis and interpretation program (Crook et al. 2002:26; see also Brooks 2005:16–18), hence 'interpretive analysis' is used as a reminder of the end goal of the research.

CURRENT APPROACHES

The broad concerns of 'consumption' and its related theories and applications have been part of the discourse of historical archaeology for over two decades, and require only a brief recitation here. Following the pioneering works of the late 1970s and the 1980s (e.g. Douglas & Isherwood 1996 [1979], Bourdieu 1984 [trans.], Miller 1987, Weatherill 1988 and Shammas 1990), many historical archaeologists have successfully utilised the core principles of consumption theory to interpret archaeological sites and assemblages (e.g. Spencer-Wood 1987a, Beaudry et al. 1991, Wall 1991 and 1999, Praetzellis & Praetzellis 1992, Stewart-Abernathy 1992, Cook et al. 1996, Carroll 1999, Buckham 1999, to name just a few). A consumer focus, often from the individualistic or family perspective, has been an important part of the work of Karskens (1996, 1999), Lydon (1995), Lawrence (1998, 2000, 2003c) and other Australian archaeologists.

Often, however, the integration of these consumer perspectives occurs only at the interpretive level and has had no identifiable impact on the analysis of assemblages. Notwithstanding the contribution of industrial histories to artefact identification and dating (e.g. Jones et al. 1989), attempts to develop testable analyses that link broad histories of manufacturing and consumerism with specific artefacts recovered from archaeological contexts are rare.

The exception, of course, is a stellar example: George Miller's ceramic cream-coloured ware indices (1980, revised 1991), among other contributions (1993, 2003; Majewksi & O'Brien 1987 should also be considered an exception). Miller conducted extensive documentary analysis of wholesale and retail price lists and receipts of earthenware bought and sold in England and America to devise an index for calculating the average relative price of cream-coloured earthenwares. He developed five major classes, based on the nineteenth-century classification of these wares: plain cream-coloured earthenwares, edged, painted, dipped and printed.

The index was first prepared in 1980 based on five price-fixing lists, and revised in 1991 following the review of an additional 17 price-fixing lists, eight additional potters price lists and 167 invoices. The expanded data set revealed two important lessons: the original assumption that plain, cream-coloured wares remained constant in price over the nineteenth century was found to be quite false; and the extent of discounting of the agreed fixed prices also revealed the true, dynamic nature of the market and its fluctuations (in American towns and cities, at least).

As ground-breaking and enduringly relevant as the indices are, they have not escaped criticism (e.g. Spencer-Wood 1987b, Yentsch 1990:24 and Brooks 2005:61) and do have significant limitations. The categories are broad and offer average costs. The time intervals, dependent of the survival of pertinent documentary records, are ad hoc; as are the listings of vessel forms for some categories in some years (e.g. the price of fluted or edged printed tea cups was available for 1846, but not 1845 or 1848 [Miller 1991:18]).

The indices have had little direct impact on Australian assemblage analysis, owing in part to the limited development of assemblage analyses that go beyond empiricist studies (see Lawrence 1999:08, Crook et al. 2002 and Brooks 2005:7–14) – i.e. interpretive assemblage analyses; and in part to an appropriately cautious approach to the adoption of American interpretive tools for use on Australian material (Brooks 2005: 61–62). Allison (2003:188) has observed the need to tie artefacts to 'price structures' and allocated each catalogue item to the categories 'luxury', 'decent' and 'utilitarian' as a short-term measure to examine the living standards of pastoral homestead life at Kinchega, New South Wales,[1] but to date, no such work on Australian prices has been conducted.

To develop local systems of cost differentiation, or even test the applicability of the American indices on Australian markets, we need to take a closer look at Australian commercial and consumer transactions.

MINING THE ARCHIVES

To better understand the significance of quality, cost and value (in Australian and global western cultures) I have been searching a variety of nineteenth-century literature for descriptions of attitudes toward these issues from the late eighteenth, nineteenth and twentieth centuries – be it general or product-specific discussion, made by manufacturers, retailers or consumers. The survey has encompassed trade and department store catalogues; trade journals and industry literature; private letters, correspondence and diaries; economic treatises; design journals and treatises (such as The *Journal of Design and Manufactures* [*JDM*], 1849–1852); and various other volumes directly associated with or arising from the (international or intercolonial) exhibitions of the nineteenth century, for example *Exhibition of the Works of Industry of All Nations*, 1851 (1852).

These latter sources provide very useful insights into the kinds of features admired or scorned in new products released on the Victorian market, for example the resistance of crazing in earthenwares, a light-weight body, a graceful design and a finely executed form (e.g. see *JDM* II [1849]: 199). The reviews presented in such journals, while consciously concerned with everyday goods for the 'common man', comprise the opinions of connoisseurs of art and design, intent on advancing the progress of design and industry. In many ways, their commentary is targeted at the manufacturer, and not the consumer willing to buy the products.

Tapping into the motivations of customers is a challenging task. Given the common difficulties of investigating universal activities like the purchase, use and discard of everyday goods, it is no surprise that personal negotiations of quality, cost and value are rarely recorded. The formal study of consumer behaviour (for the purposes of marketing or product improvement) is a development of the twentieth century. While general observations of consumer behaviour can be found in nineteenth-century economic treatises (e.g. Simmonds 1872), these are often highly subjective personal opinions and must be treated with some degree of scepticism.

Advertisements and trade catalogues present a similar problem: they demonstrate the manufacturers' or retailers'

Table 1: List of the sample of store catalogues used in the detailed price analysis.

	1880	1883	1892	1894	1895	1896	1897	1899	1900	1901	1902	1907	1911
Australia													
A. Hordern & Sons (Sydney, 1823–1969)				✓			✓	✓					
Farmer & Co. (Sydney, 1840–1976)													✓
Mutual Store Ltd (Melbourne, 1872–1964)			✓						✓			✓	
England													
Harrods (1849–present)					✓								
Civil Service Supply Association (1866–?)	✓												
Henry King & Co. (1868–?)	✓												
Army & Navy Co-op. Stores (1871–2004)		✓											
United States													
Montgomery Ward & Co (1872–2000)				✓	✓								
Sears, Roebuck & Co. (1886–present)							✓				✓✓		
Canada													
Timothy Eaton & Co. (1869–2002)						✓	✓			✓✓			
John Eaton & Co. (1895–?)							✓						

idea of what consumers may respond to. However, unlike trade journals and treatises, the consumer was the target audience. Notwithstanding the peculiarities of the kinds of consumers each retailing house intended to serve, in a dynamic market economy it is reasonable to assume that most manufacturers and merchants would have their fingers on the pulse of consumers' desires and attitudes. To this end, the store and mail-order catalogues of domestic merchandise have proved the most rewarding category of the documentary survey of quality, cost and value, and are discussed in detail below.

Store and mail-order catalogues

Most historians date the introduction of mail-order and department store catalogues to the mid-nineteenth century (e.g. Kingston 1994:24). They emerged from a major reorganisation of Western retailing practices. In all the major cities across the world, specialised shops were being transformed into retail empires of universal provision at competitive prices. High-streets, specialised shopfronts and the attentive skills of local shopkeepers were rapidly superseded as companies like Anthony Hordern & Sons used their buying might to secure the very latest designs at the lowest possible prices.

The trade catalogues we are most familiar with today are those of the mail order giants, the universal providers, and the oldest surviving documents of this kind include the circulars of Montgomery Ward & Co. (Chicago) and Silber & Fleming (London), both distributed in 1872. These dense, illustrated tomes are widely renowned for their fascinating, detailed snapshot of daily life – more precisely the apparatuses required for daily life – in the late nineteenth and early twentieth centuries (see the introductions to any of the facsimile reprints, e.g. Sears 1993 [1897] or Cuffley 1984 or 1987).

In addition to the much admired 'glimpse of Victorian and Edwardian life' that trade catalogues offer, the detailed descriptions of material culture, the illustrations and specific prices that they have preserved for over a century make them a sincerely rich resource for any student of consumption (Schlereth 1992). And yet, they are rarely the subject of rigorous research or quantitative analysis (for an exception, see Buckham 1999) – a situation best explained by the overwhelming size of the resource, and consequent challenge of taming it.

To date, this study of quality, cost and value has encompassed a general review of the language and organisation of over 55 illustrated catalogues and price lists of major Australian, English, American and Canadian 'universal providers',[2] dating from 1880 to 1911,[3] and a detailed analysis of key terms and prices of individual china and glassware items in 21 of those documents (see Table 1).[4] Each product and price was entered into a customised database that stores individual prices and product types grouped by product lines as they were described in each catalogue. The prices and descriptions of over 24 000 individual items (plates, tea cups, glass), representing over 3200 lines of glass and ceramic wares (plain, Willow, fern-etched), have been entered in the database.

While these numbers seem vast, they represent a small percentage of the total number of catalogues produced by each firm. The Mutual Store, for example, produced two price lists a year from at least 1878 to at least 1911, but only those for 1892 (No. 8), 1900 (No. 15) and 1907 survive in Melbourne libraries. Nonetheless, even with such poorly represented samples, it is still possible to exploit the rare privilege of recording seasonal price and stock fluctuations in the consecutive catalogues of Toronto's Eaton & Co., Chicago's Montgomery Ward & Co. and Sears, Roebuck & Co.

The language, tone and style of catalogues varies from store to store and from year to year. The listings ranged from the minimalist approach of a name and price (e.g. King & Co. 1880) to an illustration alongside a name (e.g. the Mutual Store 1892) to the persuasive verbosity and occasional wit of Hordern & Sons (1894, 1897, 1899), Sears Roebuck (1993 [1897], 1969 [1902], 2002 [1902])[5] and Montgomery Ward (1977 [1894], 1969 [1895]) whose copywriters managed to elevate humble bread-plates, buttons and needles to ingenuities of their time, interwoven in the fabric of decent family life. For example:

> CHEAP CROCKERY is almost as much a necessity as CHEAP BREAD. In most families both perform the vanishing trick with a wonderful celerity, and, as a consequence, the supply of both has to be continually renewed. With bread at a low figure, it gladdens the heart of the bread-winner to see slice after slice disappear, but if the STAFF OF LIFE by some combination of circumstances, were to go up to a shilling a loaf, "where would poor robin be, then poor thing?" And so with Plates and Mugs, Cups and Saucers, Pudding Bowls and Pie Dishes. Make them

dear, raise the price, and a FEVERISH ANXIETY would pervade the household whenever the table was laid or a pie or a pudding contemplated; so let all people concerned in this momentous issue, thank Anthony Hordern & Sons for cheap Crockery. (Hordern & Sons 1894:340)

When it comes to describing the products themselves, only 1420 of the 3200 sets were provided with illustrative phrases or prose (often in addition to an illustration). These ranged from a single piece of 'promotional' dictum such as 'best quality' to 200-word embellishment of the product's best features. These lengthier descriptions traced fairly accurately the subtle distinctions among the goods on offer. For example:

'JOLIMONT' DINNER SERVICE

This is one of the latest styles produced. The illustration (see Fig. 1) shows the shape of each article, but it should be explained that the Plates, Cover and Flat Dishes are fluted. The pattern, which is richly decorated, is a beautiful Floral Combination, the whole presenting a marvellously pretty effect at a very low price. Printed in Colours: Brown, Green, and 'Unique' [sic], on Ivory ground. (Hordern 1894:343, 345)

The emphasis in each description shifts subtly from the latest or most handsome, to the very handsome, the best make, the well finished, and so on. The most desirable features of goods are revealed by the carefully crafted copy, for example:

Genuine Imperial Hapsburg China Dinner Set. This is the *highest grade* of china made in Austria. It is *very light in weight* and *very transparent*. It is the *equal of* any of the *French* makes and is sold at a price *one third less*. This *pattern* is one of the choicest made by this *noted factory* and we flatter us that we have *selected* the very *best design* that it was possible to get at the price. This *shape* is considered by china critics the best modeled and most *graceful* ever made. The *decoration* is composed of an *elegant transfer* of pink flowers with green leaves gracefully arranged in dainty sprays. The pink decoration is the *daintiest color* made. This set *costs* a great deal less than French china, but the *quality* is equally good. Set ID: 3431. Order no.: 2T170 (Sears 2002 [1902]: 640, *emphasis added*)

It is often unclear how precisely these terms were to be interpreted. If a dinner service was described as 'handsome' but no mention was made of its relative quality, was it of poor or ordinary quality? If noted only to be 'high quality' was it ugly or dated?

Sometimes, and this is particularly so of the Montgomery Ward and Sears, Roebuck & Co. descriptions, they take the guess work out of the equation, and cut to the heart of the compromise between quality, price and desired use:

Dove Genoa Pattern. Manufactured by Smith & Ford, Staffordshire, England. This pattern is very handsome in shape and decoration: the decoration consists of wild flowers and leaves in soft gray [sic], although it is *very low in price*, we consider the *body of the ware*

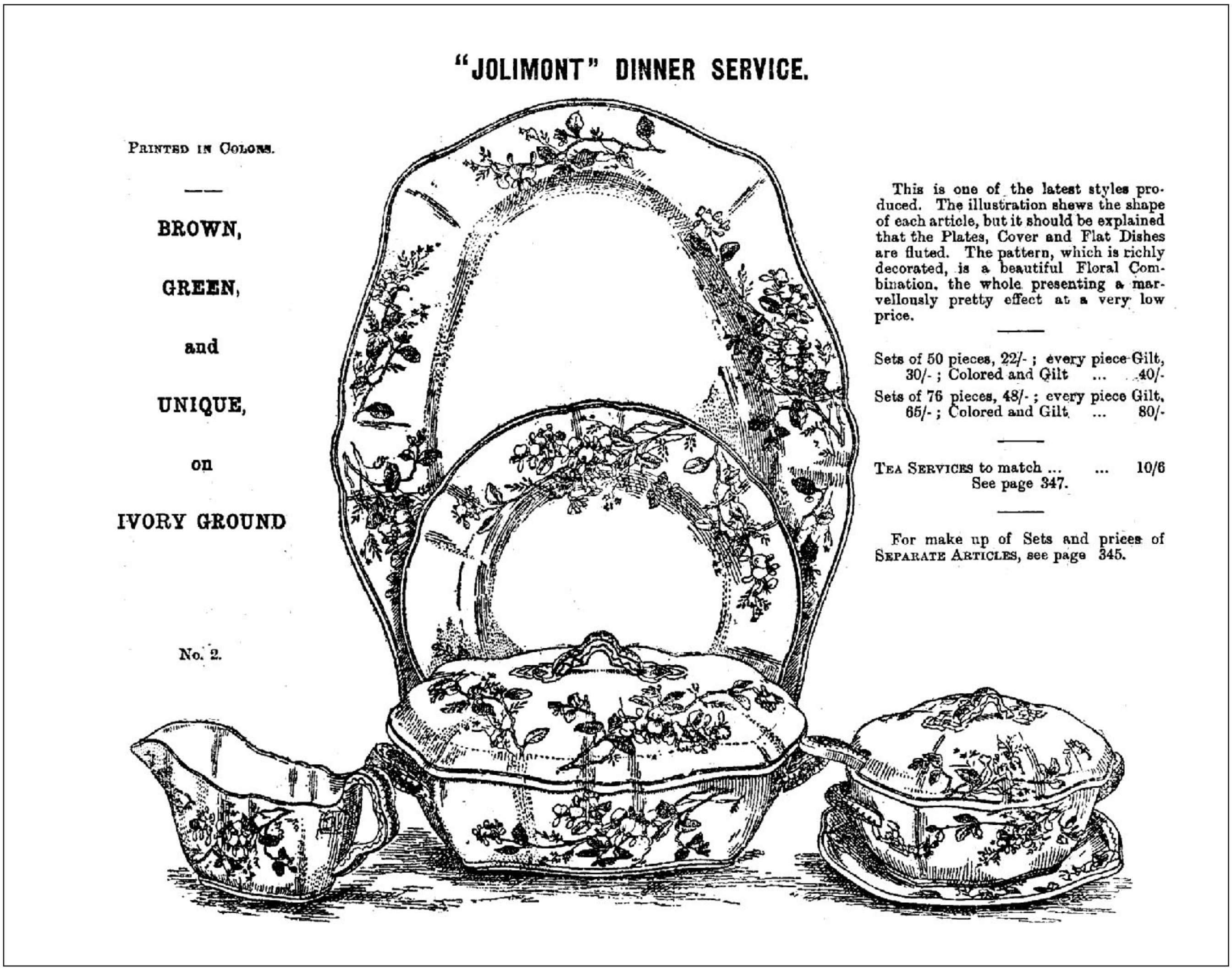


Fig. 1: The Jolimont Dinner Service (Hordern 1894:343, courtesy Powerhouse Museum Research Library).

equal to any other pattern sold by us: we recommend it very highly where a *cheap and durable* set is wanted. (Montgomery Ward & Co. 1969 [1895]: 529, *emphasis added*)

It is these descriptions that are the most telling of the interplay between quality, cost and value and the interpretive utility of these concepts in historical archaeology. The analysis of these terms to determine just how many pence lay between the 'cheap and durable' and the 'most elegant' will be undertaken in 2006, but some preliminary figures have been prepared to flesh out the significance of these concepts in the mail-order and retail consumer landscape in the late nineteenth century.

Promoting quality, cost and value

Of all the 10 500 descriptive terms used to describe the china and glass sets in the catalogue sample, only 2.6 per cent cite 'quality' (131 occurrences) or 'value' (27 occurrences), or draw attention to the cost of the item (109).[6] While these terms were not explicitly used with great frequency in reference to specific items, a concern for quality and value are evident in other elements of the product descriptions. For example, many items are described as 'strong', 'superior', 'light', 'transparent' or have a special note about their material, suggesting a concern for the quality of physical properties of the product. The notation of the maker or phrases such as 'best make' or 'well finished' indicate a concern for quality craftsmanship.

These kinds of concerns about quality dominate the descriptions analysed so far (see Fig. 2), and far outnumber the concern for a low price or other values, such as the opportunity to buy exclusive items or affordable imitations such as pressed tablewares which 'your neighbors [sic] will say … is genuine cut glass' (Montgomery Ward & Co. 1969 [1895]: 544).[7] Notwithstanding the fact that these figures will be revised as more data is gathered, the significance of the emphasis on quality but not cost and value should not be overstated. The price, of course, was included for all goods – it was the *raison d'être* for the catalogue itself – so there was little need to draw attention to the price except for the very cheapest of bargains. Furthermore, the concerns of quality, cost and value were integrally connected to each other. At the simplest level, value may be seen as a trade off between quality and cost. With the quality of the item reassured and the price clearly listed, its value would have been self-evident to the consumer. One of the reasons for the strong emphasis on quality may indeed be the low prices offered by so many of the retailers, as their various interjections in the margins and columns of the catalogues demonstrate. For example:

> While our prices are low we will have it understood that the quality of our goods is unquestioned. People wonder how we sell so cheap. That we do sell cheap is attested by the enormous increase in our trade. (Sears 1993 [1897]: 293)

This is a reminder that a consumer's consideration of quality, cost and value may have been a choice of brand or consumer agency – i.e. the store – rather than an evaluation for each individual product. Once the decision had been made to order from Sears or Hordern & Sons, choosing the tea service came down to which one suited their taste and existing décor.

THE PROBLEM OF COST IN HISTORICAL ARCHAEOLOGY

The prices listed in the catalogues present a very interesting dataset to students of consumption. As noted, Miller discovered some discrepancy between wholesalers' price fixing lists and the actual market place in which ceramic vessels reached the shelves of American stores. In the store and mail-order catalogues of the late nineteenth century, we see much fluctuation within the broad categories of price fixing lists. Printed wares, for example, had a wide variance. If you were purchasing a dozen plates from King & Co. in 1880, you could pay as little as 3*s*. for 'Asiatic Pheasant' or 'The Rhine', and up to 6*s*. 8*d*. for sets with chinoiserie or Japanese-inspired styles.

What is more interesting is the fluctuation from vessel to vessel, rather than set to set. One of the surprising discoveries of the catalogue analysis was the inconsistency of prices of individual vessels of a service among sets of a similar price range, or the same set over a number of years. Take the first two sets offered by Anthony Hordern & Sons in 1894: White Granite and Double Line (see Table 2). While the price of a 50 and 76 piece Double Line service was, respectively, 18 and 12 pence or 7.7 per cent and 2.2 per cent more than the White Granite Service, the plates, several dishes and other items were up to 20 per cent cheaper. The Soup Tureen, however, was almost 30 per cent more.

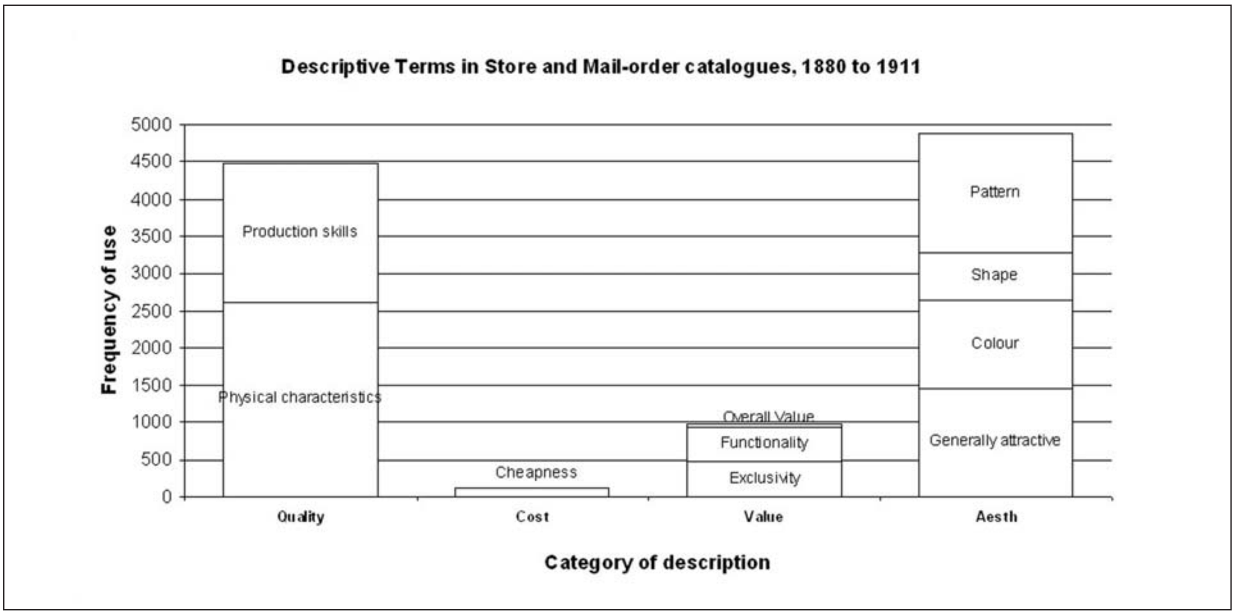


Fig. 2: The frequency of descriptive terms in Store and Mail-order catalogues.

Table 2: Variability in prices between White Granite and Double Line services offered by A. Hordern & Sons in 1894 (pp. 340–1).

Item Name	Total pence per item			
	White Granite	*Double Line*	*Difference*	*% Difference*
Plate (6 inch)	2.5	2	-0.5	-20.0%
Plate (7 inch)	3	2.5	-0.5	-16.7%
Plate (8 inch)	3.5	3	-0.5	-14.3%
Plate (10 inch)	4.5	4	-0.5	-11.1%
Salad Bowl	24	27	3.0	12.5%
Sauce Tureen	27	30	3.0	11.1%
Soup Tureen	102	132	30.0	29.4%
Vegetable Dish (10 inch)	27	27	0.0	0.0%
Dish (9 inch)	5.5	6.5	1.0	18.2%
Dish (10 inch)	8.5	8.5	0.0	0.0%
Dish (11 inch)	11	10.5	-0.5	-4.5%
Dish (12 inch)	14	13	-1.0	-7.1%
Dish (14 inch)	19	19	0.0	0.0%
Dish (16 inch)	30	27	-3.0	-10.0%
Dish (18 inch)	114	126	12.0	10.5%
Gravy Boat	7.5	7	-0.5	-6.7%
Pie dish (6 inch)	4.5	5	0.5	11.1%
Pie dish (7 inch)	6	6	0.0	0.0%
Pie dish (8 inch)	8	7	-1.0	-12.5%
Pie dish (9 inch)	10.5	9	-1.5	-14.3%
Pie dish (10 inch)	13	12	-1.0	-7.7%
Pie dish (11 inch)	15	16	1.0	6.7%
Pie dish (12 inch)	18	20	2.0	11.1%
50 piece set	234	252	18.0	7.7%
76 piece set	540	552	12.0	2.2%

Initially, these fluctuating prices were considered to be minor typographic errors, but their prevalence suggests otherwise.

All-pervasive throughout these catalogues of prices firmly fixed in print, is the repetitious notice that 'all prices are subject to market fluctuations'. This universal disclaimer gave the stores vital leeway to allow for seasonal changes in the cost of raw materials, shipping, labour and foreign currency exchange that would have affected the landed price of shipments made just a few months apart.[8]

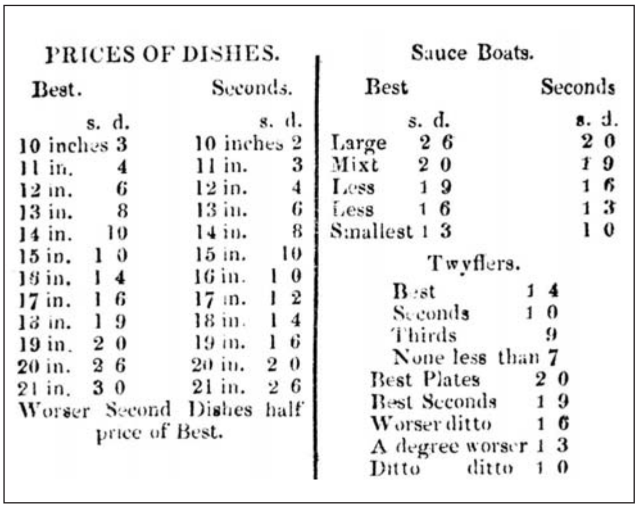
It is not yet known whether the intra-set price variability is the result of standard fluctuations or something different. Perhaps the greater fluctuation in the composition of individual sets reflects the age of stock: more soup tureens were sold in 1893 than 9-inch dishes so the price of tureens reflects the new market price, but 9-inch dishes remain at the 1893 price.

THE POTENTIAL OF QUALITY

It is clear from the Staffordshire potters' wholesale price lists from the late eighteenth century that quality was an important element of the cost structure of selling refined ceramics. The production of refined earthenware was (and remains) a complex process, aimed to mass produce and standardise a medium prone to countless variables, using small-scale workshop craftsmen. Each vessel passed through the hands of dozens of workers, and each stage of the process introduced another range of potential blunders. It is probably for this reason that pottery owners maintained the unpopular piecework system of paying workers only for vessels 'good from oven' (Owen 1970 [1901]: 30–32). This meant that a presser could lose a third of their dues if the plate they moulded was incorrectly glazed by the dipper or it was damaged by a fallen saggar during firing.

Not all vessels spoilt by careless errors were thrown away. At the end of each firing, the 'bests' were sorted from the 'seconds', 'thirds' and 'lump' and each packaged for sale to their various markets. Damaged goods still had their price. In 1770 you could have saved a penny on a 10-inch dish or $1\frac{1}{2}$ on an 'even worse' second, a saving of 33 per cent or 50 per cent (see Fig. 3). The plates were offered in no less than five ranks of quality from Bests to '3 degrees worse than seconds' to save up to 50 per cent. Aside from a reference on the 1833 price-fixing list (held by the Spode Museum Trust) that the list of minimum prices refers to the lowest quality of goods, and that better goods should attract a better price, none of the other price lists since 1770 mention quality.

One important distinction should be noted here: the terms 'bests' and 'seconds' refer to the quality of one batch of ceramics relative to the intended quality of the product. That is, 'bests' emerged from the production process in the precise state they were intended to, but 'seconds', 'thirds' and 'lump' did not. In addition, some goods were simply made cheaply and the imperfections were considered acceptable and therefore 'bests' of that batch. Thus, the presence of quality flaws does not necessarily mean the item was a 'second', but it is reasonable to group these two categories as cheaper wares. Distinguishing their differences, and the significance of those differences is an ongoing concern of this research program.


PRICES OF DISHES.
Best. Seconds.
s. d. s. d.
10 inches 3 — 10 inches 2
11 in. 4 — 11 in. 3
12 in. 6 — 12 in. 4
13 in. 8 — 13 in. 6
14 in. 10 — 14 in. 8
15 in. 1 0 — 15 in. 10
16 in. 1 4 — 16 in. 1 0
17 in. 1 6 — 17 in. 1 2
18 in. 1 9 — 18 in. 1 4
19 in. 2 0 — 19 in. 1 6
20 in. 2 6 — 20 in. 2 0
21 in. 3 0 — 21 in. 2 6
Worser Second Dishes half price of Best.

Sauce Boats.
Best Seconds
s. d. s. d.
Large 2 6 — 2 0
Mixt 2 0 — 1 9
Less 1 9 — 1 6
Less 1 6 — 1 3
Smallest 1 3 — 1 0

Twyflers.
Best 1 4
Seconds 1 0
Thirds 9
None less than 7
Best Plates 2 0
Best Seconds 1 9
Worser ditto 1 6
A degree worser 1 3
Ditto ditto 1 0

Fig. 3: Excerpt from the scale of prices agreed upon by manufacturers of earthenware, Staffordshire, England, signed on 4 February 1770 (Shaw 2001 [1829]: 207).

MEASURING QUALITY

While the promise of quality as a *material* link to another dimension of consumer choice is appealing, the task of developing and testing measures of quality on archaeological material has not been a straightforward endeavour.

The quality recording system, in its present form, is too detailed to present here in full, however, some key points are worth noting. Firstly, the system has only been developed for select classes of artefacts, namely ceramic and glass tablewares, toilet wares and food preparation items (excluding containers). It was first trialled on an 1860s assemblage of glass and ceramics from the Cumberland and Gloucester Streets site,[9] conducted in 2005. The ceramics component of the system, was then considerably enhanced by a detailed study of factory waste cached by Enoch Wood, potter of Burslem, Staffordshire in the foundations of the local meat market between 1835 and 1836 (Banks n.d.). This assemblage contains numerous examples of factory 'wasters': vessels so damaged by the manufacturing process that they are not worthy of sale even as seconds. These include imperfections such as patches where the glaze has not been absorbed (known as 'butterflies'), evidence of vessel contact during kiln firing and multi-coloured transfer prints that overlap and mismatch. Several new flaw types were identified during this process, and it is hoped that the Woods assemblage will provide a very useful yardstick with which to compare the domestic material.

In addition to the task of identifying the range of typical flaws and identifying their nomenclature, the recording of minute quality defects has required some development of other elements of the cataloguing spectrum. Perhaps the most significant thing about the more common ceramic and glassware flaws such as obtrusive kiln furniture marks, smudged transfer prints and fractured air bubbles, is that they are very small – often only 1–2 mm in size. Recording these minute flaws calls for more than a keen eye and good set of callipers. At this scale, the size of the sherd – not merely the quantity, weight for minimum vessel count – is vital in providing the appropriate spatial context for assessing the significance of these defects. Consequently, I have developed a system for recording the surface area (to the nearest square centimetre) of each sherd in the catalogue to approximate the potential area in which flaws may exist or be repeated. Because many significant flaws occur on the underside of a vessel, the surface areas of the upper face and that of the underside have been recorded separately. In addition to the location of each quality flaw, its significance and prominence has been assessed to distinguish between significant errors (e.g. a large over-glazed biscuit-crack) appearing in less-visible parts of vessel, or moderate or minor flaws (e.g. a poorly finished spur mark) that easily catches the eye owing to their position on the upper marly of a plate.

To date, an average of 4.6 flaws have been recorded for each sherd or vessel from the domestic assemblages and 7.4 from the factory assemblages, and up to 31 flaws have been recorded on single sherds or vessels from each group. (See Fig.4 for a typical range of flaws on a single, near-complete vessel.)

Substantial analysis of these records will not commence until the analysis of domestic assemblages is completed in 2006. The study will encompass several assemblages from Sydney in addition to the trial at the Cumberland and Gloucester Streets site, and other domestic groups from London. Initial survey of the London assemblages suggested a higher degree of quality items, but whether this pattern has been correctly observed, and is a genuine reflection of the assemblages – not an artefact of a foreign collection rate[10] – will be tested in the coming months. It will be some time before the precise degree of correspondence between all these assemblages, and the significance of it, can be properly assessed.

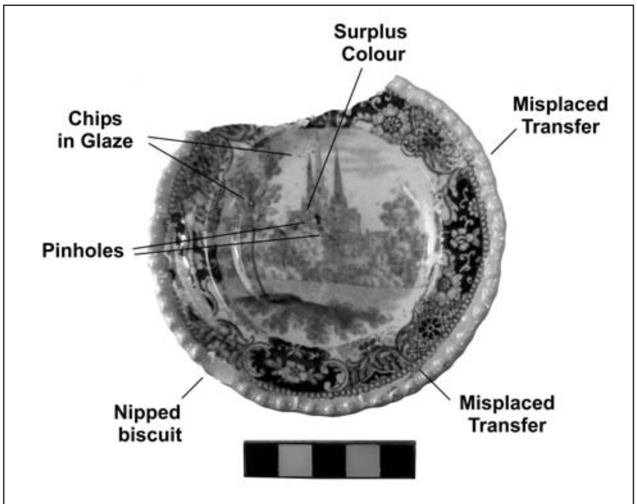


Fig. 4: Miniature plate from the Burslem Market Place assemblage showing a typical range of flaws. (BMP59 from the collection of The Potteries Museum and Art Gallery, Stoke-on-Trent.)

DISCUSSION

This broad inquiry concerning quality, cost and value draws heavily on very different resources and seeks to interrogate them in different ways. Essentially, it is the aggregate of three smaller projects: a documentary study of trade catalogues, a material study of quality flaws and a theoretical review of the role of quality, cost and value in nineteenth-century consumerism. The trade catalogues and quality flaws attack the problem from two ends and while I remain confident, I cannot be certain that they will meet neatly them in the middle to reveal the secrets of how consumers in the nineteenth century valued the material world on offer to them. That is, it may prove untenable to convincingly link the ranks of quality flaws with documented differences in price, or establish where the 'best quality' goods of the store catalogues might sit on that scale. Worse still, we may simply never understand the tolerance limits of nineteenth-century consumers precisely enough to harness the concept in assemblage analysis with confidence.

Another significant impediment to the research is temporality. Many of the more detailed records of quality, cost and value, such as trade catalogues, appear in the last few decades of the nineteenth century. The domestic assemblages under review date to the 1850s and 1860s and the factory assemblage was deposited between 1835 and 1836. Opportunities to cast-back the lessons learned from trade catalogues to earlier decades must be treated with caution. The format and presentation of some catalogues changed rapidly from issue to issue and it cannot be assumed that these documents reflect a continuum of consumer attitudes from earlier decades. That is, we cannot assume a simple transfer of slogans and promotional terminology available in store in the mid-nineteenth century to the paper records of the later nineteenth century. Thus is may be that whatever insight may be learned from them can only be applied to archaeological assemblages of the period between 1880 and 1900.

A final note must be made with regard to the applicability of cataloguing quality flaws in general historical archaeological practice. Clearly, these measures would never form part of the 'basic' artefact catalogue prepared at the end of most excavations, although some of the stand-out flaws may be more easily noted in such a catalogue. Some or all of the recording system discussed in brief above may be used in higher-level research of select deposits to provide a useful alternative, or compendium, to attempts to assess the approximate, relative or specific cost of other assemblages.

CONCLUSION

In this paper I have set out the broad scope of current research into the role and interrelationship of quality, cost and value in the labyrinth of nineteenth-century consumerism. I have briefly reviewed the current systems of analysis and interpretation that address cost, and to a lesser extent value. I have argued that close examination of documentary evidence for consumer pricing over a short time period reveals a complex market place that was subject to unexpected fluctuations at the small scale. I argue that the examination of quality flaws has the potential for a providing a testable, material indicator of relative cost. While it is not suggested that this new system of cataloguing would replace existing models for price indexation and it is recognised that there are some hurdles to overcome, the analysis of artefact quality has the potential to add another dimension to existing research on socioeconomic differentiation and consumer choice and make a significant contribution to interpretive assemblage analyses in historical archaeology.

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Many of the observations concerning quality were first made during the course the Exploring the Archaeology of the Modern City project, conducted by La Trobe University and Industry Partners: Sydney Harbour Foreshore Authority, Godden Mackay Logan, Historic Houses Trust, NSW Heritage Office, the City of Sydney and Heritage Victoria. While there was not scope within the EAMC project to explore these issues and there is no ongoing link between my doctoral studies and the project, this research would not have been possible without the opportunities presented.

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NOTES

1. Note Allison refers to these categories as a representation of 'quality or Status'. While there clearly is overlap between the concepts, these categories fall within the realm of 'Value', and particularly functional value, as defined under my enquiry. The term 'quality' is reserved for the material standard of the item, i.e. a utilitarian pudding bowl may be better finished and of a more durable fabric than another, rendering it to be of 'superior quality'.
2. The direct comparison of archaeological assemblages between the colonies of the British empire and America is in its infancy (Lawrence 2003b, Lawrence & Karskens 2003). Both Lawrence (2003a) and Brooks (2005:56–62) have sketched broad differences in the consumer markets of Australia and America, and other British colonies; and the unique features of the American ceramic market have been proficiently outlined by Ewins (1997: esp. pp. 53–55). While it is right to be cautious about simplistic comparisons, the extent to which these market peculiarities may affect assemblage analyses, or trade catalogue analyses for that matter, is yet to be demonstrated. To date, significant correlations have been observed between some of the American and Australian catalogues in the study. The comparison of American, Australian, English and Canadian catalogues used in this study has been made with these concerns in mind, and it hoped, will contribute a new suite of substantive evidence to the debate.
3. The original dates of the survey were 1880–1900, but the time period extended to allow for sequencing of available catalogues, i.e. all the Mutual Store records. Catalogues post-dating 1900 were only entered if an earlier catalogue by the same company had already been identified. It is for this reason that the many Lassetter's catalogues dating from c. 1902 to the 1914 do not appear in this selection. The 1911 Farmer's catalogue was entered following the identification of a surviving 1880s catalogue which turned out not to include house furnishings.
4. It is hoped that access to at least five additional catalogues will be secured during the course of this study and will be included in the analysis.
5. The many other abridged facsimile reprints of Sears catalogues in the 1890s and early 1900s have been excluded from the study because only select pages from the glass and ceramics departments were included, or these departments were altogether excluded.
6. Only 10 500 terms have been examined to date, representing about 75 per cent of the sets recorded in the database. This number is likely to rise.
7. Twenty-nine products have been described as looking more expensive than they are.
8. Many catalogues were in circulation for several years.
9. The Cumberland and Gloucester Streets site was excavated for Sydney Cove Authority (now the Sydney Harbour Foreshore Authority) in 1994 by Godden Mackay Pty Ltd (now Godden Mackay Logan Pty Ltd). See Godden Mackay 1996.
10. There are significant differences in the English and Australian traditions of excavation. English archaeologists rarely sieve, and gather finds by eye while removing the deposit. Several of the cesspit assemblages examined appear to be smaller in number and contain more complete vessels than occur in Sydney assemblages, which is probably a result of the processes of artefact collection.

BIBLIOGRAPHY

ALLISON, P. M. 2003. 'The Old Kinchega Homestead: Doing Household Archaeology in Outback New South Wales, Australia', *International Journal of Historical Archaeology* 7 (3): 161–194.

APPADURAI, A. 1986. 'Introduction: commodities and the politics of value', in A. Appadurai (ed), *The Social Life of Things: Commodities in Cultural Perspective*, Cambridge University Press, Cambridge.

ARMY & NAVY CO-OPERATIVE SOCIETY 1883. *Army & Navy Co-operative Stores: Price List*.

ARMY & NAVY CO-OPERATIVE SOCIETY 1907. Rules of the Society and Price List of Articles Sold at the Stores, fasc. reprint: Yesterday's Shopping: The Army and Navy Catalogue 1907 introduced by Alison Adburgham (1969), David & Charles, Devon, Eng.

BANKS, C. n. d., "… for the gratification of future antiquaries…": Enoch Wood's caches at the Potteries Museum & Art Gallery, unpublished paper for the Potteries Museum & Art Gallery, Hanley, Stoke-on-Trent, Eng.

BEAUDRY, M.C., L.J. COOK and S.A. MROZOWSKI 1991. 'Artifacts and Active Voices: Material Culture as Social Discourse', in Randall H. McGuire and Robert Paynter (eds), *The Archaeology of Inequality*, Blackwell, Oxford, pp. 150–191.

BOURDIEU, P. 1984. *Distinction: a social critique of the judgement of taste*, translated by Richard Nice, Routledge & Kegan Paul, London.

BOWER, R. 1996. Leather Artefacts Report, in Godden Mackay (ed.), The Cumberland/ Gloucester Streets Site, The Rocks: Archaeological Investigation Report, report prepared for the Sydney Cove Authority, vol. 4.

BROOKS, A.M. 1999. 'Building Jerusalem: Transfer-Printed Finewares and the Creation of British Identity' in Sarah Tarlow and and Susie West (eds), *The Familiar Past? Archaeologies of later historical Britain*, Routledge, London, pp. 51–65.

BROOKS, A. 2005. *An Archaeological Guide to British Ceramics in Australia 1788–1901*, The Australasian Society for Historical Archaeology and The La Trobe University Archaeology Program.

CARROLL, L. 1999. 'Communities and Other Social Actors: Rethinking Commodities and Consumption in Global Historical Archaeology', *International Journal of Historical Archaeology* 3 (3):131–136.

CIVIL SERVICE SUPPLY ASSOCIATION 1880. *Export list*, London.

COOK, L.J., R. YAMIN and J.P. McCARTHY 1996. 'Shopping as Meaningful Action: Towards a Redefinition of Consumption on *Historical Archaeology*', *s* 30 (4): 50–65.

CROOK, P. 2000. 'Shopping and Historical Archaeology: Exploring the Contexts of Urban Consumption', *Australasian Historical Archaeology* 18:17–28.

CROOK, P., S. LAWRENCE and M. GIBBS 2002. 'The role of artefact catalogues in Australian historical archaeology: a framework for discussion', *Australasian Historical Archaeology* 20:26–38.

CUFFLEY, P. 1984. *Chandeliers and Billy Tea: A Catalogue of Australian Life 1880–1940*, The Five Mile Press, Hawthorn, Victoria.

CUFFLEY, P. 1997. *The Federation Catalogue: Household Life in Australia, 1890–1915*, The Five Mile Press, Hawthorn, Victoria.

DOUGLAS, M. and B. ISHERWOOD 1996. *The world of goods: towards an anthropology of consumption*, revised ed., Routledge, London.

EWINS, N. 1997. *'Supplying the Present Wants of Our Yankee Cousins…': Staffordshire Ceramics and the American Market 1775–1880*, special edition of the Journal of Ceramic History, vol. 15, City Museum & Art Gallery, Stoke-on-Trent, Eng.

Exhibition of the Works of Industry of all Nations 1851, Prospectuses of Exhibitors, vol. XIII, Royal Commissioners, London.

GODDEN MACKAY 1996. The Cumberland/Gloucester Streets Site, The Rocks: Archaeological Investigation Report, Volumes 1, 3–5, prepared for the Sydney Cove Authority.

HARROD'S 1972 [1895]. *Victorian Shopping: Harrod's Catalogue 1895*, a facsimile of the Harrod's Stores 1895 issue of the Price List, introduced by Alison Adburgham, David & Charles Reprints, Devon, Eng., 1972.

HORDERN, ANTHONY & SONS 1894 *Illustrated catalogue*, A. Hordern & Sons, Sydney.

HORDERN, ANTHONY & SONS 1897. *Illustrated catalogue*, A. Hordern & Sons, Sydney.

HORDERN, ANTHONY & SONS c1899. *Illustrated catalogue*, A. Hordern & Sons, Sydney.

IACONO, N. 1996. 'Miscellaneous Artefacts Report', in Godden Mackay (ed.), The Cumberland/ Gloucester Streets Site, The Rocks: Archaeological Investigation Report, unpublished report prepared for the Sydney Cove Authority, vol. 4.

JONES, O., C. SULLIVAN with contributions by G.L. MILLER, E.A. SMITH, J.E. HARRIS and K. LUNN 1989. *The Parks Canada Glass Glossary: for the description of containers, tableware, flat glass, and closures, Studies in Archaeology, Architecture and History*, rev. ed., National Historic Parks and Sites, Canadian Parks Service, Environment Canada, Ottawa, Ontario.

KARSKENS, G. 1999. *Inside The Rocks: the Archaeology of a Neighbourhood*, Hale and Iremonger, Sydney.

KARSKENS, G. 1996. The Cumberland/Gloucester Streets Site, The Rocks: Archaeological Investigation Report, Volume 2: Main Report – New Perspectives from The Rocks, prepared in conjunction with Godden Mackay Heritage Consultants for the Sydney Cove Authority and the Heritage Council of New South Wales.

KING, HENRY S. & Co. 1880. *Cash Price List*, London.

KINGSTON, B. 1994. *Basket, Bag and Trolley: A History of Shopping in Australia*, Oxford University Press, Melbourne.

LAWRENCE, S. 2003a. 'Exporting Culture: Archaeology and the Nineteenth-Century British Empire', *Historical Archaeology* 37 (1): 20–33.

LAWRENCE, S. (ed.) 2003b. *Archaeologies of the British: Explorations of identity in Great Britain and its colonies 1600–1945*, Routledge, London.

LAWRENCE, S. 2003c. 'At Home in the Bush: Material Culture and Australian Nationalism' in S. Lawrence (ed.), *Archaeologies of the British: Explorations of identity in Great Britain and its colonies 1600–1945*, Routledge, London, pp. 211–223.

LAWRENCE, S. 2000. *Dolly's Creek: An Archaeology of a Victorian Goldfields Community*, Melbourne University Press, Melbourne.

LAWRENCE, S. 1999. 'The Role of Material Culture in Australasian Archaeology', *Australian Historical Archaeology*, 16:8–15.

LAWRENCE, S. and G. KARSKENS 2003. 'Historical Archaeology in the Antipodes', *Historical Archaeology* 37 (1): 1–5

LYDON, J. 1995. 'Boarding Houses in The Rocks: Mrs Ann Lewis' privy, 1865', *Public History Review* 4:73–88.

MAJEWSKI, T. and M.J. O'BRIEN 1987. 'The Use and Misuse of Nineteenth-Century English and American Ceramics in Archaeological Analysis', *Advances in Archaeological Method and Theory* 11:97–207.

MILLER, D. 1987. *Material culture and mass consumption*, B. Blackwell, Oxford & New York.

MILLER, G.L. 1980. 'Classification and Economic Scaling of nineteenth century Ceramics', *Historical Archaeology* 14: 1–40.

MILLER, G.L. 1991. 'A Revised Set of CC Index Value for Classification and Economic Scaling of English Ceramics from 1787 to 1880', *Historical Archaeology* 25 (1): 1–25.

MILLER, G.L. 1993. 'A User's Guide to Ceramics Assemblages: Part 4; Some thoughts on Classification of

White Earthenwares', *Council for Northeast Historical Archaeology Newsletter*, No. 26, pp 4–6.

MILLER, G.L. 2003 'Potters' Dozens and Evolving Vessel Sizes', paper delivered at the Society for Historical Archaeology conference, Providence, Rhode Island, USA, January 2003.

MONTGOMERY WARD & CO 1969 (1895). *Catalogue and Buyers Guide No 57, Spring and Summer, 1895*, unabridged facsimile reprint with an introduction by Boris Emmet, Dover Publications, New York.

MONTGOMERY WARD & CO 1977 (1894). *Montgomery Ward & Co.'s Catalogue and Buyer's Guide No. 56, 1894–95*, facsimile reprint introduced by Joseph Schroeder, DBI Books, Northfield, USA.

MUTUAL STORE LTD 1892. *Price list, guide, &c. for the half-year, commencing February 1st 1892*, and ending July 31st 1892, No. 8, Melbourne.

MUTUAL STORE LTD 1907. *General Price List*, issued October 1907, Melbourne.

OWEN, H. 1970 [1901]. *The Staffordshire Potter*, fasc. reprint, Kingsmead Reprints, Bath, Eng.

PRAETZELLIS, A. & M. PRAETZELLIS 1992. 'Faces and Facades: Victorian Ideology in Early Sacramento', in A.E. Yentsch and M.C. Beaudry (eds), *The Art and Mystery of Historical Archaeology – Essays in Honor of James Deetz*, CRC Press, Boca Raton, USA, pp. 75–99.

ROMAINE, L.B. 1990. *Guide to American Trade Catalogs, 1744–1900*, reprint of 1960 ed., Dover Publications Inc., New York.

SCHLERETH, T.J. 1992. 'Mail-Order Catalogs as Resources in Material Culture Studies' in Schlereth (ed.) *Cultural History and Material Culture: everyday life, landscapes, museums*, University Press of Virginia, Charlottesville, pp. 55–86.

SEARS, ROEBUCK & CO. 1969 [1902]. *The 1902 Edition of the Sears Roebuck Catalogue*, Cat. No. 111, facs. reprint, intro. by Cleveland Amory, Crown Publishers, New York.

SEARS, ROEBUCK & CO. 1993 [1897]. *1897 Sears, Roebuck & Co. Catalogue, Consumers' Guide No. 104*, fasc. reprint of Catalogue No. 104, intro. by S.J. Perelman, ed. by Fred L. Israel (General Editor), Chelsea House Publishers, Philadelphia.

SEARS, ROEBUCK & CO. 2002 [1902]. *The Sears, Roebuck & Co. 1902 Catalog*, Cat. No. 112, digital facsimile, Princeton Imaging, Princeton, New Jersey.

SHACKEL, P.A. 1998. 'Classical and Liberal Republicanisms and the New Consumer Culture', *International Journal of Historical Archaeology* 2 (1):1–20.

SHAMMAS, C. 1990. *The pre-industrial consumer in England and America*, Oxford University Press, New York.

SHAW, S. 2001 [1829]. *History of the Staffordshire Potteries; and the Rise and Progress of the Manufacture of Pottery and Porcelain*, fasc. of 1829 ed., Elibron Classics, Boston.

SIMMONDS, P.L. 1872. *Science and commerce: their influence on our manufactures – a series of statistical essays & lectures describing the progressive discoveries of science, the advance of British commerce, & the conditions of our principal manufactures in the nineteenth century*, Robert Hardwicke, London.

SPENCER-WOOD, S.M. (ed.) 1987a. *Consumer Choice in Historical Archaeology*, Plenum Press, New York.

SPENCER-WOOD, S.M. 1987b. 'Miller's Indices and Consumer-Choice Profiles: Status-Related Behaviours and White Ceramics', in S. Spencer-Wood (ed.), *Consumer Choice in Historical Archaeology*, Plenum Press, New York, pp. 321–358.

STEWART-ABERNATHY, L.C. 1992. 'Industrial goods in the service of tradition', in A.E. Yentsch and M.C. Beaudry (eds), *The Art and Mystery of Historical Archaeology – Essays in Honor of James Deetz*, CRC Press, Boca Raton, USA, 101–126.

The Journal of Design and Manufactures, published by Chapman & Hall, London, 1849–1852.

WALL, D. 1991. 'Sacred Dinners and Secular Teas: Constructing Domesticity in Mid-19th-Century New York' *Historical Archaeology*, 25 (4):69–81.

WALL, D. 1999. 'Examining Gender, Class, and Ethnicity in Nineteenth-Century New York City', *Historical Archaeology* 33 (1):102–117.

WEATHERILL, L. 1988. *Consumer behaviour and material culture in Britain, 1660–1760*, Routledge, London & New York.

WILSON, G. 1996. 'Ceramics and Clay Tobacco Pipes Artefacts Report', in Godden Mackay (ed.), The Cumberland/Gloucester Streets Site, The Rocks: Archaeological Investigation Report, unpublished report prepared for the Sydney Cove Authority, vol. 4.

YENTSCH, A. 1990 'Minimum Vessel Lists as Evidence of Change in Folk and Courtly Traditions of Food Use', *Historical Archaeology* 24 (3):24–53.