

1987

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### Recommended Citation

Miller, George L. (1987) "Origins of Josiah Wedgwood's "Pearlware"," *Northeast Historical Archaeology*: Vol. 16 16, Article 6.  
<https://doi.org/10.22191/neha/vol16/iss1/6> Available at: <http://orb.binghamton.edu/neha/vol16/iss1/6>

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# Origins of Josiah Wedgwood's "Pearlware"

## **Cover Page Footnote**

Part of this research was funded by a National Endowment for the Humanities grant (#RO-21128-86) for a project titled "English Ceramics in America, 1760-1860: Prices, Marketing, and Availability." Several people have read drafts of this paper and provided useful suggestions and observations. I particularly would like to thank Lynne Sussman, Ann Smart Martin, Patricia Samford, Robert Hunter, Ivor Noel Hume, Robert Copeland, John des Fontaines, Terry Lockett, Rodney Hampson, and Martin Phillips. I would also like to thank the Wedgwood Museum of Barlaston and Gaye Blake Roberts for providing me with access to the Wedgwood Archives in Barlaston and at Keele University in Staffordshire.

# ORIGINS OF JOSIAH WEDGWOOD'S "PEARLWARE"

George L. Miller

*Close inspection of the documentary record reveals that Josiah Wedgwood's "pearlware" was no more than his own version of a ware already being produced as early as 1775 by other Staffordshire potters. Wedgwood introduced a new name, Pearl White, to distinguish his product from that of his competitors, which they called China Glaze. This is an important revision to ceramic chronology because "pearlware" has been considered by most historical archaeologists as a firm 1779 terminus post quem for archaeological deposits. This new knowledge will force a reconsideration of many of the contexts in which so-called pearlware has been found.*

*Un examen serré des archives documentaires révèle que le "pearlware" de Josiah Wedgwood n'était que sa propre version d'une céramique fabriquée dès 1775 par d'autres potiers du Staffordshire. Wedgwood a adopté un nouveau nom, Pearl White, pour distinguer son produit du China Glaze de ses concurrents. Cela apporte une importante modification à la chronologie céramique parce que la plupart des archéologues historiques considéraient le "pearlware" comme un terminus post quem sûr de 1779, pour dater les dépôts archéologiques. Cette nouvelle donnée va obliger à revoir plusieurs des contextes où l'on a trouvé du "pearlware."*

## Introduction

In a recent article on the ceramics from New Windsor Cantonment, Fisher (1987: 55) lists assemblages from two Revolutionary War forts that date before 1783 and have significant quantities of "pearlware." At New Windsor Cantonment, abandoned in 1783, 12% of the 155 sherds were "pearlware," and at Fort Watson, abandoned in 1781, 11% of the 624 sherds were "pearlware" (Fisher 1987: 51).

Upon being confronted with this information, one is led to suppose that Josiah Wedgwood's "pearlware" was being shipped to the American

market within a short time after it was introduced in England in 1779. There is something that is disquieting about this information, however, because it does not fit with other evidence concerning the relationship between the English potters, particularly Josiah Wedgwood, and the American market. For instance, there are only a few references to Wedgwood's wares being shipped to America. Eliza Meteyard's *The Life of Josiah Wedgwood* details Wedgwood's expansion of sales into Russia, Spain, and Holland beginning in the late 1760s. Expansion continued into the French, Italian, German, Turkish, and other markets during the 1770s and 1780s (Meteyard 1866: 479-483). Josiah Wedgwood's papers, deposited at Keele University in Staffordshire, have very few references, however, to wares being sent to the Americas before, during, or after the Revolutionary War.

Furthermore, the limited number of letters that do exist concerning the American trade are usually related to dumping wares that had gone out of fashion and that Wedgwood wanted to unload. For example, in a letter to his partner Thomas Bentley on September 8, 1767, Wedgwood discusses the dumping of his "Green and Gold" wares for the "emolument of our American Brethren & friends." He goes on to say that "I shall be perfectly easy about the returns, be they much, little, or nothing at all" (Finer and Savage 1965: 58).

Two pieces of evidence support the supposition that Wedgwood was not very involved in exporting his wares to North America. First, marked Wedgwood wares from contexts before 1850 are rare on North American sites. Second, research conducted by Ann Smart Martin on the records of six different merchants involved in selling ceramics in Virginia during the 1760s indicates that creamware, an earlier Wedgwood ware, does not show up in these records until 1768 and did not become common until after 1769 (Martin 1987: 12). The earliest known reference to creamware in Canada is also 1769 (Collard 1976: 105-106). This is seven to eight years after its improved version was introduced by Josiah Wedgwood. Given the lag-time between the introduction of creamware in England and its appearance in North America, it would seem strange for "pearlware" to show up in

America within a year or two of its introduction into Wedgwood's London show rooms.

There is a logical explanation for the presence of so-called pearlwares in assemblages from Revolutionary War forts. Before presenting that explanation, it is necessary to review the history of Wedgwood's introduction of "pearlware."

Traditionally, Josiah Wedgwood has been credited with inventing "pearlware" in 1779. This date was derived from a series of letters from Wedgwood to his partner Thomas Bentley discussing the development of "pearlware" (Finer and Savage 1965: 231, 236, 237). Perhaps the most interesting comment that Wedgwood made on his new product is in his letter to Bentley dated August 6, 1779:

Your idea of the cream colour having the merit of an original, and the pearl white being considered as an imitation of some of the blue and white fabriques, either earthenware or porcelain, is perfectly right, and I should not hesitate a moment in preferring the former if I consult my own taste and sentiments. . . . The pearl white must be considered as a change rather than an improvement, and I must have something ready to succeed it when the public is palled (Finer and Savage 1965: 237).

What exactly did Wedgwood mean when he wrote that "... the pearl white being considered as an imitation of some of the blue and white fabriques, either earthenware or porcelain . . ."? What blue and white earthenwares were on the market in the late 1770s?

Ivor Noël Hume in his excellent article "Pearlware: Forgotten Milestone of English Ceramic History" has demonstrated that in the 1780s other Staffordshire potters used the name China Glaze rather than "pearlware" (Noël Hume 1969a). Noël Hume records eight potters and one enameller from a 1787 directory that were listed as making China Glaze in addition to cream color or Queen's ware. None of the potters in the 1787 directory list "pearlware" as a product (Noël Hume 1969a: 391).

If Josiah Wedgwood was the first to develop a white ware with a blue-tinted glaze, why would the other potters not have adopted his name for their ware? After all, they had little hesitation about using the name Queen's ware that he gave to creamware. The obvious conclusion is that

China Glaze predates "pearlware," and the blue and white fabric to which Wedgwood was comparing his new "pearlware" was China Glaze.

### China Glaze

Shaw's 1829 *History of the Staffordshire Potteries* credits the development of China Glaze to John Greatbatch:

There was increased demand for "Cream Colour", made with fluid lead glaze, by Mr. Enoch Booth's method and which had been much improved in quality by different persons, especially by John Greatbatch, (who made what has been long called the best "China Glaze" applied to Cream colour; and also first made for Messrs. Ralph and John Baddeley, of Shelton, their "Blue printed" glaze) (Shaw 1968: 184).

After crediting Greatbatch with developing China Glaze, Shaw goes on to state that:

Mr. Wedgwood therefore commenced the manufacture of improved cream colour, with Greatbatch's glaze; for which he soon had such a demand, that he engaged a third manufactory . . . (Shaw 1968: 184).

Eliza Meteyard's 1865 *The Life of Josiah Wedgwood* repeats the information in Shaw as follows:

By the close of the year 1761 Mr. Wedgwood had brought his cream-ware to a considerable degree of perfection. The body had a lightness hitherto unknown, the glaze an exquisite brilliancy, and its forms were entirely new. The proportion of native clay introduced into the body was probably but fractional. Dorset and Devon clays with a due proportion of flint were its chief components, and the glaze used was what was known as "Greatbatch's china glaze," but which Mr. Wedgwood subsequently greatly improved (Meteyard 1865: 285).

From the above evidence, it appears that China Glaze may have been a general term that was around as early as the 1760s. Both Shaw and Meteyard were writing many years after the event, however. When China Glaze was first used to describe a blue-tinted glaze is not known. There is a dated 1775 China Glaze vessel known as the Tidmarsh Jug which suggests production started by at least that date. The Tidmarsh Jug will be discussed below.

Exactly who John Greatbatch was and when he developed his China Glaze is not clear. The best known Greatbatch was William who, like Wedgwood, was associated with Thomas Whieldon (Shaw 1968: 156). William Greatbatch supplied Wedgwood with molded teapots from 1759 until he went bankrupt, after which time he was employed as a modeler for Wedgwood (Towner 1978: 34-38). According to Simeon Shaw, Wedgwood employed many of William's sons and relations (Shaw 1968: 190). Perhaps John Greatbatch was one of the relatives of William mentioned by Shaw.

Josiah Wedgwood's letters to Thomas Bentley indicate that he developed his own "pearlware" as a result of experimentation culminating in 1779. Unfortunately Bentley died in 1780, ending the correspondence so rich in information about the development of "pearlware" and other products created by Wedgwood. What contribution or influence John Greatbatch may have had on Wedgwood's development of "pearlware" is open to debate. The blue- and white-fabric earthenware mentioned by Wedgwood in his letter of August 6, 1779, was most likely China Glaze.

Another tantalizing piece of information indicating that China Glaze predates "pearlware" is from testimony given before Parliament by Josiah Wedgwood. An article by Jean Gorely titled "Cream Color, Alias Queen's Ware" gives the following piece of information:

The superiority of Wedgwood's product to earlier cream-colored ware lay in the fact that besides fineness of potting and design, it had "several of the properties of porcelain," as he [Wedgwood] stated to Parliament in 1774, and a so-called "China Glaze" (Gorely 1978: 122).

Most likely the quotation comes from 1775 rather than 1774, which is when Josiah Wedgwood was actively fighting Richard Champion's attempt to extend the Cookworthy patent for making hard paste porcelain.

Wedgwood published the following four pamphlets as part of his lobbying effort against extension of Cookworthy's patent (Thomas 1971: 33-34):

- 1) *Memorial relative to the Petition from Mr. Champion for the extension of a Patent. by*

*Josiah Wedgwood on behalf of himself, and the manufacturers of earthenware in Staffordshire begs leave to represent.*

- 2) *Remarks upon Mr. Champion's reply of Mr. Wedgwood's Memorial on behalf of himself and the Potters in Staffordshire.*
- 3) *Reasons why the extension of the term of Mr. Cookworthy's Patent by Authority of Parliament would be injurious to many land owners, to the manufacturers and to the public.*
- 4) *The case of the Manufacturers of Earthenware in Staffordshire.*

None of these publications mentions China Glaze. The other source of the quote could be testimony given before the Parliamentary committee. In any case, Gorely's quote could mean that China Glaze was in existence as early as 1774 or 1775. China Glaze is a rare term in the ceramic literature, and it is difficult to account for it in Gorely's article except as a direct quote from Wedgwood.

In Noël Hume's article "Pearlware: Forgotten Milestone of English Ceramic History," he describes a "pearlware" jug in the Victoria and Albert Museum. It is painted with a Chinese house pattern in blue under the glaze, and on top of the glaze in black enamel is the inscription "A Butcher" and "A D 1777." Noël Hume's conclusion is that the 1777 date must have been in retrospect because "pearlware" was not invented until 1779 (Noël Hume 1969a: 393). Given that China Glaze predates "pearlware," the 1777 jug in the Victoria and Albert Museum could be an early dated piece of China Glaze ware.

In response to an earlier version of this article (Miller 1985), Lockett argues in support of the supposition that China Glaze predates "pearlware" by providing an earlier dated piece of China Glaze. This is the Tidmarsh jug—a large "pearlware" pitcher painted with a Chinese house pattern in under-glaze blue. On the front of the jug is the inscription "Tidmarsh's Original Staffordshire Warehouse N 1775" (Lockett 1986: 47). This is the earliest known example of China Glaze.

Another dated example of China Glaze exists in the collections of the Colonial Williamsburg

Foundation and is on display in the DeWitt Wallace Decorative Arts Gallery. It is a medium-sized punch bowl painted in under-glaze blue in a Chinoiserie style. On the inside of the bowl is the inscription "I 1777 N." This vessel has some blue puddling of the glaze around the foot ring, and it would not be possible to distinguish it from later "pearlwares" by visual examination.

### "Pearlware" Reassessed

Noël Hume has described "pearlware" as a milestone in English ceramic history. Unfortunately, the ware cannot be placed in time with the exactitude one would expect of a milestone, and the nature of the product is such that it is overshadowed by the decoration it bears. Because "pearlware" or China Glaze was rarely produced undecorated, it was almost always referred to in terms of decoration rather than ware type. Therefore, this milestone went under names such as edged, painted, dipt, or printed, making it very difficult to identify in the documents.

Appendix A lists all of the occurrences of the terms "China Glaze," "pearlware," "pearl white," "pearl china," and other aliases that the author has been able to locate over the last decade. It is equally interesting to consider some of the major sources that do not have references to China Glaze or "pearlware." None of the 12 Staffordshire potters' price-fixing lists dating from 1783 to 1859 lists China Glaze or "pearlware." Collections of glaze and body receipts (i.e., recipes) published in 1824, 1837, and 1846 do not list "pearlware." These books and the receipts that probably referred to what is known as pearlware are listed in Appendix A. In most cases, the wares were called "printed body" or "printed glaze."

In addition to the absence of "pearlware" from the above sources, there is clear evidence that the name "pearl" began to be applied to a dry-bodied white stoneware in 1795. This is what Simeon Shaw's 1829 *History of the Staffordshire Potteries* says about the subject:

About 1795, a new kind of Pottery, a dry body, or without glaze or smear, was introduced into the market by Messrs. Cheatham and Woolley, of Lane-End. It is to the white Pottery, what jasper is to the coloured. Not being affected by change of temper-

atures, but very fine in grain, durable in quality, and of a most beautiful and delicate whiteness, it received the name it still bears, of Pearl, from Mr. J. Spode . . . " (Shaw 1968: 225-226).

This dry-bodied "pearlware" is listed in Shaw's 1837 book on the chemistry of pottery (Shaw 1900: 458). A receipt for it is also listed in Evan's 1846 *Art and History of the Pottery Business*, where it is called pearl ware (Evans 1846: 7).

Clearly if Josiah Wedgwood's "pearlware" had been a commonly used term for a white earthenware, one would not have expected Cheatham and Woolley to name their dry-bodied stoneware pearl. The dry-bodied stoneware that was named pearl would have been more of a luxury item than the ware archaeologists and ceramic historians have labeled "pearlware," and there would have been no advantage in naming it after one of the most common wares being produced in 1795.

There is also some negative evidence for the fact that Josiah Wedgwood's "pearlware" was not a new invention. First is the fact that the two great 19th-century biographies of Wedgwood almost ignore "pearlware." Eliza Meteyard's (1865, 1866) extensive two-volume work, *The Life of Josiah Wedgwood*, which relied heavily on his business papers to chronicle the development of many Wedgwood innovations, does not even list "pearlware" in its index. The only reference to "pearlware" in Llewellynn Jewitt's 1865 book, *The Wedgwoods: Being a Life of Josiah Wedgwood*, describes the "pearlware" being produced at the time the book was being written and has nothing about its origins or development by Wedgwood (Jewitt 1865: 391).

Because Meteyard and Jewitt were writing many years after the introduction of "pearlware," it is understandable that they might have overlooked its development. They are not, however, the only ones who seemingly overlook Wedgwood's role in the development of "pearlware." An 1802 directory for the Staffordshire pottery district published by J. Allbut and Son contains a history of the development of the potteries. After a discussion of Josiah Wedgwood's life and accomplishments, it lists the wares he developed. The list includes a terra cotta resembling porphyry, basalt, a white porcelain biscuit, jasper, bamboo or cane-colored ware, a porce-

lain biscuit for mortars, and Queen's ware (Allbut 1802).

Allbut's directory was published just seven years after Josiah Wedgwood's death, and at the time of its publication "pearlware" or China Glaze was the most common type of pottery being produced in Staffordshire. If it had been the invention of Josiah Wedgwood, overlooking it would have been difficult. Most likely "pearlware" was looked upon as Wedgwood's variant of China Glaze.

Jewitt reproduced the list printed in Allbut in the same order and wording, including a paragraph that refers to an earlier discussion in Allbut's history, but Jewitt attributed the list and paragraph to Josiah Wedgwood (Jewitt 1865: 187-188). Unfortunately Jewitt did not provide a citation of the original. It was a common practice in the 19th century to copy from earlier works without providing references to their sources. If the list of accomplishments was compiled by Josiah Wedgwood, then it would seem that he either did not invent "pearlware," or thought so little of his improvement that he did not feel it was worth listing.

China Glaze was still a common term when the 1802 directory was written, and it most likely was seen as the invention, with Pearl White being Wedgwood's name for the same ware. Evidence that the term China Glaze remained in use is provided by the 1807 catalogue of wares to be sold by auction from the bankrupt William Turner's Pottery. Among the wares listed were:

A large and elegant assortment of Earthenware and china, comprising the different articles usually manufactured . . . consisting of cream colour, china glazed blue edge, china glaze printed and painted, Egyptian Black, Cane, Stone, Pearl, and Patent China Goods (Hillier 1965: 74).

The "pearl" listed above appears with the Egyptian Black, Cane, and other dry-bodied stonewares. It would be the pearl dry body introduced by Cheatham and Woolley discussed above.

From the above evidence it seems clear that Wedgwood's "pearlware," which he introduced in 1779, was a variant of what the other Staffordshire potters called China Glaze, and, furthermore, that their version of "pearlware"—China

Glaze—was introduced four or possibly five years earlier than Wedgwood's "pearlware," Pearl White.

### **A Reconstructed History of the Development of a China Glaze**

Josiah Wedgwood's correspondence to his partner Thomas Bentley offers an interesting insight into the quest for a white ware and its relationship to porcelain. Unfortunately Bentley's letters to Wedgwood have been lost, leaving us with only one side of a dialogue concerning the development of a white ware—a dialogue that begins around 1769 and ends with Bentley's death in 1780.

By 1769, Wedgwood was feeling pressure to develop a white ware. In a letter to Bentley dated December 1 of that year Wedgwood wrote:

We have nobody making white ware here, only stone white ware. Our Quondam friend Sir William M[eredith] sets People a madding after it by telling them it is to come out soon, but I apprehend there is not much danger, neither will Mr. Pitt ever be able to sell white China low without sinking his fortune at the same time . . . (Finer and Savage 1965: 85-86).

Sir William Meredith was a Member of Parliament from Liverpool who supported Wedgwood in such things as building a canal connecting Staffordshire with Liverpool and promoting Wedgwood's wares (Finer and Savage 1965: 360). The Mr. Pitt mentioned above was associated with William Cookworthy's porcelain works in Plymouth (Finer and Savage 1965: 86). The statement indicates that, except for white salt-glazed stoneware, Wedgwood was not aware of any white ware being produced in the Staffordshire potteries in 1769.

White ware has a special meaning for archaeologists and has been defined as the plain white ware that replaced "pearlware" beginning in the 1820s. What we call "pearlware," however, was considered a white ware by the potters. It should be noted that Josiah Wedgwood's name for "the brat" that he asked Bentley to name in 1779 was "Pearl White," not "pearlware" (see Appendix). All of Wedgwood's references to it and later factory formulas went under the name Pearl White.

Several of Wedgwood's letters to Bentley men-

tion the development of a white ware. In his letter of April 18, 1772, after discussing the whitening of their creamware, Wedgwood goes on to discuss three possible plans of attack for future development and maintenance of their position in the market. Plan three reads as follows:

The third plan is to begin in my new works upon the White ware Sir William Meredith has for some years past been advertising for me, and which the WORLD has so long and so IMPATIENTLY expected at my hands. To make this ware as much whiter, and as better in every respect than my Neighbors as I am able, and by that means to keep up the distinction as much in white ware as I have hitherto done in Cream-color (Finer and Savage 1965: 121).

From the above quote it would appear that some other potters may have begun to produce some form of white ware or China Glaze by 1772.

In a letter to Bentley dated May 9, 1772, Wedgwood gives his reasons for postponing the development of a white ware (Finer and Savage 1965: 121). The question did not go away, however, and in a letter of March 5, again from Wedgwood to Bentley, he appears to be responding to pressure from Bentley to produce a white ware:

... and as to the Blanching of our ware in general, when that step is absolutely necessary I hope it may be done. ... The Agate, the green, and other colour'd Glazes have had their day, and done pretty well. ... Cream-color is of a superior Class, and I trust has not yet run its race by many degrees (Finer and Savage 1965: 159).

Later, on December 12, 1774, he writes: "... something may like wise be done in the useful ware, as I apprehend our customers will not much longer be content with Queens ware, it being now render'd vulgar, & common" (Farrer 1903: 210).

In the spring of 1775 Wedgwood became involved in lobbying against the extension of Richard Champion's patent for exclusive rights to make hard paste porcelain using Cornish clays and china-stone. The act extending Champion's patent for making porcelain passed Parliament in May of 1775, but the right to use Cornish clays and other materials was opened to all (Finer and Savage 1965: 177-178). Very shortly after gaining the rights to use the Cornish clays, Josiah Wedgwood and Thomas Turner set off to

Cornwall in search of clays for the potters of Staffordshire. On June 18, Wedgwood wrote to Bentley that:

We are to have a meeting of our potters. ... Mr Turner and I have concluded to set about washing some clay for ourselves and for others as soon as we can, if they chuse rather to have it, but at the same time to leave raw clay open to all who chuse rather to prepare it for themselves, for I am firmly persuaded that an exclusive company, or an exclusive right to the clay in any company. or under regulations whatever, would soon degenerate into a pernicious monopoly (Hillier 1965: 35).

A week later, Wedgwood wrote:

We had a general meeting of the potters yesterday at Moretons on the Hill [Burslem] when we told them what had been done for their interests in London and in Cornwall, they were highly pleased with our negotiations and the generosity with which the Pottery at large had been treated. ... I proposed a public experimental work [a research association] and they seemed to take the proposal very kindly, after I had cautioned them against a too precipitant change from a branch of business they were well acquainted with [the manufacture of Queen's ware of cream color] to one in great measure untried by anybody and quite unknown to themselves and we are to meet again a fortnight to try if we can bring our plans to a tolerable degree of maturity (Hillier 1965: 35).

According to Hillier, the plans for a research association fell through. The results of Wedgwood's and Turner's trip to Cornwall was the establishment of a clay mining company that supplied kaolin to the Staffordshire potteries. The introduction of that clay led to a proliferation of experiments aimed at developing a white ware.

Another development that contributed to the introduction of a blue-tinted white ware was the technological capability to refine cobalt in the Staffordshire potteries. In 1772, an air furnace was set up in Cobridge by Roger Kinnaston (Shaw 1968: 211). According to Shaw, Kinnaston had a drinking problem and sold copies of the recipe for preparing cobalt "for trifling sums" of £10 or £12 to gratify his "Bacchanalian propensities" (Shaw 1968: 211). Cobalt blue painting is one of the major changes commonly associated with the introduction of China Glaze or "pearlware."

Still Wedgwood postponed his production of a

white ware. In a response to Bentley on that subject, he wrote on January 14, 1776:

But for useful China or such white-ware as you mention I must beg a longer time. My hands, & head too have been too full of business immediately before me—especially the completion of the Art of Jasper making which I was determin'd to conquer or give up before I enter'd seriously into any other capital improvement. I say I have been too much engaged hitherto to have brought Porcelain making in such forwardness as to admit of having any ready for sale this season.

You know very well that for the moment a finer ware than Cream-color is shewn at our Rooms, the sale of the latter will in a great measure be over there. The consequence then of my shewing them a little, before I am certain of being able to supply their wants, would be a tantalizing them and ruining my own business. This transition is a very serious subject and what I am by no means ready to make at present and beg you will insense our good customers to the impossibility of bringing about such great events in a little time. I have not yet been able to take one step of any consequence towards making the useful ware, but I now intend to begin in earnest upon this subject, and devote as much of time and [energy] to it as I can spare from the business, connections, and pursuits I am already engaged in, which is the utmost I can promise upon this subject (Finer and Savage 1965: 189).

Wedgwood could not legally produce porcelain using the Cornish materials since they were protected by Champion's patent. It is clear that he was still resisting pressure from Bentley to move into white ware production. Bentley apparently was in turn receiving pressure from the customers for white ware. In the following letter of February 14, 1776, Wedgwood again defends continued production of cream color and his deliberate delay in the development of a white ware.

I am much oblig'd to Mr. Tuffnall, but I cannot at present find in my heart to relinquish my good old Cream color, if all other difficulties were overcome.

The World at large has but just seen the Ware, & seem determin'd to be better acquainted with it. My Foreign orders increase very much, & in all probability will continue to do so. I had one the other day for 1500 doz of Table Plates, and all the other articles to make them up into complete Table services, & yesterdays Post brought me an addition to

it of abo't one third of the whole. . . . I believe in the whole to amot. 3000 doz. of Table Plates, & other Articles to sort them into Table Services.

This is not a business to abandon'd lightly, but I shall go on with my experiments, & endeavor to acquire another certainty before I quit my hold on that which I have in possession (Farrer 1903: 268).

The level of Wedgwood's argument in this letter suggests an increasing pressure to produce white ware. That pressure could have come from two sources. One was that cream color was beginning to go out of style, which Wedgwood clearly was arguing against. The other is that the other potters were producing China Glaze wares which were becoming popular and cutting into Wedgwood's and Bentley's market. Bentley, at the London showrooms, was in a position to see the market for their wares eroding and would have had good reason to keep the pressure on Wedgwood to produce a white ware to meet the new market demand.

Finally, on February 25 of 1779, Wedgwood wrote to Bentley that he had: "Settled my white body and glaze (Pray give me a name for it, but I am afraid it will be porcelain in spite of me, though I shall prevent it if possible)" (Finer and Savage 1965: 229). That ware was named Pearl White by Wedgwood and Bentley. The other potters called it China Glaze, and it has subsequently been renamed "pearlware" by historical archaeologists and some ceramic historians.

## Summary

Appendix A provides a listing of the historical occurrences of the terms "pearlware" and China Glaze, both of which were rarely used. The term China Glaze occurs in ten documents dating between 1782 and 1846, whereas "pearlware" only occurs twice in advertisements from 1803 and 1805. Five references to the ware from Wedgwood's records all call it Pearl White. An order from Frederick Rhinelander dated 1780 refers to the ware as Pearl Blue, and in the probate inventory of Leonard Keehmle's china store it was called Pearl China. Even Josiah Wedgwood's older brother Thomas called the ware China Glaze (Noël Hume 1969a: 391). In addition to Thomas Wedgwood, seven other potters have been documented as using the term China Glaze

to describe their blue-tinted wares. Beyond Josiah Wedgwood, no other potter has been documented as using the term Pearl White to describe these wares.

The rarity of the terms "pearlware" and China Glaze is a reflection of just how much this so-called milestone was overshadowed by the revolution that took place in decoration. The vast majority of creamware from the 18th and 19th centuries was undecorated, whereas "pearlware" or China Glaze was almost never undecorated. Cobalt blue became a common color in Staffordshire in the 1770s and was widely used for painted and edged wares (Shaw 1968: 211).

In some respects Josiah Wedgwood's "pearlware" parallels the development of his Queen's ware. In both cases Wedgwood improved a product being produced in the Staffordshire potteries, and, in the first case, his terminology became widely accepted. With "Pearl White," however, its origins as China Glaze were forgotten. As a result, a variant of Wedgwood's name for the product has come into wide usage in recent decades.

Two other wares were improved by Josiah Wedgwood and given new names. Basalt was the name Wedgwood gave to his version of the dry-bodied black stoneware the rest of the potters called Egyptian black. Rosso Antico was Wedgwood's name for dry-bodied red stoneware, which the other potters called simply red stoneware.

In summary, the blue-tinted white ware that archaeologists and ceramic historians call "pearlware" was probably introduced sometime before 1775 under the name China Glaze. Pearl White was Wedgwood's name for it, and neither term was used very much because the new wares were almost always decorated. As such they were known as edged, painted, dipt, or printed wares. These decorative types also reflected the way that the wares were priced and classified by the potters (Miller 1980). The only information that the blue tinting provides is the date of the piece involved, which ranges from ca. 1775 to ca. 1830. Organization of ceramic information from 19th-century sites based on ware types (e.g., "creamware," "pearlware," and "white ware") obscures meaningful information and ignores the most important aspect of these wares—their decoration.

## Appendix A: Use of the Terms China Glaze and "Pearlware"

The terms "pearlware" and China Glaze rarely occur in potters' and merchants' records because these wares were almost always described in terms of their decoration, i.e., edged, painted, dipt, or printed. Pearlware was almost never undecorated thus eliminating the need for the term. Undecorated wares from the 1780s on were almost always plain creamware which appears over and over again in the price lists, invoices, and account books as CC ware. All of these descriptive terms (CC, edged, painted, dipt, and printed) represent different price levels for the most commonly produced types of ceramics from the 1770s to the 1850s.

This appendix provides a list of all of the occurrences of the terms China Glaze and "pearlware" or its variants located in contemporary documents by the author during the last decade of research on English ceramics.

None of the extant potters' price-fixing agreements from 1770 to 1859 use the terms "pearlware" or China Glaze. Years for which lists have been found include: 1770, 1783, 1787, 1795, 1796, 1808, 1814, 1816, 1825, 1833, 1846, 1853, and 1859. For references to these lists, see Miller 1988, appendix D. By way of contrast, all of the price-fixing lists from 1783 on list CC (creamware). The other wares are listed by their type of decoration, such as edged, dipt, painted, willow, and printed.

In short, "pearlware" and China Glaze were rarely-used terms, and their significance as ware types was far overshadowed by the importance of their decoration, which was closely related to their sale price. For a further discussion of this subject see Miller 1980.

**Post 1770.** There were several potters named William Adams working different potteries in Cobridge, Burslem, and Stoke-on-Trent. Turner's *William Adams: An Old English Potter*, presents some information on China Glaze and body receipts extracted from papers of the William Adams pottery established in Burslem in 1770. Turner summarized that information as follows:

In his early days Adams made cream colour ware and China Glaze ware painted. An early (1760) receipt for cream colour glaze is as follows: "To

blend cream colour gloss [sic] take 4 lbs. white lead to 1 lb. dried flint and 6 pints of white slip." There was at the time a great demand for blue painted and enamelled pottery. He is said to have been successful with his improvements in this kind of ware on cream body with an excellent glaze, which was termed China Glaze (Turner 1923: 97).

**1779 (March 8).** Letter from Josiah Wedgwood to Thomas Bentley:

You wish to see the babe before you baptize it, and kindly warn me to beware of making china. I find to my grief that I cannot make any great improvement in my present body but it will be china, though I have endeavoured all in my power to prevent it. However to give the brat a name you may set a cream-color plate and one of the best blue and white ones before you, and suppose the one you are to name another degree whiter and finer still, but not transparent, and consequently not china, for transparency will be the general test of china. Under this idea you may give it a name, and we will send you some of the stuff in a little time (Finer and Savage 1965: 231).

**1779 (June 19).** Letter from Josiah Wedgwood to Thomas Bentley:

I thank her majesty for the honor she has done to Pearl White, and hope it will have due influence upon all her loyal subjects. The dishes etc. to complete the service are gone to-day . . . (Finer and Savage 1965: 236).

**1779 (August 6).** Letter from Josiah Wedgwood to Thomas Bentley:

Your idea of the cream colour having the merit of an original, and the pearl white being considered as an imitation of some of the blue and white fabriques, either earthenware or porcelain, is perfectly right (Finer and Savage 1965: 237).

**1780.** Frederick Rhinelander's order of July 4. At the bottom of an order to the potter Anthony Keeling it is noted, "[a]ll the blue painted Ware ordered above to be fine white (and not Cream Coloured) painted we believe it is called pearl blue" (Schwind 1984: 32-33).

**1780 (November 12).** Wedgwood to Bentley:

If you think pearl white will suit the patterns you have been so good to contrive there is no necessity to wait another year, but for a better white than I cannot possibly fix any time. I will talk with you about all the rest for I have too many irons in the

fire to write much now (Finer and Savage 1965: 261).

**1782 (November 4).** Account book of Richard Vaux: "12 fine blue & wt China Glazed 2 quart Bowls," "12 Variagated China glaz'd pint mugs" (Vaux 1782).

**1783 (October 17).** Invoice of "Queen's Ware bo't of Jonathan Harris" of Tappahanock, Virginia: "2 doz. Best Green Edg'd Plates China Glaz'd 6/0" (Noël Hume 1969b: 922).

**1784 (May 5).** Newspaper advertisement in the Philadelphia *Freeman's Journal*:

CHINA AND ROAN WARES.—Imported in the last vessel from Europe and to be sold wholesale and retail by Hugh Henry, at his China Store in Chestnut-street . . . a large assortment of China, Glass, Queens, Delph and Roan wares. China tea table sets of various patterns, cups and saucers, enamel'd, burnt, blue, and white ditto . . . Queens ware, China, glazed, common, enamelled, blue and white, plain . . . Delph and Roan wares . . . (Prime 1929: 132).

**1784 (July 16).** Invoice of Faulkner & Williamson & Co. bought of Ebenezer Reed somewhere in Virginia. Lists the following in China Glaze (Noël Hume 1969b: 922):

1 China Glazed & Blue Edg'd Oval Dish /6  
4 larger ditto 3/-; 2 larger ditto at 2/-;  
2 larger ditto 2/6  
3 doz. of large Blue Edg'd Plates to Match  
4 doz. smaller ditto 8/0; 1 doz. smaller ditto 1/7.5

**1784.** Frederick Rhinelander invoice of wares sent to Virginia lists mugs, chamber pots, and plates in "China glazed blue edged ware" (Dickinson 1988: 32).

**1787.** Wares ordered by the Quebec merchant George Pozer from his London suppliers included "china glazed" table wares (Collard 1976: 34).

**1787.** William Tunncliffe's 1787 *Survey of the Counties of Stafford, Chester and Lancaster* which contains a "Directory of principal merchants and manufacturers" lists the following potters as producing China Glaze (Noël Hume 1969a: 391). Burslem: William Adams & Co.; John Bourne; Bourne & Malkin; John Robinson,

"enameller and printer of cream colour and china glaze"; John & George Rogers; Thomas Wedgwood. Cobridge: Thomas & Benjamin Goodwin. Lane End: Hugh Booth and John Barker. None of the potters in the directory are listed as making "pearlware."

**ca. 1789.** Invoice of wares sent from Heron & Company of London to Archibald Freeland in Manchester, Virginia. Two crates of assorted plates, one of "Green China Glazed," and one of "Blue China Glazed" containing 16 dozen flat and soup plates and 24 dishes each (Martin 1987). Most likely these are blue and green shell edge.

**1803 (October 15).** From an advertisement in the New York City *Morning Chronicle*: "Christina Gerard.—Elegant French China, in Tea Sets. . . . Likewise, a general assortment of Glass and Earthenware. . . . A handsome assortment of Pearl Ware" (Gottesman 1965: 132).

**1805 (December 2).** An advertisement placed in the Montreal *Gazette* by merchant N. Graham listed "pearlware." In previous advertisements, Graham had advertised Wedgwood wares suggesting that he was handling Wedgwood's "pearlware" (Collard 1984: 109).

**1807 (June 16).** A bankruptcy listing for Turner and Company's pottery in Lane End, Staffordshire, lists the following wares for sale by auction: "Cream Colour, China-glazed blue edge, china glaze printed and painted, Egyptian Black, Cane, Stone, Jasper, Pearl, and Patent China Goods" (Hillier 1965: 74). The Pearl here is obviously a white dry-bodied ware as described in several other sources in this appendix.

**1813 (November 26).** Probate inventory of the Philadelphia earthenware dealer Leonard Keehmle (Rosenthal and Palmer 1978). Keehmle's inventory lists \$7540.50 worth of ceramics and glass. Less than one percent of that ware, \$67.49 worth, is described as pearl China or pearl. The following are the wares with those descriptions.

Line	Item			
57	Five pair of pearl China Tea pots	@ 1.50 p.pr.	\$ 7.50	
61	Thirty pearl China dishes	@ .60 ea	\$18.00	
83	Five pearl china coffee pots	@ 1.00 ea	\$ 5.00	

108	Twenty five pearl tea pots	@ .67 ea	\$16.75	
235	Three brown edged pearl jugs	@ 2.00 ea	\$ 6.00	
238	One dozen half pint pearl pitchers	@ .37 ea	\$ 4.44	
269	One pair large pearl pitchers	@ 2.50 p.pr.	\$ 2.50	
318	One pair small pearl pitchers	.80	\$ .80	
350	Two dozen & two pearl milk ewers	.25	\$ 6.50	
Total			\$ 67.49	

**1815-1822.** Formulas from the Note Books of Josiah Wedgwood II as quoted in Mellanay Delhom's article "Pearlware" (Delhom 1977: 62-63).

November 20, 1815, "Pearl White Body" receipt

November 5, 1816, "Pearl White Clay" receipt

January 24, 1817, "Pearl White or Printing Clay" receipt

September 3, 1817, "Printing Body" receipt

February 7, 1820, "Printing Body" receipt

July 31, 1822, "Printing Body" receipt

Note that none of the formulas use the term "pearlware."

**1824.** Thomas Lakin's receipts for ceramic bodies, glazes, and colors was published in 1824 by his widow three years after his death in 1821 (Blakey 1980: 1). The book states that the receipts were "the results of upwards of thirty years of labor, study and repeated experiment" (Lakin 1824: vi). Formulas and receipts in Lakin's book would have been accumulated from the early 1790s to 1820 during the peak production of "pearlware" or China Glaze. Neither "pearlware" nor China Glaze are mentioned in the book.

Cream color bodies and glazes are given as well as white ware glazes. The only conclusion that can be reached is that the blue printed bodies and glazes would have produced China Glaze or "pearlware." Lakin (1824) lists the following formulas for earthen- and stoneware bodies:

two receipts for Ironstone body (p. 3, 4)  
receipt for "Common Printed Earthenware Body" (p. 5)

receipt for "Superior Printed Earthenware Body" (p. 5)

receipt for "Common Cream Coloured Body" (p. 5, 6)

receipt for "Superior Cream Coloured Body" (p. 5, 6)

Glaze formulas for these bodies are:

Superior Ironstone Glaze (p. 20)

Superior Earthenware Printed Glaze (p. 22)

Earthenware Printed Glaze (p. 23)

Common Printed Glaze (p. 23)

White Earthenware Glaze (p. 24)

Blue and Green Edge Glaze (p. 24)

Superior Cream Colour Glaze (p. 25)

Common Cream Colour Glaze (p. 25)

a fine Crystal Glaze (p. 26)

Alkaline Glaze (p. 30)

**1837.** Simeon Shaw's book on the chemistry of pottery, porcelain, and glass was the major source of information on the subject that came out of the Staffordshire potteries (Shaw 1900). It was reprinted in 1900 by Scott, Greenwood and Company, and appears to have been in use in the potteries for over half a century (Beech 1974: 11).

The only "pearl" mentioned in Shaw's book, which is over 700 pages long, is a dry-bodied stoneware. It is listed with Jasper, Cane, Drab, Red, and Egyptian Black (Shaw 1900: 458). China Glaze is not listed in Shaw's chemistry of pottery. He does present 12 different receipts for "Queen's Ware and Cream-Colour Bodies" and 12 receipts for "Blue and Fancy Printed Bodies" (Shaw 1900: 465). In addition to these, Shaw presents 6 formulas for "Dipped and Mocha" and 6 formulas for "Chalky" bodies. The chalky bodies are probably white wares.

In addition to the body formulas, Shaw presents 12 formulas for "Cream-Colour Raw Glazes" and 12 formulas for "Blue Printed Raw Glazes" for the above bodies (Shaw 1900: 477). Clearly the blue printed glazes had to include China Glaze and "pearlware."

**1846.** In William Evans' *Art and History of the Potting Business*:

"At Lane End, in 1795, Mr Cheatham produced the pearl ware, named from being in white ware what the jasper is in coloured" (p. 7).

A formula for "pearlware" is listed under the dry-bodied wares between Egyptian black and Jasper. It contains only Cornish stone, China Clay, Blue clay, and Ground flint glass (p. 19).

A formula for "Wedgwood's White Pearl Body" is given along with an alteration if it is to be used for printed wares (p. 51).

A formula for "China glaze for Printing" (p. 57).

Formulas for "Spodes Printed Body" and the glaze for it which does not include any cobalt (p. 62).

Formulas for "Cream-Coloured body," "Common Printed body," "Superior White body," and "Stone body" (p. 66).

Formulas for "Earthenware glaze" and "White Earthenware glaze" (p. 68).

Formulas for "Cream-coloured glaze," "Blue and Green Edge glaze," and "Printing Glaze" (p. 69).

## Acknowledgments

Part of this research was funded by a National Endowment for the Humanities grant (#RO-21128-86) for a project titled "English Ceramics in America, 1760-1860: Prices, Marketing, and Availability." Several people have read drafts of this paper and provided useful suggestions and observations. I particularly would like to thank Lynne Sussman, Ann Smart Martin, Patricia Samford, Robert Hunter, Ivor Noël Hume, Robert Copeland, John des Fontaines, Terry Lockett, Rodney Hampson, and Martin Phillips. I would also like to thank the Wedgwood Museum of Barlaston and Gaye Blake Roberts for providing me with access to the Wedgwood Archives in Barlaston and at Keele University in Staffordshire.

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