Mr Ball the English Potter and the American China Manufactory

A paper read by Nicholas Panes at Bonhams, New Bond St, London on 7th October 2010

Introduction

The story of the Bonnin and Morris, the American China Manufactory was first comprehensively explored by the 1972 book by Graham Hood: *Bonnin and Morris of Philadelphia: The First American Porcelain Factory*, 1770-1772.

The factory was established in 1770 by Gousse

Bonnin, an Englishman of Huguenot extraction whose family had links with Antigua. He was educated at Eton and married the daughter of Sir Charles Palmer. He does not seem to have had much of a career prior to his involvement in the factory, although his application for an English patent for manufacturing crucibles in 1769 indicates a growing interest in ceramics.









Selection of wares from the American China Manufactory (two sauceboats, a pickle dish and openwork fruit basket, all 1770-72.
 Images courtesy of the Philadelphia Museum of Art and the Chipstone Foundation

George Anthony Morris was also of English extraction, although this went back several generations. His Quaker family was prominent in Philadelphia, with the ownership of a brewery and other trading interests supporting a family that was also deeply involved in the politics of colonial America and its struggle for independence. George himself seems to have had a short spell importing European and India goods with his father, but nothing else is known of any business experience.

Only 19 extant pieces of Bonnin and Morris porcelain are known, three sauceboats, seven openwork fruit baskets, six pickle stands, one pickle dish, one covered basket and one covered basket base. Examples are shown above. (1) Comparison of the wares of Bonnin and Morris with English factories has revealed painting styles and some objects not unlike those made at Bow, and sauceboat shapes that closely match those of Plymouth and Bristol. The story of the factory is a fascinating one, but its life was short, covering a probable period of manufacture of little over two years.

In 1770 the expertise for making china lay in China itself and in Europe. When the factory was started, advertisements appeared in England to encourage workmen to emigrate, on the promise of generous pay and a free passage.

The British Connection

One of the open questions with Bonnin and Morris surrounds the role of British workers in the development of the American China Manufactory in Philadelphia. This manufactory produced at least two types of porcelain wares between about 1770 and 1773. Bonnin and Morris made a sulphurous phosphatic ware that contained small amounts of lead. This was supplemented by a silicious-aluminous-calcic (S-A-C) porcelain found as a result of chemical analysis of a dated basket. (2) The S-A-C refers to a type of paste associated with A Marked wares, Limehouse, shards from Pomona, Chelsea, and Brownlow Hill.

The A marked wares appear similar to those described in the Bow first patent made from a Carolina clay and a calcium rich glass frit. At Limehouse the pipe clay and flint rich recipe accounted for the aluminous and silicate composition and the source of calcium was probably bottle glass. At Brownlow Hill the source of calcium was more probably limestone. It should not be assumed that all S-A-C porcelains are produced by a single firing, as both Limehouse and Liverpool examples use a lead rich glaze which can only have been applied in a second lower temperature firing.

Recent publication by Diana Stradling of a press article in the Providence Gazette has proved the





 A Bonnin and Morris Basket made from an S-A-C paste. Photos courtesy of the Colonial Williamsburg Foundation and the Chipstone Foundation

The Head and most ingenious Painter belonging to the Bow China Manufactory, whose Name is Pry, and about a Dozen of their primest Hands in the several Branches, have been privately engaged, at a large Consideration, to establish a similar Manusactory in Philadelphia; and they are immediately going over there, which has greatly distressed the Proprietors at Bow.—This is one, amongst the many Instances, of the determined Resolution of the Colonists, to lessen their Wants from the Mother Country.

3. Public Register or the Freeman's Journal, Dublin, 4th October 1770

long-held contention that some of the British workers employed by Bonnin and Morris previously worked at the Bow concern. This explains some of the stylistic similarities between the London and Philadelphia wares, as well perhaps as helping to explain the types of ware (phosphatic) known to have been made at both sites. It has been speculated that Bonnin may perhaps have worked at Bow as he lived in the area for a time. During the final proofing of this paper the author identified an extended version of the same article, published in Dublin (3). This names the head painter as Mr Fry. Thomas Frye had two sons, one of which, Thomas (born 1735), was a china painter. So he may have been the head painter at Bow and his own son might have been the young man who was later to run away from the Philadelphia factory. This requires further research.

Ultimately nine workmen appear to have arrived in Philadelphia on the Pennsylvania Packet, Captain Osborne, in late October 1770.² Notwithstanding the involvement of Bow workers, there is considerable overlap in the composition of Bonnin and Morris porcelain and the phosphatic wares produced at William Reid factory on Brownlow Hill, Liverpool. This could imply a connection between the latter factory and Bonnin and Morris, perhaps related to the employment of a former employee(s) of the William

Reid factory by the American China Manufactory. This topic is explored further below.

Production Problems

The factory had several successful firings of porcelain but their labour costs were high; moreover they had some problems with supplies of materials. A possibly fatal blow was struck in August 1770 before the factory was even productive, when instructions arrived in Philadelphia from the Boston Customs House lifting the import duties on china and earthenware. Bonnin and Morris porcelain was significantly more expensive than imported English and Chinese wares.

By early 1772 the manufactory was in dispute with its workmen; by the end of that year it is clear that the workers had not been paid and were throwing themselves on the mercy of the City for support. The proprietors placed an article implicitly critical of the workmen in two Philadelphia papers, the *Pennsylvania Gazette* and the *Pennsylvania Journal and Weekly Advertiser* in November 1772. (4)

It appears that the proprietors never followed up with a full defence of their actions. The article above provoked Josiah Wedgwood's nephew, Thomas Byerley, who was in Philadelphia, to write in defence of the workmen.³

HEREAS fundry perfons are soliciting the charitable contributions of the inhabitants of the city of Philadelphia, under presence of labouring under great distresses, from the conduct and behaviour of the Proprietors of the China House towards them; and whereas the Proprietors, think it as well their duty to forewarn the Public of such impositions, as to vindicate their own characters, they request the general opinion may be suspended, until a plain and impartial flate of the case, as far as selaces to the Workmen coming over from England, and their treatment here, is made out, and published, which shall be done with all possible dispatch. Scuthwark, Nov. 2, 1772.

4. Pennsylvania Journal, November 1772

Several years later, lecturing his workers on the risks of emigration for more pay, Wedgwood claimed that not a single Bonnin and Morris English worker had ever returned from America, and all had died. Wedgwood's address identified one worker who was gaoled, Thomas Gale. The only other name of a worker is that of a runaway apprentice, Thomas Frye.

The arrival and subsequent misfortune of these workers offers avenues of research in attempting to identify them. Passenger lists, of which many exist (and many were scrutinised), are of little help as although a few English are voluntarily listed, the obligation of the Captain to make such a list only extended to foreigners, to which group the English did not belong.

Contemporary records of Philadelphia charities

Philadelphia had an Overseer of the Poor, funded by taxes on local residents. However, there were other charities, and one such was the Society of the Sons of Saint George. This organisation (whose Vice President was Robert Morris) was founded in Philadelphia in 1772, the year when the difficulties of the American China Manufactory commenced. The Society was set up to assist distressed English people in the city. Minutes from this era are available at the Historical Society of Pennsylvania. The Society of the Sons of Saint George

has already attracted attention as potentially linked to the Bonnin and Morris concern, as the basket shown in Image 2 is dated 23rd April 1773, St George's day and the first anniversary of the foundation of the Society.⁴

A reader of the early Minutes of the Society of the Sons of Saint George and those of the Overseer may detect some of the contemporary attitudes to the poor. As the records of the Overseer demonstrate, a distinction was often made between those who the Overseer regarded as 'vicious', 'vulgar' and 'useless lumps of clay' and those who were considered more industrious and deserving. Likewise, the Society of the Sons of Saint George would not normally assist somebody who was already under the care of the Overseer, presumably because they felt that most of these poor people, who frequently died whilst enjoying such care, already had as much help as they could justify.

A review of the Minutes of the Society of the Sons of Saint George mainly revealed assistance given to a number of individuals whose occupation could not be determined, though there were a few exceptions. In the Minute book just after the Minutes of October 1773, there is a seemingly retrospective extract from the Minutes of the previous year. Strangely these notes are in quotation marks but they do not reproduce

exactly any previous Minutes. Significantly, however, they mention a china manufacturer. (5)

Looking backwards through the records of the Society of the Sons of Saint George, it emerged that there were several earlier references to Mary Ball. The first of these also refers to the involvement of the Overseer of the Poor. As the contemporary Minutes of the Overseers of the Poor are available in the Philadelphia City Archives, these records were consulted and matching references were found. The records of both organisations are set out interspersed chronologically below:

St George: 23rd July 1772:

The Society having taken into Consideration the Petition of Mary Ball on Behalf of herself and Family praying for a Contribution towards her Passage to England, found that their Funds were so very low as not to enable them to be of Service to the Petitioner, as to procuring a Passage Home; and a Member having informed the Society that Mary Ball was entitled to relief from the Overseer of the Poor of this City, it was determined that she could not, agreeable to the Society's Rules, be relieved by them. But it was recommended to the Committee that they afford every Assistance they can to the Petitioner and Family (except pecuniary Assistance) and the Committee accordingly promised to speak to the Overseer

of the Poor, and cooperate with them in every Measure which would be of Service to the Petitioner and her Family.

At this July 1772 meeting the principal business was the new rules of the charity. An entry records how other applicants were dealt with:

So much time having been taken up in reading, revising, and considering the Rules and the Constitution, the Society cannot attend at this time to the several petitions presented for Charity and Assistance, but the same are recommended to the consideration of the Stewards, who are to give such relief as the Society funds will afford, to those of the Petitioners who may be found deserving.

Although unsuccessful at her first attempt to obtain relief from the Society, it appears that Mary Ball was given special treatment in having her case heard at all during the July meeting.

Overseers: 10th August 1772:

Samuel Sanson Junr reports that an Application was made to Thomas Ashton and himself by several Gentlemen of the St George's Society respecting a certain Sarah Ball, who with her Daughter and Grand Child are in low Circumstances and want a temporary support, which being represented to John Gibson Esq he approves of the Overseers furnishing the

The fase of Mary Ball the Widow of a China Manufacturer lately deceased being read " the Society agree to allow her the Sum of five " Shellings weekly 'till her Pafrage can be procured to England where the has Friends " who are able to Support her"

5. Extract from the Minutes of the Society of St George, photo courtesy of the Historical Society of Pennsylvania

said Sarah Ball with 5/- per week and SS Junr has made the first payment in conformity.

The timing and nature of these first two references, less than three weeks apart, provide the strong inference that the subject of both is the same Mrs Ball, so the change of Christian name from Mary to Sarah is both confusing and unwelcome. However, for completeness it must be repeated here. Was it simply a clerical mistake, or a generous deception designed to allow both organisations to overcome the procedural difficulties of supporting the same individual?

Research into the name Sarah Ball in England has yielded nothing informative, as with all persons of this surname there are multiple entries in genealogical records (especially in Staffordshire and the North West), leaving a trail of confusion which cannot realistically be clarified. However, though equally common, the name Mary Ball is of particular interest, as previous research has revealed that Mary was the name of the wife of the notable English potter William Ball. ⁶

The records continue as follows:

Overseers: 21st September 1772:

Samuel Sansom has . . . paid Sarah Ball 10/- at two weekly payments.

Overseers: 5th October 1772:

Samuel Sansom has... on the 10th instant paid Sarah Ball 5/- which he informed her was the last Payment he intended as she is desirous of protracting her Voyage to England untill the Spring.

St George: 23rd October 1772:

The Case of Mary Ball and Family being again mentioned, and it appearing that the Circumstances are particularly deserving of the Charity of the Society, it is thought proper to relax their Rule with respect to not relieving those who are relievable by the Overseer of the Poor of the City and therefore they direct and request the Stewards to use their Influence with the Overseer of the Poor to give them a weekly Allowance as Old pensioners, and add to the said Allowance what the Stewards shall think proper per Week, not exceeding five Shillings, until the next Quarterly meeting. Some Accounts due from Mary Ball to sundry persons being presented for

payment on Behalf of the said Mary Ball, the Society think it very improper to pay any Accounts for Debts contracted by any Persons applying for Relief considering the low state of Funds, and the Temptation it would be for Persons to contract Debts in Expectation of their being paid by the Society, the Payment of the said Accounts was accordingly refused.

Once again, there is a coincidence of timing between the *Overseers of the Poor* making what they stated to be their last payment and the *Society of St George* deciding to relax their rules. This seems to add further strength to the contention that Mary Ball and *'Sarah'* Ball are the same person.

The Overseers of the poor managed an Almshouse, built in 1766 to replace an older building. As a general rule the elderly poor were admitted to the Almshouse, and those capable of work were admitted to the adjoining House of Employment where they were put to work making apparel and woven goods. Many who were admitted endured awful conditions, and some died during their stay. However, that does not appear to have been Mary Ball's fate as the reference to 'pensioners' above refers to those people who were helped whilst resident elsewhere.

This avenue was explored further, as the area covered by each Overseer provided clues as to the location of their clients. In 1773 the Overseers split the city areas between them and Job Bacon, one of the Overseers who at that time dealt with the Widow Ball's case, was allocated the area south of Arch Street and north of Chestnut Street, an area covered by the Middle and North wards of Philadelphia. Tax records and Minutes of the tax commissioners listing people excused tax on grounds of poverty yielded no reference to anybody named Ball in these wards. There is only one reference elsewhere in the city, a Michael Ball relieved from taxes because he was poor.

St George: 23rd January 1773:

Mary Ball's Situation being again mentioned, it is thought proper to continue the Society's weekly Allowance until the next Quarterly Meeting unless the Stewards shall think there is sufficient reason to withhold the Allowance for any Time during that Term.

The Bucon report that he haid 116 for the Burnet Ball, 416 for neiring Burnet Se of Elijah

6. Extract from the Minutes of the Overseer of the Poor dated 14th June 1773, photo courtesy of the Philadelphia City Archives

Overseers: 25th January 1773:

Francis Gurney reports that he has procu[re]'d two Orders viz one for John Dubree and one for Michael Ball into the House of employment and has paid Elizabeth Ball 5/- by order of the Mayor...

There is no certain connection between the entry above and those preceding it, or between the two persons here called Ball. Indeed particular care is needed with Michael in view of the reference to an adult of that name referred to above.

However, neither should we ignore an entry in the Limehouse parish register on March 8th 1747 which recorded 'a daughter, Elisabeth to William Ball, potter, of Fore Street, Limehouse, and his wife Mary'. If at the age of 25 Elizabeth was unmarried but with child, it would not be unusual for her to fall back on her parents for support.

Overseers: 22nd February 1773:

Thomas Afflick has...become security for Eliz. Ball to the Hospital...

Overseers: 31st May 1773:

Job Bacon report that he paid . . . the Widow Ball at sundry times 10/-

Overseers: 14th June 1773:

Job Bacon report that he paid 22/6 for the Burial of . . . Ball

This entry (6) is most frustrating – the Secretary presumably left a gap with the intention of filling in the name later! We have learned that Elizabeth was in the hospital, but also that Mary has a number of unpaid bills. We cannot determine whether Elizabeth has died, or whether the long overdue burial bill for Mary's husband was the subject of this entry.

St George: 23rd July 1773:

Mary Ball's Situation being again mentioned by Mr Parr, the Society agree to allow her a Sum not exceeding Three Pounds towards her Passage to England, and none thereof to be paid but upon this express Condition, that she take her departure home as soon as conveniently can be.

The retrospective extract from the Secretary's Minutes that first attracted attention appears on 17th October 1773:

The Case of Mary Ball the Widow of a China Manufacturer lately deceased being read the Society agree to allow her the sum of five Shillings per week 'till her Passage can be procured to England where she has Friends who are able to support her.

Then follows the final record of the Widow Ball.

Overseers: 1st November 1773:

Job Bacon reports that he paid the Wid^w Ball in Weekly Payments to the Amo' of 25/-

We must assume that some time in late 1773 Mary Ball returned home. Where that home was situated is by then a moot point. The Staffordshire, Woolstanton parish registers record the burial on 25th October 1787 of Mary Ball, a pauper, and those in Newcastle under Lyme the burial on 9th January 1784 of 'Widow Ball in the hospital'. Due to the commonness of the name, the facts once again elude us.

Throughout the above sequence it is strikingly clear that the *Society of the Sons of St George* regarded Mary Ball as a specially deserving case. She is the widow of a '*China Manufacturer*'. Does this phrase imply a seniority that the words '*master potter*' would not convey? With little more than the inferences of words to go on, no tangible evidence can be produced. However, it must be said that William Ball had a perfect CV to manage the Philadelphia factory.

Neither Bonnin (despite his patent for crucibles) nor Morris had any direct experience of ceramic manufacture. What other resources did the proprietors have at their disposal?

Of the nine workers arrived from England the most senior appears to have been the head painter and its seems unlikely that a painter would be sufficiently experienced to run the factory. Contrasted with this, what is known of William Ball would provide a more than adequate justification for appointing him in such a role.

The first documentary reference to William Ball identified as a potter was the reference to the birth of a daughter Elizabeth at Limehouse, referred to above. This led to an earlier reference in Bow being identified. These two references imply an involvement with early porcelain manufacture in England and both the Bow and the Limehouse factories were start-up businesses in 1746/7.

There has been a suggestion that William Ball may then have gone to Pomona in Staffordshire, where the visiting Richard Pococke noted seeing a potter there that he had visited at Limehouse. Whilst the trail is somewhat uncertain, and confused by the common nature of the surname, Ball may then have remained in Staffordshire for a number of years. One possibility is that he worked in, or was connected with John Baddeley's Shelton concern, which made china in association with William Reid for at least two years, 1759-61.8

Alternately, and perhaps more likely, is the possibility that he worked for William Reid in Brownlow Hill, Liverpool from some time in the 1750s. Baddeley's account book show for November 1758 shows a payment of £10 to a 'W Ball', although for what purpose is unknown. The next firm evidence, following William Reid's bankruptcy, is an insurance policy dated 19th October 1761 for the Brownlow Hill premises 'in which is carried on a China Manufactory by Wm Ball, Potter'. In English ceramics we tend to know more about the owners of the manufactories rather than the managers, and Ball may only have been the latter (John Brittan in Bristol is perhaps one exception). Whatever the ownership of the works, it would appear that few would have had better qualifications to run a new china manufactory in 1770 than Ball.

The Sun insurance records confirm that Ball occupied a property in Ranelagh Street, Liverpool. Insurance was taken out by the Landlord on Ball's behalf in 1767. There is then an unexplained gap but a new Landlord, John Lyon of Liverpool, Surgeon, insured the same property 'in the tenure of Mr Ball, potter' in August 1772. Whilst the August 1772 insurance renewal might be contradictory, we must remember that the first reference to Mary Ball that we have is in July 1772. If Mary's husband was only recently deceased, the news would not have reached England by August as it took several weeks for communications to cross the Atlantic.

William Ball is shown in the Shaw's Liverpool Directory as a china maker at Ranelagh Street in 1766, and further directory entries appear in 1767 and 1769, but not thereafter. The cessation of directory entries matches Ball's inferred emigration to America.

Ceramic Pastes at Bonnin and Morris and those of William Ball

If William Ball worked at Bow, he was not there when bone-ash porcelains were being produced but if "A marked" porcelains were being produced there, he is likely to have been familiar with S-A-C pastes. The later work at Limehouse would in any event have provided that knowledge. Later William Ball is likely to have been involved in developing the Reid bone-ash paste in Shelton or Liverpool. It is in the composition of ceramic pastes that further evidence may be found to support the possible involvement of William Ball in the American China Manufactory.

Of great interest amongst the recent body of work on William Ball was a paper that may provide further circumstantial evidence for his involvement in America. In 2003 J Victor Owen and Maurice Hillis published a consideration of the chemical composition of sherds found during the excavation of the site at Brownlow Hill, Liverpool which is associated with William Reid and subsequently, William Ball. Most of the sherds found on the site are phosphatic, i.e. bone-ash porcelains showing a wide range of compositions consistent with experimentation to optimise the manufacturing process. The remaining samples have silicious-aluminous paste

(what Pococke referred to as 'stone china') and siliciousaluminous-calcic (S-A-C) compositions that resemble Limehouse (London) and Pomona (Staffordshire) porcelains produced during the 1740s.

The authors of the paper record the documentary evidence for William Ball's movements around England, and note that the finding of S-A-C porcelains in Liverpool is unusual, given that so many years had passed since their use in London.

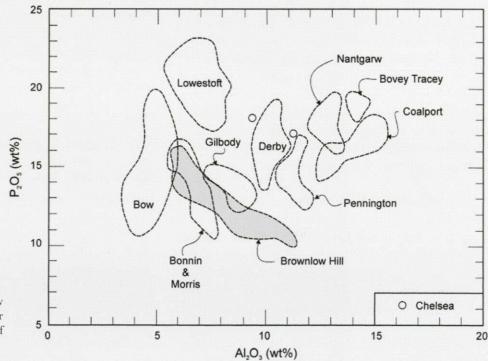
The analytical results published with the Owen / Hillis paper, together with the known ceramic history, lead to the strong inference that William Ball (and possibly others too) may have taken their knowledge from London to Liverpool (perhaps via Staffordshire) and been the guiding influence over the paste development at Brownlow Hill. The authors state:

Both 'stone china' and S-A-C porcelain were evidently produced at Limehouse and Pomona, but it is possible that the source of lime differed in the case of Brownlow Hill. This may or may not be significant with regard to the veracity of our claim that William Ball or one of his co-workers brought knowledge of these wares to Liverpool. History will judge this inference as more information comes to light.

If we consider the proposition that William Ball was in a managerial position in Philadelphia, he would have been a controlling influence over the ceramics pastes and experimentation in the manufactory. This being the case, are there any clues that his previous experience was brought into use?

The bone-ash pastes of William Reid and William Ball do not contain sulphates derived from Gypsum (as Bow does), and in this respect, as well as in the absence of lead (which Bow also lacked), they differ somewhat from those of Bonnin and Morris. The study of William Reid alone demonstrates that wide experimentation was almost the norm in 18th century porcelain making, and, as increasing analysis work is published, the many variations in paste mix become clear. However if we consider the principal ingredients of the bone-ash paste, clay and animal bones, the mixes are very similar indeed. It is surmised that knowledge of the later Bow pastes from the London potters as well as the Liverpool Brownlow Hill paste had influenced the recipes in Philadelphia.

The analytical chart in (7), provided courtesy of J Victor Owen, compares the Brownlow Hill recipes



7. Chart comparing Brownlow Hill recipes with other manufactories, courtesy of J Victor Owen

for the phosphatic porcelains with those used by other manufacturers in England and America. The chart compares the clay and bone-ash mix (by plotting the ${\rm Al_2O_3}({\rm Aluminium\ Oxide})$ against ${\rm P_2O_5}({\rm Diphosphorus\ Pentoxide}).$

It will be seen that the range of results for Bonnin and Morris overlay a significant part of the wide ranging Brownlow Hill bone-ash porcelain results. Whilst there are other minor overlaps no other factory has such a close resemblance to the Bonnin and Morris results.

19 extant pieces of Bonnin and Morris porcelain have so far been identified. Knowledge of Bonnin and Morris phosphatic pastes is derived from analysis of only 14 shards from the factory site. II n 2008 archaeological investigations at the site of the new National Constitution Centre in Philadelphia resulted in the finding of the remains of two sauceboats, which upon examination appear to be Bonnin and Morris. Analysis of these new finds is ongoing but any result similar to Brownlow Hill might add to the body of evidence.

Not only do the phosphatic pastes of Bonnin and Morris contain a similar mix of clay and bone-ash to those of Brownlow Hill, but Bonnin and Morris produced an S-A-C paste as well. The Bonnin and Morris basket dated April 1773 (2) was analysed by J Victor Owen and published by Owen and Rob Hunter. Once again, there are differences between the Bonnin and Morris paste, that of similar Brownlow Hill wares, and first period Bow wares. Indeed, Owen and Hunter comment that the paste is in some respects more similar to early Chelsea than to early Bow or Limehouse. Their further comments merit reproduction:

As already noted, S-A-C wares were among the first, if not the first, type of porcelain produced in Britain . . . In addition to early (1740s) Bow [NB 'A-Marked'] and Chelsea, S-A-C-type porcelains had been made at Limehouse during the late 1740s, apparently unsuccessfully at the Pomona (Staffordshire) works (c. 1744–54), and at Brownlow Hill (Liverpool) sometime during the tenure of William Reid (fl. C. 1756–61) and his successors (William Ball, fl. 1761–62; James Pennington, fl. 1763–68 [or 1769]) . . . To our

knowledge, the only British porcelain manufacturer that made at least some S-A-C wares approximately contemporaneously with the B&M factory was William Reid and (or) his successors, and their factory terminated production at the Brownlow Hill site where S-A-C sherds were recovered sometime in the late 1760s... It is thus ironic that B&M chose to abandon an increasingly popular phosphatic recipe in favour of a lead-rich variant of the S-A-C pastes that had virtually fallen by the wayside in Britain. This course of action can be taken as evidence that the Philadelphia concern either had serious technological problems producing phosphatic porcelain, or marketing it.

The factory advertised as early as April 1771 that it no longer wanted animal bones, so the use of an S-A-C recipe may indeed have started around that time and reflected problems with cracking of the phosphatic paste. The use of an S-A-C recipe seems to have occurred only five times in England, and William Ball could have been associated with four of these five.

If indeed our china manufacturer was William Ball, then the presence of further workmen from Liverpool should not be ruled out. Two potters Jonathan Carr and James Roberts, who worked on the China Street site after the closure of Bonnin and Morris have long been considered possible candidates for employees of the china manufactory. Genealogical maps of England published by Ancestry.co.uk show that these surnames were particularly prevalent in the North and North West of England.

Conclusions

The discovery of the surname Ball amongst those china potters present in Philadelphia is an exciting one. It the first name of a Bonnin and Morris worker to be identified for many years and there seems to be a reasonable inference that Mary Ball's husband was indeed the prominent English master potter William Ball. Like much documentary research, the evidence is circumstantial, incomplete and at times contradictory.

Perhaps the strangest contradiction is the apparent change of name from Mary Ball to Sarah Ball when the widow was introduced to the Overseers of the Poor. As the name Mary Ball is a link to William Ball this name is important. Mary is described by the Sons of St George as the 'wife of a China Manufacturer lately deceased'. Sarah, who seems to maintain the relationship with the Overseer, is described as being with her daughter and grandchild, and in a later reference seems to be referred to as 'the Widow Ball'. That both organisations dealt at least on most occasions with the senior family member is to be expected and consistent with 18th century custom.

When the Society of St George resolve to make their introduction of Mary to the Overseer, within three weeks, they have made an introduction which the Overseer records as "Sarah Ball". When the Overseer makes his final payment to Sarah because of her wish to protract the date of her return to England, within the short period of three weeks the Sons of St George review the case of 'Mary Ball and Family' and decide to lend further support. It is Mary who has incurred debts on behalf of the family and from this reference it might be reasonable to deduce that she is the senior family member. The same deduction applies to Sarah.

Some reviewers of this paper have queried whether one might be the mother, and the other the daughter. Whilst this is not impossible both would have to have been widows, making the Overseers' minute of some payments to 'the Widow Ball' carelessly imprecise. Also, as both are called Ball, one widow (the daughter),

unless she married somebody with the same surname, must have reverted to her maiden name. This all seems quite convoluted. By far the most likely explanation is that Mary and Sarah are one and the same, the naming anomaly arising either because of clerical error (a common occurrence in 18th century documents) or because Mary was the daughter of a Mary and so used her second name within the family. One thing we can be sure of is that Mary was the 'wife of a China Manufacturer lately deceased' and there is no inconsistency in the naming of this lady by the Sons of St George.

8. Extract from the Pennsylvania Packet, 18^{th} January 1773

The cessation of Liverpool directory entries is consistent with Ball's inferred period in America. Whilst the 1772 insurance renewal is contradictory it came at a time when the Landlord may not have known that Ball was dead. Conversely of course the policy could have been taken out after a long gap because the widow had advised him of her intention to return to the property forthwith.

All these strands of evidence, imperfect though they may be, can be used to plausibly suggest that William Ball was in America. If he was not, there are quite a few coincidences. The list of English 'factory managers' with a suitable CV for a key role in Philadelphia was short. In 1770 the Bow concern was a shadow of its previous greatness and workers transferring may not have been of the quality which Gousse Bonnin had hoped for. Elsewhere John Brittan was otherwise employed in Bristol but as far as we know William Ball, in Liverpool, was not. Ball had a CV which certainly would have been attractive to Bonnin and Morris.

As Liverpool porcelains found their way into Philadelphia, Ball may have had contacts in the city. One such possible contact, Joseph Stansbury, was a China Merchant in the city who was a member of the *Society of the Sons of St George*. Stansbury was present at the April 1772 meeting when Mary Ball's case was first discussed. By the 1770's at least, Stansbury imported ceramics from London, Bristol, and Liverpool. (8)

Imported in the last vessels from London, Bristol and Livespool, and now felling by

JOSEPH STANSBURY, Opposite Christ's Church, in Second-Street.

Large and general Assortment of Blue and White and Enamelled China, in hones, valiously assorted to suit the town and country siles. Likewise, Enamelled and Plain Queen's Ware of all kinds, Enamelled, Blue and White, and White Stone Ware, in crates, well assorted, Delph Bowls of different sizes, Glass Wares in small assorted crates, and a variety of Cut and Flowered Glass, viz. Decanters, Wines, Jesties, Salts, &c. which he will tell on at least equal terms with any of the business. Orders put up carefully on the thortest notice. He expects daily a fresh addition to his elegant assortment, and flatters himself he shall give full satisfaction to all that please to savour him with their custom.

Mr Ball the English Potter and the American China Manufactory - Nicholas Panes

Bonnin and Morris had denied Stansbury access to the goods which they made, instead appointing another Chinaman, Archibald McElroy, as their sole dealer in the city. Stansbury may have felt sympathy for Mary Ball and might have made the introduction to the charity which assisted her.

Finally, there is a resemblance between the ceramics pastes of the American China Manufactory and those made in factories previously associated with William Ball. The use of S-A-C pastes was employed in England contemporaneously only in Liverpool. With the phosphatic pastes we largely seem to have a composite of what Bow workers and William Ball together might have designed, though the presence of lead resembles neither. The bone-ash and clay mixes in the phosphatic porcelains show a wide range of experimentation, largely within the bounds of those mixes tried at Brownlow Hill and at no other English factory.

Whilst the chemical components compared for this purpose themselves represent a small part of the analysis (typically around 20%), they are a proxy for the clay and bone ash which together would have comprised around half of the mix, by weight. Their proportions are thus a fundamental part of the recipe which any potter would seek to control. It is potters, influenced by local circumstances, who decide on ceramic pastes, so similarities in pastes can result from the migration of potters from one concern to another, a subject which to date has received little attention from researchers. Conversely, differences in pastes can arise from local availability of materials, or the lack of it.

The Owen/Hillis paper included a map of England tracking the movements of William Ball through the potteries of England, such tracking made possible by the analytical data, or 'porcelain DNA' he left behind. Ball's inferred arrival in Staffordshire and later in Liverpool appears to have resulted in the use of his prior experience in developing viable paste recipes for his employers. Perhaps this pattern has been repeated in America. In English ceramic history William Ball was associated for many years with 'Liverpool' porcelains that were carefully grouped together by the connoisseurship of Bernard Watney but which, following excavations, later had to be given in their entirety to the Vauxhall manufactory in London.

In some ways Ball was as well known for what he did not make than for what he did make. This may now have to be re-assessed. It appears necessary to reconsider the place of William Ball in ceramic history, not only as someone whose skill and experience was associated with a number of early attempts in porcelain making across England. He could also be someone who took those skills beyond English shores to contribute significantly to the historic attempts of Gousse Bonnin and George Anthony Morris.

Whilst Mary Ball and her family were left penniless in Philadelphia, it is probable that William (if indeed it was he) was not without assets in England. It is perhaps the final sad irony that this china manufacturer, whose career took him from England to America, probably ended his days with the poor of Philadelphia buried in a 'potter's field'.

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NOTES

- Stradling, Diana, Bonnin and Morris, Reading between the lines, ECC Transactions, Vol 20, Pt 3, 2009
- ² Pennsylvania Staatsbote, 31st October 1770
- ³ Hood, Graham, Bonnin and Morris of Philadelphia: The First American Porcelain Factory, 1770-1772, Institute of Early American History and Culture Series, Williamsburg, Virginia, University of North Carolina Press, 1972
- ⁴ Hunter, Robert and Alexandra Alevizatos Kirtley, Recent Scholarship on the American China Manufactory of Bonnin and Morris, The Magazine Antiques, Vol. CLXXIII, No. 2, February 2008
- ⁵ Simon P Newman, Embodied History the Lives of the Poor in Early Philadelphia, University of Pennsylvania Press, 2003
- ⁶ MacAlister, Mrs D, Early Staffordshire China, ECC Transactions, No. 1, 1933 Adams and Redstone, Bow Porcelain, 1981, quote an earlier 1746 record of Ball recording the birth of another daughter Suzannah in the parish of Bow
- ⁷ Mrs MacAlister, op. cit.

- ⁸ Mallet, John, John Baddeley of Shelton, an early Staffordshire maker of pottery and porcelain Part I, ECC Transactions, Vol 6, Pt 2, 1966
- ⁹ Adams, Elisabeth, Ceramic insurances in the Sun company archives 1766-74, ECC Transactions, Vol 10, Pt 1, 1976
- Owen, J Victor, and Maurice Hillis, From London to Liverpool: Evidence for a Limehouse-Reid porcelain connection based on the analysis of sherds from the Brownlow Hill (ca. 1755-1767) Factory Site, Geoarchaeology: An International Journal, Vol 18, No 8, 2003
- Owen, J Victor, Geochemical and mineralogical distinctions between Bonnin and Morris (Philadelphia, 1770–1772) porcelain and some contemporary British phosphatic wares, Geoarchaeology: An International Journal, Vol 16, No 7, 2001
- ¹² Owen, J Victor and Robert Hunter, Too little, too late: The geochemistry of a 1773 Philadelphia porcelain openwork basket, Journal of Archaeological Science, Vol 36, Issue 2, February 2009.