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Prayer bead production and use in medieval England

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From ancient to modern times, in Christianity and other world religions, beads have been employed to assist the faithful in prayer. The word ‘bead’ derives from the Old English word ‘ebed’, originally meaning to pray or request, and was used to describe groups of beads which were loosely strung together. During the medieval period these strings of beads were used by Christians as mnemonic aids to physically count their prayers.¹ Initially, this was attributed to the Pater Noster (Lord’s Prayer), later the Hail Mary and then the rosary as we know it today. As well as being devotional tools these objects were probably the most common item of jewellery across all classes, and this made them an everyday object frequently accessed by religious orders and the laity.

I propose to evaluate what the evidence reveals about the production and composition of prayer beads and rosaries, to consider the limits of these sources and to discuss the problems that emerge in interpretation of the evidence. In terms of production I aim to address several questions: Who made prayer beads? Where were they produced? How was production organised? And what can be determined about production methods? To do this I will consider evidence from excavation reports from the City of London and Constance in Germany, an artistic representation of a Paternosterer from the Stadtbibliothek in Nurnburg and historical records concerning bead production from Paris, Rome and London.

Excavation reports in England reveal evidence of prayer bead production and manufacture during the medieval period. For the purposes of this article I am focussing on central London due to the high number of archaeological excavations undertaken in this area between 1974 and 1988 which reveal evidence of prayer bead production. It is known from written records that the artisans who made prayer beads were known as Pater Nosterers, who would usually work near to the main church or cathedral in the town or city.² During the later medieval period the Pater Noster area of London, surrounding St Paul’s Cathedral, so called due to the association of prayer bead production, was known for the sale of religious artefacts and

¹ For a discussion on memory in medieval culture see Carruthers 1990.

² Powers 2003.

memorabilia.³ After the Reformation and the rise of Protestantism, trade in religious objects collapsed and the publishing of religious tracts became the prime industry in this area.⁴ However, there is little remaining archaeological evidence of bead production from this site due to the bombing of the area during the Second World War. From the London Archaeological Archive and Research Centre (LAARC) records on-line there is evidence for bead production and manufacture excavated from several site codes all of which are in the Pater Noster area. At BC72 (Baynard's Castle, Baynard House, Queen Victoria Street, Upper Thames Street, EC4) there were wood, bone, natural resin, amber (late 1400s), glass and stone beads excavated. The materials excavated from TL74 (2-3 Trig Lane, Upper Thames Street, EC4) have been dated to 1066-1485 and consist of a high concentration of natural resin beads, but also bone, coral, stone, glass and wood. SWA81 (Swan Lane Car Park, 95-103 Upper Thames Street, EC4) has fewer beads discovered, however, types included stone, natural resin, glass and lead alloy. BIG82 (Billingsgate Market Lorry Park, Lower Thames Street, EC3) had a high concentration of glass beads dating to 1485-1714, and several ceramic, natural resin and bone beads, but also one ivory bead. In terms of production, COT88 which is in Camomile Street (Cotts House, 27-29 Camomile Street, EC3), contained animal bone waste dating from 1485-1714.⁵

To put this limited evidence into context it is necessary to draw upon excavations in Northern European centres which reveal that bone and wood were the most basic materials used, with bone in particular being cut into prayer beads in enormous quantities. The refuse of bead cutting, mainly strips of jaw and lower leg bones, has been excavated in massive quantities in centres such as Constance (Germany) and Basel (Switzerland).⁶ This has been identified due to the high density of material found which has holes drilled out. From the evidence it is clear that changes occurred in bone working technology in Constance during the fourteenth century.⁷ Around 1300, the choice of bones for bead production and the way they were worked was neither efficient nor professional. Production was on a small scale with the beads being cut using a bow-lathe creating rings rather than spheres. By about 1400, this process was modified with only straight portions of the metapodials from cattle being used, and only spheres, in much higher concentration, were drilled out of the bone. Huge

³ Powers 2003.

⁴ Powers 2003.

⁵ Egan and Pritchard 1991; Mead 1977:211; Schofield and Maloney 1998.

⁶ Sexi and Sutton 2005.

⁷ Sexi and Sutton 2005; Spitzers 1998.

quantities of small beads, 4-5mm in diameter, were produced, and a smaller amount of larger beads with diameters of 6-12mm. I interpret this evidence as suggesting that the smaller beads may represent those used to count the Hail Mary, the larger beads for the Our Father. This seems plausible when considering the layout of prayer beads, which I will proceed to discuss later in this article. This change in production methods suggests an increase in efficiency and a move towards production on a greater scale, which may indicate the growing popularity of the rosary. This information sheds further light on production sites and methods, but it is limited in terms of how continental examples can directly reveal information about production in England. What can be seen from the Camomile Street excavation in London (COT88) finds included a small amount of late medieval bone waste from bead-making.⁸

This process of drilling beads from wood or bone can be seen in the frequently reproduced painting of 1484 depicting a German Paternosterer at work.⁹ In the picture from the Stadtbibliothek in Nuremberg a man using a simple bow-driven lathe to make large round beads. Hanging on the rail above the table is a straight string with tassels at both ends, a loop of ten large beads and several loops that appear to have between twenty and fifty beads apiece. As a form of evidence, this depicts the methods in use and also shows examples of the finished products, however, as an artistic impression it may not be realistic. An indication that the representation of beads is realistic comes from a surviving example of a Pater Noster made of bone consisting of a single loop which originated from Cologne and dates to the fifteenth to sixteenth century.¹⁰ From the production methods revealed at the Constance excavation it is clear that bow-driven lathes were used.¹¹ What is not clear is whether a single artisan, like the Paternosterer in the image, was responsible for the production and stringing of beads.

Information on the organisation of prayer bead production comes from historical records, although again, there is little information recorded in England. To give continental case studies it is fitting to look to Paris and Rome. In Paris Pater Nosterers were divided into guilds, differentiated according to the type of bead produced and this division existed between the thirteenth and sixteenth centuries.¹² For example, in 1260 the Paris guild had three

⁸ Schofield and Maloney 1998.

⁹ Nuremberg, Stadtbibliothek, Hausbuch Amb.317.2°, f.13r.

¹⁰ Winston-Allen 1997:115.

¹¹ Sexi and Sutton 2005; Spitzers 1998.

¹² Harvey 1999:28-29; Depping 1837:66-71; Boileau 1879:57-61, 81-83.

strands – one for the workers of bone and horn, another for coral and mother of pearl and the third for crafters of amber and jet.¹³ In comparison, nothing is known about the organisation of the Paternostrii of Rome and it seems likely that, as in England, and unlike France, there was very little. They were not included in the artes in the city statutes of the fourteenth century,¹⁴ although Pater Nosters were certainly part of the commerce of Rome as mentioned in the custom accounts.¹⁵ This indicates that production organisation was very varied across Europe, and this limits what can be assumed for English production methods. In England it is possible that prayer beads of gold and silver were made by specialist goldsmiths, for example in 1382 we find a London goldsmith losing a Pater Noster of silver and pearls.¹⁶ These items tended to be passed onto jewellers for sale as records show that when jeweller Adam Ledyard gave an inventory of his shop after theft in London in 1381, he had lost Pater Nosters of white amber, amber, jet, silver-gilt, mazes or mixed, and white bone said to be for children.¹⁷

In terms of prayer bead composition I would like to address several questions: What materials were used to produce beads? Why were these materials chosen? How were the beads strung together? And what were they threaded upon? To do this I will look at excavation reports from Waterford City and religious houses in mainland Britain, studies and examples of stringing materials and bead types, surviving artefacts in the Victoria and Albert Museum, artistic representations and Flemish manuscript illumination.

I have chosen to include two case studies of excavation artefacts to briefly consider the evidence that they provide for the materials used in rosary construction, both bead and stringing. The first consists of two amber Pater Nosters dating to c.1250 discovered during the Waterford City centre, Ireland, excavations of 1986-1992.¹⁸ According to the report, the first set is incomplete¹⁹ and consists of sixteen beads of various types whereas the second set is complete,²⁰ consisting of seventy-four small flattened circular beads and nine large shaped ones, and measures 248mm in length.²¹ These two Pater Nosters are amongst the earliest

¹³ Sexi and Sutton 2005.

¹⁴ Harvey 1999:28; Gatti 1885.

¹⁵ Lombardo 1983:79.

¹⁶ Harvey 1999:28; Riley 1868:47.

¹⁷ Harvey 1999:28; Gessler 1931:45.

¹⁸ Barry, Cleary and Hurley 1997.

¹⁹ See figure 1.

²⁰ See figure 2.

²¹ Barry, Cleary and Hurley 1997.

medieval amber Pater Nosters discovered. The evidence suggests that amber prayer beads may have been produced in Waterford, the amber being imported from the shores of the Baltic. The division of bead size for different prayers is suggested in the complete Pater Noster, however, due to the variation in bead type it is difficult to draw firm conclusions regarding the incomplete Pater Noster. Neither artefact had surviving stringing material.

In comparison, my second case study comes from religious houses. Only three rosaries have been recovered from the graves of religious houses in mainland Britain.²² The earliest example perhaps belonged to Ela, Countess of Salisbury, who was buried in 1261 at the Augustinian nunnery of Lacock, Wiltshire. Her body was accompanied by a cross and beads.²³ The most recently excavated example is catalogued in a report on Carlisle Blackfriars.²⁴ An adult burial of unknown sex was found with twenty-nine beads of blue, white, yellow, amber and turquoise glass, in both annular and cylindrical shapes. The date frame for this example can be placed between the mid thirteenth century and the Dissolution. An elaborate grave, found in the nineteenth century at the Benedictine nunnery of St Mary Rusper, Sussex, provides the latest date. The grave consisted of a stout oak coffin in which a skeleton accompanied by twenty-four beads, fourteen of amber and ten of jet, a small silver-gilt crucifix, a gold ring set with emeralds and amethysts, and a silver brooch were found.²⁵ The amber and jet certainly once formed a rosary. The grave, most probably that of a prioress, was dated to the later fourteenth or fifteenth century.

The difficulty with archaeological remains tends to be that the order of beads when initially strung, and the stringing material itself, is lost. It can be proposed that beads were threaded and strung on wool, silk, cotton, linen, cord or ribbon.²⁶ Crowfoot, Prichard and Staniland record in *Textiles and Clothing* that cording is usually silk, though linen and wool threads were popular for embroidery and other textile products in the period.²⁷ To find a surviving artefact to exemplify this, there is an example of eight amber beads still threaded on a string made from one tubular silken braid that dates to the late fourteenth century.²⁸

²² Gilchrist and Sloane 2005:93-94.

²³ Hodgson 1902:108.

²⁴ McCarthy 1990:195.

²⁵ Way 1857:304.

²⁶ Sexi and Sutton 2005.

²⁷ Crowfoot, Prichard and Staniland 2001:151-153.

²⁸ Crowfoot, Prichard and Staniland 2001:135.

Stringing materials were not only chosen for their durability, but also for decorative purposes, especially symbolism in colour. Stringing materials were often red in colour, which was taken to signify blood, destiny and the power of Pentecost.²⁹ An example found in de Hamel, from a Book of Hours dating to 1420 shows the patron of the manuscript holding twenty gold beads on red string in a continuous loop.³⁰ Wills, paintings, and surviving artefacts all provide evidence that stringing materials of bright pink, black, green and crimson mixed with gold are also recorded. An example of green threading can be found in the will of Robert Preston dating to 1503 which states that he ‘... left a set of ten chalcedony beads threaded on a lace of green silk with a gilt pendant of St. Martin’.³¹ Backhouse states that Jocasta’s embassy to Adrastus created by a Flemish artist c.1525 has a central noble female with a single strand of beads hanging from the centre of her girdle. The beads consist of ten white beads with a gold tassel at the bottom hanging from black cord.³² D’Allemejo records that Laning gave a handout at the 1975 rosary exhibition in Cologne, Germany (‘500 Jahre Rosenkranz’) depicting a sixteenth century German example of a loop Pater Noster of sixteen ovoid beads of blue and green jasper strung on pink silk cord.³³ An example of gold threading can be seen in the sixteenth century filigree gold rosary of Mary Queen of Scots, displayed at Arundel Castle, West Sussex, which consists of five decades with larger gauds, and a final gaud before the elaborate crucifix.³⁴

Prayer beads could take many different shapes. Lightbown states that most beads were round but occasionally lozenge shaped beads were used.³⁵ Lightbown also gives a number of examples of figurative beads or pendant items that would be used in Pater Noster construction: crosses, hearts, stars, escallops, acorns, lions, cameos, filigree cages filled with scent, alphabetic letters, flowers, fleur-de-lis, olives, ears of barley, ears of corn, and flasks.³⁶ Assorted shapes can be seen in portraiture including flattened squares, lozenges (like two cones put together at their bases), acorn shapes, cylinders, disks and rings.

Many different materials were used to make beads. Extant examples include: seeds, nuts, bone, horn, shell, wood, glass, paste, clay, gilt, silver, gold, rubies, emeralds, sapphires,

²⁹ Ollerenshaw 2005.

³⁰ De Hamel 1997:192-193.

³¹ Lightbown 1992: 345.

³² Backhouse 1997.

³³ Erzbischöfliches Diözesanmuseum Köln 1976 (exhibition catalogue); D’Allemejo 2002.

³⁴ See figure 3.

³⁵ Lightbown 1992:348.

³⁶ Lightbown 1992:354.

diamonds, pearls, jasper, rock crystal, ivory, and mother of pearl.³⁷ Amber and glass beads were common. Glass and semi-precious stones were used to imitate higher-status materials such as coral, pearls and amber. One disadvantage of this economical measure would have been the weightiness of the glass in comparison with coral. This would make longer strings quite heavy, less convenient to carry, with the extra weight making the rosary prone to breakage as the beads scraped against the cord.

Bead materials were chosen for their beauty and mystical properties. ‘Amethyst prevented drunkenness, coral strengthened the heart, and emeralds combated epilepsy. Crystal was regarded as the symbol of purity,’ says Dubin.³⁸ Coral was perhaps the most popular of all, combining light weight, symbolic colour, beauty and expense. Coral beads were especially valuable and popular, as it was thought to be a good-luck charm against the “evil eye”.³⁹

It appears that rosaries were sometimes made of gold. The Langdale rosary⁴⁰ is housed in the Victoria and Albert Museum and dates to c.1500.⁴¹ It is made of gold with each bead engraved and / or enamelled with a Christological scene, and inscribed with the title of the scene or saint depicted in black-letter script on the rim. The rosary constitutes the only gold English rosary known to have survived from this period. It consists of fifty oval Ave beads and six lozenge-shaped Pater beads.

Jet was also used on occasions. One example is a rosary bead dating to 1520-1650 which depicts St James the Greater and descends from Santiago de Compostella in Spain.⁴² Here the saint is depicted as a pilgrim and associated with his symbolic scallop shell.⁴³ It is possible that this was once a two-sided relief which perhaps had a crucifix figure carved on the opposite side.

Boxwood carved rosary pendants were popular between c.1480 and 1520. They were mainly produced in Belgium, the Netherlands and the Rhine area in Germany.⁴⁴ In two examples,

³⁷ Winston-Allen 1997; Lightbown 1992; Bennett 1991.

³⁸ Dubin 1987:77.

³⁹ Lightbown 1992:412.

⁴⁰ See figure 4.

⁴¹ Oman and Maclagan 1936:1-22; Marks and Williamson 2003: image no. 222b.

⁴² Trusted 1996:144

⁴³ See figure 5.

⁴⁴ Williamson 2002:140-143. Two examples are housed in the Victoria and Albert Museum and a further example in the Metropolitan Museum of Art.

the exterior resembles a walnut created through intricate carving and measuring no more than 4cm in diameter. When the nut is opened it contains either two (diptych) or three (triptych) religious scenes depicting either saints lives or the life of Christ.⁴⁵

Since strung examples rarely survive, much of our evidence for patterns of stringing comes from visual representations. These need to be treated with caution, as paintings or historical drawings often show strange numbers of prayer beads and it is hard to tell whether these represent different devotions, or whether it is merely the whim of the artist, who may not have been too concerned about the realistic representation of the exact number of beads or materials. However, what is clear from artistic representations is that the rosary usually took one of two forms, either linear or loop.

One example of a linear rosary can be seen in Netherlandish artist Rogier Van der Weyden's painting of the Magdalene Reading dated prior to 1438.⁴⁶ The woman sitting on a cushion at the front is St Mary Magdalene, as shown by the prominently displayed alabaster ointment jar. In the background a man is standing holding a linear rosary in his right hand. This is actually only a portion of the original painting, the *Sacra Conversazione*, but from what can be seen, the man with the rosary may be St Joseph. His rosary appears to be about sixteen large beads, perhaps made of amber from their colour, and three white beads perhaps ivory or bone. All of the beads are strung on a black cord with heavy tassels. There is a similar rosary in the background of the *Arnolfini Portrait* by Jan Van Eyck,⁴⁷ another exponent of the school of early Netherlandish painting. This portrait is one of the earliest secular paintings depicting a rosary, dating to 1434. There are thirty-one amber-coloured glass beads in this open string which is hanging from a nail on the wall as a token of betrothal. The *Arnolfini* beads are very close in shape to the *Magdalene* picture, but reflect more light which may suggest that they are intended to represent glass.

In comparison, the painting by Gérard David (c.1460-1523) of the *Madonna and Child with Saints*, depicts the Christ child wearing a loose-strung loop rosary of very pale glass beads bandolier-style.⁴⁸ The beads seem to be divided into decades, with larger beads marking this division. Another loop structure can be seen in the depiction of the donor in the *Adoration*

⁴⁵ See figures 6 and 7.

⁴⁶ See figure 8.

⁴⁷ See figure 9.

⁴⁸ See figure 10.

of the Magi by Rodrigo de Osona the Younger, dating to the fifteenth to sixteenth century.⁴⁹ The donor is depicted in the bottom right-hand corner of the painting, kneeling in prayer with a loop rosary over his arm. The beads are a vivid red and end in a tassel, although the division of the beads is unusual (not decades).

Rosaries are sometimes depicted in the borders of Flemish devotional manuscripts.⁵⁰ One example comes from London, British Library, Add. MS 18852, a Book of Hours belonging to Joanne of Castile.⁵¹ On f.319r wooden tracery is depicted, used in gothic architecture to decorate church windows, creating four niches in which rosaries are displayed. The rosaries are all made up of round beads that are loosely strung on cord. Another example comes from another Book of Hours, Vienna, Österreichische Nationalbibliothek, MS 1979.⁵² On f.88r there are three rosaries depicted, each of which is made of rounded beads with visible stringing material and a clear distinction between Ave beads (majority) and Pater Noster beads.

I have briefly outlined what can be deduced about the physical properties of rosaries. This has raised several questions worthy of future study. How were rosaries used? Who used them? What did they mean to their owners? This would enable us to build a picture of the religious and social implications of prayer bead production and usage. This area of research requires further analysis and study, drawing together strands from archaeology, art history and historical records, to formulate a multi-disciplinary approach.

⁴⁹ See figure 11.

⁵⁰ Challis 1998:253-290 identified several examples of rosaries.

⁵¹ Challis 1998:284, fig.79.

⁵² Challis 1998:276, fig.71.

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The word "bead" derives from the Old English word "ebeda", originally meaning to pray or request, and was used to describe groups of beads which were loosely strung together. During the medieval period these strings of beads were used by Christians as mnemonic aids to physically count their prayers. Initially, this was attributed to the Pater Noster (Lord's Prayer), later the Hail Mary and then the rosary as we know it today. Excavation reports in England reveal evidence of prayer bead production and manufacture during the medieval period. For the purposes of this article I am focussing on central London due to the high number of archaeological excavations undertaken in this area between 1974 and 1988 which reveal evidence of prayer bead production.