

## Early Period Beaded Necklaces

Culture in the early medieval period was rich in talent, symbolism and art. Stoneware, metalwork, pottery and jewelry all illustrate the depth of artistic endeavor. The medieval necklace was more than a piece of decoration; it was a symbol of wealth. It represented portable cash, status and ability. Early period traders traveled to many areas and brought back with them glass, amber, amethyst and other types of beads to make into necklaces. Actual, intact necklaces still strung are extremely rare which leads to much speculation on how beads might have been organized on necklaces. In some instances such as Grave # 115 Castledyke, the archeologists have actually noted each bead as it lay in the grave and the grave itself was not disturbed (Drinkell, pg 67). For this we know what the beads would have actually looked like strung. Unfortunately in most instances, we do not have such a carefully documented recovery of the artifacts and must rely on experts to give possible reconstructions of the finds. As artisans, we want to look not only at the beads contained in these types of necklaces but the construction and organization itself. This class deals with some of the necklaces that we do have made of beads from the 6<sup>th</sup> to the 10<sup>th</sup> century.

Before we get into the specific discussion on necklaces, a discussion of some general terms for beads is helpful. When researching period finds, it is good to know what the author's definitions are for the beads they are discussing. Many authors will refer to their descriptions as "using Guido's definitions" or "using Callmer", so it is good to get a feel for some of the common references. First a small discussion of the shapes of beads: beads come in a variety of shapes:

- Annular – the thinner round bead,
- Barrel/Spherical – typical round bead
- Cylinder – a rounded rectangle,
- Biconical – pointed at both ends with a fatter middle,
- Gadrooned – section into four parts
- Polygonal – many flat sides around the diameter,
- Melon – ridged evenly around the diameter,
- Segmented – drawn beads evenly crimped to appear as a string of individual but connected beads
- Square – flattened on four sides

Next some decorations:

- Annular twist -
- Bands/Stripes
- Chevron
- Circles -
- Crossed waves with- without dots -
- Dots -
- Feathering -
- Overlying crossing waves –
- Reticillia
- Traffic light

There are several different ways that beads were made. Wound beads were one method of making beads known in period. Other methods were drawn – a funnel shape gathering of melted glass with an air bubble in the center which is manipulated, shaped or molded; (Birley & Greene, pg 16). Two other methods for making beads were folded – where the glass is folded back and forth, and pressed – where the bead is pressed into a mold of some type to make the shape. Green, Blue, yellow, white and red as well as multiple colors together and gold foil have been discovered.

The first necklaces to look at are those based on finds from Neiderbreisig, a small village between Coblenz and Bonn. Identified by some museums as Merovingian and some as Frankish, this style is dated from the 6 to 7<sup>th</sup> century. The Merovingian dynasty lasted from about AD 450 to 750 and consisted of much of France and the Rhine valley. Not much is known about these necklaces and beads as they were actually found. They were excavated, apparently not for the science of archeology and advancement of knowledge, but for treasure seeking in the 1890s and the grave goods were auctioned off in 1893 and 1896. Much of the collection was bought by J. Pierpont Morgan and eventually donated to the Metropolitan Museum of Art (MET). There are tantalizing references that each of the graves discovered had these types of necklaces which would mean there might be more than 25 different necklaces in existence. (Hommen) It is not known if these necklaces were still strung on wire as illustrated in Dubin's *The History of Beads* and in Hommen's article but continued legitimate excavation of other Merovingian period jewelry may bring further clues. Other areas in Germany and France were plundered at the same time with similar results. Thus, the student of this period of necklace will find a level of frustration in tracking the actual disposition of beads in graves. It is hoped that in the future, other contemporary grave sites may be discovered that will shed light on these older sites and give good clues to the period use of these beads.

The Metropolitan Museum of Art has on display several of the necklaces from the JP Morgan collection – referred to as the Quackenbush Collection (Ricketson) and the Dubin book features a picture of three. The first two pictures below are two of the MET's pieces. Other pictures, such as the one from the St Germain en Laye Museum below, show the necklaces strung, although at this time I do not know if they were found that way (anyone speak French or German?). In examining the pictures of the three necklaces at the MET in New York illustrated in the Dubin book and the two necklaces on-line, one can find that there was a definite organization to this style of necklace at this time period – **if** this was the way the stones were actually found in the grave. That is a very big if. Going on the assumption that this was how the beads were laying the size of stones, types and colors appear to be *predominately* planned around the necklace to provide symmetry and flow of design. Each type of necklace had both glass and stone beads. Many of the beads types were similar to each other as well as beads found in Anglo-Saxon graves as described by Brugmann. But the size progression of the beads and organization was not *rigidly* enforced and adhered to throughout the necklaces which imply creativity and individuality of the wearer. All six necklaces

discussed here are strung on wire with similar clasps. But, we don't know who strung them – did they all come from the same treasure hunter who strung them in order to display them? Were they found this way? Again, lack of documentation on the part of the treasure hunter will leave those questions unanswered for me until more tombs are excavated and properly documented.

In examining the first necklace, the eye is almost immediately caught by several design elements on the decorated glass beads: At least eleven cross wave and dot decorated beads, three melon beads, two multiple segmented beads, one reticella, and one striped beads make up some of the decorated glass beads. There are three obvious stone beads and four more possible stone beads. The beads are square, round, rectangle, and range in size from very small to quite big for the central bead. There are a total of 62 beads on the necklace.



Metropolitan Museum of Art through The AMICA Library

The second necklace has 79 total beads. Amethyst and rock crystal beads are visible on first look. The central large bead has the cross-wave and dot pattern which is repeated in five more beads. There are melon, segmented, annular, and barrel beads, and one polyhedral bead. The bead colors are mostly white, terracotta red, some yellow and green. There are very few blue beads in these necklaces.

The three necklaces pictured in the Dubin are from the same collection. Those necklaces are strung in the same way, with wire and with the same twisted together closure. One of the beads in the Dubin necklace's is a face bead which is a significantly earlier bead than most of the others. These beads were yellow, green, red and a few blues. For decorations there are striped, dots, cross wave and cross waves with dots. There are melon beads, annular, cylinders, barrel and bi-conal. It looks like there is amber, carnelian and rock crystal. The number of beads range from 77 to 99 beads. In the picture below you can spot several of the same bead types illustrated on the necklaces addressed above. Two of the necklaces are strung on wire but it looks like the other two may not be strung in this same fashion. The beads appear to be very large in several of the pieces and they fit with the general sizes and shapes of the other samples that we have.



Merovingian Beads

<http://www.historyforkids.org/learn/medieval/clothing/index.htm>

Museum: St. Germain en Laye

The Merovingian style of jewelry is a rich, vibrant and visually stunning art. The beads of the necklaces take from historic designs and more current forms. There are beads that have been traded and transported from other cultures and incorporated with more local designs. The mystery of how these beads were strung together and how they were worn, will continue until better excavation of new sites gives a more comprehensive explanation of the art, the wearer and the organization of these pieces of jewelry.

The Anglo-Saxons of the 6<sup>th</sup> & 7<sup>th</sup> Centuries have provided us with a rich variety of beads found in graves. Guido and then Brugmann have catalogued many of these beads and have provided a comprehensive guide to the styles, colors and types of beads. But, for the most part, they do not discuss the beads as they were found in the grave and while critical to the study of early period beaded jewelry, there information on the digs themselves is also important. For this information, one must go to the excavation journals from the digs to find what the necklaces might have looked like. One such journal from the excavation at Castledyke has a wonderful example of this type of documentation and conservation. The archeologist detailed each grave, as the body laid in the grave and how the artifacts were found. The Castledyke Anglo-Saxon cemetery at Barton-on-Humber was discovered in 1939 and excavated between 1970 and 1990. The cemetery consisted of over 196 graves and 227 sets of remains. Barton-on-Humber was a port town of the Anglo-Saxon period with an estimated population of over 400 people. Excavation of the cemetery revealed remains from both the 6th and 7th century which was just at the time of transition from pagan to Christian dominance in burial ritual.

Grave 115 was an intact grave of a woman aged 45+ and was undisturbed when found. Grave goods consisted of beads, brooches, and sleeve holders as well as

knives, and pottery. Grave #115 had 69 glass and amber beads discovered in the upper body area which the excavators were careful to record each bead – color, size, and decoration and where they were in relationship to each other and the body. From the position of the beads, the archeologists conclude that the necklace was one string hung between a pair of annular brooches at the shoulders. The amber was irregular in shape and size and in the direction of the drilled hole. The glass beads were both opaque and translucent. Some were plain glass. Many were decorated with designs common to the area and timeframe. Cross-wave and dot, bands and reticella decorations were noted on fourteen of the beads. There were 10 amber beads, 44 plain glass beads and 15 polychrome beads. One difference between these beads and their contemporaries in the Merovingian graves is the number of blue beads. Unlike the continental finds, there were 31 blue beads in the one grave at Castledyke. In the cemetery as a whole there were 672 beads with 414 amber, 207 monochrome, 40 polychrome and 10 identified as other (Brugmann, table). There are many similarities between the continental style and the Anglo-Saxon but also some distinct items as well.



Late 1800s archeologists were also busy in England. This illustration is from the Archaeologia Cantiana Society account of the research at Sarre, another Anglo-Saxon Cemetery. The article was published in 1868 detailing the excavations of that cemetery. You can see from the hand drawn pictures that many of the beads were similarly decorated and colored. Of course, one issue is

[http://www.kentarchaeology.org.uk/Research/Pub/ArchCant/Vol.007%20-01868/Pages%20307%20to%20321/Plate\\_08\\_80\\_dpi.JPG](http://www.kentarchaeology.org.uk/Research/Pub/ArchCant/Vol.007%20-01868/Pages%20307%20to%20321/Plate_08_80_dpi.JPG) that the pictures are hand drawn. Brugmann's table only identifies 65 beads in the Sarre Cemetery. A



The Hon Hoard was dated to approximately 860 AD. The Hon Hoard necklace has 120 beads some of which were stone but mostly of glass. This Hoard also had coins of Carolingian, Merovingian, Anglo-Saxon, Arabic and other manufacture which reinforces the far-flung nature of the Viking travelers and the access to multiple cultures. This exposure is reflected in



the diversity of items in necklaces. The central circle of all white beads provides a central focus for the necklace but the necklace was not strung when discovered, so it is only a supposition that this is where this piece would have been placed. This necklace

Necklace from hoard, Hon, Ovre, Eiker, Buskerad, 9th century (showcase 8)

<http://picasaweb.google.com/ErinLee.McG/Norway/photo#5099380367192575250>

is certainly the inspiration for the Viking Treasure necklace so popular within the SCA. The next two pictures are pictures of reproductions that I have done.

Erin's Public Picasa Web Album



The first necklace is made up of a collection of stone, glass and semi-precious beads. It includes stones of amber, lapis lazuli and carnelian, as well as glass beads. A Viking treasure necklace included beads or items that were important to the wearer and I have included several of the beads that were left at other A&S displays. One of the items I have included on this necklace is a cross. The first Christian missionary reached Sweden in 630. King Olaf was baptized in 1008, so between those two dates; it is conceivable that someone would add a Latin cross to a treasure necklace. The necklace on the right is set up similar to the first with the majority of the beads handmade and also includes beads or items that were left at other A&S displays. Unlike the Hon which had metal book bindings, I have chosen to use stones of lapis and amethyst as I do not have the metal pieces available. Both these stones would have been available in period and were used in jewelry. These stones are approximately the same size and shape as the book pieces. This set has some hand made beads, glass commercial beads, semi-precious stones of carnelian, amber, hematite, onyx, jasper, sodalite, jet, lolite, aventurine, and coral. There are also small circles made of wire strung with stones as well as pieces of cast medallions and trinkets. Some of my reasons for the pieces I put on the necklace: One of the trinkets is a site token from

Kingdom Arts and Sciences. It has the MOAS badge and since I was a MOAS for my Barony, I felt it was appropriate to have it on the necklace. Another trinket is the red die. This was made by Baroness Kaleeb the Green eyed and presented as her Baroness Award of Courtesy when she was Baroness of our Barony. As a Lady of the Rose, I value courtesy greatly and was honored to receive this – thus it deserved a place on my “treasure” necklace. The center focus of this necklace is my Pelican medallion. While this type of pendent has not been found on necklaces of this period I felt that , as one of my greatest “treasures” it belonged. This medallion is not of my manufacture.

Viking necklaces also have small circles made of wire that had smaller beads strung through and then the wire was twisted to hang from the wire or string of beads. These tidbits as well as coins, small plaques, and other trinkets made up unique necklaces for each wearer. There is great debate as to whether these necklaces were symmetrical or asymmetrical in their organization. One of the problems is that we do not have extant examples of strung necklaces. Our pictorial evidence does not illustrate the exact sequence of beads on the necklace and verbal descriptions speak of the types of stones and types of beads but not the organization. I would speculate that archeologists themselves may have strung beads together in order to better catalog and display the finds and to our modern eye, the necklace would be naturally symmetrical in nature. I will continue to search for documentation that will provide further documentation as to the organization of these types of necklaces.



The third necklace is from the Varby Hoard and is dated to approximately 940 AD. The Varby Hoard necklace is very unusual in that it consists of only rock crystal and red carnelian stones on the necklace as well as some smaller green stones. This necklace shows the small beads strung on the twisted wire as well as coins, small plaques, and other trinkets. What is unique about this necklace and different is that it is made of all stone beads and of only two types – carnelian and rock crystal rather than a combination of glass and stone beads. The Varby Hoard had beads described as “Slav and western-inspired Scandinavian beads” (Rosendahl, pg 234). This includes a

stirrup shaped Khazar ornament from Russia, what looks to be a coiled snake, an English book mount and a coin.

The biggest problem with both the Hon and the Varby necklaces were that the necklaces were not strung when the beads were found and there is not a comprehensive description of the beads. The Hon Hoard was excavated in the 1830s and the finders were more concerned with the solid gold pieces. I have been unable to find a description of the beads as they were actually found. This has led to some dispute concerning the organization of the necklaces. Pictures found in books such as

David Wilson's *The Northern World* and Rosendahl are of reconstructions of the necklaces based on archeologists interpretation but are not based on an actual find of an intact Viking treasure necklace. I would speculate that archeologists themselves may have strung beads together in order to better catalog and display the finds and to our modern eye, the necklace would be naturally symmetrical in nature. That being said, for now this organization has become the accepted organizational structure of necklaces of this time period. I will continue to search for information that will provide proof for the organization of these types of necklaces.

The "Pagan Lady Necklace" from Peel the Isle of Mann. This set of beads discovered on the Isle of Man provides an example of a forth possible necklace construction. Note the difference in size, shape and color of the stones. This necklace has 73 glass and amber beads, and no other types of pendants. This find is dated to the late 900s. These beads were found clustered around the head in the grave and are believed to make up one necklace. The largest bead is 3.3cm in diameter, whereas the smallest is only 0.3cm diameter. Beside her was a goose wing and herbs, her



<http://www.gov.im/mnh/collections/archaeology/vikings/paganlady.xml>

workbag with a pair of needles and household shears and comb. She had two knives and a cooking spit. She is the only Norse female grave to be found on the Isle of Mann. The two pictures I found of the beads show two different necklaces constructed from the same beads. My belief is that construction of these types of necklaces were unique to each individual and therefore there is not "one, true" method.





In 1979 a couple on holiday on the Isle of Lewis stumbled upon human remains protruding from a sandbank along the beach. The police came in on what they thought was a modern murder scene and instead found one of the most amazing Viking era graves for the Isle of Lewis. Because of issues involved with the location of the remains, it was decided that the police would move the remains but they were careful about documenting the grave as they did it. In the end they found with the grave a whetstone, bone needle case, iron knife, a sickle and a pair of oval brooches. The grave is dated to the 10<sup>th</sup> Century on the bases of the bronze metalwork. One of the pins found suggests a later 10<sup>th</sup>/early 11<sup>th</sup> Century dating based on similar pins found in Ireland. (pg 170) Unfortunately they collected all the beads without noting where they were and put them in a bag. This necklace is unique. It consists of 44 glass beads, 39 of which were segmented beads – “a single glass tube constricted at regular intervals to produce segments with the appearance of short rows of similarly colored, roughly spherical beads.” (Welander, pg 163) The majority of the segmented beads had two segments, a few had three and two of them had four. The other five beads were single beads. None of the beads were decorated. There were 4 yellow, 20 blue, 8 silver and 12 gold beads. If threaded as a single string the beads would form a necklace 465 mm (18 inches) long. If hung suspended from the oval brooches, they would have hung very low on the chest and so the author speculates that multiple strands would seem more likely. The author notes “The assemblage *could* have lent itself to either a symmetrical arrangement as a single thread, centered on the two exceptional blue and yellow beads with four segments or perhaps a double-threaded arrangement, roughly replicating the color pattern on both threads.” (pg 163) There were no spacers found with the dig. (Welander)

Ewing in his book, “Viking Clothing” speculates that women wore necklaces around the neck and beads strung between brooches or hanging from brooches and even sewn onto the apron dress itself (pg 65-66). This speculation seems to be supported by the archeological evidence at Lewis, Mann and other Viking era sites.



This necklace is one I put together very early on before I understood much of the background discussed today. It was to be a reconstruction of this type of necklace with multiple strands suspended between the brooches on the front of a ladies dress. This set has some hand made beads,

glass commercial beads, semi-precious stones of carnelian, amber, hematite, onyx, moss opal, coral, lapis, and agate. There are also small circles made of wire strung with stones as well as pieces of cast medallions. It is a good attempt but now that I know more – the more I want to be able to do.

A massive amount of information has been published on Viking era glass beads in Denmark, Sweden and Finland. Many of these beads were made locally as the evidence found in Birka and Gotland. Many of the beads were imported. The use of imported trinkets such as those found on the Varby hoard necklace and Arabic coins found on the Eura necklace hint at the extent of trade items during the Viking era.

Established shops for glass production have been found in the port towns Birka, Gotland and Ribe. Ports were important to get the glass necessary to make the beads. Ships would come into port with broken glass used as ballast. This could then be reused by the bead makers to create new pieces.

Glass furnaces have also been discovered in Jorvik, Viking age York, Glastonbury, Kent, Gloucester, Lincoln and Jarrow. (*British Glass*). The furnaces were usually constructed in heavily wooded areas in order to provide enough fuel for the fires. The buildings were simple rubble stone buildings. A trench is built to place the fires and it can be fed from either end. There would have been a small hole in the sides in which to manipulate the glass and bellows at the bottoms to stoke the flames. Excavations at Glastonbury Abbey have revealed colored glass rods, crucibles and crucibles with waste glass. Finds at Barking Abbey, Essex also suggest glass making in England. The discovery of crucibles, evidence of furnaces, finished and waste pieces of colored glass (Bayley, 138) suggests that there was some glass production, although limited by natural resources in England.

Each of these discoveries has added to the vast knowledge of beads and glasswork. Stripes, dots, feathering, and plain beads combine to form bright patterns to show off the wealth and status of the woman wearing them. Beads were traded and brought back from long voyages to provide visible and portable wealth. To try and reconstruct all of their research in this brief space is impossible. The importance of beads as trade goods, symbols of wealth and personal adornment is not restricted to one specific culture time, place or status. Beads can be used to track the changes in Society and as we begin to understand the significance of different beads, we can begin to fill in more details of the overall picture of life in the cultures we are studying.

LAST NECKLACE EURA – FINLAND



This display consists of two necklaces. The first is a reproduction of the necklace found in grave # 56 Luistari, Finland (Picture #4), known as the Eura necklace. This necklace was discovered in 1969 and is one of the richest burials to be discovered in Finland. It necklace consists of 34 glass beads, ten Arabic silver coins, two western coins and two silver medallions. Archeologists are able to date the find to approximately 1020 to 1050, partially by the latest date on the coins. Through correspondence with Ms Syren at the Eura Museum and through examination of other items of the same era, it can be suggested that the necklace was probably strung with waxed linen thread or leather and tied as they did not find any evidence of a clasp at Eura or at other finds. (Syren, email). The necklace is just one part of elaborate set of metal jewelry that adorned the Eura Mistress' body in her grave. I have attempted to construct the necklace as close as possible to the original in the type of beads, coins and medallions. The second necklace is the result of a commission to reproduce the Eura necklace but to make it match in color the outfit that the patron has made. The intent is to show the two sides to

arts within our organization; the first to understand the arts of the time by reproducing them as close as possible and the second is to then create a new, unique piece of artwork.

I have made all the glass beads of the necklace as close as possible to the original. I have had some difficulty with this using the equipment that I currently own. The 8<sup>th</sup> bead from the right (Picture 1) is encased in gold foil and I have not gotten the trick of doing that completely yet. The black beads with the white diamond have also caused some difficulty in execution. Please read the project journal at Tab A for a full explanation of the processes I attempted to reproduce the beads and the next steps in attempting their reproduction.

The coins in both necklaces are a mix of real and reproduction coins. The real coins have a variety of dates and the reproduction coins were made by other artisans. The coins were then pierced and a copper bail was added to allow it to be strung. This is consistent with the picture and the information that is available on other coins in grave goods. Other coins already had the bails attached. These bails are consistent with ones pictured in the gold find of the Hon Hoard. The two medallions for the original are still being worked on with efforts to reproduce the design and to learn how to work with silver. I decided to use specific pieces for the commissioned necklace to reflect the patron. One of the medallions for this necklace is a Laurel medallion, as the patron for the necklace is in that Order. The other is a modified Pearl for the other Arts Order in Atlantia.

The next step was to make the beads. The documentation showed that the necklace had 36 glass beads (Rosenthal, pg 280) but the pictures only show 34. I have chosen to only make those that I have a color picture of rather than speculate on what the other two were like.

# in Necklace	Shape	Size	Color	Decoration
13	rectangular	medium	red	small lines around the circumference
3	circular	small	blue	None
1	melon	small	blue	None
1	melon	large	yellow	None
1	round	small	red	white dots - approximately 4
1	melon	large	blue	None
9	biconal	large	blue	2 white diamonds
1	round	small	grey	"v" shaped squiggles
1	round	large	gold	gold foil
1	round	large	yellow	None
2	round	large	yellow	with twisty circles, approximately 2



To be thorough I needed to find out where each of the beads may have originated from. To do this, I searched through other images to see if I could find similar beads. The large round yellow beads with twisty decoration are very similar



to a bead found in Frojel. The blue bead is F15446 from the Frojel find. The yellow is from the picture of the Eura necklace.



The melon shaped beads have been in production since Roman times and are common in finds from England, France and Scandinavia. These examples are from Brugman's book and are Anglo-Saxon.



The small round red with white dots is also a common bead found in various localities. This one is # F4063 from the Frojel find.

The red rectangular beads are similar in shape to those found in numerous finds and in decoration found in Ribe, Denmark (Sode).

The biggest challenge was the black bead with the white diamonds. I attempted numerous techniques:

- a. using stringer to outline and then fill in the diamond,
- b. squishing a piece of glass flat and then cutting it into a diamond, then applying it to the bead,
- c. using silver leaf cut into a diamond and applying it to the bead,
- d. using the diffusion technique from *Passing the Flame* to get a dot to disperse into the diamond shape
- e. building a diamond shaped stringer and applying it.

I believe that building a mosaic stringer and applying it will be the best bet for this bead but so far, I have been unable to make it. None of the other techniques were successful in recreating this bead as it is seen in the picture. There are still several other techniques to try: a. using silver foil, b. using a press, c. using one of the techniques above with a dual fuel torch. I decided to go ahead and display the results of my attempts in the correct position on the necklace, knowing that I still have some work to do to get this technique to work.

Finally I was able to string the various pieces together to make the necklace. I have used linen thread waxed with beeswax to string each one. The reproduction piece has been tied to close it. For the commissioned piece, I used the same thread but have used a bar and circle clasp in order to facilitate wearing the necklace. I used glass beads the patron requested as well as a variety that would make the necklace stand out from the dress. All of the colors would have been correct for glass beads in this period.



