Wire-Wrapped Roman Jewelry

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Making Roman Jewelry

Introduction

This project was born when Their Majesties requested the Laurels create "largesse kits" that would allow the recipient to make something period. My Laurel, Eulalia Piebakere, passed that request to me. As a result of this research, I put together kits of wire, beads, findings, and instructions, including this paper.

Ancient jewelry covers a wide variety of aesthetics and styles. Although most is beyond the reach of a basic artisan, a large subsection can be authentically recreated in a modern living room. I have focused on finds from 100 BCE -300 CE. There is no doubt that jewelry was more ornate and refined both before and immediately after this period. The Etruscans made stunning, miniature wonders in granulation (right[1]), with graceful curves and whimsical motifs. The Greeks expressed religious devotion and a dedication to harmony through exquisite goldwork. Byzantine pieces are highly complicated. By comparison, the Republic and early Empirical Roman aesthetic – which relied heavily on colored stones and pearls rather than skilled metal working - could be considered pedestrian… even crude.[2] However, the simplicity of design appeals to me. It's consistent with the social conservatism of the period, and appropriate for my persona (50 BCE in Rome).

Although there are complicated contemporary Roman jewelry types (set gems, carved gems, repousee, enamels, signet rings, chains, etc.), this paper is limited to a discussion of designs that can be accomplished without soldering, wire drawing, or other complex techniques. With carefully chosen materials and a pair of pliers, the more basic artifacts can be recreated by intrepid SCAdians with no previous jewelry experience.

Rather than exactly replicating individual finds, I chose to analyze trends. I wanted to understand the Roman aesthetic and be able to make jewelry that would be congruent with their cultural style. To that end, I have spent hours looking at books and museum websites. For each type of jewelry, I will include a few pictures as examples, but those are chosen from a massive collection of similar artifacts.

Note: When researching online, pains must be taken to vet all sources carefully. Many pieces labeled "Roman" are a pastiche of antiquities restrung, remounted, and rearranged with later elements. This was very popular in the Victorian era, and can even be seen from otherwise trustworthy sites like Christie's auction house. A close examination of clasps and findings can usually ferret out the truth.

Materials

When Pompey Magnus held his triumph in 61 BCE to celebrate his victory over Mithridates, he paraded a great many precious jewels and wonders made of them, including a portrait of Pompey himself made of pearls. Pliny attributes this triumph with changing the Roman taste from goldwork to jewelry featuring gemstones.[3]

Since the ancients had only observable characteristics (color and hardness) to go by, they tended to clump different stones together by name. For example, "smaragdus" was the term for the highly prized emerald and everything that resembled it, including fluor spar, green vitrified lava, chrysoprase, dioptase, and green jasper.[4]

Carnelian, pearls, and emerald were Roman favorites. Between extant Roman jewelry pieces and Pliny's writing, we also know they had opal, chalcedony (and its variants, onyx, sardonyx, agate), sapphire, star sapphire, ruby, garnet, amethyst, bloodstone, coral, amber, obsidian, rock crystal (quartz), tiger eye, turquoise, tourmaline, topaz, malachite, lapis lazuli, and an array of colors of jasper.[5] Diamonds were used in Rome[6], but given the disparities between Pliny's description and scientific understanding[7], I'm guessing that they were also confused with other clear stones. Bone, ivory, shell, horn, and glass were also used in jewelry.

Stones were cut into drums, bicones, spheres, tubes, and other carved shapes. Natural crystalline structures were sometimes drilled and mounted. Basic faceting (left[8]) appeared in the 1st century. In order to create more convincing "straight from the dig" Roman jewelry, I purchased stones that are handshaped. The slightly irregular spheres are more authentic looking than perfectly round machined beads.

Some plebeian ornaments and charms were bronze and brass, but the vast majority of jewelry was made in gold. Silver was used more for tableware, but does show up in the occasional ring or bracelet. Iron was used mostly for good luck charms. Iron's other jewelry use was as a wedding ring, particularly in the early Republic when marriage was legally closer to ownership of a wife. The ring was less a profession of affection, and more a warning to other men that this one was already claimed. Betrothal rings evolved into gold as women achieved more legal rights.

The Romans used gold in natural and refined alloys (combinations of metals). Both coins and jewelry of my period run 90-99% pure (Ogden, 18-19).[9] The price of gold puts true recreation out of reach, sadly. I am using a combination of brass and hypoallergenic wire in a gold tone, focusing on yellower wire that more closely matches the purity of the gold of the ancient world. I did get lucky and find an 22 karat earring base from Fire Mountain Gems that closely matched the Roman aesthetic: I sprang for a set and that became the start of one of my pairs.

Modern gold is labeled by karats, which is a ratio of purity out of 24 parts. The rest is made up of silver, copper, iron, and other metals to decrease the cost and to affect color and hardness. 12 karat gold is half gold (12/24). 22 karat, which is 91.7% pure gold, is closest to ancient Roman usage. 24 karat is so soft that it affects the durability of an object - it can be bent easily. This is why people used to bite coins to test for legitimacy.

Wire was made by cutting pounded sheets of gold into strips. The ribbons were then hammered, rolled between flat surfaces, or drawn through a drilled hole in a bead. Ogden maintains that draw plates were developed at the end of the Roman period, when harder metal alloys were being used, although Higgins (page 15)[10] claims they were used in the Hellenistic and Roman periods. Very fine wires would have been formed by twisting them between the fingers. Wires from the Roman times have been found as small as .2mm (Ogden, 47-51), which equals a 32 gauge wire in modern parlance. Note that gauge numbers go up as the wire diameter decreases. 30ga is larger than 32ga. To give you a sense of the sizes here, modern earring posts are usually 20-22 gauge.

Necklaces of valuable gems were usually strung on metal wire. Others have been found with organic materials like flax, cotton, Egyptian reeds, and sinew. Even animal hair – horse, elephant, giraffe, and cow - was utilized (Ogden, 121-122). I will try to source some horsehair for future projects.

Techniques & Tools
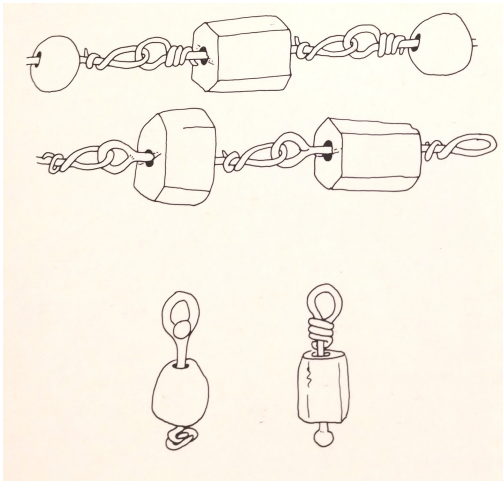
This sketch (Ogden, 75) shows a few common Roman techniques, including both soldering and wrapping of wire, to secure beads. Note the inconsistency in the number of coil wraps. For vertically strung beads, twists, loops, or soldered bulbs on the bottom kept the bead in place.

Clasps for necklaces were cast hooks, or wire wrapped to form hooks (Johns, 100).
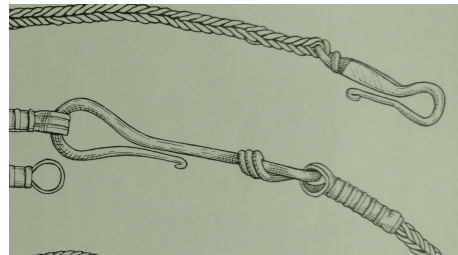
Iron working[11] and surgical tools[12], and tweezers[13] from ancient Rome.

Although there are plenty of extant Roman tools for woodworking, ironworking, and medical use, I have not yet found evidence of pliers small enough for jewelry making. High karat gold is much more malleable than the brass wire I'm using. It's possible that pliers weren't needed, and fingers or non-specific tools were enough. We know the

Romans had tweezers for cosmetic use, and Fjorlief InHaga[14] reports that she often uses them with a clamp for bending small wire.

This wood clamp[15] is a recreation of the antler one found at the Viking Hedeby site. Obviously it's the wrong period, but gives an idea of how the Romans might have used clamps to secure a work in progress.

Modernly, I used round nosed pliers, flat nosed pliers, and wire snips to manipulate the wire.
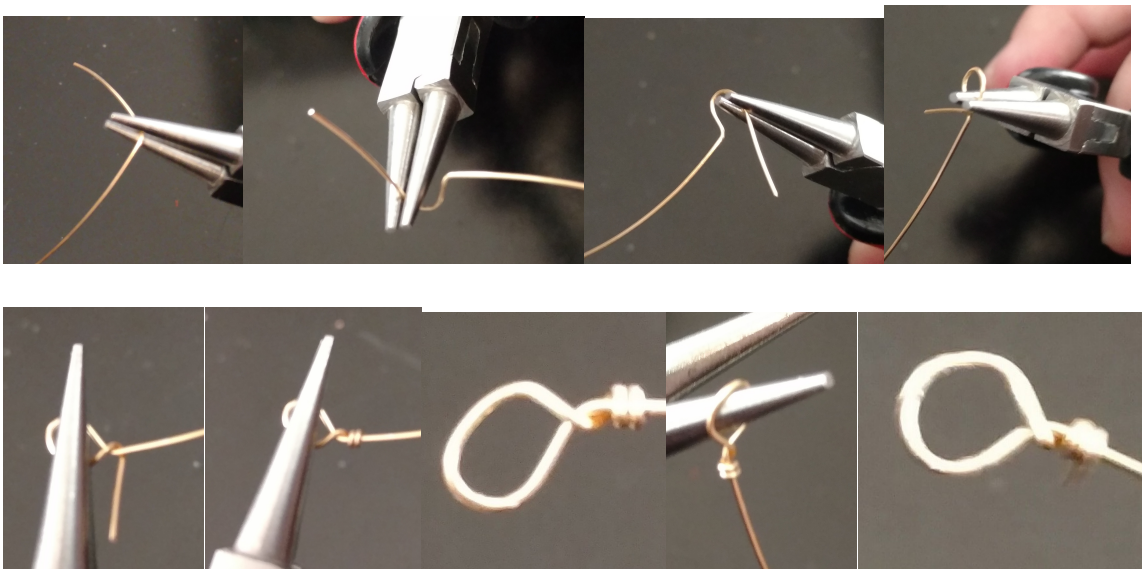
First, bend the wire, using the round-nosed pliers (so the wire curves instead of creasing), until you have a loop. Then, holding the loop firmly with those pliers, use the flat-nosed pliers (for a precise grip) or your fingers to wrap the wire 1-2 times around the neck just below the loop. Clip off any excess wire and use the flat pliers to pinch the end close to the neck, so there's no pointy bit to snag. If your loop is irregular, put it onto the round-nosed pliers to shape it.

Video instruction here:
http://www.firemountaingems.com/resources/videos/652t

I always use hypoallergenic or at least nickel-free for anything touching the skin, like earwires, when it's intended for largesse. When using modern findings, you may need to modify them a little. Left, earwire as purchased. Right, after using pliers to straighten the pre-made angles. This more closely mimics ancient shapes.

Modern wire wrapping uses techniques – like bending the wire around the pliers to make a perfect circle, or marking the pliers with a sharpie to ensure identical lengths – that I have deliberately ignored. Ancient Roman jewelry has a charming irregularity that I wanted to maintain. On the right[16], the dangles on this obviously expensive cameo have 8, 7, and 10 wire wraps. Likewise, they weren't particularly careful about being precise in their loop sizes. One thing that makes modern replicas stand out is the post-industrial obsession with symmetry. I prefer a more organic, handmade aesthetic, and find its products more convincing as a period item.

To make your own: In addition to the pliers and snips, you will probably want to buy some earwires until you are comfortable shaping them. JoAnn Fabrics, Craft Warehouse, Michael's, and Rio Grande & Fire Mountain Gems (the last two are online) are good sources. Have fun with choosing beads, too!

Amulets

Superstition played a large role in Roman jewelry choices. Both children and adults used phallic (left) and eye images to fend off *invidia*, the evil eye.

Freeborn boys wore a *bulla,*[17] a pouch containing protective charms (often amethyst or amber[18]) including a phallus. The *bulla* itself was leather, bronze, or gold, depending on status. The phalli were made of a variety of materials such as bronze, gold, silver, gemstones, ivory, amber, coral, green glass, marble and iron. With organic materials such as bone, ivory or wood, there was a link with vitality, life and growth.[19] Some stones are particularly associated with gods or goddesses. For example, Jupiter is represented by milky chalcedony, Mars by jasper, Ceres by green jasper, and Bacchus by amethyst, [20] which protected against poison.


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We don't have any extant leather bullae, but all the statuary evidence is for large round discs. This 2nd-3rd century bronze one shows the construction: Two circles joined around the outer edge.

I made two leather circles, precut the holes with a knife, and sewed them together with a period brass needle and sinew. It contains a bone phallus, amber (simulated by glass) and amethyst.
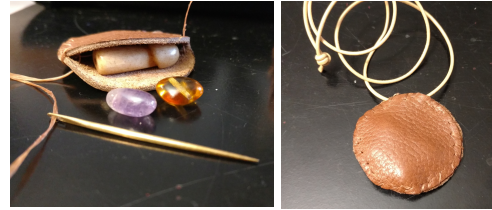
Women and girls often wore a lunula, a crescent moon with points facing down, for similar protective reasons.

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I strung a purchased lunula[28] (I love that that both have filigree with twisted wires) on sinew[29] with bamboo coral drum-shaped beads. I found that most of the modern beads I had were drilled with holes that were too small for sinew. Fortunately the coral worked, but I needed to split the sinew and use a half-thickness "thread." It still seems to be sufficiently strong. By twisting the ends back into points every few beads, I was able to construct the necklace below, on the left. In the center is a lunula purchased from Etsy[30], which sadly got held up by customs. I have made a tiger-eye necklace to mount it once it arrives.
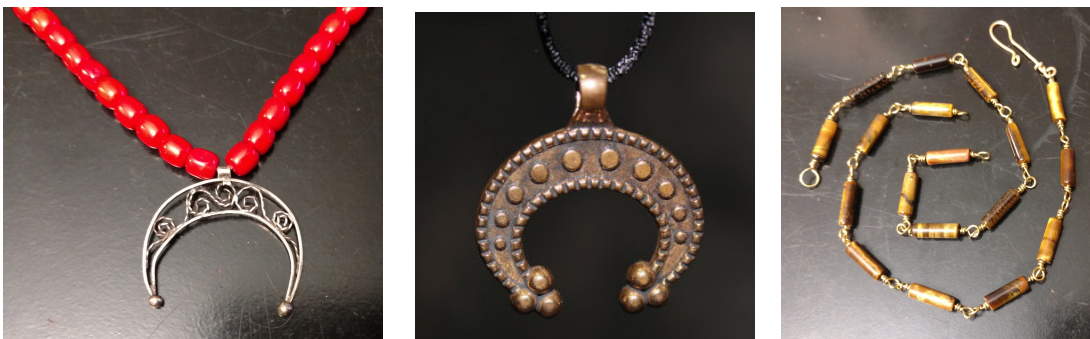
Necklaces

The original carnelian and quartz necklace (left) has been restrung on what looks like modern tigertail. Unfortunately, museum sites rarely mention the original stringing material, so I experimented with a variety of gauges with my recreations. My carnelian and quartz imitation (right), on 20ga wire, probably would have been too heavy for string or

sinew. It doesn't suit the early Empire so much as the later Byzantine aesthetic (below left[32]), but I am choosing to trust Christie's as a source, which claims it belongs to the 1st-2nd century. I imagine some sour dowager empress wearing this behemoth.

I love this carnelian necklace, with alternating drops and spheres.

My recreations on right: Garnets with 28ga wire and Vesuvianite (idocrase) with 24ga wire.

Roman jewelry ranges from chunky quartz to this slim, delicate chain with gold cornerless cube beads.[34]

The Met (far left[35]) has one that's all natural emerald crystals. For this recreation, I really wanted to use my bag of tiny, low-quality emerald beads. Sadly, only 28ga wire would fit through them, which was too small to be practical, and not likely to be historically accurate (left). Going to 24ga wire meant the necklace would be durable enough to actually wear, and I had some aventurine for a smaragdus (emerald) stand-in that worked with it. The hook closure is 20ga.

Charm bracelet

Left: Original   Right: My copy

"Roman gold and hard stone amuletic bracelet. Eastern Empire, circa 1st-3rd Century A.D. – "The gold bracelet in the form of a bangle, oval in section, each end wound spirally along the hoop, with seven amulets or beads, including an amber bead, a carnelian phallic pendant with gold mount, a spherical banded onyx bead, a pointed agate pendant suspended from a gold loop, an amber bead with drilled detail, a rock crystal pendant with gold mount, and a hematite pendant."[36]

Both have spiral coiled ends, and both have 7 stones. Mine has three strung directly instead of four because I had three appropriate stones that slid onto the wire but they both alternate pierced directly vs. suspended. I couldn't do the pretty gold end caps, so four are attached with wire jump rings like the original center stone. I used hematite, turquoise, onyx, rock crystal, agate, and tiger-eye, and gold-plated wire.

The bracelet is not in my collection, since it was made as a prize for the Champion's Choice completion in 2014. All other pieces were made for this project.

Hemisphere Bracelet

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Gold hemispheres, both standing alone and as a base for a dangling pendent, were very popular during this period.[39] The paired hemisphere bracelet[40] design was so popular that multiple variations have been found. This one is unique because of its tiny seashells between the globes. Sometimes the domes were bunched together like grapes, as in earring #38.

I experimented with some shell earring wires and half-ball earring posts, both gold-plated. By clipping off the ear posts and wiring everything together, I attempted to duplicate the Pompeii bracelet. The result inspired me to learn actual metalsmithing and soldering, and make one with legitimate Roman techniques.

Earrings

Hoop Earrings

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Mine:

These are simple loops of gold wire, with the ends bent to clasp each other. Some are meant to come on and off, but frequently hoop earrings were permanently installed in the ear, such as the emerald and pearl example, #42. These adorned women who only owned one pair of earrings: Young girls, middle class women, or the slave of a master who chose to decorate them. Note that symmetry of stones was not all-important – one is significantly larger than the other in the rock crystal pair.

DOMED EARRINGS

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Last year, I found this 22kt finding at Fire Mountain Gems. It was extremely pricey but worth it to have one truly Roman pair of earrings. When I first made them, I added a pearl and two carnelian beads (left). I was thinking of the dangling earrings below, which often have three elements. After reviewing the hemispheric collection above, I decided to reduce the earrings down to just one dangling ornament (right).

Loop Earrings

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Note the difference in the top securing loops on the left agate pair.

To recreate the changing diameter wire used in these loop earrings would require a rolling mill, forging, or both. Attaching a smaller wire to the thicker one would require soldering. I have simulated this effect in the carnelian pair by wrapping two different diameter wires together.

Dangling Earrings

For the dangling style of earring, the separate wire mounted elements move independently. That is, the earring is a collection of distinct pieces, not multiple beads stacked on a single wire. This style would not look out of place in a modern jewelry store.

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Below: I chose to mimic the funky #55 for its upright front piece. My recreation substituted carnelians for the pearls, and a seed pearl for the emerald. I also did a riff on #53, with an aventurine tube.

CROTALIA

Crotalia (from the Greek word for rattle or castanets) are named for the jingling noise they produce when worn. Earrings of this type, with two or three pendants, were extremely popular with Roman ladies. Numerous examples have been found at Pompeii and Herculaneum.

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My recreation required a little creative thinking. My more authentic findings – the straight bar – had three loops, so I figured I would suspend a gold ball to mirror the attached gold ball in #53 However, the gold balls in my stash have enormous holes, so I had to rig a wire sling for them rather than the expected pinhead mounting. I am pleased with the result from the front view. I also chose to do the extra curves in the earwire. If you look closely at #57 you can see the back of the earwire rises up. This security measure can be seen in #37 and #38 as well. They look uncomfortable but I can attest they are not.

Also pictured: A pair of crotalia made with modern findings (the curlicues are not quite right) and lapis. They are a nod to cost-effective largesse.

Summary

My biggest surprise, once I sat down and looked at these with an analytic eye, was how sloppy they are to a 21st century eye. Some of this can be attributed to damage from two millennia, but sometimes it looks like the artisan just whacked stuff together, even when they were using cherished materials. Letting go of a post-industrial obsession with precision made for more natural looking pieces and frankly took a lot of the stress out of creating.

I did find that I was constantly checking back with my gallery of extant pieces. At one point I was about to make some dangling earrings using the seashell tops and a blue glass bead. Although the separate elements are Roman (and ear wire, a shell, a glass bead) somehow when they came together it was a different aesthetic. In a previous largesse project, I made a number of hoop earrings. I am no longer satisfied with many of them. Again – hoop, check. Shell, check. Carnelian, check. Three beads, check. But the three flat beads (although I have seen similar beads used before) on a perfect, machine-made wire just looks wrong.

59

As long as I stayed tied to the archeological record, though, I there was still plenty of opportunity for creativity. I was thrilled by how many Roman-looking components are out there, if you look for them. Some are still too pricey to make practical largesse offerings, but others are well within a modest budget.

I have assembled 5 boxes as largesse kits. Each one contains basic instructions, artificial sinew, findings for crotalia, ball-headed pins, carnelian, pearls, amethyst, aventurine, rock crystal, and 20, 22, and 24 gauge wires. Rather than a kit for a specific project, they are meant to be a tasting, with enough supplies for someone to create a number of pieces. I hope they inspire more SCAdians to make jewelry that's accurate to their period, whatever it may be.

In the future, I definitely want to learn soldering. Making chains is fascinating – I'd love to do some of that. If finances allow it, I'd love to make some gold sheet and do some repousse and chasing work. Maybe I could even make my own wire, with changing diameter, for loop earrings. Specific pieces I'd like to make include cluster earrings (like the ones from Pompeii, below), and the double-hemisphere bracelet with period techniques.

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Footnotes

1 One of a pair of Estruscan gold disks, late 4th century BCE. Each are 7/8" across. Christie's http://www.christies.com/lotfinder/ancient-art-antiquities/a-pair-of-etruscan-gold-disks-circa-5158071-details.aspx?from=salesummary&pos=3&intObjectID=5158071&sid=614e2ec4-a495-490b-8e5b-68d7e8835615&page=4

2 Pinckernelle, Kathia. *The Iconography of Ancient Greek and Roman Jewellery*, University of Glasgow, 2007.

3 Pliny, Natural History, Book 37, Chapter 6

4 Beckmann, Hist. Inv. Vol. II. p. 67, cited in a commentary on Pliny, Natural History, book 37, ch 16-19. http://www.perseus.tufts.edu/hopper/text?doc=Perseus:text:1999.02.0137

5 John Bostock's commentary on Natural History, book 37

6 Bedini, Alessandro, et al. The Vallerano Diamond From Ancient Rome: A Scientific Study. Gems & Gemology: Spring 2012, pg 39. Retrieved from https://www.researchgate.net/profile/Stella_Cesaro/publication/273710987_The_Vallerano_Diamond_from_Ancient_Rome_A_Scientific_Study/links/56e14f4608ae9b93f79d5d56.pdf?origin=publication_list

7 John Bostock's commentary on Natural History, book 37, ch 15.

8 Gold and faceted carnelian. Rome, 1st-2nd century CE. The Walters Art Museum, # 57.1550 https://thewalters.org/

9 Ogden, Jack. *Jewellery of the Ancient World*. New York: Trefoil Books, Ltd., 1982.
10 Higgins, Reynold. *Greek and Roman Jewellery.* Los Angeles: University of California Press, 1980.

11 Chasing Chatillon Sur Seine, Musée Du Châtillonnais (Archaeological Museum)

12 Tools from the House of the Surgeon, Pompeii. Photo from Wiki Commons.

13 http://metmuseum.org/art/collection/search/250568

14 Private conversation with Fjorlief InHaga, OL, 2/28/17.
15 http://www.fjellborg.org/LodinsToolbox.htm

16 National Museum of Georgia

17 Page 84, Croom, Alexandra. *Roman Clothing and Fashion*. Stroud, UK: Amberly

Publishing, 2000.

[18] Page 83-84, Sofroniew, Alexandria. *Household Gods*. Los Angeles: Getty Publications, 2015.

[19] Pinckernelle, 2007.

[20] Henig, Martin. *Religion in Roman Britain*. London: B.T. Batsford, 1984.

[21] Earring (?) with pendant in the shape of male genitalia. Gold, emerald, coral. 3.9 cm. Thorvaldensens Museum, Inventory number: H1863 http://www.thorvaldsensmuseum.dk/en/collections/

[22] Roman Gold Bulla. Circa 1st Century B.C.-A.D. 1st Century. 1 1/4 in. (32mm in length). Weight: 4.4 grams. Two convex disks are joined by wires; the top loop is aesthetically embellished by ribbing and a coiled wire. Goldberg Coins and Collectibles, via Christies. http://images.goldbergauctions.com/php/lot_auc.php?site=1&lang=1&sale=49&lot=1335

[23] http://kcl-antiquities.co.uk/an-extremely-rare-complete-and-wearable-roman-boys-bronze-bulla-amulet-with-its-original-protective-contents-still-intact-sold-940-p.asp

[24] Statue of Nero as a Child. Vatican Museums.

[25] Gold and agate lunula necklace, 1st century CE. The Walters Art Museum, 57.525

[26] British Museum, #1856,0701.810 Romano-British, 1st-2nd century.
Gold earring. Flat crescentic plate. Fine wire has been soldered around the edge and in curling motifs on the face ending in very small coils at the points of the crescent, perhaps to hold insets, though no trace now remains of glass or enamel. The central motif has a possibly fortuitous phallic form. The wire has been incised to give the impression of twisted wire. A wide strip of gold decorated with two ribs is split at one end and soldered to the back of the plate curling forward above the plate to provide a wide hook. The hook holds a ring of thin circular-sectioned wire, with overlapped terminals which coil around the shank twice on either side (Type 3). AUTHOR'S NOTE: Although this is an earring, the vast majority of lunulas are worn as necklaces.

[27] 1st-2nd century CE, Romano-Celtic lunula http://www.ancientresource.com/

[28] Made by local SCAdian Morgan Hall / Morgan de Comyn

[29] Artificial sinew sourced at the Oregon Leather Company, Portland.

[30] The seller is EmeraldGoldShop
https://www.etsy.com/shop/EmeraldGoldShop?ref=l2-shopheader-name

[31] Rock crystal and carnelian bead necklace 1-2nd century CE. Composed of eleven scaraboid shaped rock crystal beads, twelve biconical rock crystal beads. Interspersed with twenty-four biconvex carnelian beads. L. 18 1/4" (46.4 cm). See: See: Limper K. Uruk. Perlen. Ketten. Anhänger. Ph. Von Zabern, 1989, tbl. 59, 348; Christie's NY, Ancient Jewelry, 12/08/1999, lot #98.

[32] "Serena and her son Eucharius, late 4th century ivory diptych." From Sebesta, Judith L. *The World of Roman Costume*. Madison, WI: University of Wisconsin Press, 2001.

[33] Roman or Parthian carnelian necklace, I century B.C - I century A.D. Composed of globular carnelian beads and seventeen conical pendants with round bottoms and tops. Wide range of light orange to red-brown with different degree of transparency. Pendants and beads have conical opening, some are drilled from both ends. Some globular beads have a shallow slit across the opening at one or both ends to prevent drilling device from slipping. L.17.5" (44.4 cm). See: Limper K. Uruk. Perlen. Ketten. Anhänger. Ph. Von Zabern, 1989, tbl. 56, 57. http://www.ancienttouch.com/roman-necklaces.htm

[34] Gold, 1st century BCE- 1st CE, 18 in. (45.7 cm)
Metropolitan Museum of Art, # 22.139.65

[35] Gold and emerald necklace, 1-2nd century CE, Metropolitan Museum of Art, # 21.29.2

[36] http://www.bonhams.com/auctions/21928/lot/136/

[37] Pair of hemispherical gold ball earrings with S-shaped hooks: earrings of the standard gold ball-and-disc type. The ball elements, forming less than a hemisphere, are made of two sections with a very neat vertical join. At the back they are finished with a flange 4 mm wide. A vertical supporting wire is attached at the back of the ball, and the end of the recurved hook is coiled around the end of it; the hook then runs up the back of the domed disc, about 9 mm in diameter, which is attached to the top of the ball. The join is concealed by a row of four gold grains. 1st century, Italy. British Museum, 1872,0604.1109

[38] Israeli find, dated to 132-135 CE http://www.timesofisrael.com/cache-of-ro Steisslinger

man-coins-and-jewelry-discovered-near-kiryat-gat/

[39] Higgins, Raynold. *Jewellery from Classical Lands.* London: British Museum Publications, 1976.

[40] Gold bracelet found at Pompeii. National Archeological Museum of Naples. Picture credits: On glass: Rosa Klein.
https://www.flickr.com/photos/93051314@N00/5531180731/
Red background: Nancy Steisslinger.
https://www.flickr.com/photos/nsteiss/5055802452/in/photolist-BGwfV4-CBAQdd-CBAGoA-BGwjFa-CDUBnV-BGoLQb-CBAKVW-BGoL27-BGwfe4-Cumjtu-CBAQCG-BGoKPU-P4nPQh-Q7Ln2d-QhrjWy-QaxLb6-QaxJaH-QkLw1v-QhrgSN-QkLkvc-QaxTKz-P7bTCv-QaxCFM-ManxYg-oeLK9S-ManCNg-dBuVpv-ovqrJu-ovfaZ5-BGwmAx-odXjPW-C6ptuz-CBAYfW-CBB253-CDUQU4-8HbMQi-BGwoZF-C6pBg6-CcMorj-CcMn13-cSRMJY-4AbqiV-cSRHPh-oxYbT2-ovWAWr-oeJREk-oddUmG-kUNAgU-8GLiVN-6utPZ5/lightbox/ Both taken at a traveling exhibit. Used with permission.

[41] Gold and garnet, 3.01 grams, 34.94 mm/2.90 grams, 33.71 mm. 1st century BC-4th century AD. A pair of loop-and-pendant earrings formed from expanding gold wire formed into a hoop with twisted hook and loop ends. Each pendant is formed from wire with a securing collar and two pierced garnets. Reference: Higgins, R.A. Greek and Roman Jewellery, London, 1961 plate 54 A, C. Very fine condition, complete. Provenance: from an old English collection.
http://www.time-lines.co.uk/roman-garnet-pendant-earrings-022705-32977-0.html
[42] Gold earring with rock crystal bead, 3.8cm. 1st-2nd century Metropolitan Museum of Art, Accession Number: 74.51.3619

[43] Earring with pearl and emerald pendant: the earring consists of a simple gold penannular ring with overlapping ends, each finishing in a small knob; from this is suspended a gold element incorporating a very small, round/oval box-setting, tapering to a wire on which is threaded a pearl. The box-setting contains an emerald, and between this and the pearl is a single reel-shaped gold bead, now somewhat crushed. 3.25cm. British Museum, # 1872,0604.583

[44] Gold, emerald, pearl. 2,0 cm diameter, Thorvaldsen's Museum. Inventory number: H1817

[45] Ten pairs of roman gold earrings , 1st-3rd century CE, including three pairs with plain disks; four pairs with disks framed by beaded wire and centered by a single granule; another similar pair with spherical pendants hanging by stout beaded wire, embellished with granules; a plain pair of beaded wire; and a pair with shields

above gold glass beads. Pair with the pendants: 1 1/8 in. (2.9 cm.) Christie's.
http://www.christies.com/lotfinder/ancient-art-antiquities/ten-pairs-of-roman-
gold-earrings-circa-5274367-
details.aspx?from=salesummary&pos=3&intObjectID=5274367&sid=d8d19f3f-
1f37-4b2b-b8a2-758d035d5236&page=9

[46] 1st-3rd centuries C.E. Gold, stone

[47] Gold, garnet, pearls. From a tomb in Bari, Italy. Sadly, this pair has now been
damaged by the addition of modern post-type backs by the owner so they are
"wearable."
http://www.jewelsofancientlands.com/antiquities/antiquities0005.html
[48] 200 BCE-100 CE. Two earrings,with a disk and a pendant ending with a gold bead.
2.4 cm. Sold by lepanese on eBay, item #371641642266

[49] Gold and agate, 4cm. Late 1st century B.C.–2nd century CE
Metropolitan Museum of Art, 74.51.3936

[50] Loop earring with beads: a single tapered S-shaped wire with a small knob at the
tip is finished in front with a neat coiled-wire join. On the front of the wire a central
cylindrical dark blue glass (?) bead is set between two small emeralds. Separating
the stones are two small reel-shaped gold beads. The wire thickens immediately
below the beads to hold them in place. 2.9cm tall. British Museum, item number
1917,0601.2680

[51] Gold and garnet, 1st-3rd c. London V&A 8734&A-1863

[52] Gold, emerald, pearl. 4.8 cm Thorvaldsens Museum. Inventory number: H1836

[53] Gold, emerald. 3.2 cm. Thorvaldsens Museum. Inventory number: H1829

[54] Gold, sapphire, pearl. 3.4 cm. Thorvaldsens Museum. Inventory number: H1824

[55] Gold, emerald, pearls. 4.3 cm. Thorvaldsens Museum. Inventory number: H1823
[56] Photo by Sharon Rose, taken at the travelling British Museum Pompeii exhibit
while in Seattle, 2/15/15.
[57] Metropolian Museum of Art, item # 20.235. 3.3cm.

[58] Cameo and gold earring (c. 1 to c. 199 Italy)
 http://www.onlinegalleries.com/art-and-antiques/detail/rare-roman-cameo-gold-
earring-/76613
[59] Gold, emerald, pearl. 2,0 cm diameter, Thorvaldsen's Museum. Inventory number:
H1817