

16th c. German Goldhaube Cap

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Division II: Costume: Accessories or Costume: Single Component

Documentation Summary

A reproduction of the gold-red, pearled caps worn by wealthy German women in the 16th century¹. As an accessory, this hat — known modernly as a goldhaube — would be worn with the richly adorned gowns of the high born. Based on my survey of the surviving paintings from this time period, most notably those by Lucas Cranach, the hats were either made of cloth of gold² or were netted³. I've chosen to reproduce the cloth version of the cap. I drafted the pattern for the cap, which required considerable research and many changes to get the right look. I assumed that the German women wearing these caps had very large, coiled braids underneath —most likely *zopfe* (fake braids) — based on paintings and research into 16th century inventories. I created my own *zopfe* to achieve the right look. I then constructed my cap from gold-shot-red silk taffeta, with linen as an underlayment and lining. More than 1000 natural freshwater pearls resembling the type used were both couched and sewn, and gilt thread was couched as well. Silk finger loop braids are used as ties. Everything was stitched by hand. My goldhaube is intended to be a moderately decorated.



Portrait of an Aristocratic Saxon Lady - 1534
Lucas Cranach the Elder ¹



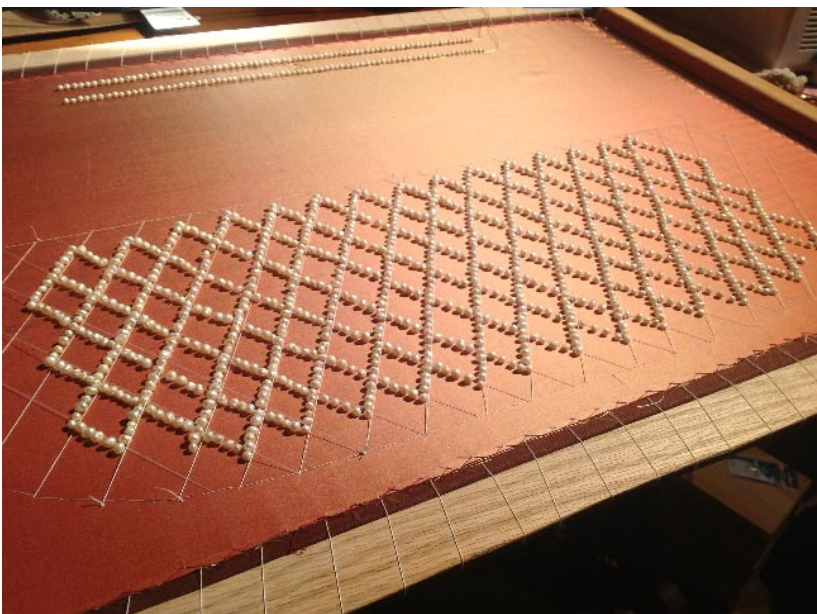
My reproduction goldhaube

Cap Materials

I used all natural and period-appropriate materials in the creation of this cap. I was unable to find real “cloth of gold” (fabric woven with real gold-wrapped or spun weft) so I substituted a gold-shot-red silk taffeta and oriented the fabric with the gold threads going the same way as those in paintings.. The interlining is brown linen and the lining is red linen. I used silk and linen threads. Pearls are natural, freshwater that would be similar to those obtained from the Saxon rivers in the 16th century. Gold thread is a gilt passing thread with real gold content. Ties are silk finger loop braids created by myself.

Period Tools

Several standard period tools were used in the creation of this cap (i.e. needle, awl), but one tool in particular stands out -- the slate frame used to secure, stretch, and tighten the fabric during the pearl and gilt thread application process. In 16th century Germany, *Der Seidensticker* (embroiderers) used “slate frames” to keep their fabric taut and tensioned while stitching⁴. A slate frame is really just a frame (a square or rectangle) made of slats. And rather than clamp or pinch your fabric between bars as with other embroidery frames or hoops, a slate frame is intended for you to sew your fabric right to the frame, providing the absolute best tension control. Not only did I use a slate frame for this project, I had to create custom sized stretcher bars from oak because the project was so large. I’ve written a tutorial on how to dress a slate frame at <http://germanrenaissance.net/dressing-a-slate-frame-to-embroider-on-silk/>



My fabric on the slate frame, mid-project.



Acupictor. Der Seidensticker - 1568

Pearls

Pearl-producing mussels (*pearlenmuschel*) flourished in the Saxon streams and rivers of Germany in the 16th century⁵. *Unio margaritfera* is the principal pearl-bearing mussel in this part of the world. The pearls produced were divided into three classes (first, second and third) and it is the third class that by far most pearls fell into. These pearls were known as *sandperlen*, and though of poorer quality, they had sufficient whiteness and luster to be used as ornaments. Unfortunately, Saxon pearls are nearly unknown today due to the widespread destruction of the habitat by pollution. I attempted to choose a pearl similar in nature, quality, and size to those seen in paintings of goldhaubes. To that end, I am using 3 mm natural freshwater pearls, both new and vintage. These pearls are the same size as those I see in some paintings⁶, and tiny bit larger than those in other paintings.



Detail of The Pfirtsch Altar: Mary Magdalene [recto right wing], 1526



The pearls in this detail from Portrait of an Aristocratic Saxon Lady definitely appear sewn on to me.

In deciding how to apply the pearls, I studied both the paintings and the 16th century practice of applying pearls. In the paintings, the pearls do not appear to be connected—no string can be seen between them, even in high resolution photos of the paintings. Period practice of applying pearls was to both couch strung pearls and to individually sew pearls. I was really torn on how to apply the pearls. In the end I chose to do both so I could see how the pearls behaved on the cap over time, but primarily I chose to sew down each individual pearl so they would better match the paintings. For those pearls that were sewn, not couched, I've secured them with additional knots at every fifth pearl in the event of breakage.



Pearl threads are secured every five pearls with extra knots.

The Zopfe (Fake Braids)

German women in the 16th century augmented their own locks with false braids (zopfe). The use of false braids during this time period is documented. There is at least one extant fake braid in existence, created from padded linen cloth-tubes⁷.

False zopke are also depicted in a painting quite clearly. In two of the scenes of St. Clare of Assisi, 1465-70, first we see a woman with large braids. Then we see the same woman with her hair being cut off — her fake braids are seen nearby.

Zopfe are also mentioned in “Textiler Hausrat : Kleidung und Haustextilien in Nürnberg von 1500-1650” by Jutta Zander-Seidel⁸. This is a book, written in German, that gives descriptions of clothing and household articles common to Nurnberg in the years from 1500-1650. According to that book, the German ladies did indeed wear false braids. Not only that, but it seems women from all classes wore them, the author having found them noted in the wills of working women and married women, as well as in the inventory of Heironymus Imhoff in 1571.

Based on the evidence and the notes in Textiler Hausrat, zopke were made from silk (seiden), waste silk (Flidtseide), linen, and (later in the 17th century) cotton. Predominate colors were red,

green, and yellow, but also found are liver color, flesh color, gold color, brown, black, blue, nail color, ash color and sea green color. We get a hint as to the creation of the artificial braids by an entry made in 1571 into the household account book of the Behaim family where they purchased blanket weaver's wool to fill two pairs of braids. Four years later this was recorded, “the 15th of December I paid for an ell and a quarter of black sendal for a pair of braids, and sewing silk 2 pfund, 6 pfennig.... same year the 18th of December 1575 I paid for an ell and 1/8 of brown ormesin for Maria a pair of braids and for sewing silk and for wool 18 pfennig.” The braids were mostly stuffed with waste wool. There was even a “Zopfmacher” (braid maker), whom you can see pictured below with a bundle of braids in his right hand.



Extant false braid (15th/16th century, Allgäuer Landesmuseum, Kempten, Germany)



Scene from St. Clare of Assisi, 1465-70



Der Zopfmacher (Braid Maker) – Hausbuch der Landauerschen Zwölfbrüderstiftung, Band 1. Nürnberg 1511-1706



I created my zopfe from linen, wool roving, and linen thread. A full tutorial on how to create and wear zopfe is at <http://germanrenaissance.net/zopfe-german-braids-false-braidsartificial-braids-history-how-to-make-and-how-to-wear/>. The zopfe are an important part of this cap and can be braided up with my own hair to fill out the cap properly.



Goldwork

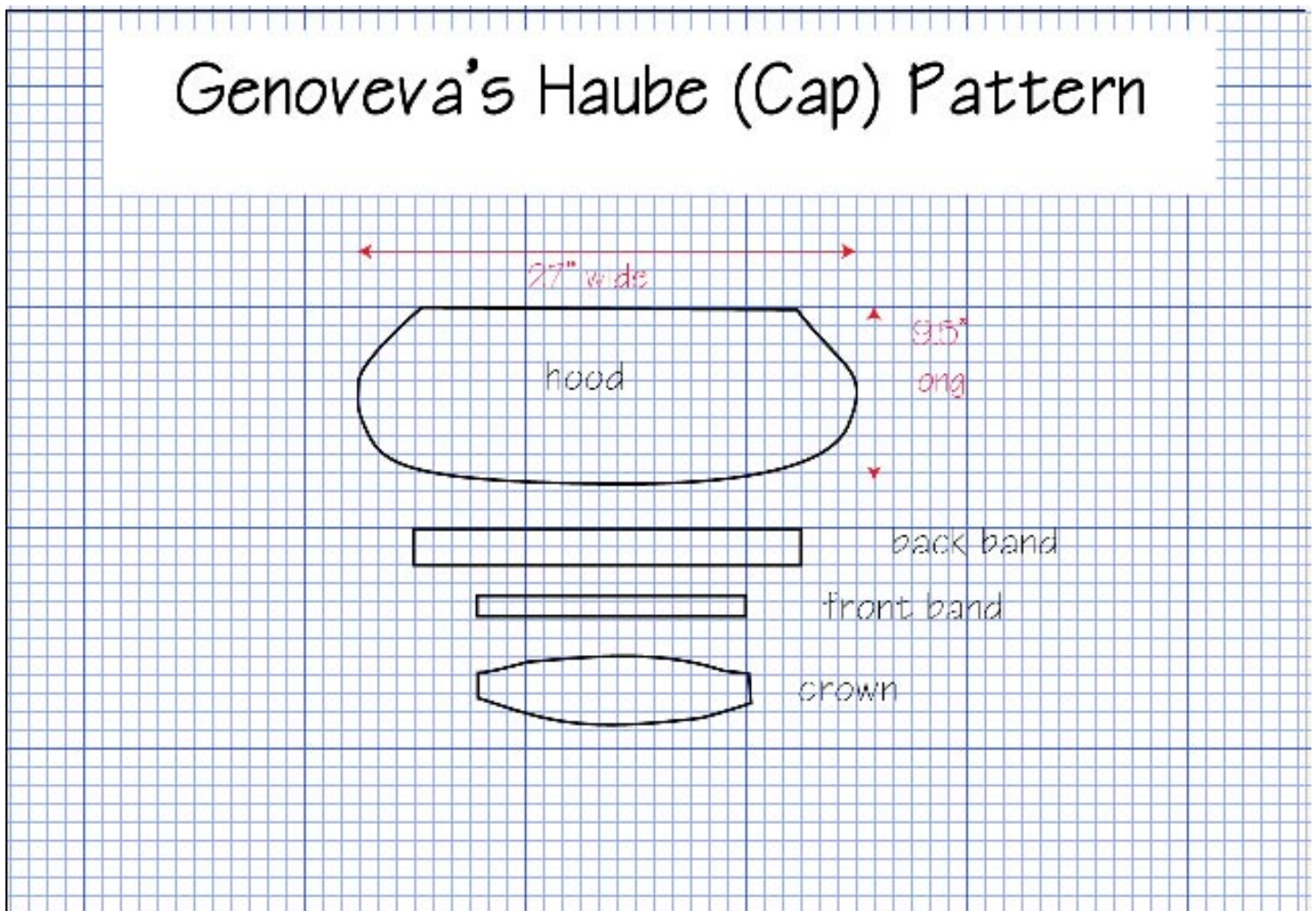
Goldhaubes invariably have gold threads in all the paintings I've seen. As I am attempting a moderately decorated version with pearls, that tends to limit the amount of gold thread I use. I chose to use four lengths of gilt thread (one each along the pearls on the two headbands) and to create three small hearts to decorate the fore band. I could have chosen more decoration, but I was leaning toward a more pearl-heavy decoration as seen in several paintings. I chose the hearts because they are part of my heraldry and because the looping design was reminiscent of goldhaube paintings.

My goldwork was started by anchoring gilt passing thread in the back of the fabric, pulling it through to the front, laid down, couched down, pushed back through the fabric, and anchored to the back at the end. Gilt passing thread is couched down because it is fragile and would be damaged if it is passed through the fabric many times. To couch the passing thread down, thread a needle with matching silk gold thread and bring this thread up to the right side next to the other gilt passing thread. Take the needle back to the wrong side by making a tiny stitch over the first thread and then bring the needle back up a little further along the edge of the surface thread. Continue along the length of the first thread, making tiny stitches across it, until the entire length has been secured. The stitches that hold the surface thread in position should not pierce it, but simply sit around it holding it in place and can be worked as close or as far apart as needed. For example, a row of couching done on a tight curve will require stitches closer together than a row done on a straight line. In my goldwork, I chose to couch down one strand (rather than two) of the gilt passing thread for this project due to its size.

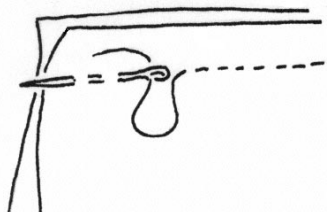
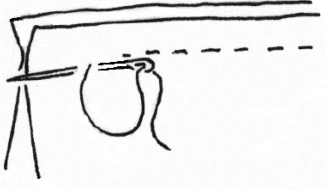
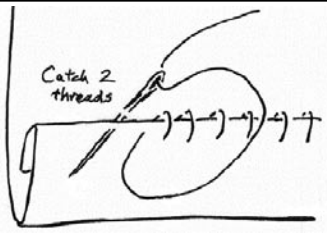
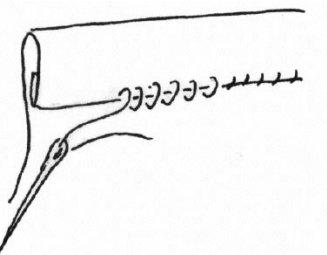
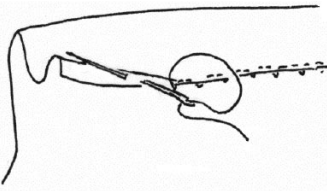


The Pattern

Determining the correct pattern was by far the most challenging aspect of this project. No extant goldhaube in this style exists, nor are there any published patterns. The lack of gathers in portaits mean this was not a simple caul. And yet the caps are quite full, containing bulging braids at the sides of the head. I studied every portait I could find. I also expanded my research to the construction of other caps in and near to this time period. In the end, it required drafting many patterns to finally find one that seemed to match those depicted in paintings. I should also note that there a variety of different styles seen in paintings as well. Not only are there ones that appear to be netted, but among those that appear to be cloth, some have on headband, some have a headband and an additional crown piece, and some have two headbands in addition to the crown piece. Ultimately, I found that the two headband and crown piece version fit my head the best and appeared to best mimic the look and feel of this unusual cap.



Note that the sizing is for my head and hair with zopfe. (Please also note that if you're looking at the hat on the head model, that head is little narrower than mine and it's lacking hair, so it will look a bit different than on mine. I regret I was unable to include a photo of me wearing the cap.)

Stitch Used	Diagram
Straight (running) stitch	
Back stitch	
Hem stitch	
Whipstitch	
Slipstitch	
No machine sewing used in this project.	

*Note: Credit to Master Henry Kersey for teaching hand sewing techniques and tips.
Stitch Images Credit: <http://www.ia470.com/wardrobe/stitches.html>*

Construction Notes

Determining the proper way to construct this cap was difficult and I had to rely mostly on paintings. I wasn't sure if, or how, the bands were applied to the crown and hood—it's possible they were separate—so I've chosen to tack them on with simple back stitch so they both appear loose and in case I decide they should be separate in the future. I also chose to have the front band disappear under the edge of the back band, as seen in paintings, but I attached a ribbon to it in case I decide to remove it and wear it separately.

The back closure was particularly troublesome. I couldn't find a single painting or woodcut that showed the back of this cap. So I relied on the construction of extant coifs of the 16th century to provide a clue as to how the back was closed. For example, the linen coif⁹ pictured below from the Museum of Fine Arts in Boston has a gathered closure. I created a casement along the edge, inserted a braid, and gathered it closed. I have temporarily kept the lower edges of the cap unstitched because the cap needs to fit over the prodigious braids. I believe this still retains the same look as in the paintings, however.

I was concerned about the cap's ability to stay on my head (it's quite heavy), but the crown piece seems to do a very good job of centering it on my head and using the weight to keep it there. It also helps a great deal that I lined the cap with linen, and not something slippery like the taffeta.



Linen coif, Museum of Fine Arts, Boston

Also note that I created the cap so that the seam on the lining of the large hood portion could be easily snipped and opened for any repairs, as I do not yet know how the pearls will behave.

As to what I'd change, next time I might make the hood smaller so I don't always have to have huge braids. I might also try a different arrangement of pearls, or netting. I would definitely like to try a different fabric -- the taffeta's weave seems too tight and it's very shiny compared to the portraits.

Persona

This goldhaube was constructed for a noblewoman in early 16th century Germany. This would be a wealthy woman who could and would display her status and wealth on her person through the extensive use of gold. This matches the persona of my Genoveva von Lübeck personality in the SCA.

I do not yet have a gown to wear with this cap, but it is in the works. I plan to make a gown similar to the gown pictured below.



St Ursula - 1524 - Workshop of Lucas Cranach the Elder

I do already have a tellerbarret that I can wear with this goldhaube (similar to the one pictured below).



Aschaffenburg, Schloss Johannisburg, Weibliche Halbfigur mit Federhut von Lucas Cranach (Johannisburg Palace)



My Tellerbarrett

References

1. Cranach (the Elder), Lucas. Portrait of an Aristocratic Saxon Lady. 1534. Musée des Beaux-Arts de Lyon. View online at high resolution: http://www.lucascranach.org/object.php?&obj=F_MBAL_B494_FR348&uid=6265&page=7&fol=01_Overall&img=F_MBAL_B494_FR348_2010-10_Overall.tif



Salome - 1530 - Lucas Cranach

2. Cranach (the Elder), Lucas. Salome. 1530. Museum of Fine Arts (Budapest). View online at http://commons.wikimedia.org/wiki/File:Lucas_Cranach_d._%C3%84.-_Salome_-_WGA05722.jpg (example of a cloth cap—note the obvious fold).

3. Cranach (the Elder), Lucas. Portrait of a Woman. 1520. The National Gallery (London). View online at http://www.lucascranach.org/object.php?&obj=UK_NGL_291_FR172&uid=6045&page=8&fol=01_Overall&img=UK_NGL_291_FR172_2005-01_Overall.tif (example of what appears to be a netted cap).



Portrait of a Woman - 1520 - Lucas Cranach

4. Hartmann Schopper & Jost Amman. Ständebuch & Handwerk & Seidensticker. 1568. Deutsch Fototek. View online at http://commons.wikimedia.org/wiki/File:Fotothek_df_tg_0002106_St%C3%A4ndebuch_%5E_Handwerk_%5E_Seidensticker.jpg

5. Kunz, George Frederick. The Book of the Pearl: The History, Art, Science, and Industry of the Queen of Gems. (New York, 1908)

6. Anonymous Master from the Cranach Workshop. The Pfirtsch Altar: Mary Magdalene [recto right wing] 1526. Staatsgalerie im Schloss Johannisburg, Aschaffenburg.

7. Extant false braid (15th/16th century, Allgäuer Landesmuseum, Kempten, Germany)

8. Zander-Seidel, Jutta. Textiler Hausrat : Kleidung und Haustextilien in Nürnberg von 1500-1650. 1990. München : Deutscher Kunstverlag.

9. Arnold, Janet. Patterns of Fashion 4: The cut and construction of linen shirts, smocks, neckwear, headwear, and accessories for men and women (London: Macmillan, 2008), page 47.

10. Hacke, A.M.; Carr, C.M. Investigation into the nature of metal threads in a Renaissance tapestry and the cleaning of tarnished silver by UV/Ozone (UVO) treatment. Journal of Material Sciences 38 (2003), 3308–3314

11. Saunders, Sally. Royal School of Needlework Embroidery Techniques. (Potomac Books, 2000).