



RECONSTRUCTING A 1510 SPANISH SAYA

ABSTRACT

A Spanish saya (gown) for a middle class woman circa 1510, after the fashion of Natividad de la Virgen, main retablo shutter, inner side, Cathedral of Valencia, by Fernando de Llanos. Patterning based on Juan de Alcega, informed by the work of Mathew Gnagy. Construction and stitch choices based on the satin gown worn by Eleonora of Toledo as profiled in Janet Arnold's Patterns of Fashion 3. Fabric choices based on the Inventories of Isabel of Portugal.

Baroness Elena de la Palma

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Project Brief

A Spanish saya (gown) for a middle class woman circa 1510, after the fashion of Natividad de la Virgen, main retablo shutter, inner side, Cathedral of Valencia, by Fernando de Llanos. Patterning based on Juan de Alcega's Jubon de seda para mujer, Basquiña sola de seda para mujer, and saya de pano para muger, informed by the work of Mathew Gnagy, most particularly his conjecture 1580-1640 Vasquina y cuerpo (sin punto)/Skirt and Bodies (without point). Construction and stitch choices based on the satin gown worn by Eleonora of Toledo as profiled in Janet Arnold's *Patterns of Fashion 3*. Fabric choices based on the Inventories of Isabel of Portugal.

Part 1: A Survey of Available Resources

Late period costuming is an exercise in having less resources than seems reasonable. We have precious few extant garments (and none of them are Spanish). We have a relative proliferation of tailor's manuals, but these come from the end of period and have their own complications as a source of patterning. We have inventories, meticulously detailed in some aspects and frustratingly lacking in others. And of course, we have plenty of images - but these are often artistic interpretations that omit key details.

Let's start by exploring this landscape, because understanding all the possible sources available to me is key to understanding everything about my dress. What I chose to ignore and what I chose to include shaped the ultimate materials I used, the pattern I created, and the stitches and construction that hold it all together.

Extant Garments

Funeral gown of Eleonora di Toledo – Italian, 1562 (the date of her burial)

The funeral gown of Eleonora di Toledo is badly decomposed, yet well chronicled due to the access granted to Janet Arnold for its study. Exact dimensions are available through her work, as are the complete details of stitching and construction. Key features of this garment:

- A silk satin exterior, lined in linen and interlined with coarser linen
- Seam allowances were folded in over the interlining to hide the raw edges completely
- The skirt was stitched to the bodice
- The shoulder straps were cut integrally to the bodice front/back
- The shoulder straps were joined at the $\frac{3}{4}$ back (join roughly sitting on the shoulderblade)
- The bodice was laced at the $\frac{3}{4}$ back
- The attached skirt was slit at the lacing join
- The skirt hem is faced with matching satin
- There is a small (1" - 1 1/8") tuck in the skirt just above the guard
- There is no evidence of stitching or cutting for lacing holes at the armscye
- The lacing rings are offset, indicating spiral lacing was likely used
- Bodice laces are silk 3mm (1/8") wide
- Eyelet holes on the bodice were worked over metal rings
- The embellished guards are couched gold thread over velvet ground
 - The pattern is cut in places to fit it to the dress, indicating it was originally designed for a different gown
 - The velvet is entirely cut through in places, revealing the silk satin of the dress underneath
 - The velvet has not frayed, indicating the use of some kind of glue or sizing to seal the edges
 - The bodice guards are 2" wide with gold braid 1/4" wide on both sides
 - The guards at the hem are 4 1/8" – 4 1/4" wide inclusive of the braids

A second bodice was found underneath the dress:

- Made of velvet
- Likely lined with linen as well
 - The stitching is loose, indicating it once held additional layers of fabric
- Closed with hooks and eyes at the front instead of lacing
 - Hooks on the right, eyes on the left
- Has stitching holes at its waist for a possible skirt

- Stitches all around indicate either a lining or a binding
- A small fragment of unknown material from lining or binding remains on the inside right front of the waist
- Bodice has seams at the $\frac{3}{4}$ back

Red Dress of Pisa – Italian, 1560s

The Red Dress of Pisa is similar to the Funeral Gown of Eleonora di Toledo (so much so that there is conjecture they were made by the same master tailor)¹, but in much better shape. However, details are not as readily available – Janet Arnold was not given access. Much of this information relies on my observations based on detailed photos taken while this garment was on loan in Spain and also from observations by Anea Arnesen.² Key features of this garment:

- A silk velvet exterior
- Bodice lined in linen
- The skirt was stitched to the bodice
- The shoulder straps were cut integrally to the bodice front/back
- The shoulder straps were joined at the $\frac{3}{4}$ back (join roughly sitting on the shoulderblade)
- The bodice was laced at the $\frac{3}{4}$ back
- The attached skirt was slit at the lacing join
- The skirt hem is decorated with bands of cut velvet with couched goldwork
- The front is decorated with guards, usually in pairs, with couched goldwork
- The sleeves tie to the bodice
- The skirt hem has the same tuck and facing found on the Eleonora di Toledo funeral gown
- The skirt is largely composed of rectangles joined and pleated into the waist

Funeral Dress of Giulia Varano – Italian, 1540s

Very little of the gown survives, which is unfortunate as it is 20 years closer to our time period of study. The restored gown is held by Castello Brancaleoni di Piobbico (Pesaro e Urbino). The information here relies on a translation of *I Della Rovere*, the catalog of a showcase held in 2004 which included detailed information about this gown.³ The translation referenced here is the original work of Anea Arnesen, whose website has since been taken down but whose work survives accessible via the Wayback Machine.⁴ Key features of this garment:

- Bodice was stiffened with linen further hardened with glue
- Bodice was lined in silk taffeta, with an external of silk satin and twill
- Skirt was roughly 5 meters of fabric, pleated
- The sleeves were tied to the shoulders
- The skirt was laced to the bodice

¹ <https://web.archive.org/web/20170525074119/http://aneafiles.webs.com/renaissancegallery/extant.html>

² <https://web.archive.org/web/20170525074119/http://aneafiles.webs.com/renaissancegallery/extant.html>

³ *I Della Rovere*. Piero della Francesca, Raffaello, Tiziano, [catalogo della mostra] a cura di Paolo Dal Poggetto, Milano, Electa

⁴ <https://web.archive.org/web/20170602110641/http://aneafiles.webs.com/articles.html>

Maid's Dress – Hungarian, 16th century

This gown is relatively intact, but has not been studied with as much depth as other extants. Key features of this garment⁵:

- Made of silk
- Trimmed with velvet
- Edged with gold

The following is based on my visual inspection⁶

- High collar
- Appears to close at the front with hook and eye (no visible lacing)
- Seams appear to be at the side, but angled slightly back – possibly a legacy of side back lacing, but unclear.
- Skirt is gathered at the waist
- Sleeves are short (t-shirt style). Additional longer sleeved may have tied in.
- Skirt must have closed at the front – there is no evidence of seams elsewhere

Mixed gown (also referred to as a house dress) – Italian, c.1550s

Very little is known about this gown, held alongside the Red Dress of Pisa in the costume collection of the Palazzo Reale in Pisa. Most of the information comes from Anea Arnesen's firsthand description of it after seeing it on display.⁷ Key features of this garment:

- Mixed wool and linen woven in a diamond pattern
- Back of the dress is entirely missing
- Unclear where the garment would have closed – potential arguments for front or ¾ back
- There is a seam down the front – but that may have been a modification after it began life as a garment on a statue of a saint
- Skirt made of four straight panels sewn together and pleated
- Skirt is sewn to bodice
- Discoloration along the hemline indicates possible trim there

Red satin sleeves – c1580-1600

These sleeves fall substantially past our period of consideration, but are one of the better preserved specimens we have. It is reasonable to suspect that stitches used on sleeves in 1580 likely existed in 1510, and could have been used on our exemplar *saya*. Key features of these sleeves:

- Decorative backstitching
- Linen lining
- Padding of cotton wool with an interlining of blue linen
 - The lining, padding, and interlining are quilted together and then sewn in at the seams
- The sleevehead is bound with a strip of straight-grain satin matching the rest of the exterior fabric
- Hooks are attached at the sleevehead to allow the sleeve to hook onto a bodice (no matching bodice survives)
- Two rows of satin are sewn at the cuff (the exterior fabric is turned under and secured with visible backstitching at the cuff)

⁵ <https://www.flickr.com/photos/fiberferret/19968828662/in/album-72157656258313642/>

⁶ <https://www.flickr.com/photos/fiberferret/19950376826/in/album-72157656258313642/>

⁷ <https://web.archive.org/web/20170525074119/http://aneafiles.webs.com/renaissancegallery/extant.html>

Note – undergarments and foundation garments have no bearing on the construction of this exterior dress, and so are not chronicled here.

Tailoring Manuals

The second source of information available to the late period costumer is tailoring manuals. That name in itself is a misnomer – tailoring manuals are better translated as “books of tracing and cutting out”, which better reflects their actual goal: showing knowledgeable tailors how to best lay out patterns given a certain amount of cloth. Indeed, you’ll often see two or more different layouts for the same garment reflecting different amounts of cloth.

Juan de Alcega

A master tailor working out of Madrid, Juan de Alcega’s *Libro de Practica y Traca* has several different iterations. The first was published in 1580.

Diego de Freyle

The *Geometria y traça para el oficio de los sastres* published by Diego de Freyle in 1583 is later in time than Alcega’s⁸.

Inventories

The only inventories I am currently aware of for Spain during this time period are those of Isabel of Portugal, Queen and Empress of the Holy Roman Empire, and her family. As the gown I am replicating here is worn by a servant, the difference in class makes the Isabel inventories of limited use.

⁸ <https://www.folger.edu/blogs/collation/a-master-tailors-manual/>

Part 2: What I Did

Periodness of Materials and Methods at a Glance

See below for detailed discussion.

Component	What They Used	What I Used	Comments
Fashion Fabric	Wool or silk	Wool	
Lining Fabric	Linen	Linen	
Interlining Fabric	Linen	Linen	
Thread	Unknown	Silk	

Component	Exemplar/Source	Adjustments Made
Bodice Shape	Alcega	Adjusted front and back neckline to match the reference portrait. Armscye and shoulder straps per Alcega.
Bodice Construction	Alcega & Eleonora di Toledo extant gown	Side back lacing and single piece front construction per Eleonora di Toledo extant. Back seam per reference portrait. Installation of lining and integration of layers per Eleonora di Toledo extant. Added decorative stitching to back seam per reference portrait.
Skirt Shape	Alcega	None.
Skirt Construction	Alcega	Left slits at $\frac{3}{4}$ back to match bodice lacing.
Skirt Hem	Eleonora di Toledo extant gown	None.
Sleeve Shape	Alcega	Removed fullness at tricep per reference portrait.
Sleeve Construction	Red Satin extant sleeve	Left open from elbow to wrist per reference portrait.

Materials Choices

Exterior fabric: wool twill

Wool was an extremely common fabric choice among the middle classes. A wool twill like this would have been additionally prized for its fineness, making it a solid choice for this middle class garment.

Bodice interlining: one layer of medium weight linen

This interlining is taken directly from the Eleonora di Toledo burial gown, which was also interlined in linen.

Bodice lining: one layer of medium weight linen

Another take directly from the Eleonora di Toledo burial gown.

Thread: silk sewing thread (including for buttonholes)

I was unfortunately unable to source matching wool, but silk is a plausible thread material for the time period. Both the construction threads and the decorative thread are silk.

Bodice Construction

Shape

Primary shaping was informed by the visual reference. This showed key characteristics:

- **Square neckline at the front.** This is a characteristic found in the portrait, Alcega patterns, and the Eleonora di Toledo Italian extant garments.
- **V neckline in the back.** We can clearly see the back of this gown – a relatively unique thing in a world where most artwork focuses on the front. The v neckline at the back is not deep, but is pronounced.

These shape details were layered onto a base pattern created from two pieces in Juan de Alcega's *Libro de practica y traca: Jubon de seda para mujer* (P. 14 of Alcega's *Libro*) and *Saya de pano para muger* (P. 64 of Alcega's *Libro*). The *Jubon* is a bodice only, whereas the *saya* is a complete dress.

- **Armhole and shoulder straps cut as per the Alcega *jubon de seda* pattern.**
- **Side back lacing.** The portrait itself does not clearly show lacing. By looking at the other women in the portrait, we can see that front lacing is not used. By looking at our subject dress, we can see that back lacing is not present, nor is side lacing. Therefore we can conclude that the artist did not correctly or clearly represent lacing in this particular instance. Given that lack, we default to our other sources. Every single Alcega dress pattern uses side-back lacing, as do all of our contemporary extants.
- **Single piece front construction.** In the original pattern, a front seam is present. Given the lack of seam detailing in the reference image, I have elected to remove the front seam.
- **Added back seam.** I have added a back seam, as we can clearly see that back detail in the image.

The combination of side back seams and back seam allow for more than enough tailoring to achieve period fit.

Understanding what shape is desired, I was ready to begin drafting the bodice pattern. Like all pieces of this dress, the bodice was drafted entirely using the *bara* method. I used Mathew Gnagy's Conjecture 1580-1640 Vasquiña y Cuerpo (sin punto)/Skirt and Bodies (without point) as a base for the proportions.⁹ However, being that this pattern is a conjecture and based largely on manuals even later than those of Alcega, I made significant alterations to better match some key features.

Gnagy Pattern	My adjustments	Comments
Separate shoulder strap	Shoulder strap cut with bodice front	Alcega patterns clearly show the strap integral with the bodice front. Being that Alcega is closer to my reference period, I elected to use this style.
Convex curve at back neckline	Concave V neckline	The concave v neckline is not present in Alcega, but is clear from the reference image.

⁹ Gnagy, Mathew. *The Modern Maker Vol. 2: Pattern Manual 1580-1640*. Createspace.org, Charleston, SC 2018. P.178

Construction

- **Decorative stitching.** The portrait clearly shows some kind of center back seam and has rows of additional decorative seaming tracing the neckline. This decorative stitching has a structural impact as well: it acts similarly to modern topstitching, holding the lining in place.

The remaining construction is taken from the Eleonora di Toledo extant garment.

1. Stitch fashion fabric to interlining, folding over to enclose raw interlining edges.
2. Stitch lining down to cover raw edges of fashion fabric.
 - a. Note – this will be done differently in the future. The lining should be stitched to itself at the shoulders and then installed after the fashion fabric and interlining shoulders are joined. This allows for complete hiding of the shoulder seam. I didn't properly follow my own plan and accidentally skipped this step.
3. Use awl to create lacing holes, and finish edges with buttonhole stitch.

Skirt Construction

Shape

The visual information for this skirt is largely inconclusive. We can see that it is lightly gathered at the waist, but not cartridge pleated or rolled. We cannot see any seams or other construction elements. There is a decorative band around the skirt hem.

Lacking significant visual evidence for the actual shape, I relied on Alcega's manual once more. The pattern used is directly pulled from *Basquiña sola de seda para mujer* (Alcega p. 58), which translates to only skirt of silk for a woman. It is extremely fabric efficient and yields a skirt with a slight conical shape. I traced the pattern directly onto the fabric with chalk rather than using a template. All curves were simply freehanded. Note – A+B must equal bm in order for this pattern to work.

Construction

After cutting the skirt according to the pattern above, I attached the shorter triangular pieces to the longer. Note that this pattern puts selvage on selvage rather than connecting bias to selvage. This is a necessary artifact of the pattern itself: since the triangular pieces are extending the width of the skirt, the angle must continue. The amount of stretch from the bias to bias connection between front and back has never been significant enough to cause issue, although I always let my skirts hang before hemming.

Hem

The hem style is directly from the Eleonora di Toledo gown profiled in Janet Arnold. I cut the hem to length with roughly 1.25" remaining. I have opted for a slightly shorter ankle length dress, as I would like to wear this garment outside without getting it incredibly muddy. I cut a wool felt interlining 3.5" in width and a bias strip of my blue wool 4" in width. I folded the excess hem under and basted a few inches above my measured hem length. Then, I followed with a running stitch approximately 1/8" from the fold. It does not matter that these stitches show – they will be completely hidden by the hem trim. Next, I basted the felt in place on the facing. Then I turned the top of the facing under by 1/4" and the bottom under by 5/8" and pressed. Then, I eased the bottom of the facing (the one with the 5/8" turn) around the hem of the dress and basted it in place. I did the same with the top (the one with the 1/4" fold) and basted it in place. I secured the top with a running stitch first, again not concerned about visible stitching as it will be covered by trim. I then followed with a slip stitch through the folded bottom of the dress to secure the bottom edge of the facing.

In the case of my example garment, the hem trim is a high contrast color decorated with what appears to be couchwork embroidery and possibly beads. Because I am unfamiliar with how this piece will wear, I have decided to place a simple strip of grey wool, cut on the grain rather than the bias, for now. I turned both sides under, pressed, and slip stitched them into place.

The extant garment has one feature I have omitted – a tuck in the fabric just above the decorative trim. This is a visible feature: if it were present on Spanish garments, we would see it in imagery like we see other seams. Given that it is so clearly absent, and is equally clearly not structural, I have omitted it entirely.

It should be noted that while we have an extant with this exact hem treatment, it is only plausible that it would have been used on a middle class garment like this one. The bias-cut strip that is used as a facing would have been expensive, possibly more expensive than could have been justified for the wearer's class. Additionally, the exemplar dresses where this hem treatment is used have trains on them, where this dress does not. I will be interested to see how this hem treatment wears on this gown.

Sleeve Construction

Shape

Visual inspection of the example dress shows that the sleeve is sewn in, which already distinguishes it from all the available extants, which all have detachable sleeves. The visible stitching details and lack of visibility of a white chemise at the shoulder makes clear that there is no gap there. Visual observation also reveals that the bottom of the sleeve is open from the elbow to the wrist. It ties closed, but allows the chemise to be pulled through the gaps between the ties. The visibility of chemise here further reinforces its absence at the shoulder: the painter clearly does show chemise since we can see it here. There is simply no chemise to be shown at the shoulder. Finally, we can see a slight excess of fabric at the tricep.

Construction

- **Decorative Stitching.** The portrait clearly shows decorative stitching along the seam of the sleeve, which itself runs along the back of the arm (as distinct from underneath the arm, as is more common in modern sleeves).
- **Seam at the back.** The decorative stitching also highlights the location of the seam, at the back of the arm.

I started by using the sleeve pattern of the *Jubon de Seda* from the Alcega pattern manual. I revised my initial draft several times to better visually match the sleeves as depicted in the picture while retaining the period construction. Once the shape was finalized, I cut two sleeves out of my wool, and two linings from the same medium-weight linen used as the lining on the bodice. All pieces were cut on the straight grain. I simply rolled the edge of the linen under, folded the wool down and tucked the linen underneath, and then slip stitched the linen in place.

As we have no extant womens' garments with sewn-in sleeves, I chose to finish the armholes with a technique from men's garments, where sewn-in sleeves are the norm. I first sewed the raw edges of the bodice and the sleeve together. Then I pressed the sleevehead open and stitched the pressed edges down. Finally, I cut a piece of bias linen and stitched that over the pressed edges. This not only creates a neat result, but moves the bulk clear of the armhole, allowing for easier wear.

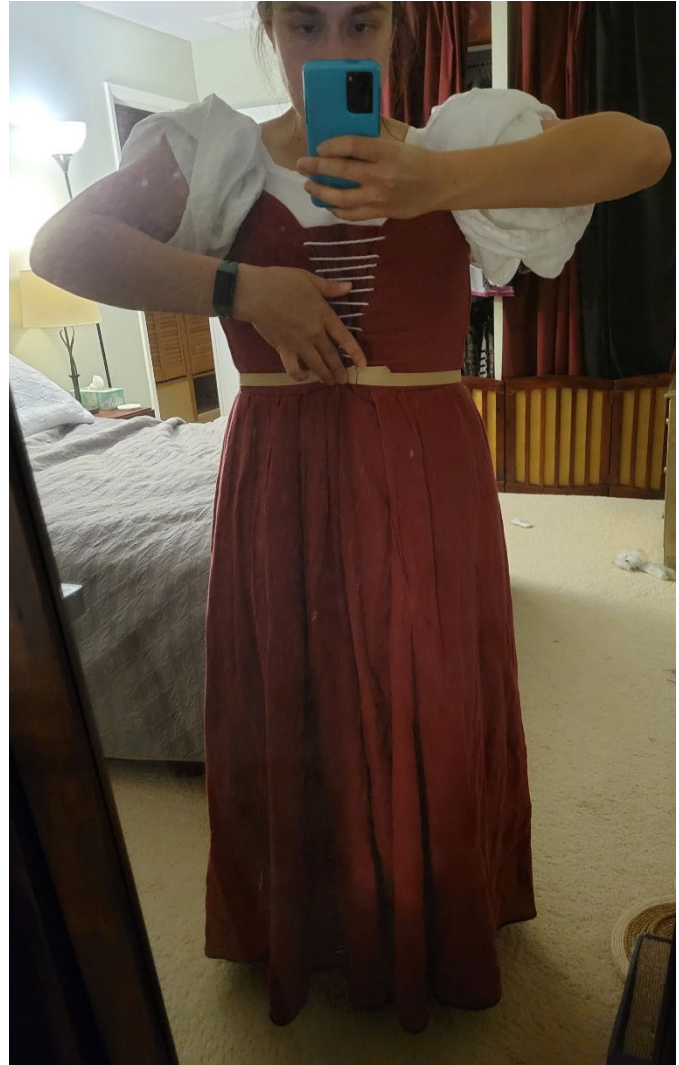
As the last step, I tacked two ties into each sleeve, one at the wrist and one in between the elbow and the wrist. They are designed to tie in the middle. When doing this project in the future I will attach the

ties to the exterior fabric prior to installing the lining, but in this case I needed to wait until the sleeve was completely assembled to confirm my placement.

Part 3: Detailed Project Journal

Step 1: Make the *Bara* Tapes

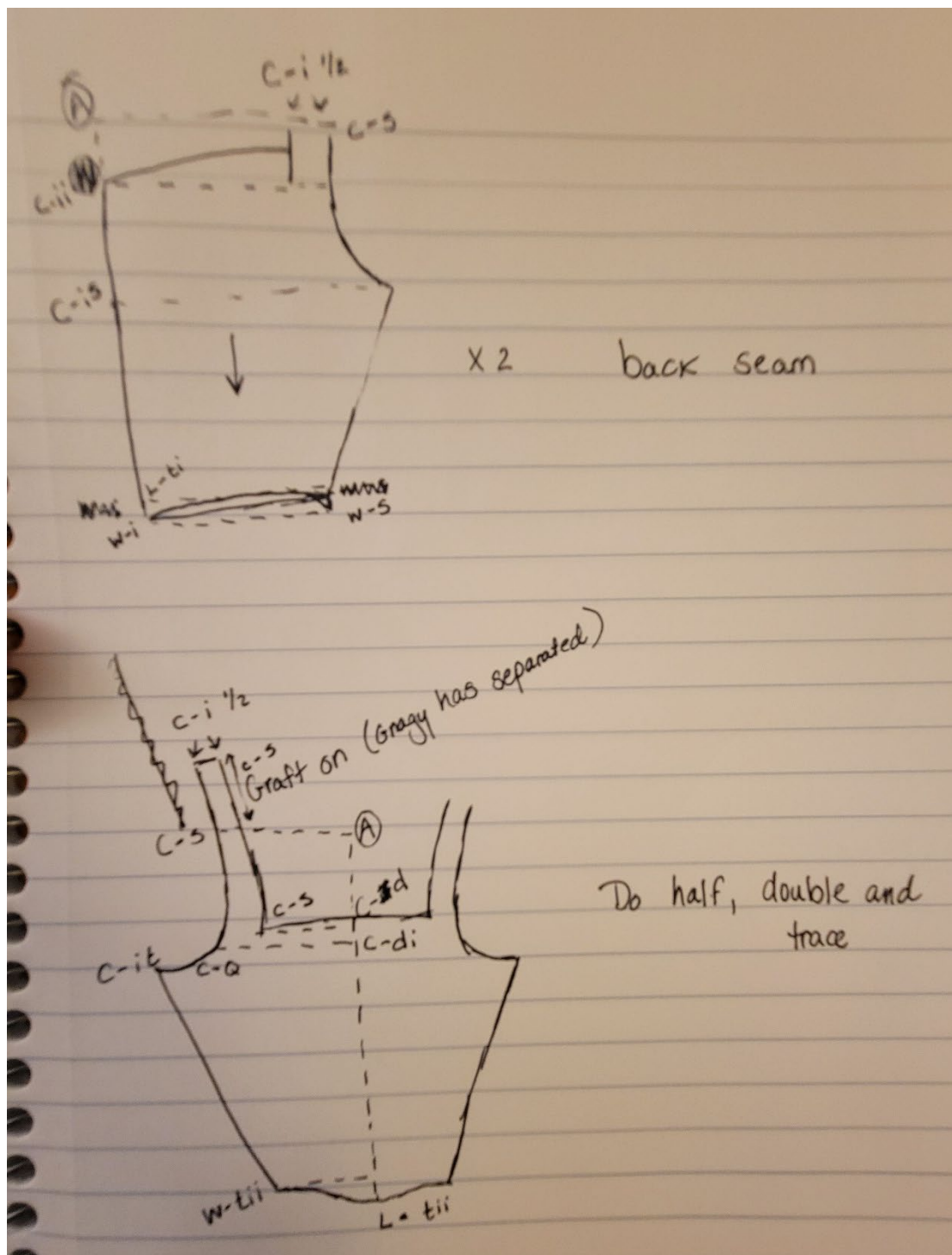
Current *bara* tapes are necessary for all aspects of the pattern. Since I knew I would be wearing this dress over a separate supportive garment, I measured over that garment. For more detail on how to make and use *bara* tapes, please see Appendix A.



Step 2: Use The *Bara* Tapes to Pattern the Bodice

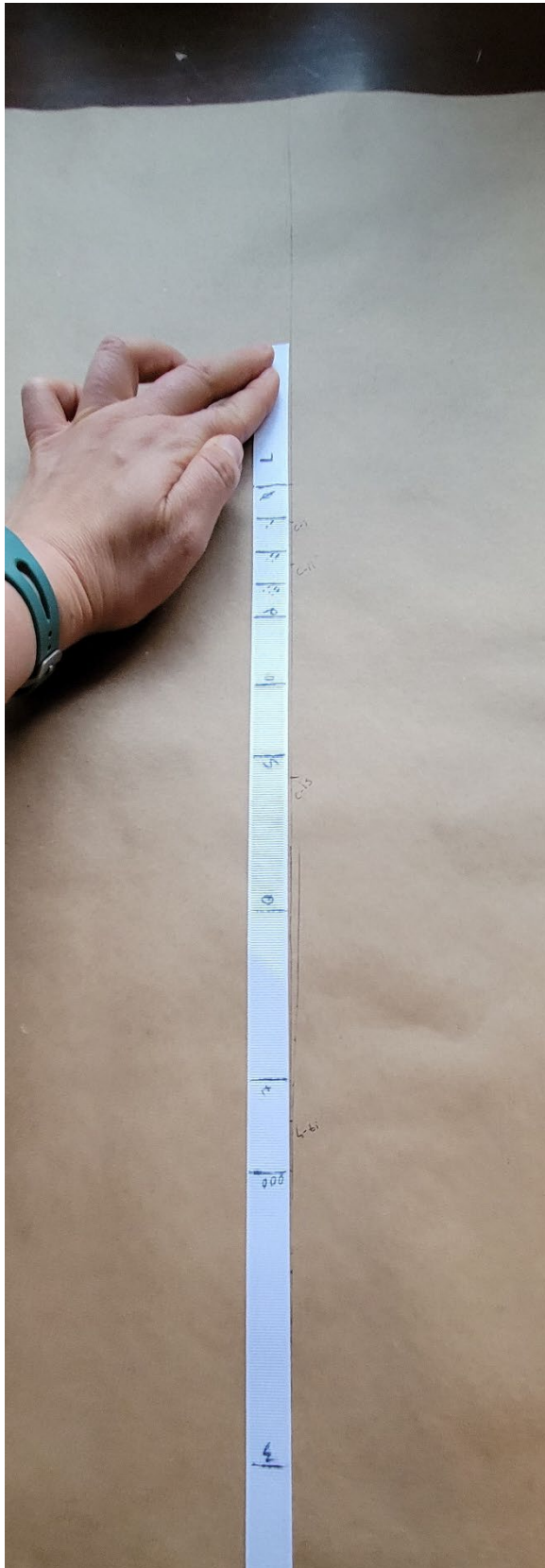
I started with the bodice first because it is the foundation that will connect and secure all other pieces of the gown. I also expected it to be the most challenging. I followed the pattern redacted by Mathew Gnagy in [INSERT EXACT NAME OF BOOK HERE] to form the base. I started by drafting the base pattern onto a piece of notebook paper, not to scale, and noting each modification I wanted to make. This is also helpful to get the pattern layout squared up in your mind – it's much easier to visualize what you're going to do before doing it full scale.

My pattern modifications focused on better duplicating the appearance of my exemplar image. In particular, the upper back was a shallow V rather than flat, there was a clear center back seam, and the neckline was slightly higher. In addition, my shoulder straps would be primarily attached at the front, with only a short stub at the back. The strap design was driven by the extants I could examine and the Spanish tailoring manuals I could access.



The markings on the draft reflect the tapes and measurements I would use to craft the pattern. W indicates the waist tape, C indicates the chest tape, and L indicates the length tape (length of body – height is not used as H is used for hip instead). These measurements are all taken from Mathew Gnagy's redaction of the Alcega pattern.

Step 3: Draft half the back Pattern At Scale



With the layout and proportions decided, I next drafted half of the bodice onto packing paper at scale. Once one side is drafted, it will be copied onto the other side to ensure exact proportionality. You always start with the center measurement, right down the middle. That becomes your reference point, from which everything else gets drafted. I like to start by drawing a line all the way across the paper with a yardstick and then measure from there – that way I know the final result is square. This line will be my “spine” from which all the other measurements will branch. Then, I mark my reference point, A, $\frac{3}{4}$ of the way up that line. This need not be exact; it will be the reference point for all the other marks but does not impact their relative spacing itself. What’s most important is to mark it low enough to leave room for the straps, but high enough not to cut off the bottom of the bodice.

Next, I mark all of my important points along that spine. First, I ensure that I’ve selected the correct *bara* tape. The bodice happens to almost exclusively use the C (chest) tape, but it’s still important not to mix these up. There are three different types of measurement mark: a simple length (e.g. the “d” that will mark the beginning of the neckline), one length subtracted from the other (e.g. the di that marks the point of the arm curve), or two lengths added together (e.g. the is that marks the bottom of the arm curve on the back). These can be determined by the order of the letters: a simple letter indicates that you measure to that letter. A larger length followed by a smaller length indicates subtraction: di is in fact the length d minus the length i. Two lengths added together is indicated by a smaller length followed by a larger length: is is the length i added to the length s.

Marking these out along the spine line sets the foundation for building out the rest of the bodice. These lines will determine not just the neckline and the waistline, but also the width of the straps, the spot where the armscye hits, and the width across the chest. This initial set of lines becomes the scaffolding on which the rest of the bodice will sit.

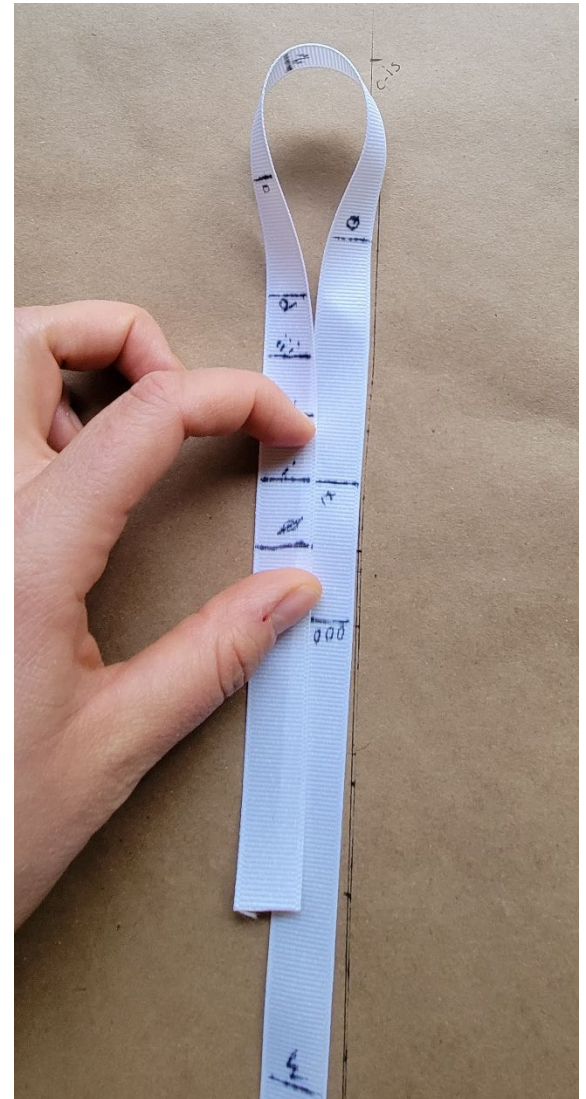
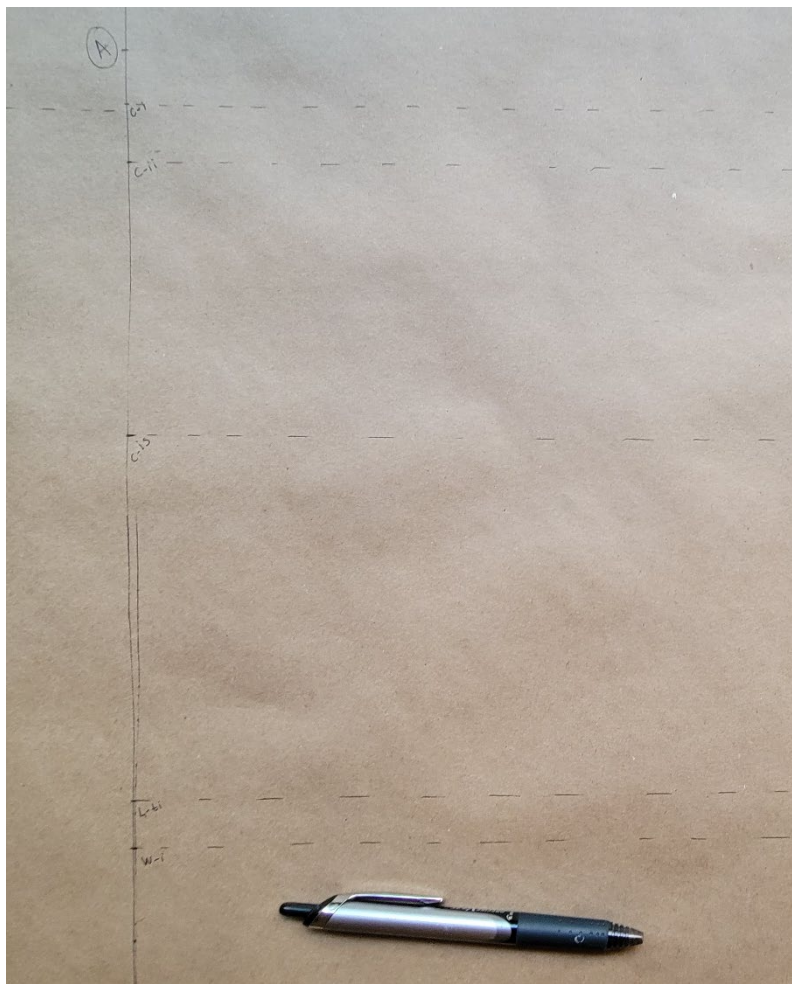
Make sure to note exactly what each mark is – the typical convention is tape – marking, e.g. L-ti, as you can see at left.

Compound lengths can be easily marked out by folding the *bara* tape over itself and strategically positioning it. See photo at right.

To subtract, measure as usual, and then fold the tape over so that the end of the tape is aligned with the initial measurement. Mark at the point you wish to subtract.

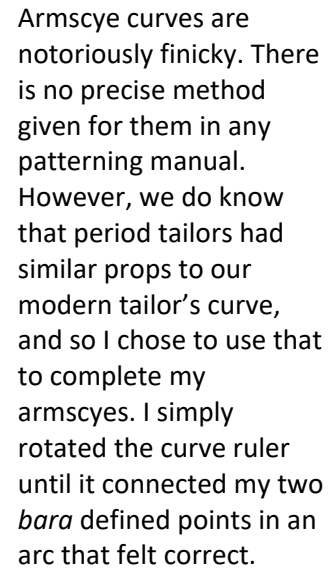
To add length, measure to the first length, and then fold the tape over until the second length is aligned to the first. Mark at the end of the tape. The photo at right is an example of adding length – i is being added to t.

Once all points along my spine line were marked out, I used a yardstick and my *bara* tapes to mark out the sides. Since I was so careful to have a straight spine line, I can mark out one side of my pattern, fold it over, and trace to have a completely symmetrical bodice pattern.



I used my yardstick to mark out a straight, dashed line from every key point. I stretch these out much longer than is necessary; they are guidelines to keep my *bara* tape straight as I measure in the future. See left for an example. This is the draft for the back of the bodice pattern, and will be used as the example going forward. The front is drafted using the same principles.

Step 4: Drafting the Armscye Curves

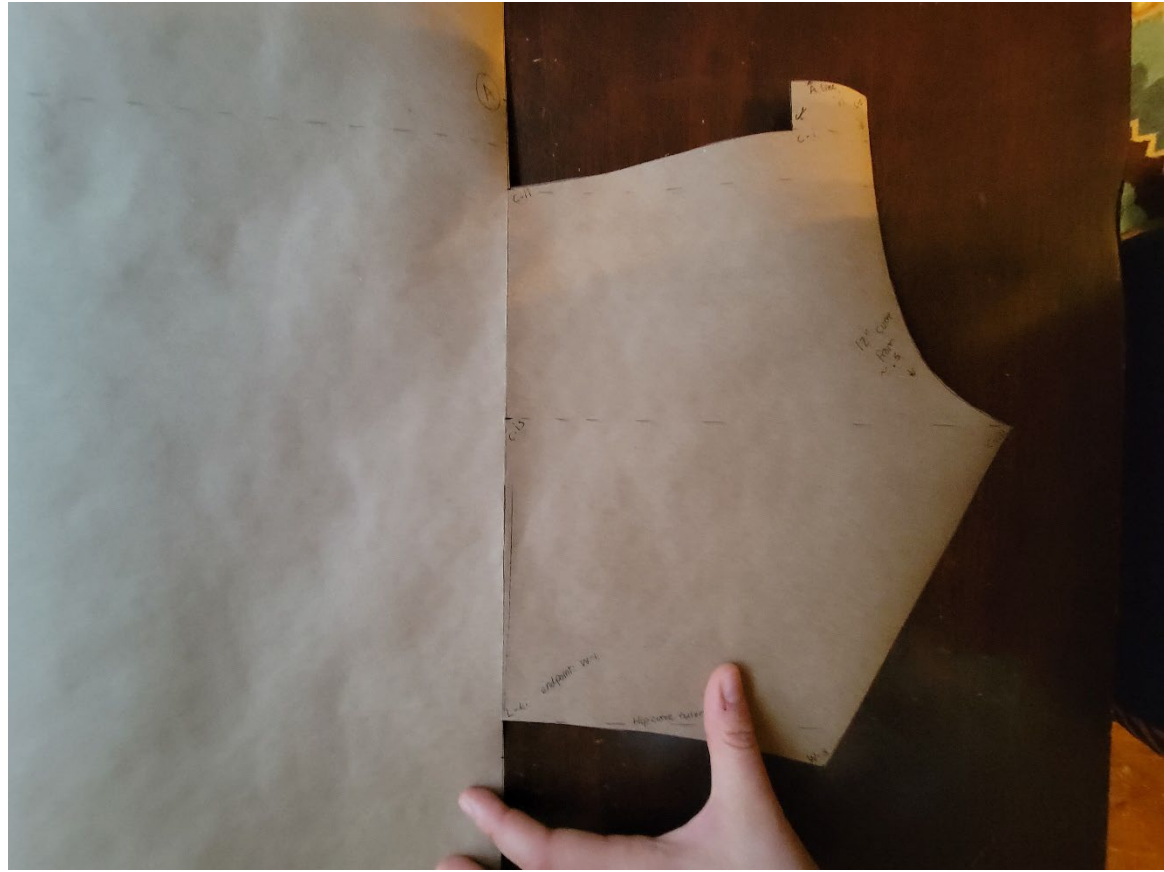


At this stage, be sure to annotate any important marks (e.g. adjustments to original pattern, markings, grain line, etc).

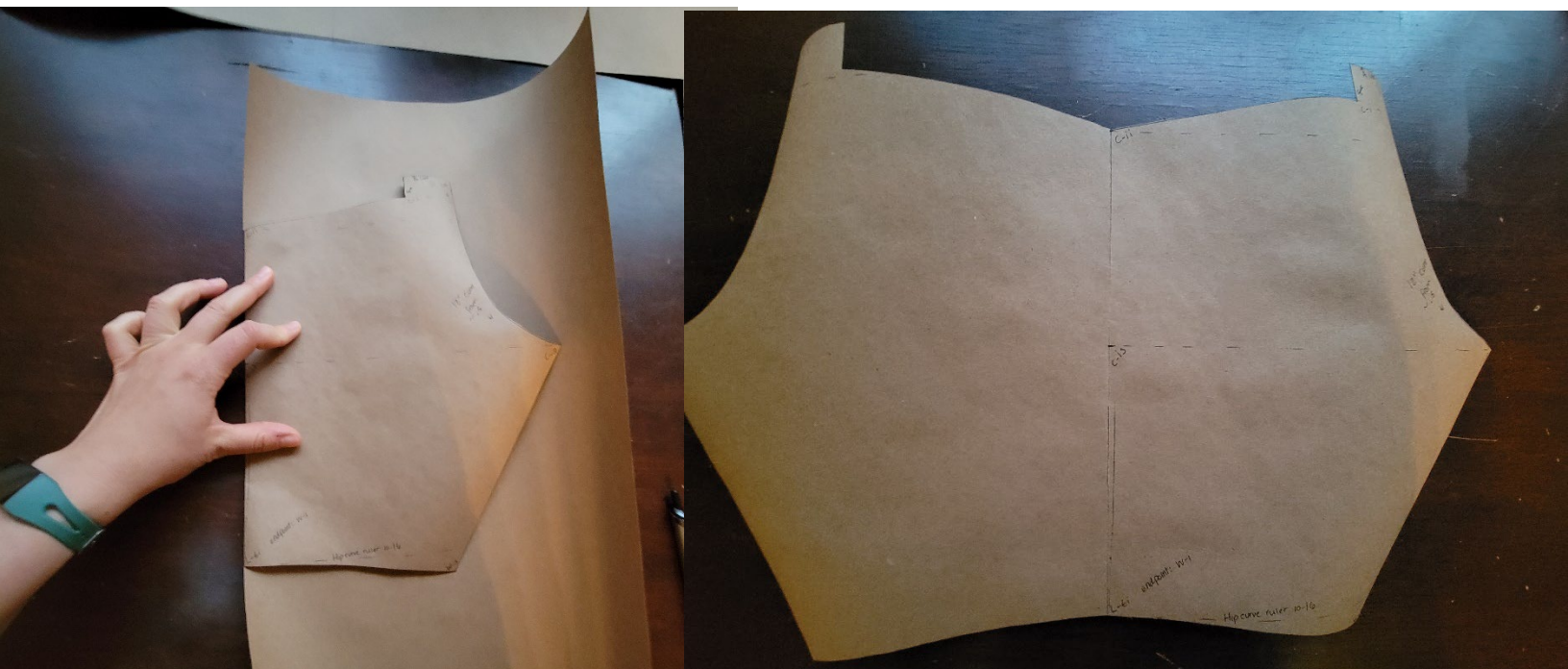
Step 5: Copy the Bodice Back

Cut the draft of the bodice back, leaving the other side of your paper uncut (see image at right).

Fold along the center line and then trace onto the other side. This will give you an exact mirror on both sides and ensure symmetry. This works best when you use a thicker paper for pattern drafting, like the craft paper that I'm using here. Be careful not to accidentally push up the paper as you trace. See below left.



Once you have a copy, cut that out as well. You should then have a symmetrical back piece. See below right.



Step 6: Transfer All Markings and Annotate

Write down every piece of information about the pattern. Write like you're going to set this aside for years and come back to it. Write in great detail. Write your references. Take advantage of every inch. You're never going to regret including too much detail here. See example at right.

I include:

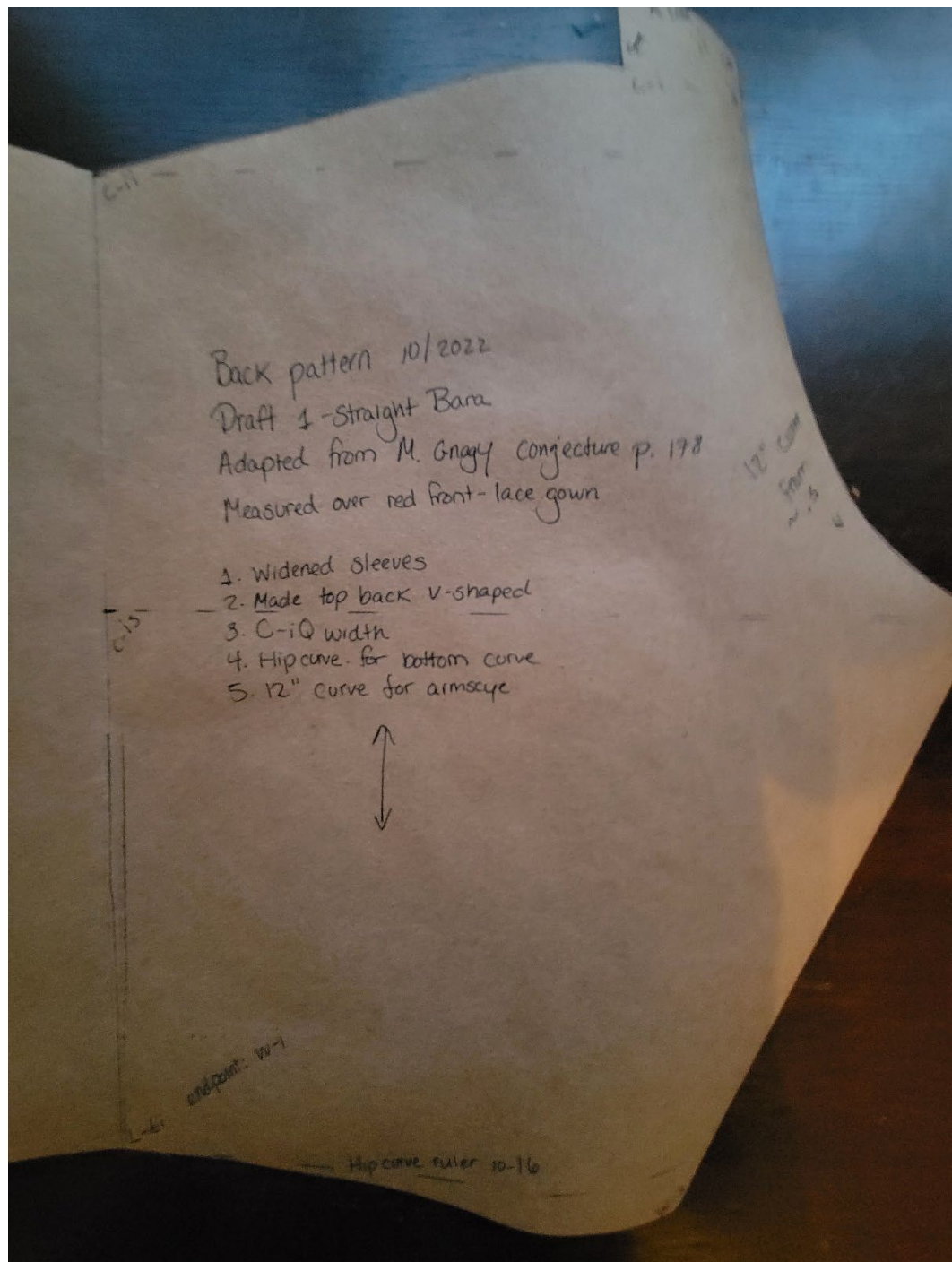
- The date of the pattern's drafting
- Which draft it is (and what I modified, if more than one draft exists)
- Where the original pattern comes from
- What I measured it with if using the *bara* patterning system as I did here.

Finally, I note any particularly important elements. For example, the widened straps on the bodice, the v-shape at the back, the adjusted width, and the ways I used the hip and arm curve to develop the waist and armscye respectively.

Finally, ensure you have the grain line marked out for future cutting.

Step 7: Draft the Bodice Front

The bodice front is drafted in the same way: construct the "spine" and built out with *bara* measurements from there. I like to make a few tweaks to ensure the two parts of the bodice match up perfectly. In particular, I check the alignment of the sides and the straps to ensure that my



measurements are identical. These are the pieces of the bodice which will attach, so having them as close as possible is vital.



Step 8: Make a Mock-up of the Bodice

Use scrap fabric to make a full mockup of the bodice. I used an old bedsheet. Baste it together using long running stitches. Loosely whip stitch the side back seam, which will eventually be laced. This will need to be treated like lacing and tightened once you're wearing the garment. Then, put on any relevant undergarments and try out your mockup. The goal here is to test the fit and adjust if needed. I did not need to make any adjustments on mine.



Step 9: Draft Sleeves

My first sleeve draft was taken directly from Mathew Gnagy, but I quickly found that they had too much fullness. These were clearly closer to the “wineskin” sleeves common at the time: an extreme amount of fullness at the tricep, tapering in at the elbow into a tighter wrist.

Apart from that one aspect of shape around the tricep, I really liked the initial fit of the sleeve (right). The armhole felt good, the taper toward the wrist looked nice, and the length was good. So rather than seeking a different pattern, I elected to adapt my current one. I trimmed in at the tricep and kept everything else similar.

I also adapted the sleeve to have the characteristic below the elbow fit from my reference portrait. My sleeves are open along the seam from elbow to wrist, with two pairs of ties at the mid-arm and a few inches in from the wrist.



The second and final pattern (left). I accidentally sewed this mock-up inside out, but the shape was still nicely visible. The $\frac{3}{4}$ seam tracks nicely down my arm and is very comfortable to wear.

There is slight extra fullness right at the top of the tricep. This is a deliberate choice to match the styling of the painting. That sleeve also appears to have that same fullness at the top, accentuated further by the decorative stitching. I have not found this shape to either help or hinder construction or wearability of the garment. It is not enough volume to interfere with range of motion, and as it flares out from the armhole it does not impede the fit of the sleevehead into the armhole.

Step 10: Cut Everything Out!

Now it's time to get to work! Bara-drafted patterns have the seam allowance baked in, so marking and cutting out is easy.

I prefer to weigh my pattern down and trace, and then cut. Some patterns and instruction manuals recommend cutting pieces as layers; I don't prefer this either when I'm working with just a few layers of fabric as here.

The total pieces needed are:

- Of blue wool:
 - Exterior bodice front
 - Exterior bodice back
 - Exterior sleeve
- Of red linen:
 - Bodice front lining
 - Bodice back lining
 - Sleeve lining
- Of green linen:
 - Bodice front interlining
 - Bodice back interlining

Anything can be a pattern weight if you believe in yourself.



Step 11: Baste!

Set the interlining on the wrong side of the exterior fabric. Baste together using long running stitches. Basting is my preferred method of holding fabric together for more detailed sewing. It's more effective than pins, travels more easily, and won't poke you. Secure with basting threads around all edges that will ultimately be sewn. The white threads in the image below are my basting threads.

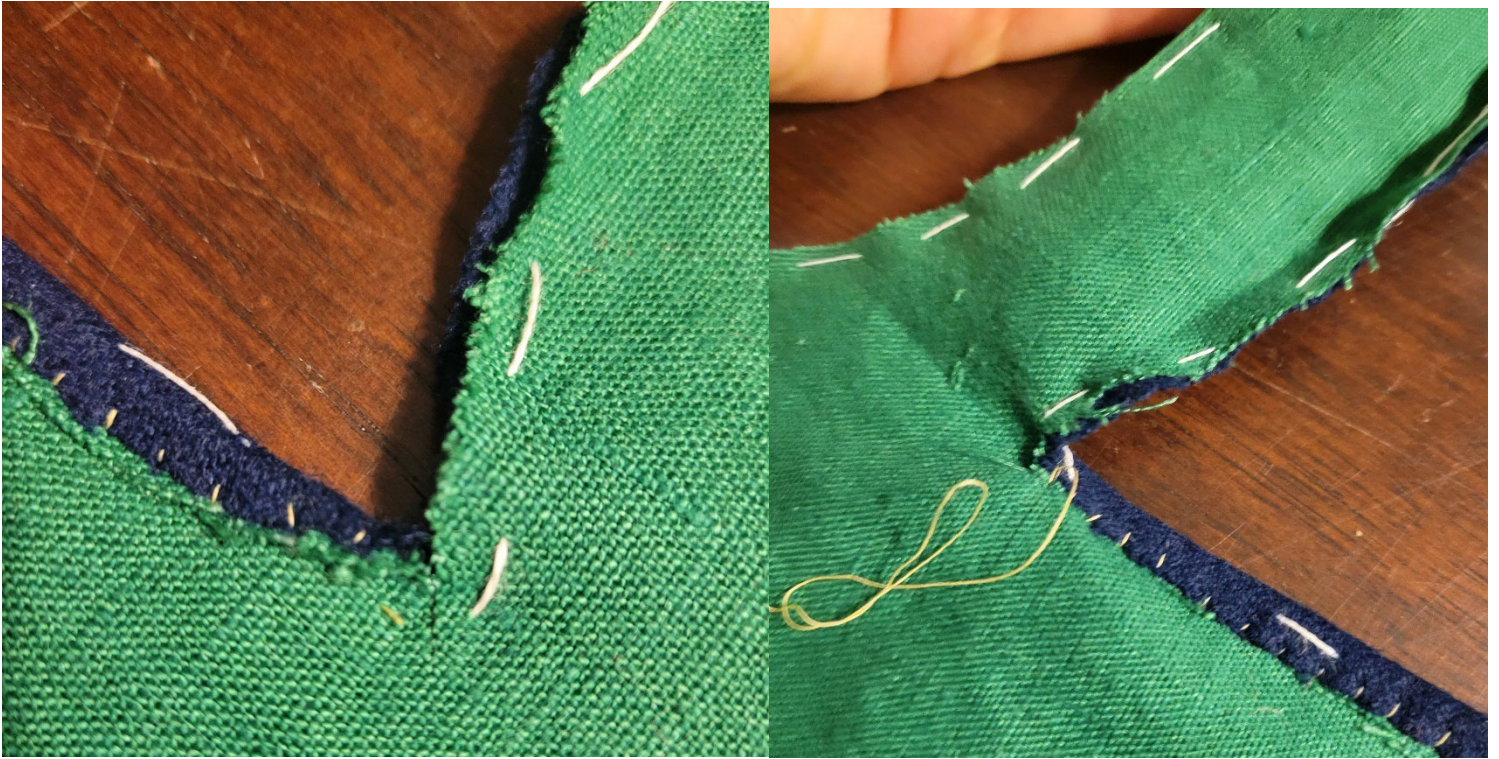


Step 12: Sew Interlining to Fashion Fabric

Fold both layers of fabric over and secure using a slip stitch. The needle should pass underneath your interlining and up again to catch both interlining and fashion fabric at the fold. These stitches will be completely hidden in the finished product, so it doesn't matter what color thread you use. The yellow thread is my slip stitching.

Step 12.5: Ease Around Inner Corners

This bodice has sharp inner corners where the straps meet the neckline. Fabric doesn't like to fold that sharply. Do the best you can, and secure well with whipstitch to keep the edges from fraying.



Step 13: Stitch In Lining, Leaving Open At Bottom

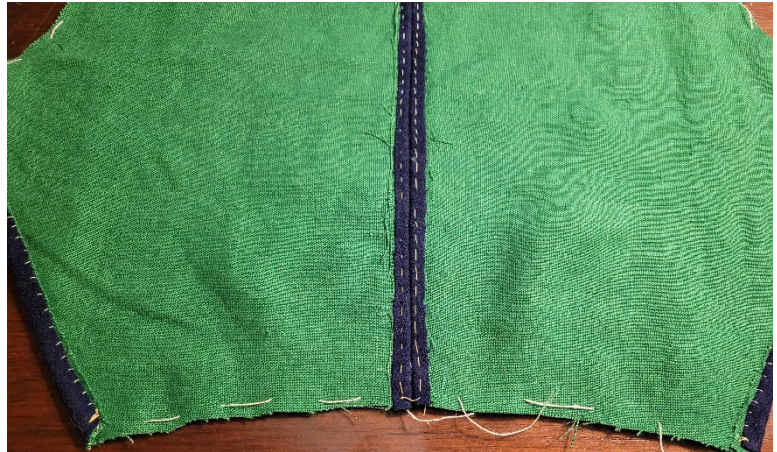
Next, lay the lining on top of the bodice, right side out. Baste as before. Fold the edges of the lining gently under and slip stitch in place.

This is one spot where I will do this project differently next time. Instead of adding the lining at this point, I would first stitch the shoulder straps of the back and front lining together and then attach it to the front. That would prevent the exposed shoulder seams that I have in my current bodice. While not terribly noticeable after all the other finishing steps, I'd prefer they were completely invisible. Any exposed edges can also be more prone to fraying.



Step 14: Repeat Steps on Back

The back goes together very similarly to the front, with the exception of having a center back seam. Start by setting the interlining in to the back pieces separately, finishing the setting in all the way around. Once that is complete, then sew the back together at the center. I added pick stitching as a back seam detail at this point. This both adds decoration to the outside and strength and comfort to the inside, as it will be used to tack down the extra fabric at the center back.



Pick stitching is simply a modified backstitch where the needle travels less far on the outside of the bodice than on the inside. The end result is an embellishment stitch that also has some strength to it. Like any decorative stitch, it must be evenly spaced for best effect. The completed pick stitching is visible on the blue of the center seam.

After completing the pick stitch, sew the two lining pieces together at the center back. Then attach the back lining as was done on the front, treating it as a unified piece. Do not attach the lining and interlining/fashion fabric at the center back – you want your lining to have a slight stretch/give, if attached at the center back as well it will bind unpleasantly. Make sure to leave the bottom edge open.

Step 15: Add Lacing Holes

This garment is spiral laced, meaning that the holes should be offset from each other. I mirrored exactly the placement shown on the Eleonora di Toledo extant, which has the lacing holes on the front slightly higher than those on the back. This keeps the whole piece in place as the lacing occurs.

I prefer to make my lacing holes with buttonhole stitch. First, baste the fabric at the inner edge of the lacing hole area. Keeping the fabric rigorously in place will ensure no puckering or pulling from fabric shift. Next, mark out the location of each hole using tailor's chalk. Then, lightly bend the piece to mirror its position in use use an awl to push the raw hole into the fabric. Whip stitch roughly around this hole in order to keep it open (see image at right). Re-push the awl frequently in between stitches, as the hole will tend to become too small. I prefer to work my buttonhole stitch from the right side of the fabric, but so long as you are consistent either option is fine. I push my needle through the hole and up from the



underside of the fabric, then loop the thread around it and pull tight, so the thread catch settles around the edge of the hole. This provides added strength and friction resistance.

The bottom lacing hole should be well above the unfinished bottom edge of the bodice. This will be necessary to add the skirt and properly enclose it in future steps.

For this project, I did not add any stabilization to the lacing holes beyond what was already inherent in the bodice construction. This garment is not a foundational garment that shapes the body, but sits on top of one instead. Thus, the stresses on the lacing holes here are not as intense, and the need for reinforcement is not present.



Step 16: Cut out and Sew Sleeves

Using the pattern drafted in step 9, I cut out a piece of the blue wool exterior fabric and a piece of red lining. I did not use any interlining on the sleeves, as I did not feel any need for additional stabilization. I don't recommend extensive interlining on sleeves generally; there's already a tendency to catch and bind that can be problematic, and more fabric just makes that worse.

I basted the seams of the sleeves together and sewed them together starting at the armhole using a backstitch. I tried on the basted sleeves and marked off my elbow, leaving the seam open below.





I finished the edges of the sleeves in the same way I did the back seam of the bodice: I folded the edges of the blue wool down and secured them with a pick stitch which can be seen decoratively from the exterior of the garment.



I next secured the lining. I basted it in place first all around the sleeve, and then folded it under and secured with a slip stitch. I finished the long seams first, and then the cuff. I used some additional stitching to further secure the cuff at the edges where the finished seams were present and therefore the fabric was a bit thicker.



Step 17: Attach Sleeves to Bodice

I next basted the sleeves into the bodice to check fit. I aligned the sleeve seam and the center-back seam of the bodice to best overcome the awkwardness of attached sleeves connecting to a not totally attached bodice. This worked nicely – the garment goes on and off very easily, and looks correct when worn.

To attach the sleeves permanently, I simply used a strong backstitch. With so many layers in play, I followed with a second backstitch over the first one for added durability. I next folded the raw edges over to the inside (e.g. pointing towards my torso rather than down my arms towards my hands) and whip stitched them in place. Finally, I cut a bias strip of linen and tacked it down to completely enclose the raw edges. The end result is a neat finish with minimal bulk that is very comfortable to wear.



Step 18: Cut out Skirt

The skirt is cut according to *Basquiña sola de seda para mujer* (Alcega p. 58), which translates as skirt of silk for a woman. I drafted the pattern directly onto my fabric, as this tends to be a very forgiving pattern with simple measurements. The most important thing is that both sides must be *bm* – a *bara* and a half – and must be equal.





Step 19: Sew Skirt Together

Start by sewing the gores into the front and back of the skirt. They should attach selvage edge to selvage edge. Fell the seams to enclose the edges and prevent fraying. Then, sew the sides of the skirt together, leaving the final ~8" open. These side openings will correspond to the side back lacing, allowing the garment to be easily taken on and off. Roll the raw edges at the side openings to prevent fraying. Add some reinforcement stitching at the bottom of the side openings for added stability.

Step 20: Sew Skirt Into Bodice

With a thicker wool like this, I did not feel a need to reinforce or roll the top of my skirt – however, with thinner fabrics, I would. In this case, I simply used a long running stitch to allow easy gathering. I then laid the front of my skirt into the bodice front, and adjusted the gathering fullness until it looked right. I then secured the gathers with a line of



stitches. Finally, I sewed it into the bodice right side to right side. I left roughly $\frac{1}{2}$ " of fabric free at the top, and stitched that down to the inside of the interlining. I reinforced the edges, anticipating that the thickness of the fabric and gathers might make it challenging for the stitching to hold as closely as I would like. Finally, I folded the lining, covered the remainder of the skirt, and stitched the lining down with a slip stitch to cover the raw edges.

Step 21: Hem and Finish Skirt

I recruited a friend to help me hem my dress. I started by simply turning the edge under and securing it with a running stitch. Then I cut a 4" bias strip of the same blue wool and ironed the edges under $\frac{1}{4}$ "

Part 4: Analysis & Next Steps

What Went Well

- **Overall fit.** Once again the *bara* method provided absolutely wonderful results. The base pattern required almost no adjustment. I re-drafted the sleeves several times, but I knew the closest pattern I had for them was not a good match and so expected a bit of a challenge getting that exact shape.
- **Bodice shape and construction.** I was initially concerned that the sleeves would tend to slide off the shoulders, and that the bodice might not be sufficiently stiff. They turned out perfectly!

Next Steps

- **Continue to refine the underlayer.** This was a strong proof of concept for the support garment + exterior garment structure.
- **Expand my learning to more complicated dress styles.** This dress was relatively unadorned; the main focus was the construction. The only decoration was stitching. Expanding and applying these same concepts to a dress more aggressively decorated (e.g. with *tiras*) would be a strong next step.