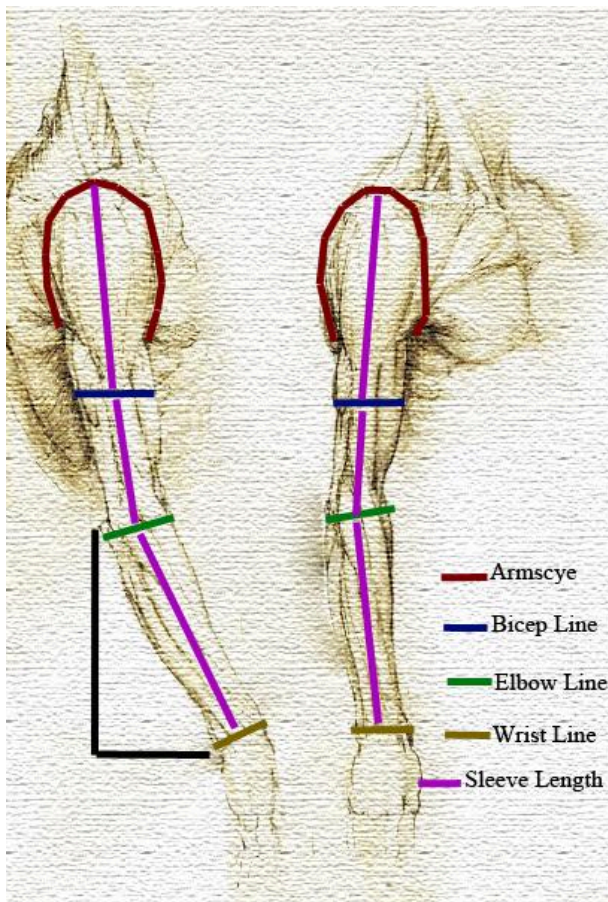


7.4.1 Informal Expository

Constructing an Evolution of the Fitted Sleeve 1250-1400

Much like biological evolution, fashion evolution does not follow a neat line of changes marching toward modern clothing. There are hiccoughs, retro active movements, and parallel progressions. In general, fashionable shapes progress to be more and more extreme in their shape until the fad bursts into a new look. The faster the change progression to an extreme, the more likely it is to be a fad, or a fashion that goes out of style quickly. The 150 years between 1250-1400 demonstrate all of these aspects of fashion evolution.

Sleeve styles offer a wide variety of tailored engineering. Pattern constructs show the subtle use of unequal trapezoid at the start, to the ingenious use of grain lines and curves, and even a few straight lines at the very end. Tailors in each era found ways to solve 2D to 3D puzzle problems, covering one of the most mobile parts of the body in fashionable grace and reasonable comfort. The effects of time, fashion, and tailoring experience become more transparent by comparing guidelines at the armscye, bicep, elbow, wrist, and sleeve length on extant illustrations and pieces.



Let's begin with a few definitions:

Armscye Line will be defined as the circumference perpendicular to the floor from the top of the shoulder, under the armpit and back to the top of the shoulder.

Bicep Line is the widest circumference over the flexed upper arm, parallel to the ground. Usually this is found slightly lower than the highest part of the armpit.

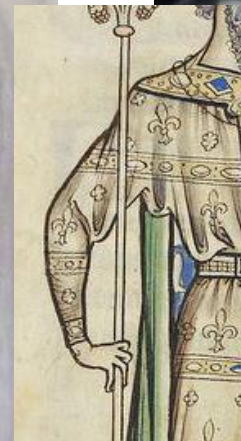
Elbow Line is the circumference over the widest part of the elbow over the point.

Wrist Line Is the widest circumference over the point of the wrist.

Sleeve Length will be from the Armscye Line to the Wrist Line plus whatever extension there may be onto the body.

The Black L shows the **Pitch** of the arm, or the amount of natural bend. For setting in sleeves in a mock up, marking where the front of the arm naturally hangs on the side of the garment can help get the sleeve to the right angle without the model being present.

With that in mind, let's start with the 1250's. The era's most prominent style has a very fitted forearm, soft and full elbows, horizontal wrinkles across the inner elbow and underarm, and vertical soft wrinkles from the inner elbow to the shoulder. These attributes can be seen quite well in the statues from Notre Dame de Strasbourg. Some armscyes are significantly lower than others, with women's' tending to be higher and tighter. The sleeve length is fairly short, showing off the wrist to just past the widest point across the bone.



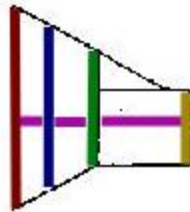
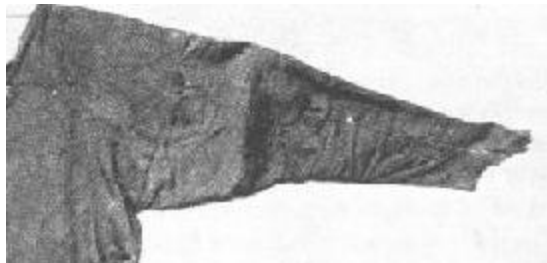
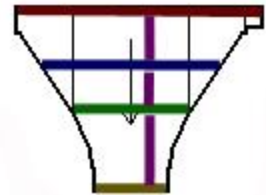
*^Magdeburg
Cathedral
1250*

^Notre Dame de Strasbourg Wise Virgin 1250

^Westminster Psalter

1253 St. Clare of Assisi & Marc Carlson Pattern

St. Clare of Assisi's extant gown shows one way that this look can be achieved. From the analysis and pattern by Marc Carlson, we can see the tight construction of the forearm is a slightly curved trapezoid. Also the ingenious use of uneven angles on the main sleeve seam. These uneven angles contribute to the extra fullness at the elbow, and helps pitch the sleeve ever so slightly with the elbow. This form of construction can be seen in a more extreme version with the admittedly earlier Kragelund Tunic Sleeve.



This form of construction can be seen in a more extreme version with the admittedly earlier Kragelund Tunic Sleeve.

<Kragelund Tunic & Margrethe Hald Pattern

The 1260's show a very similar shape, with a tendency towards more tightly fitted armscyres than dropped armscyres, and continuing with the tight forearms, exposed wrist points, and full elbows.

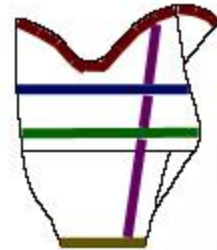
Both: 1260 Detail from "The Rutland Psalter" British Library Add MS 62925>



<1270 Children chemise made of fabrics imported from Spain in 1270-80, Prague castle, Photo - Cesky rozhlas

A 1270's child's chemise from Prague Castle shows the sharp widening at the elbow and slight curve in over the bicep as one way to get the desired shape.

Another good example can be seen in the Herjolfsnes No.63 sleeve. In the pattern created by Poul Nörlund, note the closely fitted armhole curve to match the shape of the arm flat to the body. This would help eliminate some of the wrinkles under the arm. This is a major step away from the previous examples of a flat armhole.



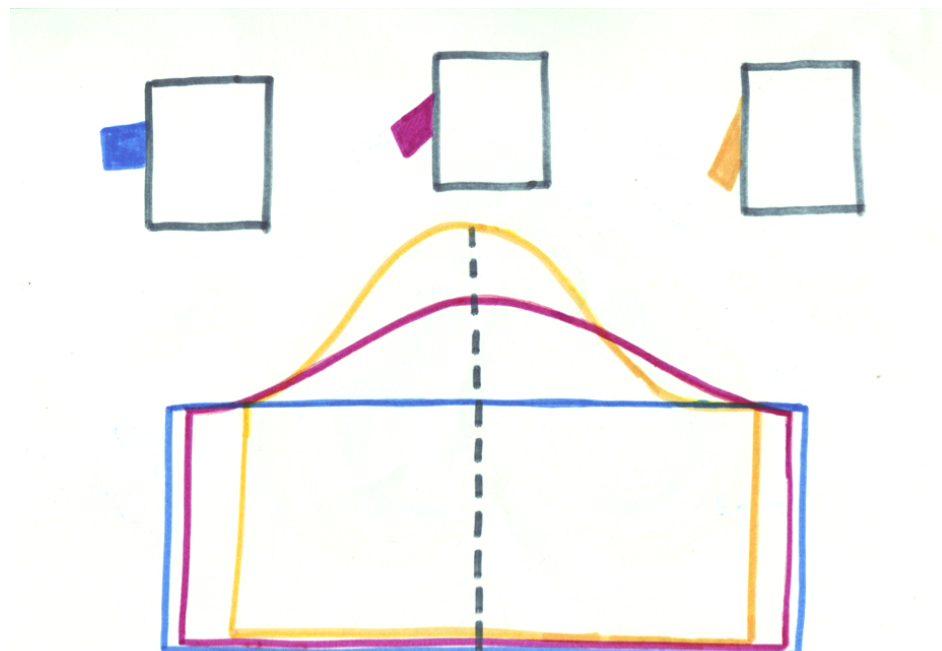
Pattern by Poul Nörlund[^]

<Herjolfsnes No. 63

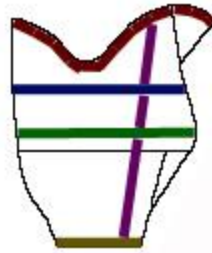
One of the best ways to explaining the differences in armhole shapes can be found by Lorraine at ikatbag.com. She suggests to take a small box like an empty tissue box or a shoe box and cut an armhole shaped hole in it. She goes into great detail as to what makes a good armhole, but we're going to move forward to the sleeve. The opening of your box should be roughly egg shaped, and that is close enough for this particular activity. Roll up a piece of paper, and stuff it into the armhole hole on your box. Hold it straight out at 90° from the side of the box. Trace around the hole and down the overlap of the paper. Cut it out along the lines. Next take another piece of paper and repeat, but only at about 45°, and once again as close to flat to the box as possible. The resulting pattern pieces will look much like the drawing that Lorraine created for our edification.

*Armhole Tutorial
from ikatbag.com >*

Note that the flatter the armhole of the sleeve, the wider the sleeve, and also creates more fabric under the arm. On the sleeve closest to the body note the sharp curves. That's a major change in how closely a sleeve can fit.

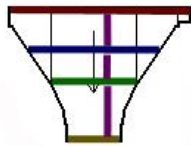
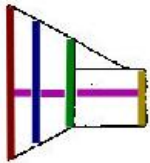


Looking at the period examples, the sleeves tend to follow the same principles and fall into two main categories. The less fitted sleeves, the flatter armscye, tend toward a seam at the under arm. The more fitted the sleeve, the curvier the armscye, and the more likely the seam is moved to where most of the curves take place-- on the back of the arm.



< *Herjolfsnes No. 63
& Poul Nörlund
Pattern*

The Poul Nörlund pattern of the Herjolfsnes No.63 Sleeve shows that kind of pattern, with a steeply fitted armscye and a main seam up the back of the arm. Another thing to note with that style of this particular pattern is the continued use of asymmetric main seams. Much like the earlier Kruglund tunic sleeve and the sleeve of St. Clare, the two sides of the seam up the arm are not identical. This unequal shape forces the sleeve to pitch without the shaping of a two part sleeve, and allows for the oh so very fashionable wide elbow and upper sleeve.



<< *Kruglund Sleeve Margrethe Hald Pattern*
< *St. Clare of Assisi Marc Carlson Pattern*

The earlier Moselund Gown is an excellent example of an armscye that is halfway between the 90° St. Clare, and the very steeply fitted Herjolfsnes No. 63. The elbows are not nearly as wide as the later examples, but the high armscye in comparison to the Kruglund tunic matches the pattern shape.

Moselund Gown & Marc Carlson Pattern V



Through the 1280's and 1290's the fullness over the elbow and bicep grows a bit more pronounced and fewer underarm wrinkles are shown, so the sleeve armscyes are getting curvier, set higher under the arm, and with increasingly curvy seams up the back of the arms. Sleeve lengths are still hovering above the widest point of the wrist.



^1280-1285. *Sabio*, Biblioteca de San Lorenzo de El Escorial, Madrid

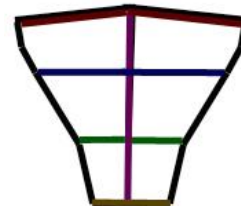
^Book of images of Madame Marie Hainaut, 1285-1290

1290-1300, *Somme le Roy*, France, British Library, Add MS 28162. >

The straight and wide armscye construction is far from gone, though, as can be seen in this 1300's tunic from the Bayerische National Museum. Once again the lack of a close fitting armscye allows for a seam in line with the side seam. This one is even loose enough over the elbow that using uneven trapezoids to deliver a pitch over the elbow is not necessary for a comfortable fit.

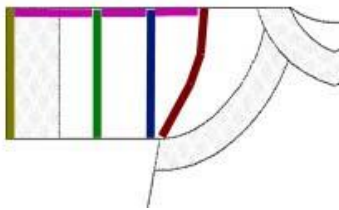


^1300's tunic from the Bayerische National Museum. Speculative Pattern >

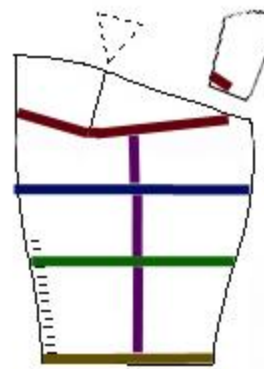




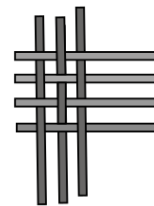
Right around the early 1300's is when we start to get into some really interesting armscye innovations. This Dalmatic from the Kunsthistorische Museum in Vienna shows another sleeve patterned straight out from the body, with all the eucromonts except for the shape of the armscye. It is moved in on the body, from the tightest point around the shoulder, with beautiful decorative curves. [^]*Dalmatic from the Kunsthistorische Museum in Vienna*
<<http://www.kostym.cz> Pattern



Our next example of an innovative armscye uses similar sweeping curves as the 1300's Dalmatic, but it uses those curves for a surprisingly ingenious fit. It is also one of the most famous examples: the Moy gown. This gown from the early 1300's uses a highly fitted armscye, but extends the main seam onto the body. The sharp curves that splay out over the torso are created through roughly triangular gussets. The gussets allow for ease of movement through stretching on the bias over the shoulder; one of the most mobile and curving part of the body. This clever use of the stretchiest part of the woven structure to create a comfortable and fashionable fit shows an expert understanding of patterning.

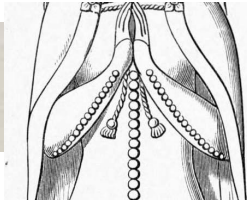


<Moy Gown & Pattern by Marc Carlson



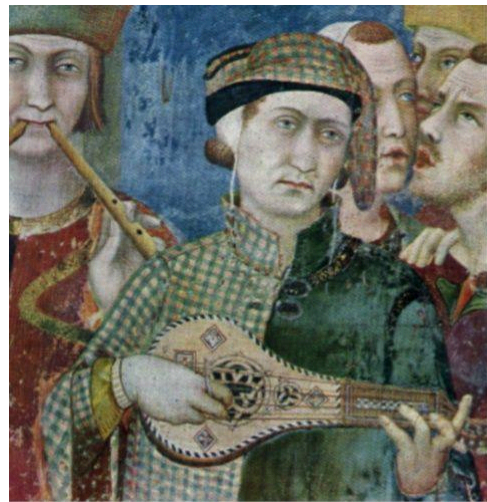
Woven fabrics at their most simple have strong threads running in one direction with more threads running over and under across them, to create a weave. If you tug on the fabric in a straight line along those threads, either vertical or horizontal the fabric does not stretch very much if at all. However if you grab one corner of your fabric and another bit 45° from your other hand and pull the fabric will stretch a great deal further. Bias is any angle between those threads, and is stretchiest at 45°. That stretch is caused by the collapsing of the space between the threads. Therefore any pattern piece edge not cut 90° to the main threads has some use of bias, but the insertion of gores at the angles on the Moy Gown deliberately place the stretchiest part over the shoulder blades and front of the chest, where they give the most flexibility to the wearer.

Our fashionable images show continued use of the more traditional armscyres throughout the 1310's and 1320's. Elbows get ever wider, and full upper arms get more pronounced. Sleeves start showing some variation in length as well, coming over the point of the wrist, and in some cases down over the hands.



^1310 East Anglia, Oxford Bodleian Library, MS. Douce 366: Ornesby Psalter

Middle: Elizabeth de Bohun (1316)^
A woman teaches geometry, c.1309-1316>



^The Holkham Bible 1327-1335 Fresco1320-1330, Lower Church San Francisco, Assisi^



^Dona Teresa Gil Tunics 1307

The Dona Teresa Gil Tunics from 1307 are a nice example of the style for longer sleeves, and the continuation of the wide elbows combined with the very fitted forearm.

Sometime between the 1330's and 1340's the wide elbow bubble burst. The fabric width at the elbows goes from very wide to as fitted as possible fairly suddenly. Also Grande Assiette armscyes set in onto the body become increasingly popular. This detail from the Luttrell Psalter shows an armscye line very similar to the 1300 Dalmatic from earlier, but the fit at the armscye is much much tighter to the body. For an in-depth analysis on Grande Assiette patterns and fitting, check out the La Cotte Simple articles by Tasha D. Kelly.



<1325-1340 Luttrell Psalter British Library MS 42130



^The Golden Legend, 1348



^Margaret Alsokene



^(1348) Morgan Library MS M. 772

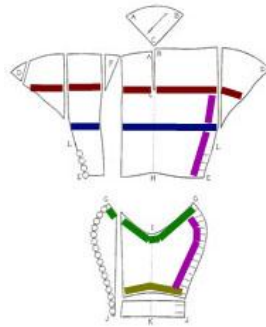
Through the 1340's and 1350's, fitted elbows and upper arms show a relatively small bump over the point of the elbow to allow complete bending. Often prominent buttons are depicted in illuminations and sculptures, to get the tightly fitted shape, while still allowing the hand to fit through the thinnest parts of the wrist.



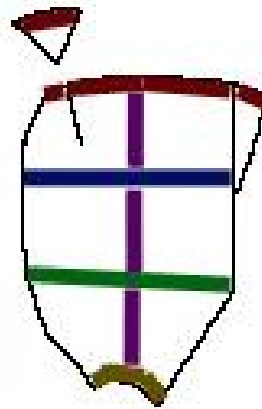
^1350 Morgan Library ^Much Marcle, St Bartholomew Walter de Helyon, 1350



The Charles de Blois Pourpoint shows off all this extra tight fitting, with an extra seam right above the elbow, the Grande Assiette's use of bias for comfortable movement, and only the slightest legacy of the wide elbows in a relatively subtle elbow bump. Note the relative thinness of the bicep line, the sharp curve over the elbow, and the small crescent taken out at the wrist to flare the cuff a bit over the wide part of the wrist--and perhaps part of the hand. This sophisticated tailored engineering feat is the main reason for this investigation. Understanding where it came from, and how it continued forward, is what inspired the 1250-1400 timeline.



Charles de Blois Pourpoint & Jeanne d'Arc Pattern^

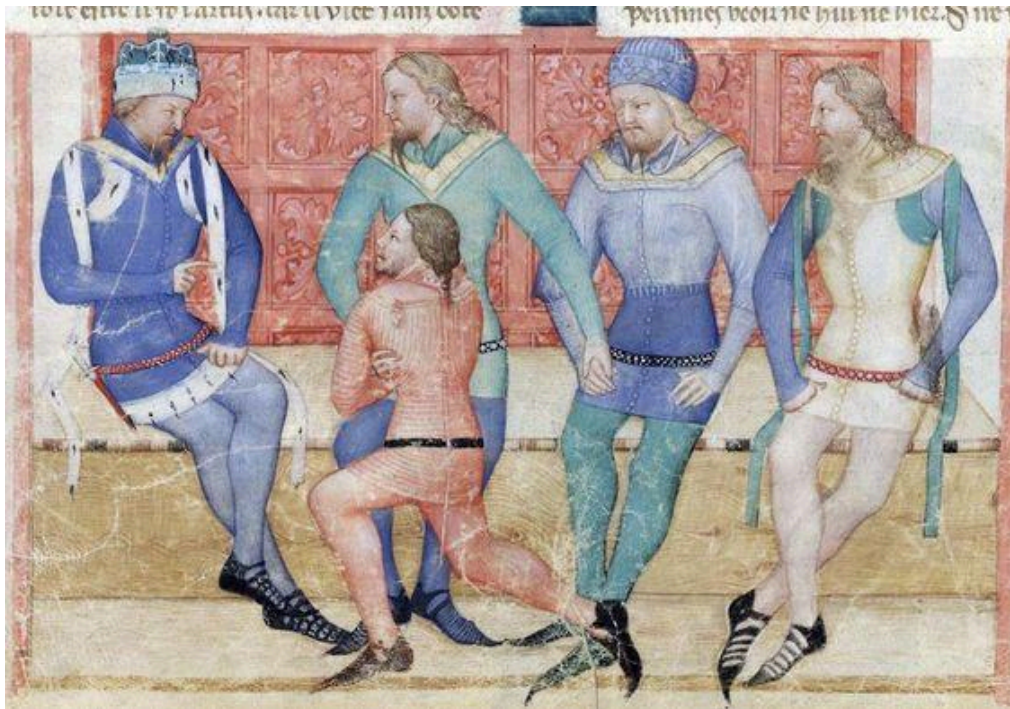


The Herjolfsnes No. 58 from around 1315-1375 shows a similar, if much shallower, version of the grande assiette sleeve. Note how the armscye is slightly in from the smallest part of the shoulder, and

the flare is created through use of triangular gussets. The elbow on this one is very wide, but the change to a very small wrist, while steep, is not nearly as pointed or bumpy as many of our other examples.

<Herjolfsnes No. 58 & Poul Nörlund Pattern

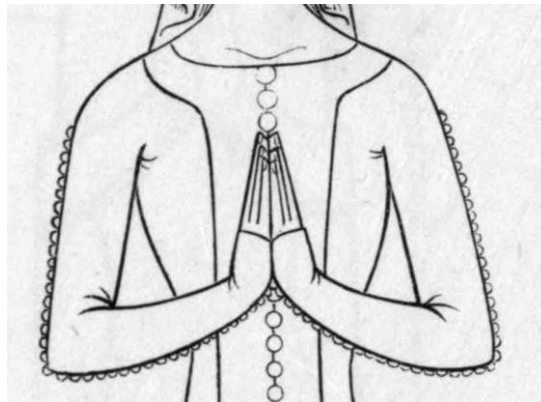
The 1370's show a wide variety of Grande Assiette and set in sleeve shapes. Some are more shallow than others, some trimmed in eye catching furs, impressive quilting, and conspicuous buttons.



<BNF Nouvelle acquisition française 5243 Guiron le Courtois 1370-1380 f49v, Italy



^Also BNF 5243

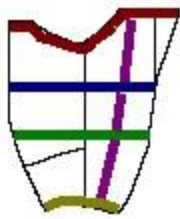


^Margaret de Cobham

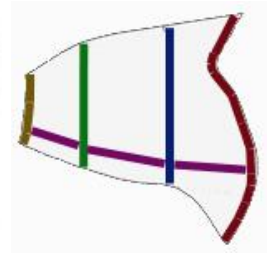
Most of our extant examples from Herjolfsnes from 1370-1398 are not of the Grande Assiette variety. They are largely the steeply curved armscye of the sleeve set in close to the body. They have the shaping main seam down the back of the arm, sometimes with buttons sometimes without. The biceps are fairly thin, the elbows moderately wide, and the wrists invariably quite tight to the body. The angle and distance down the arm, the sharp nipping in to the wrist varies a bit, but almost all of them have unequal angles to the two edges of the main seam down the back of the arm. Once again, this helps create the pitch.



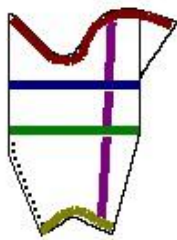
^Herjolfsnes 33



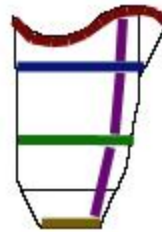
^Herjolfsnes 38 (All Poul Nörlund Patterns)



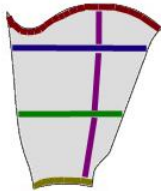
^Herjolfsnes 41



^Herjolfsnes 42



< Herjolfsnes 43



The 1370's show a widening of the elbow and upper arm a bit again, if just slightly, and over garments with sleeves get more popular as well. Though most of the extant garments from this period have the curvy armscyes of sleeves set in close to the body, the Black Prince's Arming Coat shows an almost straight armscye, was not completely out of favor.



^V&A Embroidery Archive



Also from around 1378 we have the Arming Coat of Charles VI. In Tasha D. Kelly's analysis of the extant garment "The Tailoring of the Pourpoint of King Charles VI of France Revealed" she proposes a sleeve pattern very similar to the 33-43 Herjolfsnes finds.



^Arming Coat of Charles

VI1380 - 1385 Institution: Bibliothèque Nationale^

The 1380's have a brief revival of super wide and pointy elbows. Grande Assiette armscyes can be seen on fitted sleeves, as well as wide sleeves, and still at various depths onto the torso. Women's sleeves tend toward the set in sleeve with the highly fitted and curvy armscye.



^BNF 1390-1400



1390s (Ms.VII.14) Biblioteca Civica, Bergamo ^



Katherine Verter^



<Cod. Sal. IXa Missale Parisiense Paris, um 1400

1390's and 1400's sleeves are smooth off the elbow again. Over garments coming down to at least the elbow become so common that bare fitted upper arms are not as easy to find. However, considering many of the tight fitting bicep lines of the over sleeves, the undersleeves likely continued to be constructed in a similar fashion.

Auteur du texte Auteur : Maître de la Cité des dames. Enlumineur de l'œuvre reproduite Date d'édition : 1400-1415 >

When viewing sleeves from the 1250's and the 1400's side by side the jump in style and fit seems night and day, but with enough small evolutionary steps in between the evolutionary arc becomes much more clear and understandable. Understanding where a pattern came from and where it is going can help inform pattern making and interpretation. This paper's look into the progression of the style lines and fit will help in practical production and further research.



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