

# Cruzaden and Quadriljes

## An Eighteenth Century Dutch Woven Poem

by Augusta Uhlenbeck

Frans Hals Museum <sup>1</sup> in Haarlem, The Netherlands, has had a little Dutch textile manuscript in its collection since the nineteenth century. This anonymous manuscript is known as *Het Digtenboekje*<sup>2</sup>. It is filled with woven samples and explanations on how it was done. The manuscript seems to be unique in The Netherlands because no similar manuscripts have been found from the same century. The writer, the master-weaver (?)<sup>3</sup>, of *Het Digtenboekje* completed his notes on December 8, 1753. There is a reference to a second book which up till now has unfortunately not been found. (You haven't seen it in your cupboards, archives?)

### The International Research Team and Point Carré

In 2004, we started the research together with Frieda Sorbor, curator of the Fashion Museum of Antwerp (Belgium) and Sjoukje Colenbrander (Amsterdam, Netherlands) who was preparing for a Doctor's Degree in Art History about "Woven Silks in Haarlem During the Seventeenth Century". We wished to find out how and why the fabrics were woven in a certain manner. We hope to finish in 2008/2009 by editing a facsimile of the *Digtenboekje*. To attain this goal in such a short time we used the textile program of Point Carré for the shaft weaves and for the draw loom weaves. In these drafts, both the liftplan and tie-up and treadling modes are depicted in the same graphic.

### The Manuscript

There are 140 shaft-weaving samples, 99% of which have tie-ups and some explanations. Of the 75 draw loom samples, 99.9% have tie-ups and some draw instructions. All the samples are fabrics for clothing; there are no furnishings, no coverlets and no velvets.

### The Name: dight or dicht

In the eighteenth century, the Dutch language, like other languages at the time, was not well formulated. Words were not always written in the same manner, and the meaning of them changed over the centuries. The tie-up is called "dight" or "dicht" in the manuscript. Now a "dicht" or "gedicht" in the Dutch language is a poem.

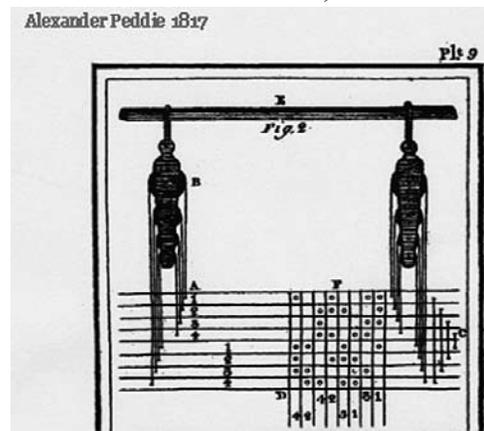
### The Motifs

All the 140 shaft samples, except for two, are figured with little stylized flower patterns. There are chevrons and lozenges, stripes with flowers, and some are what we now call block weaves. The two non-figured ones are simple twills, but no name was used.

### Looms, Names and Techniques

#### Looms:

There were shaft looms, pulley looms, and draw looms with shafts and one or two harnesses, or with two harnesses



1. Peddie pulley loom

and without shafts. A certain number of techniques were woven on the pulley loom, others on the shaft looms. All the bigger flowered patterns were woven on the draw loom.

Alexander Peddie described the pulley loom in 1814. A member of the Complex Weavers told me that a pulley loom is the same thing as a counterbalance loom. Is a counterbalance loom really the same as the pulley loom?

Between 1930 and 1970 there was a renewed interest in these kinds of looms with six or eight shafts, but to obtain a clear shed with these looms is not easy at all. Weaving twill or a satin is impossible. Tabby was woven with a special treadle named "bordelou/bourdelou". This word is also used in the Swedish language. Peddie gave it the word "flushing treadle".

#### Tie-up

In the manuscript only a tie-up is used. The carton (lift plan) is never used.

#### Number of Shafts and Treadles:

The number of required shafts was high, even very high: 24, 32 and more was not an exception. The number of treadles was high too. Tricks were used to make the treadling easier.

#### Materials:

- Warp and weft in silk
- Warp in silk and wefts in linen
- Warp in silk and wefts in wool

And sometimes a silver lamella is used in the weft in the drawloom samples. There are always more warp threads/cm than wefts /cm

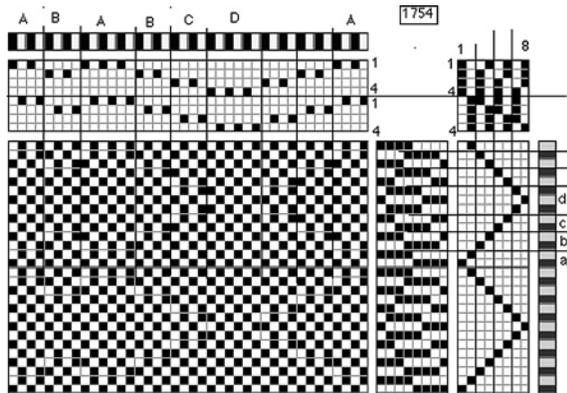


2. 1980/1990 Princess of Norway Evenschoon

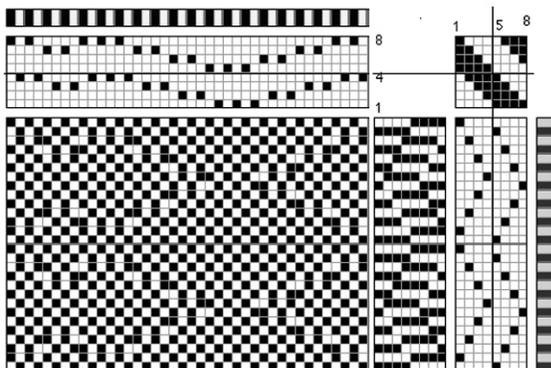
### Techniques and names

A honeycomb was woven called **Evenschoon**. It could be woven with two good sides by using half of the warp rep; it was still woven in the 20th and 21st centuries, even in industry. (Figure 2).

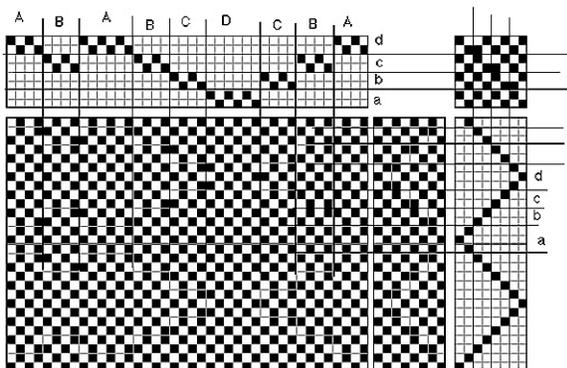
**Cadrille/Quadrille**, called now shadow weave, is classified under “colored patterns”. To obtain a nice one, you need a tabby and a warp- and weft- rep. Two different thicknesses of wefts were used, and it was woven on the pulley loom. If not changed into a block weave, this threading and tie-up seems strange to us.



3. Oldest Cadrille



4. Parallel Cadrille



5. Blocks Cadrille

Figure 3 Cadrille was used in 1753/1754. We think that this is the oldest one. It was woven on a pulley loom.

The threading is separated into two parts. So is the tie-up. The positive upper part is negative in the lower part. No flushing treadle is used (with this treadle you could weave one pick of the tabby). But by looking at the tie-up and using treadles one and two you have the tabby.

Figure 4 Cadrille was used by Mary M. Atwater around 1920 (?). The threading is done like the pulley loom. The tie-up is based on twill 4/4, but the treadling is again a diagonal.

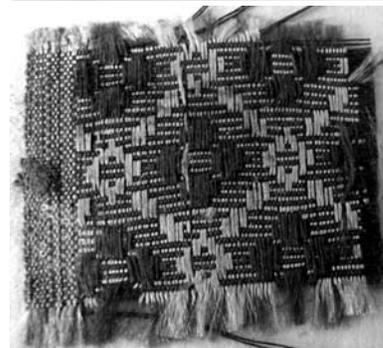
Figure 5 Cadrille is what we do now. It was woven in 1960 (?) based on block weaves. The threading is based on blocks and so is the tie-up.

**Crusade** is unknown now. The tie-up is based on diagonals, plus a tabby in the ground. There were also **broglios, drogets, French drogets, saaytje, drogets with a mirror, lucoois, and chagrijen**. The latter are stitched twills. Why did it have the name “chagrijn”?<sup>3</sup> And why not twills?

6. sample of broglio



7. sample of evenschoon



The word twill is used twice -- a shaft loom sample “broglio” with a twill line (diagonal) effect and a draw loom sample, and “A damask with a twill effect”, a diagonal line in the five-end satin. All the draw loom samples are flowered. In *Textiles in America 1650-70* by Florence Montgomery, broglios are also mentioned. They came from Rouen (France). Almost the same sample is in *Het Digtjenboekje* classified under the name “Evenschoon”. It is nice on both sides.

### Some Names of the Draw Loom Samples

**Lampas** were called Italian damask, with the added phrase “opdat de grond niet doorslaat” meaning that the ground will not be visible. The fabric is not reversible.

Damask with two effects was also called damask. **Atlas** (now the German word for satin) was a certain kind of damask. Flowered damask? There were **triumphanten** (three shades of one color), **drogetten, carrelés** (we call them now cannetillé), figured **cadrilles** and **cruzaad**.

**Moor:** warp rep in the ground.

**Dirty moor:** the warp rep with two different weft colors.

There is even a sample with the nice name, “lost the courage”. I suppose that it was a difficult moment for the weaver. The most amazing sample is the one with two different motifs on each side. I guess that it is in a kind of double weave construction with two warps and one weft.

### The Cruzaad: Hoping that everybody will weave it

The number of shafts is high and also the number of treadles. In the *Keure en Ordannantie van de Smal-Redery*



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### 8. Inverness cruzaad (woven by author)

dated in 1749, the cruzaden were already mentioned together with the cadrilles/quadrille. Woven with 24 to 36 shafts and 36 treadles fabrics cost “4 stuivers and 8 penningen”. With fewer shafts and treadles fabric cost only four stuivers. More than 36 shafts and treadles required “half a stuiver” more. The price for fabrics woven in quadrilles and the cruzaad was the same. The structure is

almost the same. Quadrille does not have a ground, while cruzaad does.

### How to Weave the Cruzaad

The cruzaad was woven on shaft and draw looms. The tie-up is based on even diagonals<sup>5</sup>, plus a ground weave in tabby. You need two warps. One for the ground and one supplementary for the pattern (see Figure 9). If the two warps are totally different, you need two warp beams.

Warp Proportion: 1 / 1 or if there is a thicker thread, or a thread with fuzzy ends like mohair, thread two ground threads for one pattern thread.

You need two wefts. One thicker one for the ground, and a finer one to bind the warp floats.

Use a warp rep to design a nice diagonal for the tie-up. The total number of picks has to be an even number. If not, you have to change it.

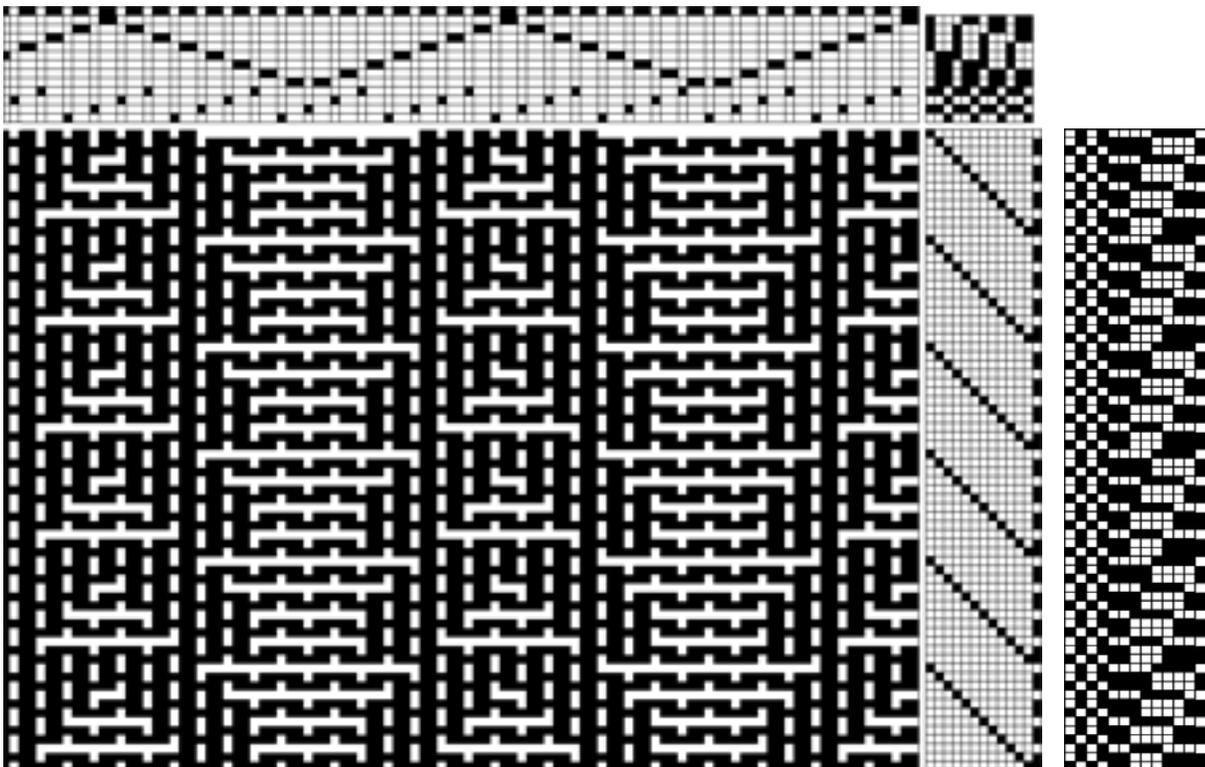
More shafts, and more treadles will result in nicer patterns. People with dobby looms need more picks because this loom cannot treadle both the ground and the pattern at the same time.

How does the warp rep turn into a diagonal? It is the same idea as the cadrille. The ground is on four shafts (minimum two); the other shafts are for the pattern. Start the construction of a warp rep, here 4/4, with an interval of at least plus one in both the warp and the tie-up.

Insert the ground tie-up on two extra treadles if you have a handloom with a lot of treadles. It is much easier to treadle in this way.

When working on a dobby loom, the number of treadles

### 9. Cruzaad draft; tie-up and treadling and lift plan

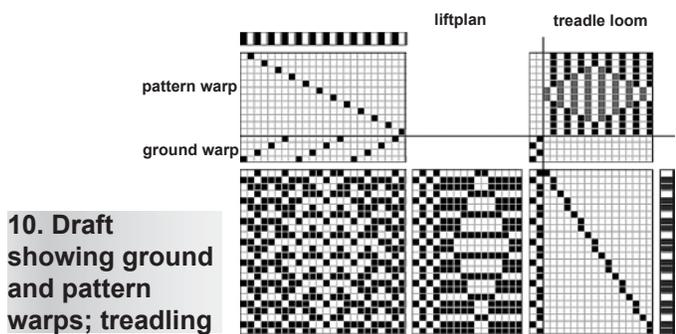


will be 1/4 more or 12 in the pattern shown here.

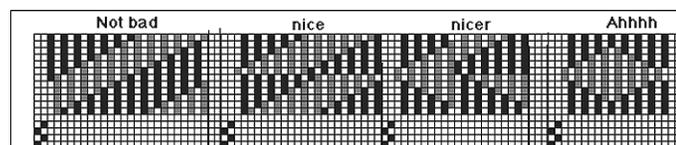
The reason is the ground is changing three times and will be turned into a warp rep 1/2. The pattern will be treadled 2/1.

### Threading

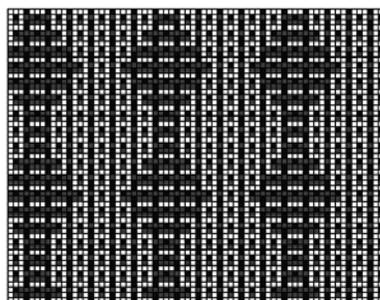
Four shafts (with a minimum of two) are needed for the ground and others for the pattern. There is the basic unit of the threading for the ground (16 threads) and the basic unit for the pattern threads. The two units have to fit well. Take care that the number of ends in the pattern threads corresponds with the number of ends in the ground (i.e. if there are 16 ends in the ground warp there must be a corresponding number of 16 in the pattern warp). You can play with the threading, of course, and also with the diagonal in the tie-up. There is one diagonal and three possible variations for the tie-up in the example shown here. These variations are only a few examples; by cutting and turning the tie-up in different directions the number of possibilities soars. For 16 shafts, (12 for the pattern and 4 for the ground) you take part of “Not Bad”, turn and turn again, and adjust the tie-up.



10. Draft showing ground and pattern warps; treadling



11. Adjust tie-ups to derive different patterns



12. Simulation

### And the Structure of the Cruzaad is...?

Looking at the structure in Figure 12, you see a warp

and a weft effect. The wefts are floating over three and under one warp thread. The two structures known to do that are: taqueté and summer and winter. This last one is a derivation of the taqueté (weft effect). The cruzaad can also be a derivation of the taqueté.<sup>6</sup> The ground is not a warp rep 2/2 but a warp rep 1/2, and the treadling/sequence is two thicker wefts and one fine one, and not 1/1.

### Conclusions

It is not clear how the weaver constructed his patterns for the shaft looms. It seems that the tie-up was the starting point. Did he take well-known patterns and adapt them? (See Figures 6 and 7) We had to take care with names. The broglio from Rouen is an “Evenschoon” in *Het Digtenboekje*. Broglies have another structure. There are a lot of mistakes in the tie-ups, but not in the samples. Can we conclude that the weaver did the corrections on the loom but not on the paper? Even in the tie-up from Alexander Peddie (Figure 1) there is a mistake.

### Endnotes

<sup>1</sup> Frans Hals museum <http://www.franshalsmuseum.nl>. Daniel De Jonghe spoke about this manuscript during the CIETA congress in 1991 (Cieta bulletin N° 71 1993). Draw loom sample N° 66. Here also are mistakes in the text.

<sup>2</sup> In the whole manuscript the word weaver is not used. This word is also rare in French documentation from the same period. The word used to indicate the person who did the weave was “workman”. In Dutch “workman” is called “werkman” and in French “ouvrier”.

<sup>3</sup> There is the Dutch expression “een stuk chagrijn” = “an aggrieved person” And of course the leather quality “Chagrijn”/ Chagrin. Chagrin is the name for a fine quality leather made from the skin of horses, ponies and sometimes sharks.

<sup>4</sup> Used in: Mary Meigs Atwater’s: *Recipe Book, Patterns for Handweavers*.

<sup>5</sup> A diagonal has an even number of picks in the tie-up. A corkscrew has an odd number in this diagonal.

<sup>6</sup> Daniel De Jonghe proved that taqueté is (could be) a derivation of twill. *Technologie van archeologische en Kunsthistorische weefsels*. Gent (Belgium). 1986

### References

Atwater, Mary Meigs. *Recipe Book, Patterns for Handweavers*. Wheelwright Press,LTD. Salt Lake City Utah. ISBN 0-937512-01-x.

“Keure en ordonnantie van de smalredery, mitsgaders reglement op de loonen binnen de stad Haarlem en de vrydom van dien” Te Haarlem gedrukt bij (printed by) Izaäk and Joh. Enschedé ,Ordinaris Stadsdrukkers (by order of the printing-office of the town), 1749.

Montgomery, Florence. *Textiles in America 1650-1870*. ISBN 0393017036

Peddie, Alexander. *The Manufacturer Weaver Warpers Assistant*. Glasgow, 1814.

The author wove the fabric in figure 8 and all the designs were done with Point Carré except Figure 9 which was done by the Editor using Fiberworks PCW.