



PAPILIONACEOUS

Robert Ely takes the designing and weaving of ribbons to a sublime peak with Papilionaceous.

I studied textiles at West Surrey College of Art and Design and spent three years hand weaving there. The first computer-aided hand looms had just appeared and I was able to get started with that new technology: a programmable module was used in place of wooden slats and pegs to store the sequence of lifts on a dobby loom.

My first job out of college was in retail, selling (and wearing) bow ties. I had in mind all along that I would return to weaving at some point, and part of the thought behind weaving narrow fabrics was that I could weave silk specifically for bows. (I am often asked why I don't make ties: ties are cut across the grain of the fabric so that they tie nicely and what I do is simply not wide enough for this, bow ties are cut straight.) In France, bow ties are called papillon – butterfly – and I had a conversation with a customer one day about, if I remember correctly, the Romans believing that butterflies were in some way linked to the soul, and this gentleman made a connection with bow ties as being a window to the soul of the wearer. When I got to finding a name for my new silk-weaving company, a word meaning butterfly-like seemed entirely appropriate.

I went through a very gradual process of looking at various fabrics and products, working out how they had been made, wondering how I could do something similar, who would I sell it to, and so on, and this process gathered momentum until I started making enquiries about textile machinery. I knew I was going to weave but also had in mind that there should be a firm industrial base if the potential business was going to progress in the way I imagined.

I set up Paponaceous with the intention of weaving in the manner of a hand weaver but with the capacity of a modern producer. This is still the case; I design, sample and weave everything myself, but can still deliver several thousand metres of ribbon if that is required. The very first order I delivered in 1996 was silk for gents' braces and I have been supplying the same company ever since.

The business has remained small. To some extent fabric is in the blood: my father's father was a tailor, my mother's mother was a dressmaker and my great-great-grandparents grew and wove linen.

Narrow fabric silk weaving is rather a specialist area to start with, and specialising within that makes some products very specific indeed. I have been producing ribbons and trimmings for costume for more than twenty years, but the coincidence of Poldark on the BBC and visibility through social media have given this area of my work much greater visibility.

Most of the costume ribbons that I weave are not commissioned for any particular production. The majority are produced for a costume haberdashers in London and from there they go out to costume makers and wardrobe departments. The designs evolve from an on-going collaboration that leads to new colours and patterns, taking inspiration from historical textiles and documents as well as from the process of weaving ribbons itself: the loom, the silk threads, the structures that all weavers use give rise to these ribbons. Surprising as it may be, the first I usually know of a ribbon being used is when I see it on screen.



This was the case with the braces worn by Ross Poldark. Although I have been producing ribbon for silk braces since the very beginning, the silk for Ross's braces was actually designed and woven as a more general trim that was then used by a costumer to turn into braces. Elizabeth and Verity wore Papilionaceous ribbons in season one of Poldark and they decorated Caroline Penvenen's bonnet in season four: I thought it rather appropriate that a story set in Cornwall should use ribbons woven in the next county of Devon.

I think of what I do now as a very concentrated form of weaving. I do far more weaving in a square inch than I did in a square foot when I was hand weaving. Or, to put that in a computer context, an image printed at 72 dots per inch will have 5,184 dots in a square inch, and a silk bookmark design has 28,000 dots in a square inch. As a natural fibre, silk has its inconsistencies and imperfections and is not the easiest fibre to work with, but it also has qualities not found elsewhere. Weaving ribbons brings additional concerns; the edges and back are going to be seen so there is nowhere to hide from a structural point of view.

I use the same grade of silk almost exclusively - it's around 40 denier (approximately 0.03mm in diameter) - and I weave on a jacquard loom. This is a loom that gives a very high level of control over what the yarn is doing and what colour gets used where; all of the 28,000 points per square inch have to be told what to do and it's the jacquard mechanism that does that.

All of this is ideally suited to computerisation, the punch cards of the loom were of course a very early form of stored program. I now design on a computer screen using design software, but also specialised weaving programs that allow me to combine the weave structures that are necessary to turn ideas into woven ribbons. The design file is loaded onto the loom, which will then carry out what it has been told and the first sample is woven. At that point I can see what needs to be changed and progress in that way until the design is finalised and ready to produce in quantity.

Unlike the dobby loom that I used at college, where groups of warp threads are manipulated together so that across the width of the weaving there will always be some repetition, with a jacquard this restriction is removed, hence the ability to produce the more pictorial designs that we associate with the term. At the same time, a jacquard loom can still be used to weave simple geometric and plain designs. The huge advantage to an individual weaver is the versatility that a jacquard allows. It does come at a price though, both financially and in the need to find space to accommodate a machine weighing over a ton and standing fourteen feet tall.

The versatility of this loom leads to a variety of different jobs at any given time. At the moment I am making a small batch of custom-designed bookmarks that are destined for Mexico; tubular weaving for audio cables that will be constructed in the UK but used in China, Hong Kong and Australia; and small quantities of a wide variety of new colourings of a costume ribbon that have already gone to historical costume makers in Norway, Sweden, Spain and the UK.

Next year I have an exhibition planned at the newly refurbished Whitchurch Silk Mill. This will feature both small and larger scale wall pieces that are assembled from multiple individual silk ribbons all designed and woven to hang together.

The hardest design challenges are almost exclusively the ones that I give myself. In recent years these have involved multiple layered ribbons, ribbons that are woven as several tubes that are then turned inside out through each other before the final product is realised. Graphic designs can be challenging when I am pushing the boundaries of what I want to achieve with weaving; working from photographs where I want to preserve the photographic quality but also to make it quite clear that it's not a woven photograph, it's something that is different to both photography and weaving and has a particular quality of its own. Satisfying the search for that intangible quality is certainly a challenge.



Poldark images
Mammoth Screen Ltd