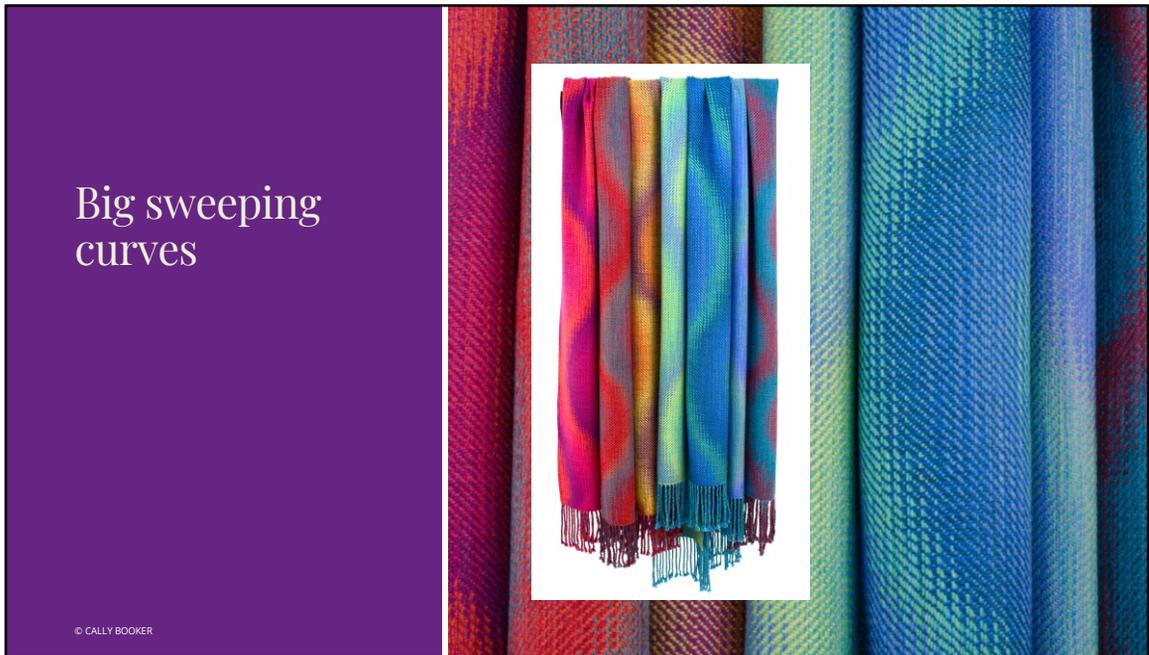


# *Mechanical Magic*

## ZIGZAGS AND CURVES INTRODUCTION

There are many ways to create zigzagging or curving designs in woven cloth, so in this video I am going to introduce a few examples of the kinds of zigzags and curves which I have found especially fruitful on a mechanical dobby loom.

## MMZCo1 Mechanical Magic - Zigzags and Curves - Introduction



When I think of curves, in the first place I think of curves like the ones in these scarves. Big sweeping curves in the warpwise direction, which I can design at the loom as I weave. Looking up close we can see the structure is a twill. In fact these scarves are all echo weaves. That is, there are two warp layers threaded in parallel and woven with a twill structure. This mixes both warps with the weft to create bands of colour. For instance, in the third scarf from the right we can see bands of light green, dark blue and periwinkle in succession.

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### Smaller scale patterns

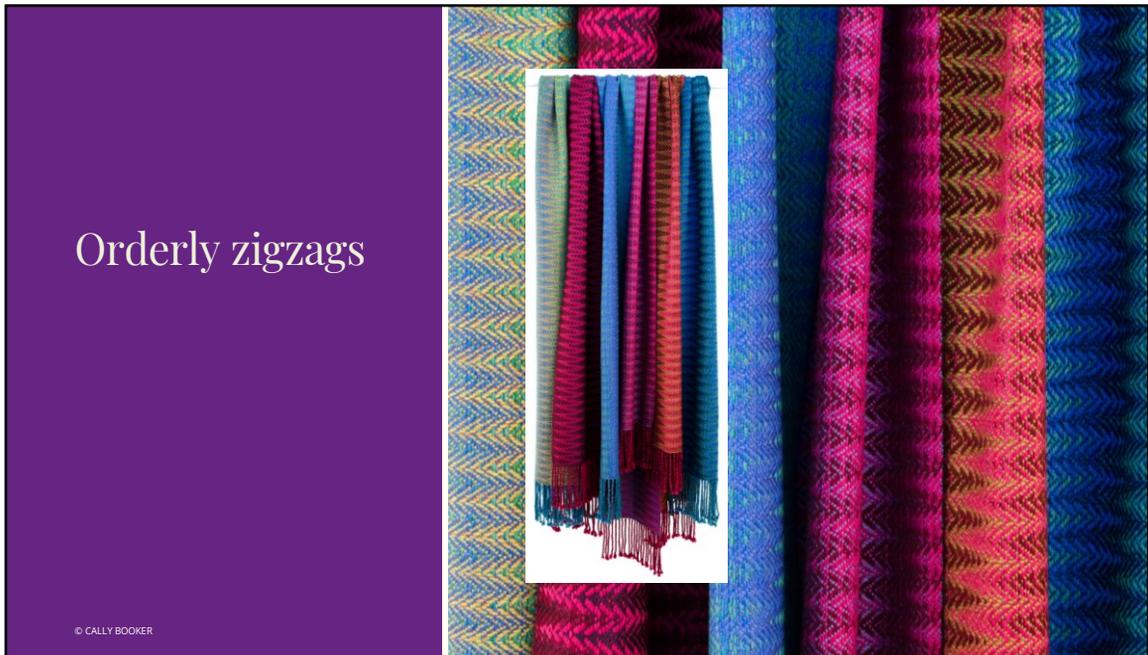
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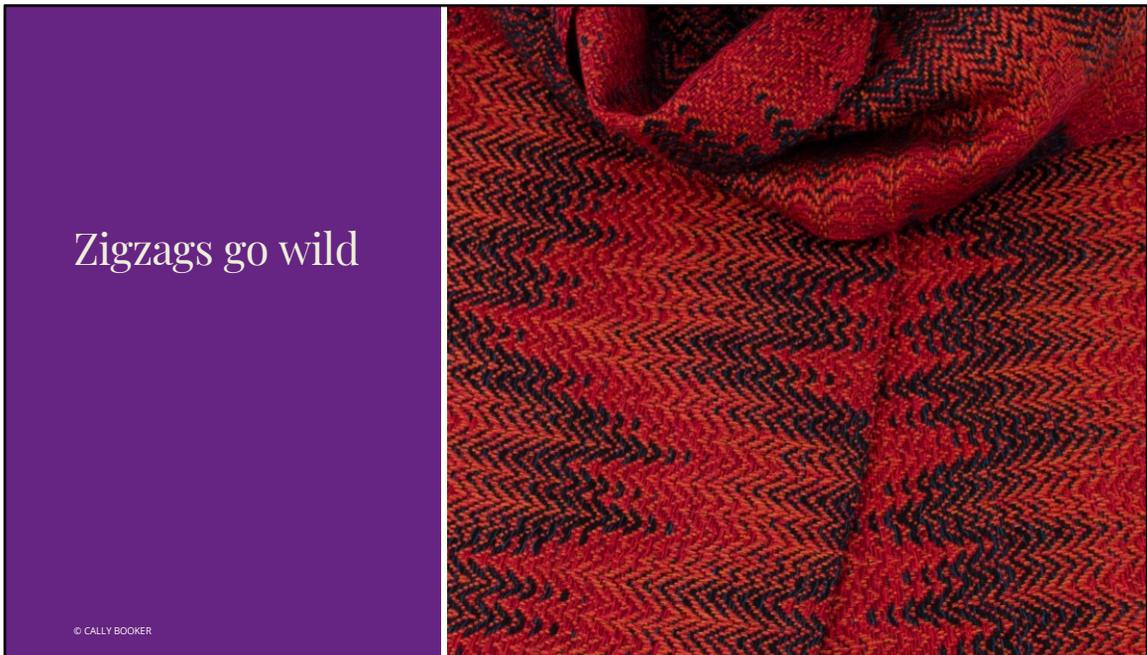
The same structure can be used with different threadings to create symmetric or asymmetric designs. This symmetrical leaf-shaped motif is another example of a curved design but at a smaller scale to make this patterned yardage. We'll talk about varying the scale when we discuss threadings.



Another structure that lends itself happily to curves is four-colour double weave. I use the term here as it was introduced to me, to refer to a double cloth with two warp layers, where each layer is threaded across all the available shafts. Every pair of picks, therefore, interlaces both wefts with both warps, so four distinct blends are created. We'll look at the structure in more detail when we talk about pegplans.



Of course, I have promised you zigzags as well as curves, and here we have another array of echo weave scarves which are zigzagging away. For a consistent zigzag, like the ones shown here, we can make the simplest kind of lag chain, which we just treadle round and round.



But we may not want to be consistent. We can go as wild with our zigzagging as with our curves and design them at the loom. The mechanical dobby lets us do this very easily.

Let's not hang about then, but get straight on with the threading.