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Name Drafting

an approach to a better understanding of overshot drafting principles

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I don't remember when or where I was first exposed to name drafting, but over the years I have developed my own approach to creating a draft for weaving in overshot. A person's name, a song title, a motto, or just a few words can be transformed into a four-shaft draft and woven following basic instructions and weaving principles.

When I taught intermediate weaving, I was always surprised to find weavers copying drafts exactly from the books, with little understanding or regard for the composition of the draft and a lot of reluctance to alter it in any way. Students—and others—often did not realize that the drafts, like those in Davison's *A Handweaver's Pattern Book*, for example, often start with major blocks and the repeats are given without regard for balancing at the beginning or end.

Students would thread a draft and begin to weave it only to discover that the selvedges had partial patterns/motifs or that the pattern would have looked better if it had begun (the threading and treadling) in a different place. Only trial and error revealed the appropriate threading for the beginning and end as well as an understanding of the draft as a whole.

The benefits of name drafting

Recently, when helping a student friend to understand drafting, I went back to lessons I had given on creating an original draft/pattern by a technique commonly known as "name drafting." Through this process of creating an original draft from the beginning and working out the treadling and examining the drawdown for pattern centers and individual motifs, the principles of drafting become clearer. Using it, weavers can begin to look at drafts more critically, understand the components, gain the ability and the courage to alter drafts to suit their own needs, and also create new patterns.

The student's name in this case is "Patricia Pomeroy Smith." This article explains how her name can be drafted into an overshot pattern and woven several ways. By following the steps for developing the draft and understanding the rationale involved, you can take your name, a song title, or any phrase and create your own original draft while also gaining a better understanding of drafting principles so you can use and adapt the drafts you find in most weaving books.

Name drafting step by step

To arrive at a name draft, each letter in the name is assigned a shaft number from 1 through 4 (for a 4-shaft draft). The most common way to do this is:

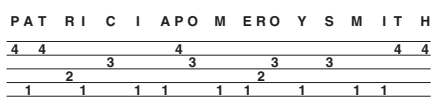
4	D H L P T X
3	C G K O S W
2	B F J N R V Z
1	A E I M Q U Y

Patricia Pomeroy Smith becomes:
41421311 4311231 31144

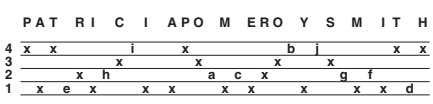
Following the principles of the structure, we know that to maintain the plain-weave ground cloth in overshot, the threading must follow an odd/even order from beginning to end and we cannot have two adjoining ends on the same shaft. Therefore, we must leave a space between any two odd-numbered shafts, two even-numbered shafts, or two adjacent threads on the same shaft and in that space add a number called an "incidental" to maintain the odd-even order. Our draft now, with no spaces between the three names and placing dashes where we will need incidentals, becomes:

414–21–3–1–143–1–123–1–3–1–1–4–4

It is easier to derive the incidentals when we have placed the other numbers in draft form, leaving spaces for the incidentals:

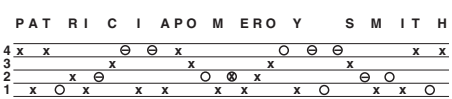


We can now look at the draft for any symmetry and we discover that it is rather symmetrical, showing a center section and two end sections. We can then begin to fill in the spaces with incidentals to produce the complete overshot draft, working with the two end sections and the center section to increase their symmetry. The incidentals are shown below with letters indicating the order in which I placed them (a–i):

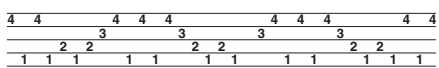


A cotton table mat using our sample name draft, woven rose fashion. Pattern wefts are inlaid to form lacy borders rather than extending across the whole warp. The warp is16/2 cotton at 24 ends per inch; the pattern weft is 8/2 cotton.

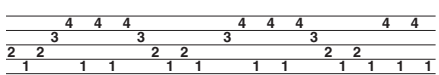
Reaching this point, we find we have added the incidentals to achieve a symmetrical pattern for the parts bracketed. However, we need to add one incidental on the left and two on the right to make the draft completely symmetrical. On the left, the incidental must be on shaft 2 or 4; on the right, one on either 1 or 3 and one on 2 or 4. We chose shaft 4 on the left and 1 and 4 on the right to give:



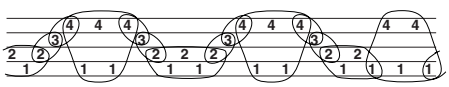
I have marked the shafts corresponding to the original letters in our name with an **x** and the incidentals with a ○, ⊗, or ⊖. I marked the center of the repeat with a ⊗. That incidental, and those marked with ⊖, could be placed on other shafts to vary the draft and ⊗ could be placed on shaft 4. However, since we wish a symmetrical draft, those ends marked ⊖ must be moved in pairs: The first and sixth ⊖ from the left must be on the same shaft and could be moved to shaft 4; the second and fifth ⊖ could be moved to shaft 2, as could the third and fourth ⊖. These moves would offer some variation to the draft should we not be satisfied with the drawdown, but let's proceed with the draft as it looks now.



Since our draft is symmetrical (beginning and ending with the same block), we cannot repeat it end to end without getting a 7 to 9-thread float over the block on shafts 1 and 4. While that float length may be acceptable, depending on the size of the threads used, it is too wide a block compared to the others in the draft. If we drop the last three ends on the left side and move the end on shaft 1 to the right side, the result is a 5-thread block on shafts 1-4:



Before we actually draw down the pattern from the draft, we must determine the treadling sequence. Most overshot patterns are treadled "as drawn in," meaning that the treadling order of the blocks is derived from the threading order of the blocks. This treadling method is also known as "star fashion" since the resulting pattern produces two diagonal lines intersecting each other (some patterns are more starlike than others). To find the as-drawn-in treadling sequence, we circle each block/pair of shaft combinations: the 1-4, the 1-2, the 2-3, and the 3-4. The number of ends circled in each group, minus one end, becomes the number of pattern picks treadled for that block. The "minus one" is because the first end of one block is shared with, or the same as, the last end of the preceding block.



In our draft (reading from the right) we have five ends in the 1-4 block, which means four picks for that block; four ends in the 1-2 block for three picks, etc. In this way, we derive a treadling repeat that consists of 30 pattern picks.

We will create the drawdown as though we were using a counterbalance loom. In the lefthand tie up below, "x" indicates the shafts that go down. For jack looms it is the reverse, shown below right by "o" (these shafts go up). Even if you have a jack loom, it's easier to do the drawdowns for shafts that go down; these threads are covered by the pattern weft.

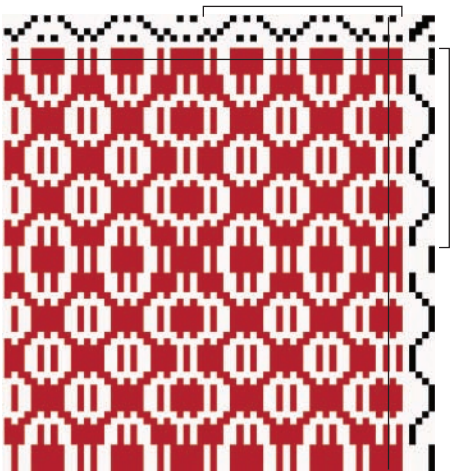
1	2	3	4	a	b
		X	X		X
	X	X		X	
X	X				X
X			X	X	

1	2	3	4	a	b
O	O			O	
O			O		O
		O	O	O	
	O	O			O

a, b = tabby

Deriving an overshot drawdown

Drawdowns should always be made of at least two full repeats of the threading and treadling. Figure 1 shows two repeats of our threading and two repeats of the treadling. To do the drawdown using the as-drawn-in treadling sequence, note the first four picks are in the 1-4 block. Four



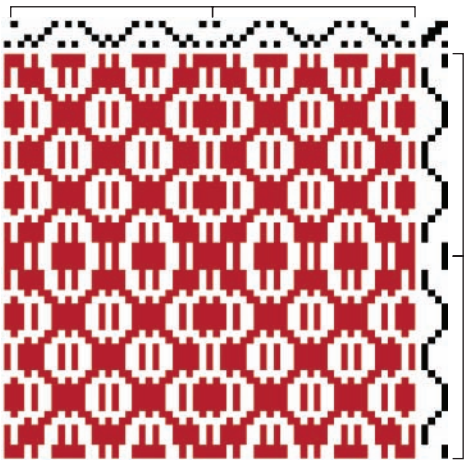
1. Two repeats in threading and treadling

squares are marked in the treadling sequence under the fourth treadle, and for each weft row a mark is made below the warp threads on shafts 1 and 4 to indicate the pattern weft floating over those threads. Three picks are made next in the 1-2 block. This is marked under the first treadle and then in the drawdown below all threads on shafts 1 and 2 across the draft. To complete the drawdown, continue for the entire treadling sequence and repeat the sequence; see Figure 1.

Again, drawdowns should always consist of at least two repeats of both the threading and the treadling. This enables you to judge symmetry, pattern centers, and the resulting motif(s). Had this pattern been threaded and treadled with only one repeat, we would think that the pattern consisted of a small dogwood-like flower. With two repeats, we can see that the pattern forms a large flower in the center of the drawdown and that this flower is the center motif of a large diamond. The points of the diamond overlap with adjacent diamonds, side to side and top and bottom.

Now that we see this, let's go back and look at our draft. The true center of the pattern is not the center of our draft. Our eyes and the diagonals tell us that the center of the pattern motif is the 1-4 block at the beginning of the repeat. We can see that it takes two repeats of the draft to give one complete pattern/ motif, so we should always thread an even number of repeats.

We can also see in the drawdown that it would look better to start the threading on the right side by dropping the first two ends of the repeat and adding three ends on the left side to complete a full diamond. At the end of the number of repeats in your draft, a final thread on shaft 1 must be added to balance the final motif; see the threading in Figure 2.



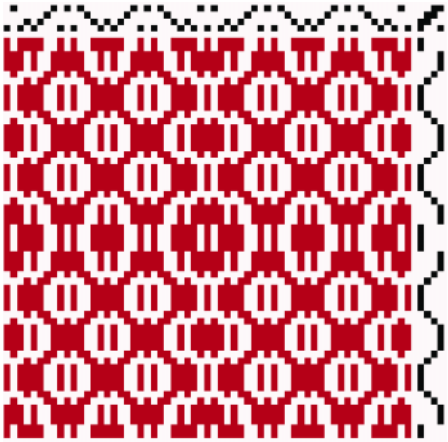
2. Beginning and ending points are moved in threading and treadling to center the design.

The treadling also requires two repeats to complete the large diamond. To start and end at the points of the diamond, two picks are removed from the beginning of the repeat and added at the end. No balancing picks are necessary; see the treadling in Figure 2.

When you are doing drawdowns, look at the results from different angles. You may notice motifs that encourage you to begin and end the threading at a different point in the repeat, add to and subtract from the treadling sequence at start and/or finish, or even alter your draft to make the threading sequence more logical or so it fits the start of a pattern or motif. A complete examination of the draft and drawdown is the key.

Treadling rose fashion

A simple transposition takes us from the as-drawn-in, or star fashion, treadling to a treadling method known as "rose." The diagonal lines of the as-drawn-in treadling thereby become a roselike pattern cluster. In rose-fashion treadling, the threading draft is followed as usual, but blocks are exchanged in the treadling. In our draft, for example, where the 1-4 block is threaded, the 1-2 block is treadled and vice versa. Where the 2-3 block is threaded, the 3-4



3. In this rose-fashion treadling: the 1-2 block exchanges with 1-4, the 2-3 block with 3-4.

block is treadled and vice versa. Compare the treadling sequence in Figure 3 with the sequence in Figure 2.

A new pattern emerges. The central diamond is a little smaller. There is a more pronounced overlap, horizontally and vertically. In some drafts, when a rose fashion treadling is used, the differences in the design cause a rethinking of beginning and end points for both the threading and the treadling.

Some other considerations

Since we are "weaving on paper" we do not have to worry about "squaring" the pattern. If we follow the rules and weave one pick fewer than the number of warp threads circled for each block, our diagonals will be truly diagonal and our circles round and our squares square. In actual weaving, these diagonal lines should also be true diagonals. If your beat is too hard or your pattern weft too thin, the pattern will be compressed; if your beat is too weak or your pattern weft too thick, the pattern will be elongated.

And don't forget, we are weaving overshot! We have a plain-weave ground cloth: a tabby pick must be made before every pattern pick, using treadles a and b in alternation. We don't think about tabby when we are doing drawdowns because tabby picks do not affect the design.

Weaving on paper obviously gives us a much sharper image than an actual woven piece. However, what may look fine after the first few treadling repeats on the loom might not look so fine when the finished piece is off the loom, stretched out, and viewed from a few paces back. Again, I'm talking about where the motifs begin and end. A few inches on the loom may not be representative of the final piece. Always allow for a length of sampling and view the results from different angles, both under a light and without direct lighting.

We have seen how necessary it is to use two repeats or more in a drawdown. Again, examine Figures 2 and 3. In Figure 2 you can see a smaller diamond or flower motif, within the larger diamond, that does not overlap with the same motif at the sides, above, or below. Concentrating on that smaller motif would produce another point at which to begin and end the draft and another point at which to begin and end the treadling.

There are also alternative treadlings for that smaller motif. You could repeat it over and over with 27 pattern picks, or repeat the pattern as overlapping flowers with just 18 pattern picks. Can you find those two treadling sequences?

Overall patterns can produce motifs within a motif that can be isolated from the full treadling and as such can be used as borders. Now look at Figure 3. Can you isolate a border pattern having 14 pattern picks? One having 20?

The asymmetrical draft

Very often, perhaps more often than not, a name or phrase does not make possible a symmetrical draft. While most traditional overshot patterns tend to be symmetrical, there is nothing wrong with asymmetry. Asymmetrical patterns can be considered "directional" and can often be adjusted to work quite nicely.

There are no rules in arranging an asymmetrical draft. However, there are a few guidelines. First: Watch the width of your blocks. Block width affects the length of the pattern-weft float, which can't be so long as to be impractical. It also must be considered in terms of its relationship to other blocks, i.e., its proportion in the rest of the draft. Here, some creative manipulation may be needed, such as adding more incidentals than called for or eliminating a few ends entirely. Progressively wider or narrower blocks may give your pattern a directional slant that can be especially pleasing.

Watch the transition between blocks: If the transitional block between two large blocks is small, it might not be effective. It may be best to widen it or eliminate it altogether. If you eliminate it, you may end up with blocks "on opposites" (e.g., 1-4 followed by 2-3). You must judge how this affects your overall pattern.

Of course, an asymmetrical draft can be turned into a symmetrical one by reversing it once you reach the end of the original draft. However, this will give you a final repeat that is twice as long as the original draft. You must also consider the width of the center block—the turning block. In addition to preventing it from being too wide for practical float length, you must make sure this block has an odd number of ends so that the draft is mirror-imaged from the center thread. You can further increase the length of an asymmetrical draft in addition to making it symmetrical by repeating it, reversing it, and then repeating the reversal.

There are a lot of possibilities, so don't be discouraged or give up if your name or chosen word or phrase lacks symmetry. All other principles still apply. For those of you with a name, song title, or slogan that just doesn't work out symmetrically or asymmetrically in a way pleasing to you, you can always try a different code when you assign your shaft numbers:

4	T	U	V	W	X	Y	Z
3	M	N	O	P	Q	R	S
2	G	H	I	J	K	L	
1	A	B	C	D	E	F	

Whatever you come up with, you'll enjoy creating original designs.

Resources

Mitchell, Peter. *Overshot: A Manual for Creative Drafting and Weaving*. West Newton, Massachusetts: Chesebro-Mitchell Associates, 1994.

Sullivan, Donna Lee. *Overshot: Redesigning the Tradition*. Loveland, Colorado: Interweave Press, 1996.

van der Hoogt, Madelyn. *The Complete Book of Drafting for Handweavers*. Petaluma, California: Shuttle-Craft Books, 1993.