Compound Weaves with Supplementary Sets: Unit Weaves

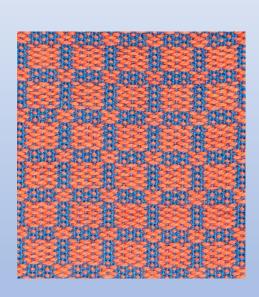
Marcy Petrini

A Weaving Year of Wonder Study Group

June 21, 2021

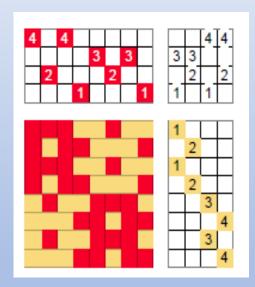
Unit Weaves

- Supplementary weft-float patterning
- Background fabric, often tabby, but not always
- Patterning weft heavier and loftier
- Floats anchored ("tied")
- Each block is fixed in width
- Blocks can be repeated
- Blocks are independent (don't share pattern shafts)



Summer and Winter

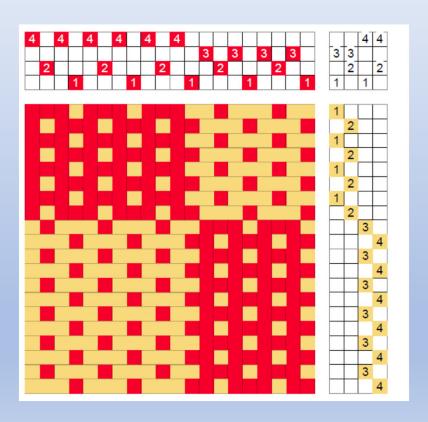
- Two blocks on 4 shafts
- Two tie-down shafts, 1 and 2
- One pattern shaft per block
- Note sinking shed



Comparing Overshot with Summer and Winter

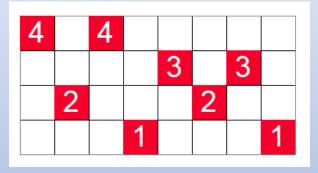
Overshot	Summer & Winter
Variable blocks, determines float	Fixed block, float anchored, no more than 3 threads
Shared shafts	No pattern shafts shared
4 blocks on 4 shafts	2 blocks on 4 shafts
1 pattern pick per block, square the block	2 pattern picks per block, repeat in sets to square
Tabby odd vs. even	Tie-down shafts vs. pattern shafts
Blocks cannot be repeated, float too long	Blocks can be repeated, tie-down threads stop float
Blocks cannot be combined in treadling	Blocks can be combined in treadling

Blocks Can Be Repeated

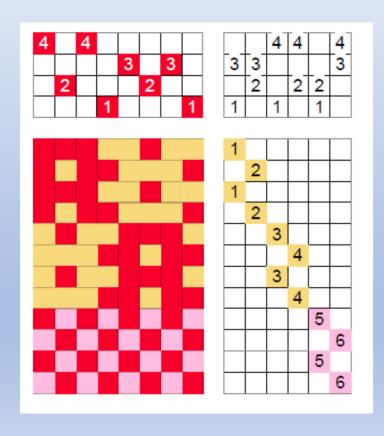


Ground Tabby

- Every other thread for tabby: 1, 2, 1, 2
- Alternate every other thread: 3, 3, 4, 4
- Tabby treadling: 1 & 2 vs. 3 & 4

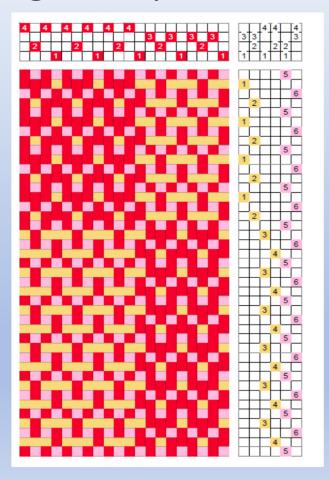


Treadling Showing Tabby

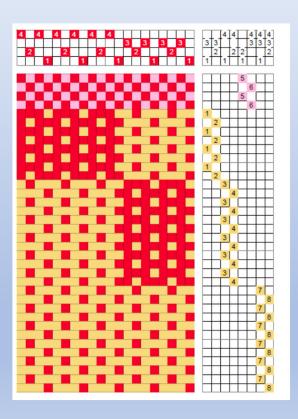


Alternating Tabby with Pattern Picks

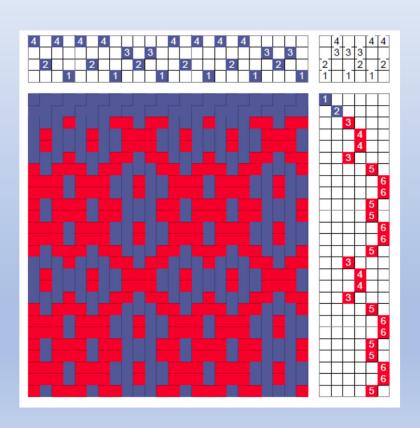
Treadling "Singles"

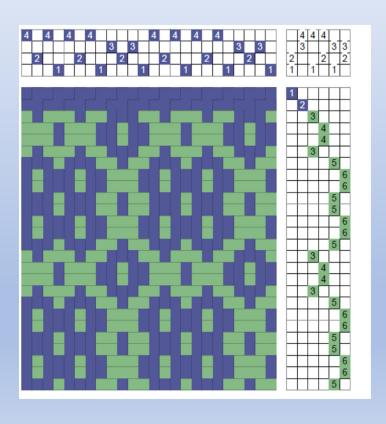


Combining Blocks in the Treadling



Treadling Options: Paired O's and X's





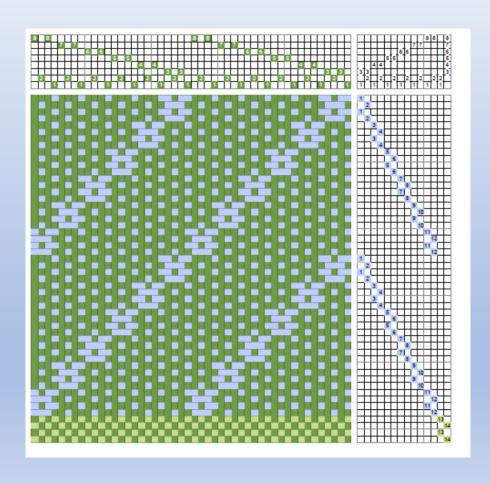
Converting from Sinking to Rising Shed

Untie what's tied, tie what's not tied

4			X	X		X	X	X
3	X	X				X	X	X
2		X		X	X			X
1	X		X		X		X	
	1	2	3	4	5	6	7	8

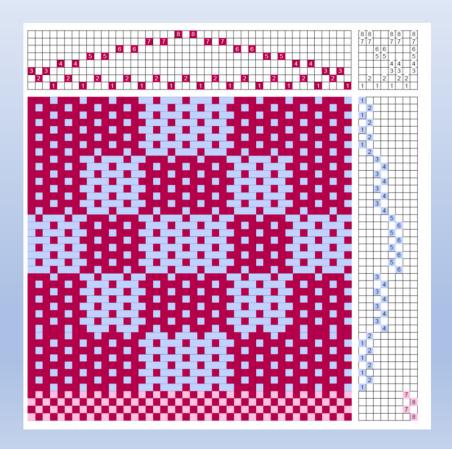
O	О			O			
		O	o	O			
O		O			O	O	
	О		О		О		o
1	2	3	4	5	6	7	8

Summer and Winter on More Shafts



Blocks Are Usually Combined

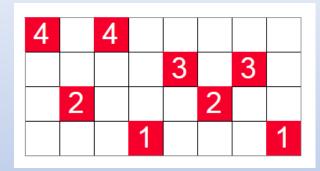
- More pleasing design
- Need fewer treadles



Unit Weaves Nomenclature

Single, double, etc.

Tie shafts



- Paired or unpaired Whether the ties are next to each other (paired) or not

 Ratio Tie-down threads to pattern threads within a block
- Summer and winter is single, two-tie, unpaired unit weave with a ratio of 1:1
- Single, two-tie unit weave

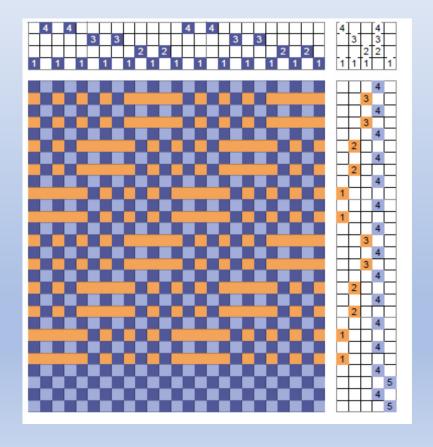
Single	One shaft of pattern per block, 3 for A, 4 for B, 5 for C, etc.
Two-tie	Shafts 1 & 2
Unpaired	Shafts 1 & 2 are separated by the pattern shaft
Ratio of 1: 1	For each tie-down thread, there is a pattern thread

Number of pattern shafts per block

Number of shafts for the tie-down threads

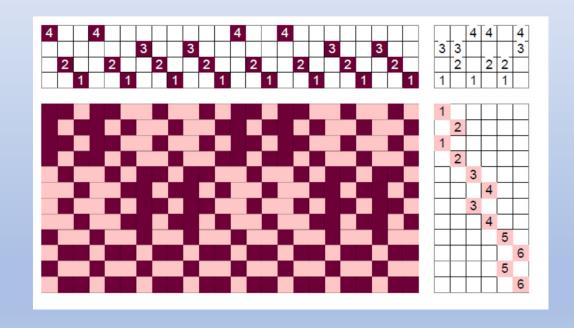
Barley Corn

- Same threading as Spot Bronson
- Single, one-tie unit weave

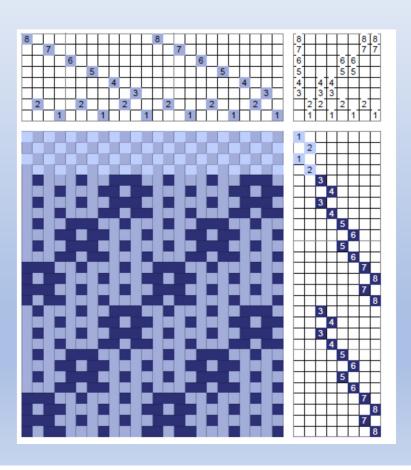


Pairing is not Successful on 4 Shafts

- No tabby possible,
 pseudo basket weave
 formed
- Background floats same
 as pattern floats

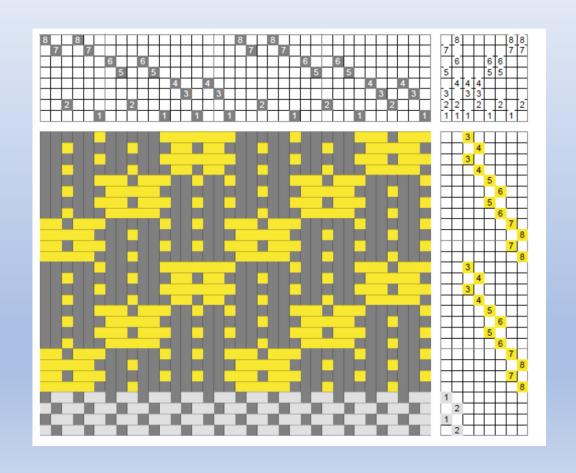


Double Two-tie Unpaired Unit Weave, Ratio 1:1



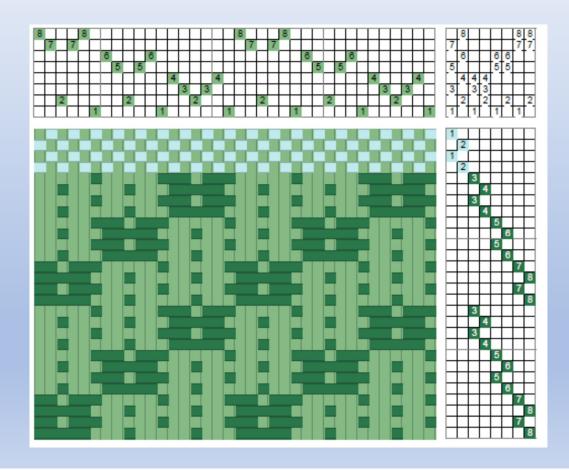
Double, Unpaired Two-Tie Unit Weave, 1:2 Ratio

- Beiderwand misnomer
 - Beiderwand is a doubleweave
 - All unit weaves called beiderwand aren't
- No tabby possible, pseudobasket weave formed



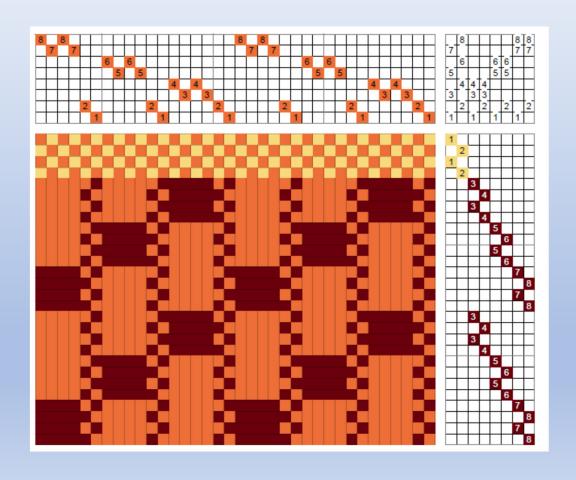
Double, Unpaired Two-Tie Unit Weave, 1:2 Ratio

Pattern shafts in pointed twill order



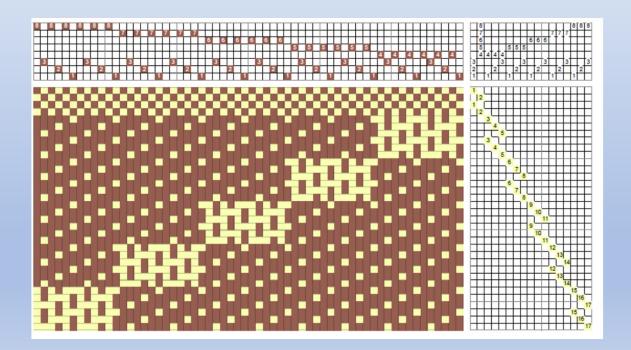
Double, Paired Two-Tie Unit Weave, 1:2 Ratio

- Tied Latvian
- Tied-Lithuanian on same threading uses only one pattern pick, shaft 2 + pattern shaft
- Odd vs. even tabby

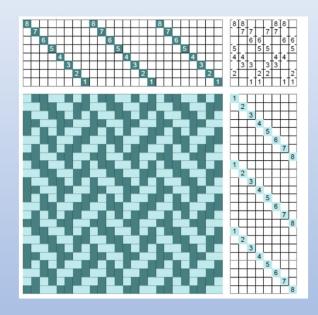


Single, Three Unpaired Unit Weave, 1:1 ratio

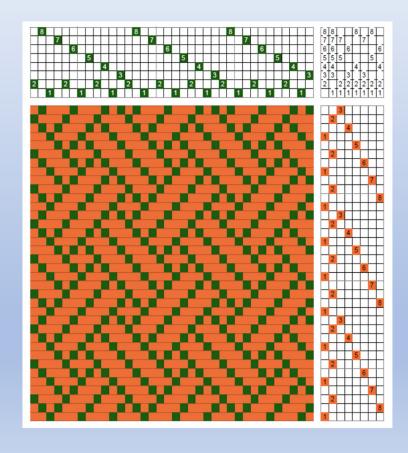
"Half-Satin" name is erroneous



Unit Weave Threading Used for Twills

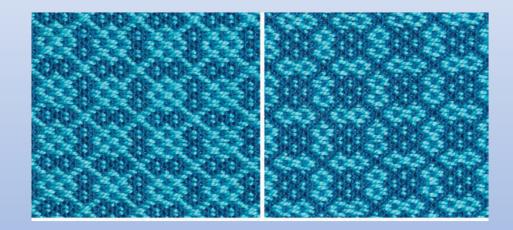


Unit weave threading more complex plaited twill



Fabric Use

- As in supplementary weft
 weaves, unit weaves have two
 wefts, they are heftier fabrics
- Traditionally coverlets
- Afghans, pillows, other household items
- Finer wefts = finer fabrics



This Month Challenge

- Weave a unit weave, 1 set for warp, 2 sets for weft, one weft ground, one supplementary. On 4 shafts, you have two choices of threading and tons of choices for treadling.
- 2. Do not weave true beiderwand as it does NOT belong to this group.
- 3. Do not turn the draft; yes, I know, one weft is easier to weave but we will turn drafts separately.
- 4. Do not use a tied weave threading to weave other structures, for example twills. Always, the fabric determines the structure.
- 5. Unsure as to whether your choice is a unit weave? Ask!

References

- Donna Sullivan's Summer & Winter A Weave for All Seasons 1991,
 Interweave Press
- Carol Strickler A Weaver's Book of 8-Shaft Patterns from the Friends of Handwoven, Interweave Press
- My Right from the Start articles in SS&D
 - Overshot and Summer-and-Winter Compare and Contrast, 145: 21-26,
 Winter 2005/6
 - Examining a Tied Unit Weave, 198:11-16, Summer 2019
 - A New Dimension to a Tied Weave 199: 11-17, Fall 2019

Questions?