Code Drafting, Part 7: Crackle

Previous articles in this series showed that code drafting need not be limited to the traditional overshot technique [1-6].

As yet another example, code drafting can be applied to the design of crackle weaves using the motif-along-a-path method [7-9]. In this method, the path is the design element.

A path can be constructed from numbers associated with the characters in the string used. For example, if only the uppercase letters are considered, they can be given values from A = 1 to Z = 26.

This, however, may result in a path with unacceptably large values. A better solution is to assign the same value to more than one letter.

One possibility is to use the tables that are traditionally used for overshot code drafting [1]. One of these, suitable for 4 shafts, is

AEIMQUY 1

BFJNRVZ 2 CGKOSW 3

DHLPTX 4

For the string

HELEN OF TROY

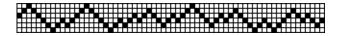
the path is

4, 1, 4, 1, 2, 3, 2, 4, 2, 3, 1

which, shown graphically, is:



When the crackle motif — 1, 2, 3, 2 — is placed at each point on this path, and incidentals added as required for crackle weave, the resulting sequence is:

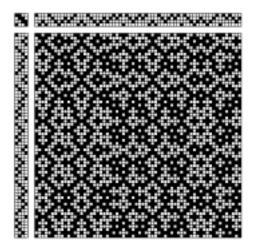


There are no constraints on a path for crackle. Instead, the constraints are applied

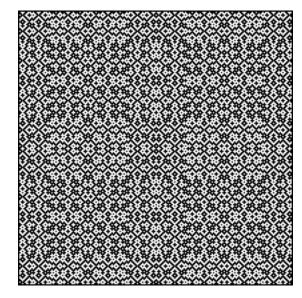
after the crackle motif is placed along the path. Modular reduction [10] then is used to bring the values in range of the number of shafts to be used. For 4 shafts, the result is



A draft for a 2/2 twill and treadled as drawn in is



The drawdown, with reflection for visual effect, is



There are, of course, endless possible variations on this idea. Have fun!

References

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- 9. *Crackle Weave, Part 3: Path Design,* Ralph E. Griswold 2004: (http://www.cs.arizona.edu/patterns/weaving/webdocs/gre_crk3.pdf)
- 10. *Drafting with Sequences,* Ralph E. Griswold, 2002: (http://www.cs.arizona.edu/patterns/weaving/webdocs/gre_seqd.pdf)

Ralph E. Griswold Department of Computer Science The University of Arizona Tucson, Arizona

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