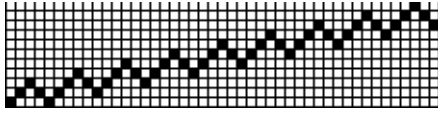


T-Sequences, Part 5: Motifs Along Paths

Some of the most interesting patterns in t-sequences come from placing a (usually) short sequence, called a *motif*, at successive points along a path. Here is an example:



The motif is



and the path is a straight draw:



Other examples of motifs along paths are given on the last page of this article.

The operation of placing a motif M along a path P is denoted by

$$M @ P$$

Placing a motif along a path is concatenation with an offset. Adjacent duplicates may arise, and as for other forms of concatenation [1], duplicate values at boundaries are removed by default. The operation

$$M @_+ P$$

does not remove duplicates that arise at boundaries.

It is worth noting that if the path is a constant sequence (all terms the same), a motif along the path simply is a repeat [1]. In other words, the concept of a motif along a path is a generalization that subsumes repeats.

Summary

With duplicate removal:

$$M @ P \quad \text{motif along a path}$$

Without duplicate removal:

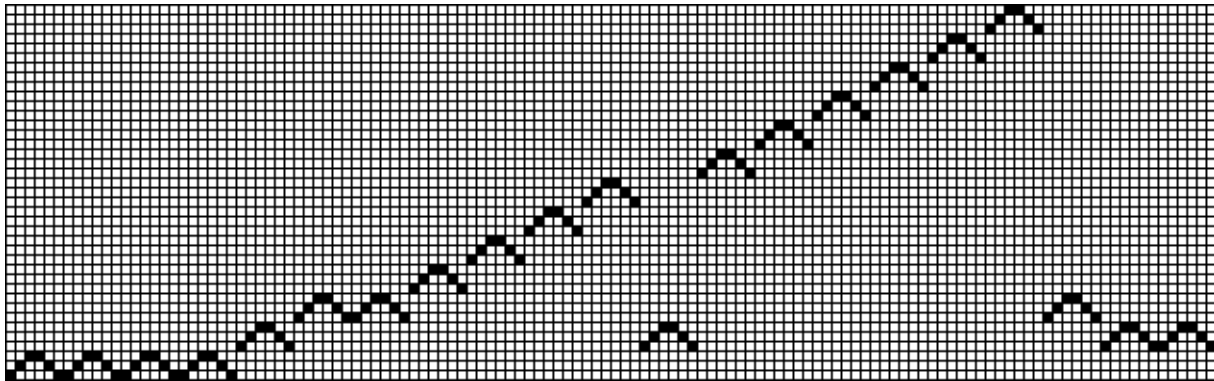
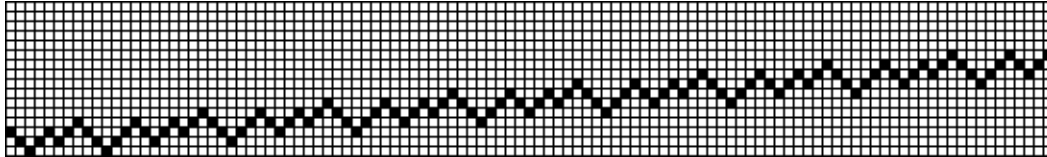
$$M @_+ P \quad \text{motif along a path}$$

Reference

1. Ralph E. Griswold, "T-Sequences, Part 2: Extension":
http://www.cs.arizona.edu/patterns/weaving/webdocs/gre_ts02.pdf

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

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Motifs Along Paths