

```

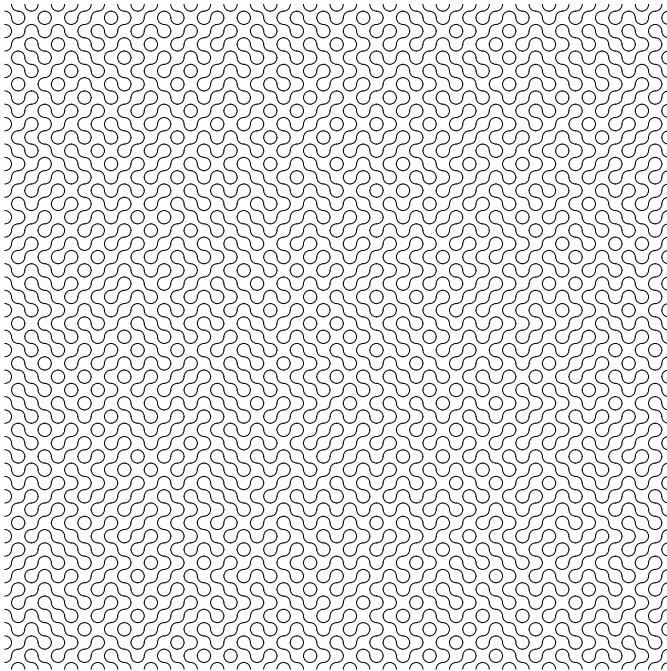
ABlock[x_, y_] := {
  Circle[{x - 1/2, y - 1/2}, 1/2, {0, Pi/2}],
  Circle[{x + 1/2, y + 1/2}, 1/2, {Pi, 3 Pi/2}]
};
BBlock[x_, y_] := {
  Circle[{x + 1/2, y - 1/2}, 1/2, {Pi/2, Pi}],
  Circle[{x - 1/2, y + 1/2}, 1/2, {3 Pi/2, 2 Pi}]
}

```

```

Show[Graphics[
  Table[
    If[Random[] > 0.5, ABlock[x, y], BBlock[x, y],
      {x, 50}, {y, 50}
    ]
  ], AspectRatio -> 1]

```



```
Dynamic[Length[trail]]
```

0

```

Clear[BlockType];
BlockType[pos_] := BlockType[pos] = If[Random[] > 0.5, 1, -1];
{pos, dir} = {0, 1};
trail = First[Last[Reap[
  Sow[pos += dir];
  dir = BlockType[pos] * Replace[dir, {1 → -I, I → -1, -1 → I, -I → 1}]];
  While[{pos, dir} != {0, 1},
    Sow[pos += dir];
    dir = BlockType[pos] * Replace[dir, {1 → -I, I → -1, -1 → I, -I → 1}]]];
]]];
Show[Graphics[{
  RGBColor[1, 0, 0], Disk[{Re[#], Im[#]}, 1/3] & /@ {First[trail]}, RGBColor[0, 0, 0],
  If[BlockType[#] === 1, ABlock[Re[#], Im[#]], BBlock[Re[#], Im[#]]] & /@ trail
}], AspectRatio → Automatic]

```

