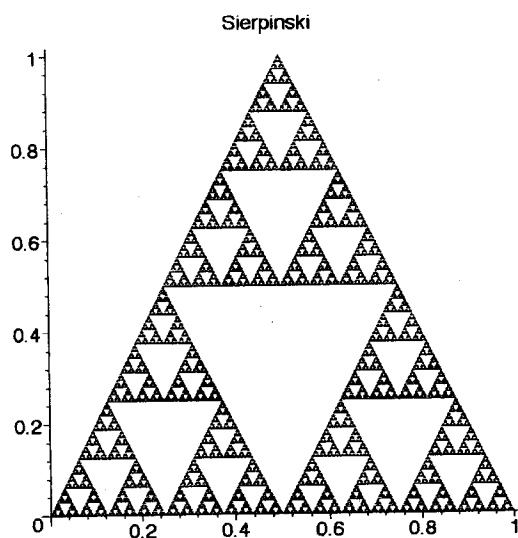
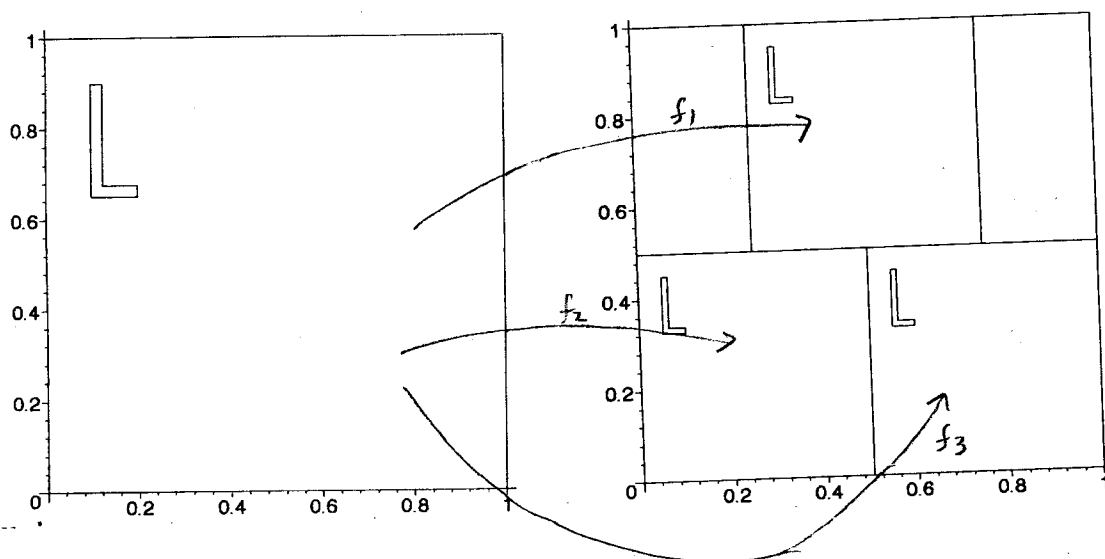




What
Hutchinson
saw.



Let S be a set

$$F(S) := f_1(S) \cup f_2(S) \cup f_3(S)$$

- F is a contraction, using Hausdorff distance.
- Sierpinski Δ is its fixed point!

e.g. $f_1\left(\begin{smallmatrix} x \\ y \end{smallmatrix}\right) = \begin{bmatrix} \frac{1}{2} & 0 \\ 0 & \frac{1}{2} \end{bmatrix} \begin{bmatrix} x \\ y \end{bmatrix} + \begin{bmatrix} \frac{1}{2} \\ \frac{1}{2} \end{bmatrix}$