

Fig. 2. The traditional *lusona* representing the chased chicken's path (left) and the chased chicken's path as a mirror-curve (right).

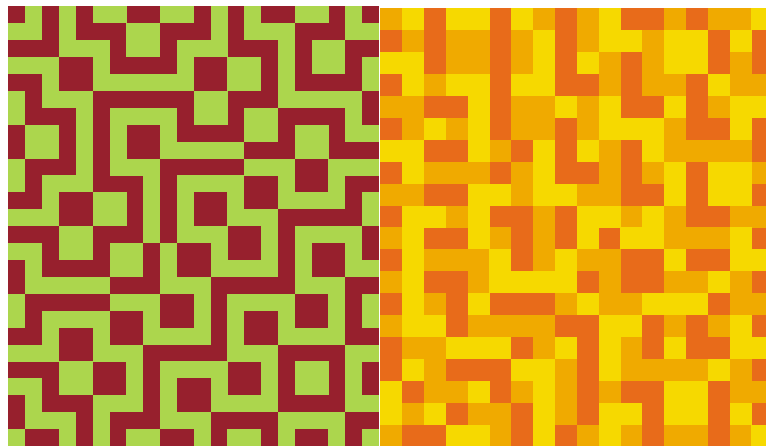


Fig. 3. Examples of a 2-colour Lunda-design and of a 3-colour design.

class of traditional *sona* drawings from Angola. Later I saw that several Tamil *kolam* drawings from India and Celtic knots may also be described as mirror-curves.

The mathematical study of mirror-curves led me to discover several new types of designs and matrices (GERDES, 2007): First of all, various types of *Lunda-designs* and *Lunda-matrices* (Fig. 3); Later on, I found a particular class of *Lunda-designs*, that I called *Liki-designs*, that led me to discover a type of interesting matrices, called *cycle matrices*. By changing some characteristics of *cycle matrices*, I was led to several types of *helix matrices* and *cylinder matrices*. During the presentation I will present examples of *sona* and *kolam* that may be considered mirror-curves, and I will explain the relationships between mirror-curves, *Lunda-designs* and the various new types of matrices.