



Weaving Textiles: The Raw Guide

Bali and the Textile Arts of Indonesia

By Karen Madigan

You will enjoy this tour even if you don't know a thing about weaving. Indonesian textiles are alive with history, ritual, cultural meaning and beauty; they connect you directly to the people and communities that create them.

However, your journey will be enriched with some technical knowledge about the way textiles are woven. The techniques themselves celebrate human ingenuity and creativity - and help us to appreciate the complexities of the 'threads of life'.

What is a woven textile?

Weaving is a way of interlacing threads to create a fabric.

Firstly a set of threads, called the *warp*, are placed lengthways under tension by a loom. Then, another thread called the *weft* is woven through the warp to form the fabric. Two unique rows are repeated to form a plain or basic weave cloth. (See Illustration 1 for weave structure).

In this plain weave structure notice that two rows are repeated continuously to form the cloth. To make the process more efficient lifting devices are used to raise all the

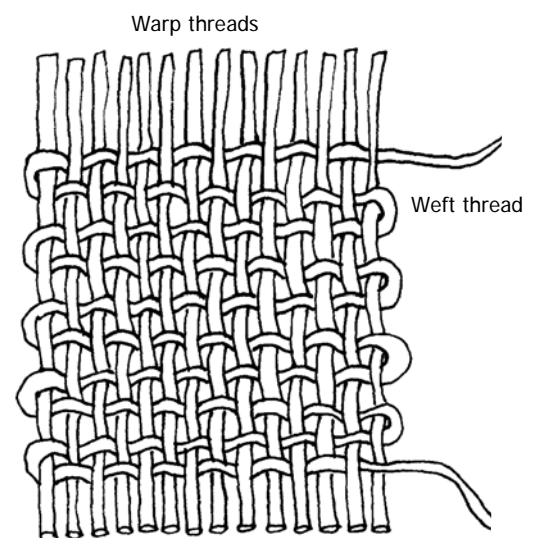


Illustration 1: Shows the structure of a plain weave textile.

appropriate threads at once when weaving each row.

Sometimes the warp threads are placed very close together, allowing the weft thread to be hidden but still form a cloth. This allows colour patterns dyed on the warp to be seen vividly.

The loom

Weavers throughout Indonesia use the backstrap loom. This amazing piece of equipment consists of little more than a collection of customised sticks holding the warp threads in position under tension applied by the body of the weaver. It's also portable and easily stored. But don't let the apparent simplicity of the loom mislead you, as some of the most complex and beautiful textiles in the world have been woven of this type of loom.

Preparing to weave

For many textiles actual weaving happens towards the end of a very long process. For example:

1. Thread needs to be sourced; either commercial or handspun.
2. The threads may be wound onto a frame for the dyeing process called *ikat* (See Page 4 for more detail). This is a resist dye patterning technique. Commonly performed on the warp OR weft threads. In the village of Tenganan it is used on BOTH, creating complex dyed patterns. (See Illustration 3).
3. After dyeing is completed the threads are placed on the loom.
4. The loom is then 'set up' to weave by inserting devices for lifting specific warp threads. This will enable the weaver to quickly weave each row with the weft.

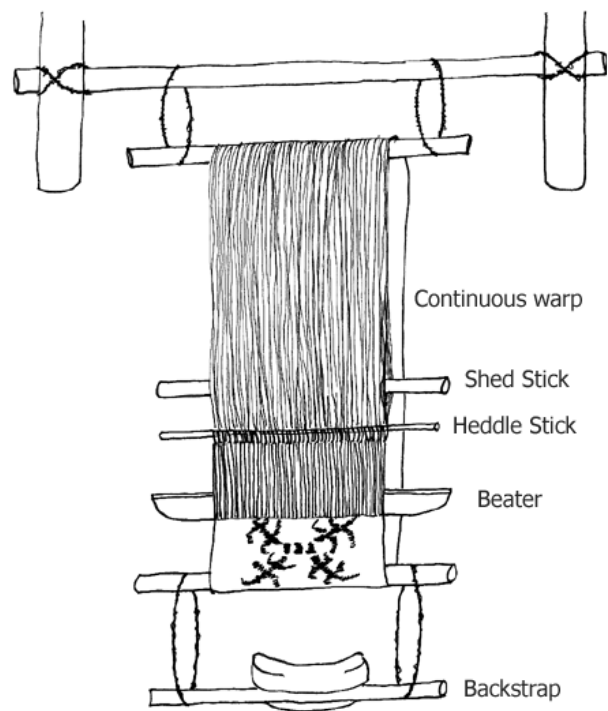


Illustration 2: The basic components of a backstrap loom.



Illustration 3: Weaver from Tenganan creating a gringsing, double Ikat cloth. *Karen Madigan 2004*

This simplistic overview neglects the intricate attention to detail and the accuracy needed to maintain the pattern and organisation of the threads.

The Weaving Process

Before weaving takes place the loom must be set up. On the backstrap loom, plain weave is achieved using two sticks to provide the passageway for each row. These are the shed stick and heddle stick. (Illustration 4)

After transferring the prepared warp threads onto the loom, the shed and heddle sticks must be inserted. In simple terms every second thread is placed over the shed stick and the remaining threads are connected to the heddle stick with string.

After each row is woven the wooden beater is used to pack down the weft threads firmly into place. Illustrations 5 & 6 show how the 2 plain weave rows are woven.

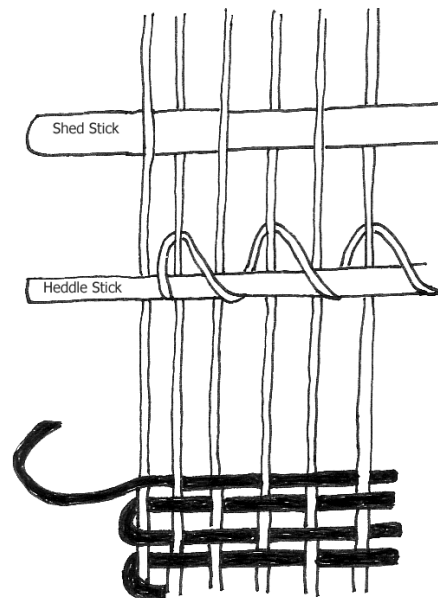


Illustration 4: Simplified and magnified detail of the backstrap loom set up to enable efficient weaving.

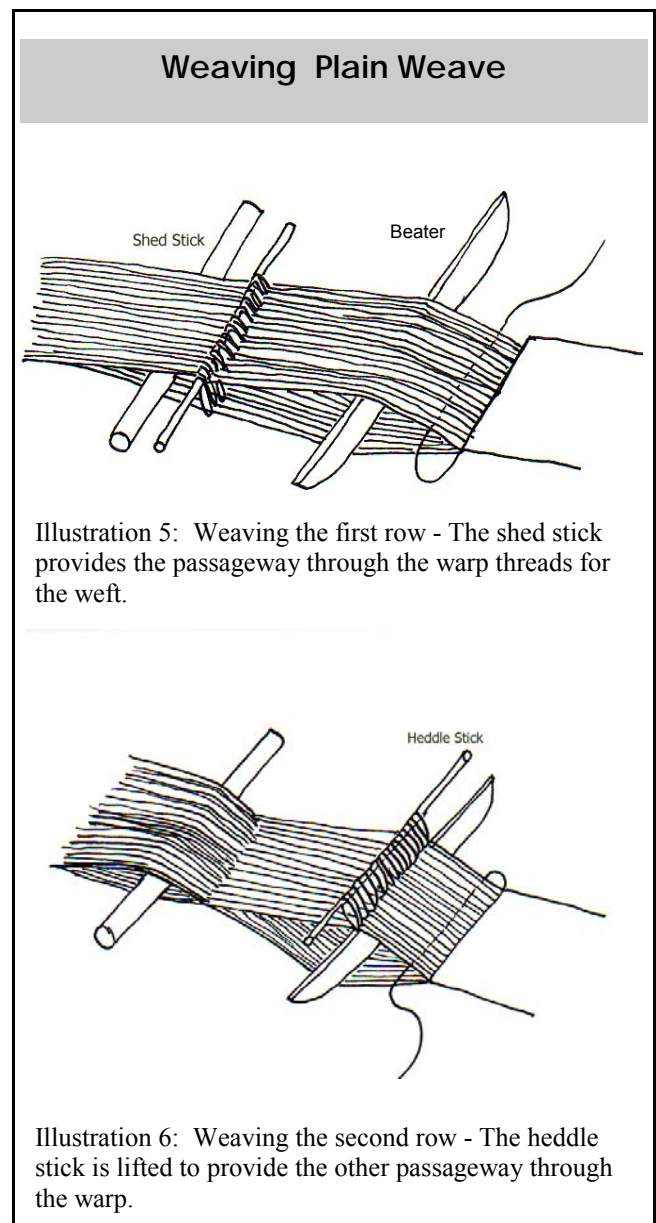


Illustration 5: Weaving the first row - The shed stick provides the passageway through the warp threads for the weft.

Illustration 6: Weaving the second row - The heddle stick is lifted to provide the other passageway through the warp.

Ikat

Ikat is a way of dyeing the warp (and or weft) threads to a specific pattern BEFORE weaving the cloth.

Using East Sumbanese techniques as an example, you will notice that the cloths seem to contain several colours, so it is dyed more than once. To achieve various shades and colours some of the original tying is removed after the first dyeing and more ties added to retain the first dye colour in some places. Three different types of knots are used to differentiate between colours and pattern areas for each dyebath. These knots are tied with a dried natural raffia like fibre. (See Illustration 7). You may also see knotting with coloured synthetic raffia – a colour coded way of building the pattern.

Where to Now

This guide has focussed on plain weave textiles using dyed ikat techniques to achieve pattern and colour on a textile. However you may also encounter many other types of weaving in Indonesia. For example:

- patterns which use the weft thread as a feature eg. songket weaving.
- Patterns using stripes or checks in the warp and/or weft.
- Separate warp threads introduced as a pattern (supplementary warp patterning).
- Tapestry weaving techniques are also known in Indonesia.

Indonesian textiles are rich with technique, skill and wonder. Enjoy.



Illustration 7: Imelda Ndwa tying warp threads to a pattern ready for dyeing (Ikat). The damp tying fibre makes a squeaking noise as she tightens each knot.
Karen Madigan 2004



Illustration 8: Warp Ikat textile being woven by Teresia Mhal Mhana. *Karen Madigan 2004*