

Ply-split Braiding - An Introduction by Julie Hedges

Introduction

Ply-Split Braiding has been found extensively in Rajasthan and Gujarat, North West India and a few other places, where it has mainly been used to make camel girths and animal regalia. Many of the designs are highly patterned and often figurative and were traditionally made by men whilst tending their flocks of camels and goats. *Figure 1*. During the 1990's Peter Collingwood travelled to India and collected and analysed braided artifacts, the techniques of which had been barely documented before. His researches culminated in a book 'The Techniques of Ply-Split Braiding' published in 1998. During this time lectures, workshops and demonstrations given by Peter in the UK, Europe, USA & Japan brought the technique to a wider audience. Consequently weavers & braidmakers have explored and developed it in a number of directions. Textile jewellery, bags, belts, hats and even dresses have been developed whilst others have taken the techniques into 3D vessels, baskets and sculptures. See Ply- Split Braiding Bibliography and Resources for reference to makers, further information about the technique and resources.

Materials

High twist cords are essential for Ply-splitting. They are not readily available to buy, so it is usual to make your own. They were traditionally made from handspun goat hair, but smooth cotton, linen, silk, rayon or rug yarn all work well. See Ply- Splitting resources for cord winder suppliers.

Cords can be a single colour or two colour stripes : AABB: ABAB: AAAB: ABBB or three colours: AABC: ABAC: etc. It is easier to learn using 4 ply cords of the same thickness & direction of twist. *Figure 2*. Interesting results can be had from mixing S & Z cords, varying the thickness of cords and using 2 or 3ply cords. The cut ends of cords are secured with sticky tape or PVA glue to ensure a smooth passage of the cords through each other when braiding.

Tools for ply-splitting

The ideal tool for ply-splitting is the gripfid. See *Figure 3*.

They are available in various diameters and the tube size is chosen to match the diameter of cords in use; see Ply- Splitting resources. Alternately, a rug latchet hook may be used; the disadvantage of this tool is that it harder to draw the doubled cord (splitter) through the splittee.

The Structure:

The two basic ply-split techniques from which most others are derived are Ply-Split Darning and Ply-Split Braiding, which includes Plain Oblique Twining, POT, and Single Course Oblique Twining, SCOT.

Ply-Split Darning:

Two sets of cords that work in warp/weft relationship, the warps are Splittees, the weft is the Splitter.

Ply-Split Braiding :

Where a series of cords intersect each other in sequence, splitting the plies 2 above and 2 below, (2 ply ↑ & 2 ply ↓). The braid design depends on the colour order of the cords and the sequence in which the cords are split by each other.

There are two main methods of Ply-Split Braiding;

Single Course Oblique Twining, SCOT : where a splitter cord passes through two or more successive cords that it crosses in sequence.

Plain Oblique Twining, POT : where each cord alternately splits and is split by each successive cord it crosses.



Figure 1.
Traditional Camel Girths at
Pushkar Camel Fair



Figure 2. Highly Twisted
four ply cords



Figure 3. A Gripfid

Basic Ply-Splitting for 4 ply cords

Some starting methods

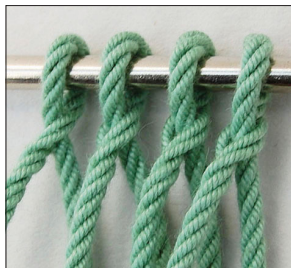


Figure 4.

Work directly onto ring, rod or cord. This gives pairs of colours

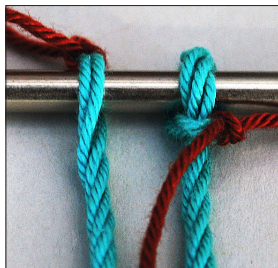


Figure 5.

A single cord can be added by using the out end or 'eye' loop that was made at the time of making the cords.



Diagram 1



Figure 6.

Begin by folding the centre cord A and taking one end through splitting it with 2 plies up & 2 plies down to form a loop. Split both A cords below loop & pull another cord through. The colour sequence is defined by the order in which cords are added.

Splitting cords

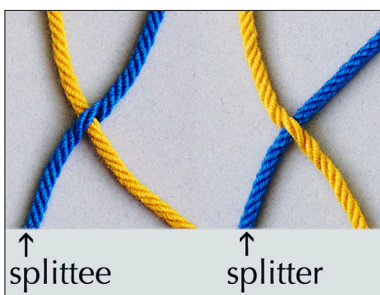


Figure 7.

Using 4 ply cords, Each cord is intersected with 2 plies 2 up, 2 down.

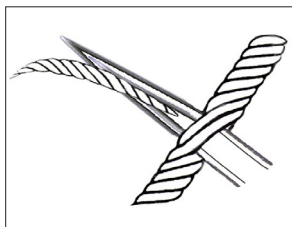


Diagram 2.

Split plies 2 up, 2 down, insert tool & draw the cord through.

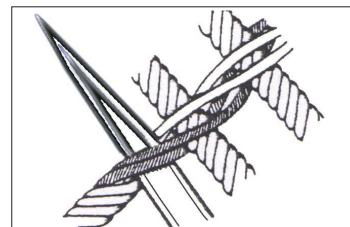


Diagram 3.

Next row: Leave quarter twist each time.

Ply-split Darning (PSD)

Note: the colour sequence does not change with PSD. Start: See Diagram 4 and Figure 8.

The 'weft' or darning (the splitter) needs to be longer than the other cords, & can be much finer.

For flat bands, with 1 splitter, turn the work over after each row. See Figure 8.

Alternatively 2 darners can be used: work 2 rows, turn the work over. Figure 9. To finish, bring the 2 splitters to meet in centre & use twined linking, Diagram 7.

For the tube: Use 8 splittees minimum. + splitter.

The weft splits the cords from the same side each time, leaving a loop on the underside initially. See Figure 10. Split 5 cords, pull 'weft' through, then split the next 5 cords, pull 'weft' through & pull tight to make the tube. Repeat.

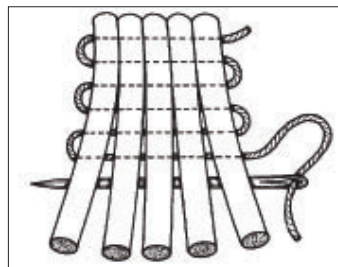


Diagram 4 and Figure 8.

Two sets of cords that work in warp/weft relationship, the warps are Splittees, the weft is the Splitter.

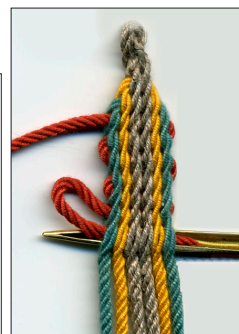


Figure 9. Ply-split Darning (PSD) using 2 wefts



Figure 10 Tubular Ply-split Darning (PSD)

Single Course Oblique Twining (SCOT)

In SCOT, a splitter cord passes through 2 or more successive cords (splittees). See diagram 5.

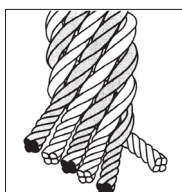


Diagram 5. Single Course Oblique Twining (SCOT)

To make the 3 designs below the following cords are used: 4 x 4ply cords in 3 colours, used double



Figure 12. Diagonal stripe in SCOT

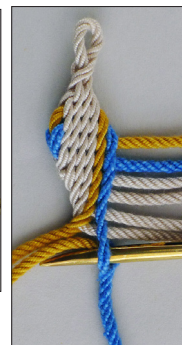


Figure 13 & 14 Waves in SCOT



Flat diagonal striped braid. See Figure 12

For set up, see *Diagram 1*.

Start colour sequence: CBAAAABC. SCOT is worked from left to right, the first cord on the left always splits the other 7 cords. pull the splitter tight after each row. Do not turn the braid over.

Waves Designs. Figure 13 & 14. For set up, see *Diagram 1*.

Start colour sequence: CBAAAACB

Here the left hand cord is splitting a decreasing number of cords in each row to form a tapered shape. Figure 13. Pull all cords very tight, turn the braid over and repeat. This shape may be varied in a number of ways by turning or not turning the whole braid over between sections.

SCOT Chevron. Figure 15. For set up, see *Diagram 1*.

Start colour sequence: CBAAAABC

It is made as follows:

The outside cord from the left splits 3 cords (1>2,3,4) into the centre and the braid is turned over. The outside cord from the left then splits 4 cords (1>2,3,4,5), into the centre and the braid is turned over.

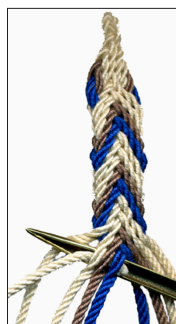


Figure 15 Chevron braid in SCOT

Plain Oblique Twining (POT)

For a flat braid started on a ring, rod or cord. See Figure 4.

Suggested colour order: AABBBBAA

See Figure 16.

Row 1 (short): Omit 1st cord, 2 > 3 (2 splits 3), 4 > 5, 6 > 7, leave 8 unsplit. Turn work over.

Row 2 (long): 1 > 2, 3 > 4, 5 > 6, 7 > 8. Turn work over. Repeat rows 1 & 2.

Other colour sequences to try: AAAABBBB. AABBAABB

For a Tube: AAAA + BBBB cords.

Start: Split the four A cords into a square, see *Figures 17 & 18*.

Add one B cord to each side of the square. On each side, split one A cord with the other A, then work POT in circle. Finish: Push alternate cords up into the tube. Work two rounds with the remaining cords.

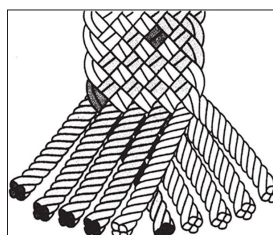


Diagram 6

In POT, each cord alternately splits (Splitter) & is split (Splittee) by each successive cord it crosses.



Figure 16. POT in two colours.

Some finishing methods for ply-split braids

Use Twined Linking 2 or more times to secure the cords on the last row *Diagram 7*.

This can also be used to change colour order in POT.

Make a wrapped knot. *Diagrams 8 & 9*.

Cord ends can also be darned in, become fringes or trimmed and glued with PVA to prevent fraying.

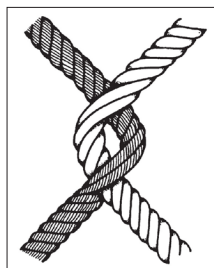


Diagram 7. Twined Linking

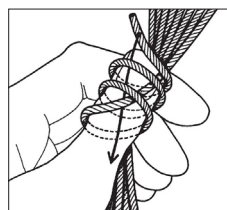
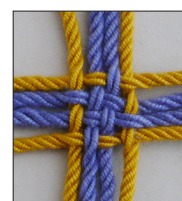


Diagram 8 & 9. Make a wrapped knot. Use 1 of the cords to wrap all the cords & pull the knot tight.



Figures 17 & 18 A tube in POT



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The Braid Society

www.braidsociety.com

Dave Budd

Devon, UK

www.davebuddknives.homestead.com

Supplier of Gripfids, knives and basket making tools.

Anna Crutchley

Cambridge, UK. 01223 327 685

www.annacrutchley.co.uk

Supplier of Cord twister

Louise French

www.louisefrench.com

US Supplier of gripfids and cordwinders, books

Braidershand

www.braidershand.com

Washington State USA

Supplier of books, yarn and equipment

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www.juliehedges.co.uk

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www.lindahendrickson.com

Lolox, www.lolox.nl

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