An Introduction to Karakumi
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Introduction and Acknowledgements

This booklet aims to introduce the reader to the basic techniques used in the making of karakumi braids. The techniques are explained through a series of photographs and diagrams, showing the making of a number of simple karakumi samples. By far the best way to learn karakumi is the traditional way – to be taught in person by an experienced master. If this is not possible for you, then I offer these instructions as a poor substitute.

I assume the reader has some previous experience of kumihimo bobbin and stand braiding techniques, and also has access to a karakumidai with at least 32 bobbins. Details of how to make a karakumidai and the necessary bobbins can be found in my booklet “Building a Karakumidai”, which can be obtained by contacting me on steve.g.pretty@btinternet.com. I am always interested to hear your feedback and questions regarding this booklet – they can only help to improve it.

I was taught the basics of karakumidai work by Makiko Tada. She has kindly given her permission for me to produce this description, and has also been kind enough to review it. <TO DO – NOT YET REVIEWED BY MAKIKO>

Yarn for Karakumi

Traditional karakumi braids are made using strands of high twist 2 ply reeled silk cord. This must be S plied. Makiko Tada supplied me with some traditional karakumi silk, which I used when learning the technique. Examining this silk, I found that the strands supplied were of a number of different sizes. On average, the strands were approximately 12/2 nm, with the thinnest being approximately 16/2 nm and the thickest approximately 8/2 nm. Best results will be obtained when all stands are of a uniform size.

The closest matching silk I have been able to find to the traditional material is supplied by Treenway Silks (www.treenwaysilks.com). They supply a range of Chinese produced Bombyx Silk reeled yarn of which the 2P is similar to the finer traditional silk. Their Fine cord has a size similar to the average of my sample and the medium cord is similar to the thickest. I have successfully made a small sample using the fine cord.

The Karakumi technique can also be used with other yarns. I have successfully made samples with wool, thick cotton, nylon parcel twine (all of which had S ply), silk braided cord (no ply) and Z ply yarns. At the 2007 International Kumihimo Conference in Kyoto, many karakumi pieces were seen which had been made using bundles of fine kumihimo silk. In choosing yarn, the main thing to remember is that it needs to be strong enough to withstand a fair degree of pulling, which is necessary to tension the karakumi structure. Smooth, low friction yarns work best. DMC No. 5 perle cotton has the correct ply and is of similar size to the traditional silk. It makes a reasonable and inexpensive choice for early samples – though the samples will lack the lustre of a good silk.
Structural Overview

Karakumi braids are made using PAIRs of strands. Each strand of the pair is attached to a small flat bobbin (called hiradama in Japanese). These are typically 2.5cm by 4cm, made of folded card containing a weight of around 3.3g, such as a small coin. They have a cotton leader thread just like other kumihimo tama.

Pairs are organised into GROUPS. Traditional Japanese Karakumi work most often uses 8 pairs to the group, and it is recommended that a beginner starts with this number. Braids with higher numbers of pairs per group are found. The technique works equally well with fewer pairs per group. I have seen a number of karakumi samples which have been made with 6 pairs per group.

Karakumi braids are made by braiding diamond shaped lozenges, which are produced by inter-working two groups. Down the two long edges of the braid there are half diamonds, produced by inter-working a group with itself.

The inter-working is done in such a way as to produce a twined structure, which is always done with an S twist.

The simplest braid is made using two groups, and will consist of a column of single diamonds. Four groups are used to make a double diamond braid. The traditional Japanese Karakumi Hirao (a broad sword belt worn by emperors and the highest ranks of the nobility) are many lozenges wide (typically between 10 and 15). These braids are illustrated below:
Within a braid, the two groups used to form a diamond can be split and worked in such a way that a single diamond is replaced by 4 small diamonds. Traditional hirao will have one or two columns made like this on either side. These columns are usually highlighted by a white stripe either side. Each stripe is made by twining 4 white strands longitudinally as the braid is made. These features are shown in the 10 diamond complex braid illustrated above.

**Technique of working**

The braid is made one diamond (or edge half diamond) at a time according to the following rule:

*Rows with half diamonds at either end are worked right to left. Rows with full diamonds only are worked left to right.*

To make a diamond, the two groups required (one group in the case of edge half diamonds) are identified, and the pairs laid out across the front of the karakumidai.

Depending on the hand moves to be made, the two stands of a pair may either be placed in a single gap between the pegs, or the two strands may need to be separated and placed in adjacent gaps. If the strands are separated, it is important to distinguish between the “Upper” and the “Lower”. The pair will have just twined over another pair, so one of the strands will lay above the pair just twined – that is the Upper. The Upper is always placed to the right of the Lower – this ensures that the proper S twist twining is maintained. There are occasions when a pair must be laid out separately, but it is not possible to distinguish an upper and lower – because the pair has just passed through the centre of the other twined pairs. In this case the two strands are just laid out so they are not twisted.

Each pair takes a turn as a WORKER PAIR, inter-working with a number of PASSIVE PAIRS.

There are 4 basic hand moves involved:

1. Worker pair moves left to right, twining over passive pairs
2. Worker pair moves right to left, twining over passive pairs

In 1 and 2, the worker pair will show in the pattern produced, and the passives will be hidden.

3. Worker pair moves left to right, with passive pairs twining over it
4. Worker pair moves right to left, with passive pairs twining over it.

In 3 and 4, the passive pairs will show in the pattern produced, and the worker is hidden.

The worker pair can either (A) be twining with members of an adjacent group, or (B) members of the same group. The way that the hands are moved is the same in the (A and B) case.

In this document, the moves will be referred to as 1A, 1B, 2A, 2B, 3A, 3B, 4A and 4B.
Whichever move is being carried out, one rule always applies:

*If the working pair is moving left to right, it is worked with the right hand (and passives with the left). If the working pair is moving right to left, it is handled with the left hand (and the passives with the right).*

When inter-working two groups to form a diamond, a further rule applies:

*The worker pair from the right hand group always moves first, followed by that of the left.*

The hand moves of karakumi are simple and can be quickly learned. The great skill in the technique comes from the careful tensioning of the braid following the hand moves. The aim is to achieve a perfectly flat braid of consistent width down the length, with all diamonds of identical size and shape. It will take a lot of experience and many years to master this aspect of karakumi. This booklet offers some guidance on tensioning, based on the author’s limited experience – but you will largely learn this aspect through hands on experience.

**Notes on the Photographs, Samples and Text**

All photographs are of the author’s karakumidai. The dai has had a piece of card placed under the working top – the aim of this is allow the strands to be more clearly seen in the photos.

All sample braids are made using just 4 pairs of strands in each group. This is to make diagrams and photographs as simple as possible. It is important to realise that the technique does not change with increasing numbers of pairs in the group – the working pair simply has to interact with a larger number of passive pairs.

A heavy cotton yarn has been used in these samples, with a different colour for each pair within a group. This does not make a very attractive braid, but the aim was to produce clear photographs of the techniques, rather than make a pretty braid!

In the descriptions of the braiding techniques, the strands are referred to using the colours in the associated picture.

In the text, the karakumidai is referred to as the dai.

**References**

<table>
<thead>
<tr>
<th>Ref</th>
<th>Title</th>
<th>Author</th>
<th>Date</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Karakumi Hirao</td>
<td>Seigyoku Takatsukasa</td>
<td>1972</td>
<td>This book was written by a pupil of the karakumi National Living Treasure, the late Jyusuke Fukami. It provides detailed information on karakumi work and the hirao made using this technique. It is written in Japanese and is out of print.</td>
</tr>
<tr>
<td>3</td>
<td>Comprehensive Treatise of Braids I: Marudai Braids</td>
<td>Makiko Tada</td>
<td>1999</td>
<td>The introductory section of this book includes a concise history of the making and use of karakumi braids in Japan.</td>
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</table>
Before diving into the full complexity of the karakumi braid, I’d like to suggest that you try making a sample of a simpler Sasanami braid. This only involves two of the hand moves. It will get you used to setting up the dai and carrying out the hand moves. This sample is completed in Exercise 2, where the traditional method of ending a karakumidai braid is introduced.

1.1 Warping Up

To make this sample you will need 8 lengths of yarn. The length of these will depend on how long you want your sample to be. 4 times the required length of sample (including any tassle) is a good starting point.

This sample will be started with a flat end. You will need a double eye needle or equivalent. Take a length of yarn, thread through both eyes of the needle and tie the two ends in an overhand knot. Pass the loop through the braid clamp and hang over pins at the back of the dai as shown in the photograph.

Take each length of yarn in turn and fold it in half over the double eye needle. Do not use a larks head knot, as this causes the braid to spread out at the start and it will then gradually narrow. I find it convenient to wrap the yarn around pins at the front of the dai, as this secures them while the bobbins are attached and ensures the two halves of the doubled yarn stay equal in length.

An alternative technique is to tie the strand around the double eye needle using an overhand knot.

Once all yarns are in place, attach a bobbin to each end. The bobbin should be fitted with a thin cotton lead cord, which is attached to your yarn as you would in any other kumihimo stand and bobbin technique. The bobbins should hang about half way down the stand.
1.2 Set Up

This photograph shows the strands set up ready to start braiding. The first move will be a 2B - right hand worker moving right to left, over passive pairs of the same group.

Note that the pair on the right (turquoise) has been separated into its two strands. The strand that has come from the top of the double eyed needle is considered the upper, and therefore placed to the right.

1.3 Move 2B

With the left index finger, pick up the left strand of the worker pair (turquoise).

With the right hand, pick up the first passive pair to the left of the worker (white) and pass it left to right under the worker strand held in the left hand. Place the white pair into a gap to the right of the right hand strand of the worker pair.
1.4 Move 2B Continued

Now pick up the right hand strand of the worker pair using the middle finger of the left hand.

Move the middle finger from right to left, so that the worker strand that started on the right is now of the left. This introduces the required S twist.

Place the two worker stands into gaps in the dai between the red and the white passive pairs.

(Note that, once you understand this move, you will find it more efficient NOT to drop the strand held on your middle finder at the end of the move, but to simply transfer it to your index finger, ready to inter-work with the next passive pair).

1.5 Move 2B Continued

Repeat the above move inter-working the turquoise worker pair with the red passive pair.

Repeat the above move inter-working the turquoise worker pair with the purple passive pair.

The turquoise worker pair is now placed in a gap to the right of the left hand group. It now become a passive pair of the left hand group.
1.6 Tightening the Braid

Holding the purple, red and white passive pairs of the right hand group, push the turquoise thread up toward the needle. Tighten the work by pulling on each strand of the turquoise pair in turn.

You may find it easier to carry out this tightening step if you first move the turquoise worker and place it in a gap on the left side of the stand close to the braid clamp. Return the pair after tightening.

1.7 Move 1B

Next, a 1B move will be performed, with the left hand turquoise worker pair twining left to right over the passive pairs of its own group.

Start by separating the two strands of the worker pair, with the upper to the right. Using the index finger of the right hand, pick up the left hand strand of the worker pair.

Using the index finger of the left hand, pick up the white passive pair and pass it to the left, under the worker strand held in the right hand.

Place the white pair in the gap immediately to the left of the worker strand that is still in a gap on the stand. Place the worker strand in the right hand into the gap where the white pair came from. Notice that the left hand strand of the worker pair has now become the right hand strand - introducing the required S twist.
1.8 Move 1B continued

Repeat the above move, twining the turquoise worker with the red passive pair, then the purple and then the turquoise.

Take the worker pair and place it to the left of the right hand group (note that this final placing step is not shown in this photograph).

1.9 Tightening the Braid

Holding the left hand passives, push the turquoise worker thread up toward the needle. Then tension by pulling the worker pair, one strand at a time. Tensioning will be easier if you temporarily move the turquoise worker to the right hand side of the stand, close to the braiding clamp.

To continue the braid, go back to step 1.2 - but this time around, the white pairs will be the worker.

Repeat again with the red pairs as worker and then purple as worker. The sequence then repeats, starting with turquoise worker pairs. Continue until enough braid has been made.
2.1 Ending with a Yotsu-gumi braid and Yotsu-me knot

One way to simply finish a braid is to take the two pairs that have just been workers (those now closest to the middle of the front of the dai) and braid them with the 4 bobbin yotsu-gumi braid. This braid will clamp the other pairs in place, and allow them to be cut off as a fringe.

The yotsu-gumi braid can be made by using the karakumidai as though it were a marudai. Take the 4 bobbins of the two pairs that have just been workers. Hang one bobbin at the back of the dai, one at left, one at the right and one at the front. Braid as follows:

Exchange back and front with a clockwise rotation.
Exchange left and right with an anti-clockwise rotation.

Repeat the above steps until sufficient braid has been made – perhaps 10 to 12 cycles.

2.4 Tie the yotsu-me knot

The approach shown here should make it easy to learn this knot. The knot is also known as a crown sinnet (you may be familiar with it if you have ever made Scoobie-doo braids!)

Take the right strand over to the left hand side, passing over the top strand, leaving it looped on the right as shown.
Take the top strand down to the bottom, crossing over the top of the strand that came from the right and over the left strand.
Take the left strand to the right, crossing over the top of the strand that came from the top and over the bottom strand.
Take the bottom strand to the top, passing over the strand that came from the left strand, over the right strand and finally down underneath the part of the right hand strand that has crossed over to the left.

Take the loops off the pegs, and gradually pulling the ends one at a time, draw the knot tight.

Traditionally, the karakumi hirao would leave very long ends after the knot. Pairs of strands are taken and each strand highly twisted (adding S twist). The two twisted strands are then Z plied.
2.5 Alternative Knot

If you do not ply the remaining strand ends as described above, the yotsu-me knot has a problem - the four ends stick out sideways, and do not hang as a neat tassel. I prefer to use an alternative knot, which I have used in this sample. This knot is often used to finish off Scoobie-doo braids neatly. It is shown in the diagram below.

Right (1) strand passes under top (2).
Top passes under strand that came from right and under left (3).
Left passes under strand that came from top and under bottom (4).
Bottom passes under strand that came from left, under right, and over part of right strand that passed to the left.
In this exercise, a sample of single diamond karakumi braid will be made. As in Exercise 1, a flat end start will be used. A top level view of the braiding sequence is shown in the following diagram:

1. Bottom Half Diamond
2. Right Half Diamond
3. Left Half Diamond
4. Top Half Diamond
5. Centre Crossing
6. Bottom Half Diamond

Repeat Steps 2 - 6
3.1 Set Up

Set up the dai with 8 pairs of ends as in 1.1.

The karakumi braid will start with the making of a bottom half diamond. This uses moves 3A and 4A (different to the moves used in exercise 1).

In the bottom half of a diamond, it is the passive pairs that show and the worker pairs are hidden – so a different set up is required to that explained in box 1.2. Each member of a passive pair requires to be in a separate dai slot, with the upper (strand passing over the top of the double eyed needle) placed top the right of the lower.

The inner right hand pair (purple in the picture) can be placed together, as these will be the first working pair.

3.2 Move 4A

The right hand purple pair will inter-work with the left hand passive pairs such that the passives twine over the working pair (the working pair is to be hidden).

Pick up the left most strand of the left purple pair with the right hand.

Pick up the purple worker pair with the left hand and place the pair in the slot vacated by the strand held in the right hand.

Place the strand held in the right hand in the slot to the right of the left hand purple strand that did not move.
3.3 Move 4A Continued

After 3.2, the dai will appear as in this picture.

Move 4A continues using the same hand moves as above to:

Inter-work purple worker pair with red passive pair

Inter-work purple worker pair with white passive pair

Inter-work purple worker pair with turquoise passive pair.

The purple worker pair are finally placed in a slot on the left of the dai, close to the braid clamp.

3.4 After Move 4A

This picture shows the results of move 4A. Notice how the purple worker pair has been hidden by the passives, which now twine over the top of the worker pair.
3.5 Move 3A

The two left hand purple strands are now placed together into a slot, ready to become the worker pair for move 3A.

Lift the left most strand of the right hand red passive pair using the index finger of the left hand.

Pick up purple worker pair with right hand and move to right under the strand held in the left hand.

3.6 Move 3A Continued

Take the right strand of the red passive pair with the middle finger of the left hand.

Draw the middle finger of the left hand to the left, so that a half S twist is added to the passive pair.

Place the purple worker pair in the slot to the left of the white pair.

Place the red passive strand held on the index finger in the slot to the left of the worker pair, and the strand on the middle finger in the second slot to the left of the worker pair.

Now repeat the above hand move to inter-work the purple worker with the white passive pair and then the turquoise passive pair.

Finally, place the purple worker pair to the right hand side of the dai, close to the braid clamp.
3.7 After Move 3A

This picture shows the appearance of the braid after the completion of move 3A.

3.8 Complete the bottom half diamond

Using move 4A, inter-work right hand red worker pair with left hand red, white and turquoise passive pairs.

Using move 3A, inter-work left hand red worker pair with right hand white and turquoise passive pairs.

Using Move 4A, inter-work right hand white worker pair with left hand white and turquoise passive pairs.

Using Move 3A, inter-work left hand white worker pair with right hand turquoise passive pairs.

Using Move 4A, inter-work right hand turquoise worker pair with left hand turquoise passive pair.

The braid should now be tightened. Start with the left hand purple pair. With the right hand hold the purple pair at the point where they enter the braid. With the left hand, pull each strand of the purple pair in turn while the right hand is pushing against the turquoise edge of the braid.

Repeat with right hand purple pair (this time the right hand pulls the purple strands and the left hand is pushing against the braid margin.

In a similar manner, now tension left hand red pair, right hand red pair, left hand white pair, right hand white pair, left hand turquoise pair and finally right hand turquoise pair.
To achieve good tightness, it is recommended that the above tightening steps are repeated until little or no movement is detected when strands are pulled.

The aim with karakumi is to achieve a perfectly flat, consistently tightened braid. Much practice will be required to perfect your technique!

3.9 Preparing for the Right Hand Half Diamond

The upper half of the right hand half diamond is made using 2B moves (explained in Exercise 1)

The right hand strands are laid out as pairs. The right most (purple) pair are separated ready to be the worker pair for the 2B move.

3.10 Top Half of Right Hand Half Diamond Complete

The right hand purple worker pair inter-works with the red, white and turquoise passive pairs using move 2B.

The right hand red worker pair inter-works with white and turquoise passive pairs using move 2B.

The right hand white worker pair inter-works with the turquoise passive pair using move 2B.

The turquoise pair is not used as a worker.
3.11 Preparing for Bottom Half of Right Hand Half Diamond

The bottom half of the half diamond will be made using 4B moves.

The purple, red and white pairs are laid out as separate strands. Remember that the upper (the strand that sits on top of the turquoise pair in this case) must be placed to the right. The strands of the turquoise pair are together, as they will act as the first worker pair.

3.12 Carrying out initial 4B move and Tightening

Pick up left hand strand of the white passive pair with the right hand. Take the worker pair with the left hand and move it to the left under the passive strand held in the right hand. Place the worker pair in the slot vacated by the strand held in the right hand. Place the strand held in the right hand to the right of the white passive strand that did not move. Repeat this move with the worker turquoise pair inter-working next with the red passive pair and then the purple passive pair. Place the turquoise pair to the left hand side of the dai.

Tightening is required at this stage, and it is tricky as the worker pair is making a very tight 180 degree change of direction. Make a loop of the turquoise worker pair out to the right of the braid as shown. Now, using the left hand, pinch the purple, red and white pairs just below the point that the turquoise strands have just passed through them. Pull on each white, red and purple strand in turn. This acts to push the turquoise strands upward until they sit tightly under the upper half of the half diamond.

Still pinching the white, red and purple strands, pull each turquoise strand in the upper part of the loop (A). This ensures that the right hand diamond is tightly seated. Failure to do this can result in a loose section of turquoise thread to the left of the half diamond that cannot be tightened due to the 180 degree turn that the thread takes. Finish tightening by pulling each strand of the turquoise pair at the left hand side.
3.13 Result of 3.12

This picture shows the result of the move and tightening procedure described in 3.12.

3.14 Complete the Half Diamond

Complete the diamond using 4B moves. The white strands are taken as a worker pair and inter-worked with red and purple. Tighten the white by pinching the red and purple strands below where the white strands have just passed through them. Pull each strand of red and purple ends in turn to push white strands upward. Finally, pull on each white strand in turn.

Next take the red strands as a worker pair and inter-work with the purple, and tighten.

3.15 Storing the Finished Half Diamond

The strands used to make the right hand half diamond can now be stored on the right hand side of the dai. The pair of strands which did not take a turn as worker pair - the purple pair in the diagram - should be stored in a separate dai slot, above the other strands. If all strands are stored in the same slot, the lower part of the half diamond can easily become unbraided when these strands are next brought into use.

It is to be expected that the half diamond just produced will loosen up while being stored and also when its strands are next arranged for braiding. The edge half diamonds are only finally tightened when the strands making them are incorporated into the next diamond.
3.16 Making the Left Hand Half Diamond

This is made in a similar manner to the right hand half, but requires moves 1B for the upper half and 3B for the lower half. Move 1B is explained in Exercise 1.

Move 3B - Worker pair will be to the left of passive pair, which will be laid out as two separate strands. Lift left most strand of passive pair with index finger of left hand. Lift worker pair with right hand and carry to right underneath the lifted passive strand. Lift remaining passive strand with middle finger of left hand and place worker pair in the slot just vacated. Draw middle finger of left hand to the left to place half twist in the passive pair, and place the strands in the two slots to the left of the worker pair.

3.17 Preparing to make Upper Half Diamond

Passive strands are laid out as pairs. The first worker pair (right hand turquoise in the diagram) are laid out as a pair.
### 3.18 Making Upper Half Diamond

Inter-work the right hand turquoise worker pair with left hand turquoise pair, then white pair, then red pain and finally purple pair using move 2A (this move works in a very similar way to move 2B explained in exercise 1). Place the turquoise worker on the left hand side of the Dai. Some tightening is useful at this stage. Hold the turquoise worker pair with the left hand. Take the turquoise passive pair with the right hand and pull it to the right. Do this with the white pair, the red pair and the purple pair. Then use fingers of right hand to push the twining of the turquoise worker pair into place (in the case of this example, tight up against the purple). Finally pull on each strand of the turquoise worker in turn.

Now make the left hand turquoise pair as the worker and inter-work with right hand pairs using move 1A (very similar to move 1B). Tighten.

Complete upper half diamond by inter-working right hand white (move 2A), left hand white (move 1A), right hand red (move 2A), left hand red (move 1A) and finally right hand purple (move 2A).

Tighten work by pulling each strand of the workers, starting with left hand turquoise then right hand, left hand white then right hand white etc. Karakumi braids naturally have small holes between the bottom of one diamond and the top of the diamond immediately below. The aim of tightening at this stage is to ensure that hole is as small as possible.

### 3.19 Making Centre of Diamond

Take purple pair from the right hand side of the dai and hold in the right hand as shown.

Take purple pair from left and side and pass the bobbins between the two strands held in the right hand. Before placing them into a slot on the front of the dai to the left of centre. Place the strands held in the right hand into a slot on the front of the dai to the right of centre.
3.20 Completed Centre

The completed centre should appear as in this diagram.

Note that a left strand and a right strand make a crossing at A. The other left and right strands make the crossing at B. When tightening the centre of a diamond, it is necessary to take a left hand strand and a right hand strand and pull them apart. This must be done with the pairs of strands making the crossings A and B. If the wrong strands are selected, your tightening move will pull the centre of the diamond apart, rather than tightening it.

3.21 Set Up for Bottom Half Diamond

Set up strands as shown. Strands of passive pairs are placed in adjacent slots, with the upper on the right.
3.22 Making the Lower Half Diamond

Start with the purple worker pair on the left this is inter-worked with left hand passive pairs (move 4B).

Right hand purple worker now inter-works with right hand passive pairs (move 3B).

Note that moves 4B and 3B are used for the purple central worker pairs only. The lower half is completed using moves 4A and 3B.

Some initial tightening of the centre can be carried out (see note in 3.20).

3.23 Completing the Lower Half Diamond

This is completed and tightened as in step 3.8
4. **Ending with multiple Yotsu-gumi braids.**

This ending can be made when the top half of a diamond has been completed (after step 3.18).

Yotsu-gumi braids and Yotsu-me knots are made as in Exercise 2.

Start with right hand two pairs (white and turquoise, as seen in the picture).

Next braid and tie left hand two pairs.

Complete by braiding the right hand red and purple pairs and finally the left red and purple pairs.

Try to ensure each braid is the same length.
5. **A Double Diamond Karakumi braid sample including half size diamonds**

This braid uses identical techniques to those explained in exercise 3 for making of diamonds and half diamonds.

Relax - there are **NO** new hand moves to learn!

<table>
<thead>
<tr>
<th>5.1 Top Half Diamonds</th>
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<tbody>
<tr>
<td>Make a half diamond as in step 3.8. Now make an identical half diamond to the right of the first.</td>
</tr>
<tr>
<td><strong>5.2 Braid Row with Half Diamonds at Side</strong></td>
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<tr>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>Braid right hand half diamond.</td>
</tr>
<tr>
<td>Braid centre diamond</td>
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<tr>
<td>Braid left hand half diamond.</td>
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<tr>
<td>5.4 Subdivided Diamond</td>
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<td>------------------------</td>
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<tr>
<td>In traditional karakumi hirao sword belts, it is usual to have a column of subdivided diamonds at each side. See page 2.</td>
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<tr>
<td>Braid a small diamond using only the top two pairs (red and purple in the diagram).</td>
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<table>
<thead>
<tr>
<th>5.5 Complete Subdivided Diamond</th>
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<tbody>
<tr>
<td>Braid right hand small diamond.</td>
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<tr>
<td>Braid left hand small diamond.</td>
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<tr>
<td>Braid bottom small diamond.</td>
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</tbody>
</table>
Annex - Ideas for Further Development of this Draft

1. Perhaps rework and develop section 5 (double diamond) to show work done with 8 pairs.
2. Pointed start and progressive addition of diamonds.
3. Tubular karakumi
4. Working in the round
5. Use of karakumidai for Andean flat braids – introduce moves for Z twist and plain weave.
6. Photographs of further samples, hirao and makers? (Copyright issues?)

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