# **Cutting the Pen**

To cut a pen for Arabic-script calligraphy, there are five basic steps: Opening, first trimming, nib cut, final trimming, and splitting. This method applies for both bamboo, kamish, and Java pens, though Java pens have no split. Pens also require minor periodic maintenance to keep the pen in top writing condition, and occasionally it is necessary to cut the pen again from scratch to correct a broken nib.



will work fine for all pen cutting needs.

Before you begin you must have two essential pieces of equipment: a razor-sharp knife, preferably with more than one blade, each for a specific task, and a makta, preferably made from bone or horn, though a dense hardwood can work. Do not use glass for the makta, ever. The instructions below assume the use of a knife on a kamish or java reed. The same steps apply to bamboo, but a knife is usually not tough enough to cut the bamboo, so use a chisel instead. If you do not have a full set of chisels, a one-inch Japanese or Western chisel



## **Pre-cut preparation:**

In order to determine which end to cut, see which end is smaller. Reeds and bamboo grow in such a way that the base is always wider, the top narrower. Because water and nutrients flow upwards and often collect at the knuckles, the narrower part tends to be harder and thus more suitable for calligraphy. For that reason we cut the narrower end.

First, cut the top knuckle off by making deep cuts into the pen 5 mm or so below the end, working your way around so you can easily pop the top off and remove the knuckle. You can skip this step if you want, but make sure you start the opening cut at least 1 cm farther back from the end if you do, because you want to have enough space to cut the knuckle off and still have a functional nib. If cutting a kamish pen, you will see long strands of crimped threadlike material inside the pen; remove this.

## 1. Opening:



**1.1 Belly Cut.** About 4 cm from the end of the pen, make a long deep swooping cut towards the end. The goal of this cut is a graceful curve that meets the end of the pen with enough material left so it does not flex if you apply pressure, but has gone all the way to the other end. After the first cut, it is typical to make several more cuts to even out, complete, or amend the cut so you have a full cut to the other end. If cutting bamboo, hold the bamboo flat against your work table while standing up, keeping it tight with your palm while cutting with the other hand. This allows you enough leverage to cut without the use of a mallet and vise. If your bamboo slips on the table, use a small section of non-slip rug pad to give extra traction.

**1.2 Beveling.** Now that the first cut is made, take the knife and run it at a 30 degree angle along the edge of your cut to make a bevel on each side. When you get towards the tip, the knife will run deeper into the nib of the pen, creating a low slope on each side of the pen's tip, and ideally leaving a fingernail-shaped area of uncut flat at the very end.

#### 2. First Trimming:

2.1 **Wings.** The beveling will likely have left a very thin section of wood at on the sides of your pen. Trim that off very gently with your knife, so

you put a chamfer on the bevel and remove the translucently thin wood on the very tips. This will get soggy and ruin your work, so we cut it off.



2.2 **Fingernail.** Flip the pen over and cut a flat section of material off. The size of the fingernail depends on the size of the pen, but it is usually about 1/5<sup>th</sup> the length of the entire belly cut. The point of this cut is to take the end profile of the pen from a semi-circle to a thin rectangular slit.



#### 3. Nib cut

This is the most crucial cut of the entire process.

- 3.1 **Determine cut placement.** The cut of the nib should come at a point of the pen that is not too far out from the belly that you will get a flimsy and bendable nib, nor too close in that you have a stumpy and fat nib either. It should be right in the middle of the fingernail, so you are not cutting through too much wood, but with enough wood left that the pen doesn't feel weak and easily bent or translucent after you cut it.
- 3.2 **Determine cut angle.** Lay the pen down on the makta and determine the angle you would like to cut it. There is no set angle, you must determine what works for you, but generally speaking Naskh and Sulus have a more acute angle then Talik, around 30 degrees, while Talik is nearly flat, with only a slight incline, in the area of 10 degrees.



3.3 Cut! Once you know the angle and placement at which you would like to make the cut, hold the pen steady against the makta and with one fluid, determined motion, firmly press the knife into the pen until you hear and feel it pop. The sound it makes is very important. If you hear a single tone, a clear and singular crack, you got it right. It is a clean cut that will likely produce clean and crisp letters. If you hear multiple tones, or felt the knife pause or otherwise not go through in one clean motion, you need to recut it. There are tiny fissures and imperfections within the nib that will come out in the calligraphy, cause sputtering or smeared letters. Recut the pen a millimeter back from the last cut. If you need more leverage, stand up so you are holding the pen at arm's length against the table.

### 4. Second Trimming

4.1 Following the nib cut, it is useful to check the pen for any trouble spots, flimsy areas, pithy areas, or other potential trouble makers. It may help to use a jeweler's loupe to inspect the nib for fibers and stray splinters. These catch ink and ruin work. If found, cut them off. The nib of the pen should be a graceful and flowing extension of the belly cut, it should not flare out at the ends. If it does, even it out so the pen comes to a logical and elegant conclusion.

## 5. Splitting

The final step of the pen cutting process is to split the end so there is a small crack to allow ink to flow. Flip the pen up on the makta, take a thin-bladed knife and make a cut directly in the center of the nib. The cut should come just past the inside fingernail of the pen's nib, caused by the bevel on either side.

After you make the cut, hold the pen and gently apply pressure upwards from the belly of the pen to pop the split.

You are now ready to write!

## Common mistakes:



