THE ART OF THROWING AXE AND KNIFE

This stuff really isn't rocket science. Of course, you can do a vector analysis to describe the action of throwing. You can probably describe the arc of the throw with a calculus equation. But none of this will help you to learn or teach how to throw. Throwing live steel weapons is best approached as an applied art.

All instructions are for a right-handed thrower.

ROTATION: Throwing axe and knife is all about rotation. In An Tir, we throw from an established throwing line at 12 feet from the target. For most people, this means that when they throw one of these weapons, it will make 1 full rotation in the air before hitting the target. If you stand closer, you will get to a _ rotation distance. If you move back, you will find a 1_-rotation distance. And so on.

MUSCLE MEMORY: A key to good throwing is having your style become muscle memory. Always make the same movements with your arm and body, with the same force. Good throwers don't think about what they are doing. They just throw and let the muscles take control of the action. I often tell new throwers, "Stop thinking and just throw."

STANCE: A right-handed thrower should start in a martial arts T-stance. The left foot points at the target and the other is 45° - 90° to it. The knees should be loose, not locked.



DISTANCE FROM THE TARGET: Once you find the correct distance, you must stand in <u>exactly</u> the same spot each time you throw. It is OK to mark your spot. Moving one inch from that spot can mean the difference between a hit and a miss, especially with a knife. The axe is a bit more forgiving. The caveat here is that as you warm up/loosen up that spot may change slightly. Use the Fine Tuning info to adjust.

HOLDING THE WEAPON: You must hold the weapon <u>exactly</u> the same each time you throw. The best way to do this is to anchor a fingertip on some feature of the weapon. This can be a rivet on a knife scale, the bottom of the axe handle, or a notch cut into an axe handle. See "Holding the Knife" for more details.

CHOSING THE RIGHT WEAPON: Try a variety of different length and weight knives and axes. Use the one that works. Here's where the rocket science comes in. The length, width, shape, and weight of each part of a knife or axe all affect the rotation. A knife or axe that sticks in the target well for one person at a certain distance, may not stick at all for someone else at the same distance. Many factors come into play, including the length of the person's arm, how hard they throw, where they stand, where they grip the weapon, if they lock or snap their wrist when they throw, and how much spin they put on the weapon as it leaves their hand. Don't spend too much time trying to figure this out unless you really like Physics.

FINE TUNING THE KNIFE THROW

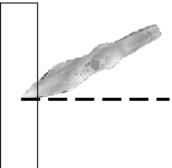
These guidelines are for correcting a right-hander's knife throw from the 12' line. A knife held by the handle will make 1 full rotation from this distance for most throwers.

HANDLE UP OR DOWN?

Watch the knife as it hits the target. If it did not stick, did it hit handle up, handle down, or butt first?

HANDLE UP: If the knife hits handle up, it has rotated more than one full rotation, i.e., it over-rotated. There are several "up" ways to correct this:

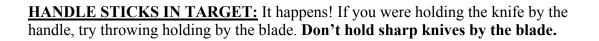
- Move up:
 - If you are standing behind the throwing line, move 4" - 6" closer to the target.
 - If you are right-handed, change your Tstance from left foot forward to right foot forward. This moves your throwing arm about 4" - 6" closer to the target.
 - Stand, facing left, with both feet parallel to the throwing line. This moves your throwing arm about a half arm's length closed to the target.

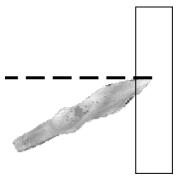


- If you are at the line, lean forward.
- Thumb up: If you are holding thumb down, put your thumb or index finger up. Holding this way decreases the spin you put on the knife.
- Size up: Try a longer knife made from the same type and thickness of steel.

HANDLE DOWN: If the knife hits handle down, it has rotated less than one full rotation, i.e., it under-rotated. There are several "down" ways to correct this:

- Move back: Move 4" 6" away from the target.
- Thumb down: If you are holding thumb up, put your thumb or index finger down. Holding this way increases the spin you put on the knife.
- Size down: Try a shorter knife made from the same type and thickness of steel.





FINE TUNING THE AXE THROW

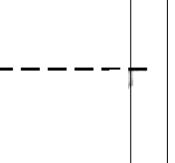
These guidelines are for correcting a right-hander's axe throw from the 12' line. An axe held with the cutting edge facing the target will make 1 full rotation from this distance for most throwers.

HANDLE UP OR DOWN?

Watch the axe as it hits the target. If it did not stick, did it hit head first or handle first?

HANDLE UP: If the axe hits head first (handle up), it has rotated more than one full rotation, i.e., it over-rotated. There are several "up" ways to correct this:

- Move up:
 - If you are standing behind the throwing line, move 4" - 6" closer to the target.
 - If you are right-handed, change your Tstance from left foot forward to right foot forward. This moves your throwing arm about 4" - 6" closer to the target.
 - Stand, facing left, with both feet parallel to the throwing line. This moves your throwing arm about a half arm's length closed to the target.



- If you are at the line, lean forward.
- Thumb up: If you are holding thumb down, put your thumb up. Holding this way decreases the spin you put on the axe.
- Size up: Try an axe with a longer handle.

HANDLE DOWN: If the axe hits handle first (handle down), it has rotated less than one full rotation, i.e., it under-rotated. There are several "down" ways to correct this:

- Move back: Move 4" 6" away from the target.
- Thumb down: If you are holding thumb up, put your thumb down. Holding this way increases the spin you put on the axe.
- Size down: Try an axe with a shorter handle.