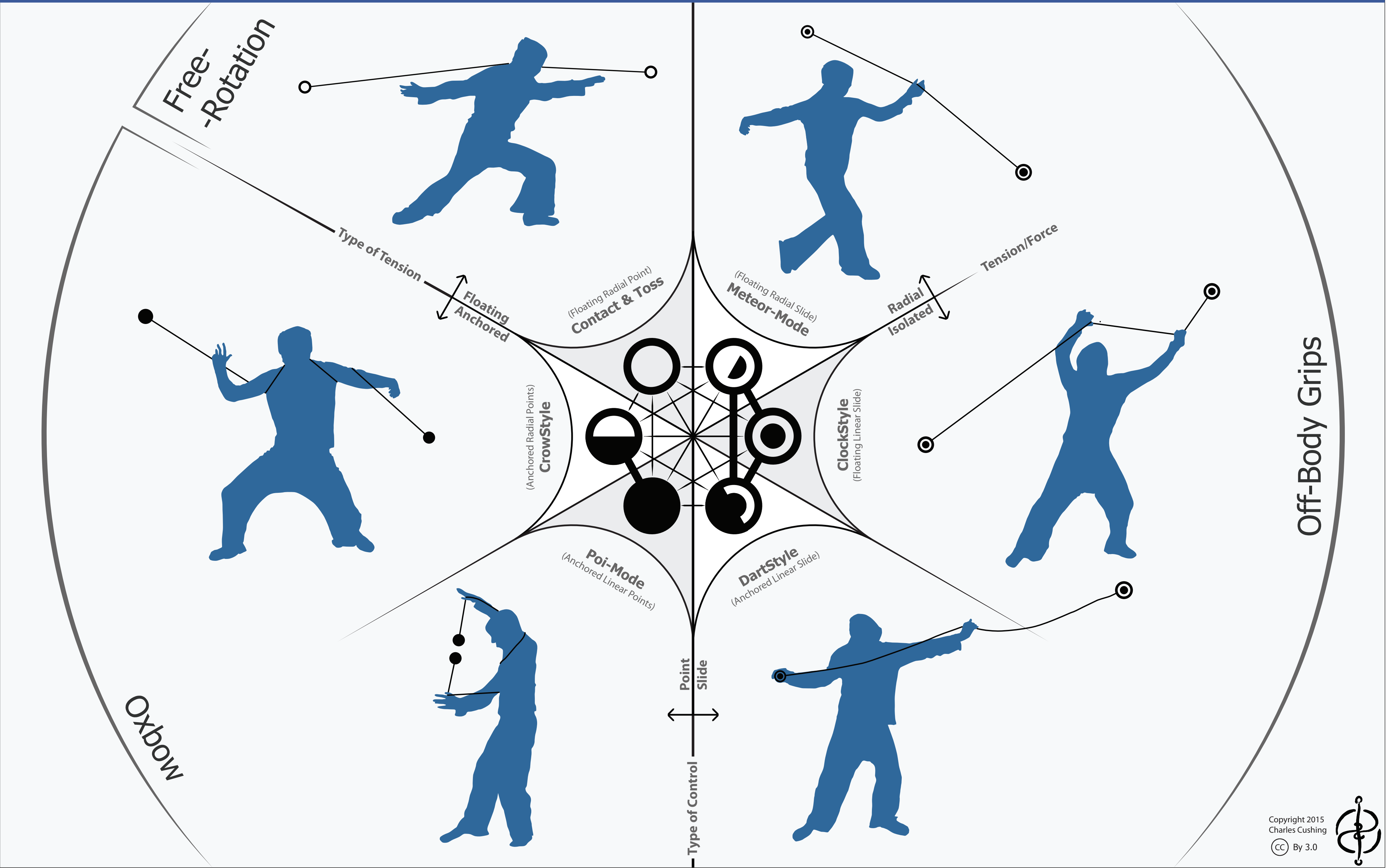
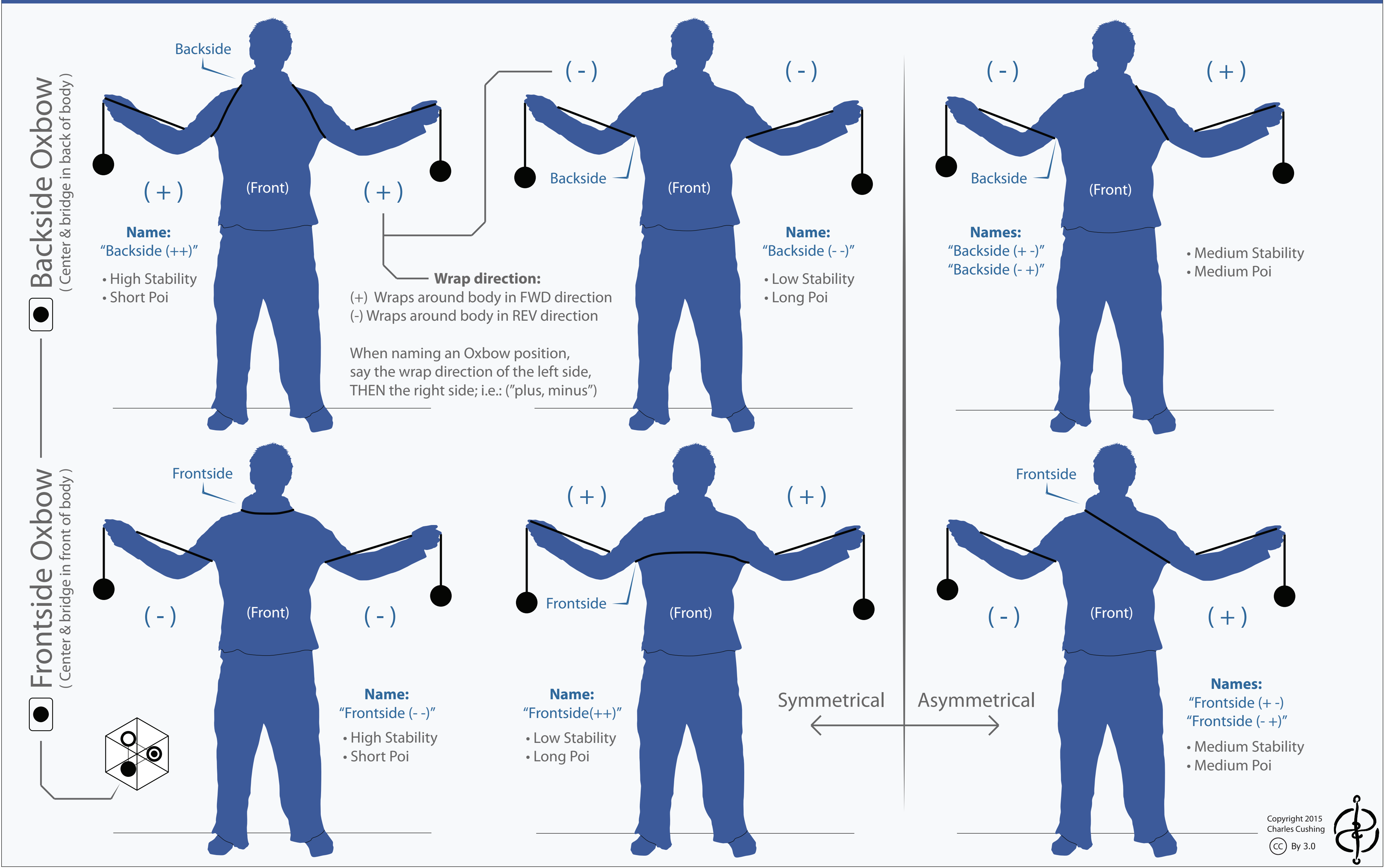


Mapping the Playing Styles & Modes of an Oxbow Hammer





Mapping The Six Captured Oxbow Positions



Oxbow Sizing, Design & Temperament

1 Tether Material Selection and Design:

- Tether material should be strong & VERY stretch-resistant
- Smooth, low texture braid to minimize burns and chafe
- 12-strand coreless "solid" braids are recommended

Materials for Non-Fire Spinning:	Strength	Abrasion	Flex	Stretch	Aerodyn.	Slide	Cost
• MFP	D	D	A	D	B	Skin	1
• Polyester	C	B	A	C	B	Skin	1
• HTPET	C	B	A	B	B	Skin	1
• 100% Spectra, Dyneema, Vectran	A	B	A	A	B	Skin	2
• 100% Technora or Kevlar(Aramid)	A	C	A	A	B	Skin	3
• Reinforced plastic tubing	A	A	C	A	A	Hoodie	4

Not Recommended: • Nylon • Cotton • Unreinforced plastic tubing • Hemp

Ideal Materials for Fire Spinning:

- 100% LCP Vectran (close to temperature limits)
 - 100% Technora, Kevlar, or Twaron (Aramids)
- (Minimum of 5" chain buffer between wick attachment and tether is recommended)

4 Well Tempered Placement of Poi-Nodes:

Testing Placement & Fit of Poi-Nodes:

- Poi-mode from Backside (++) Oxbow can be used to test & adjust the poi-node fit.
- Poi-weaves should just barely tug nodes into contact with fingertips in a relaxed pinch-grip.
- If the nodes are so far in as to be completely out of reach during poi-weaves, move them out
 - If the nodes are too easily reached and the yoke is loose during poi-weaves, move them in

Poi-nodes are frequently too far out:

People are used to holding poi handles and build their hammers the same way, BUT: Nodes are meant to function as stoppers that catch on the fingers PASSIVELY. Poi-mode is meant to be supported by the NECK, while the hands gently finesse the tether. It is fairly common to see spinners holding the nodes directly (especially the poi-nodes) This is undesirable for two reasons:

1. Repetitive Stress Injuries (RSI's):

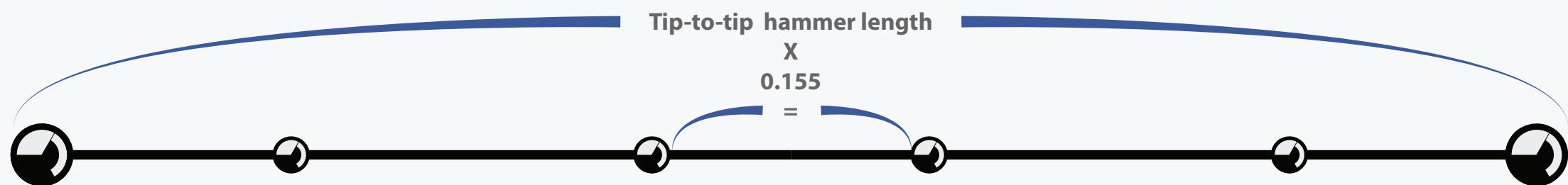
Firmly gripping the small nodes engages a type of muscle strain that can quickly develop into painful and debilitating tendonitis or other inflammatory problems in the hand, wrist, and forearm. Gripping the tether directly allows the spinner to relax their hand, letting the node take all of the tension. Not only does a relaxed grip reduce the potential for injury, but it also increases fluidity and control.

2. Harmonic Stress on Tether:

The node regions are subjected to hundreds of thousands (if not millions) of stress-cycles over the life of the instrument; Rubbing and bending in the same way over and over... Holding the node rigidly as a grip focuses these rubbing and bending stresses, making each cycle worse. Grasping the tether directly allows it to yield against the skin, making bending and rubbing less focused.

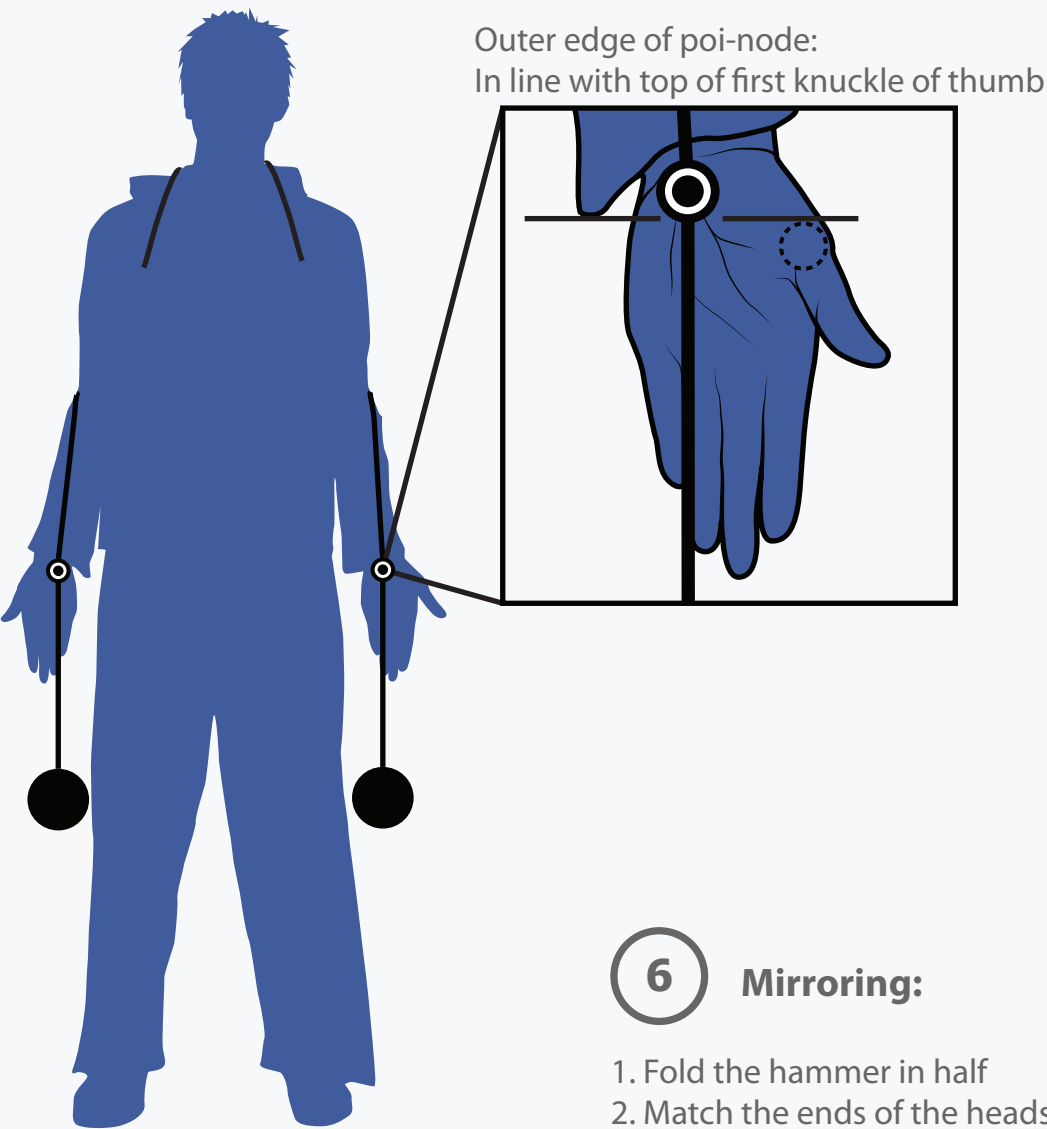
5 Numeric Sizing for Well Tempered Shoulder-Nodes:

- Shoulder-nodes are frequently too close together
- Total length of hammer x 0.155 = Inside width of bridge



2 Head Type & Mass

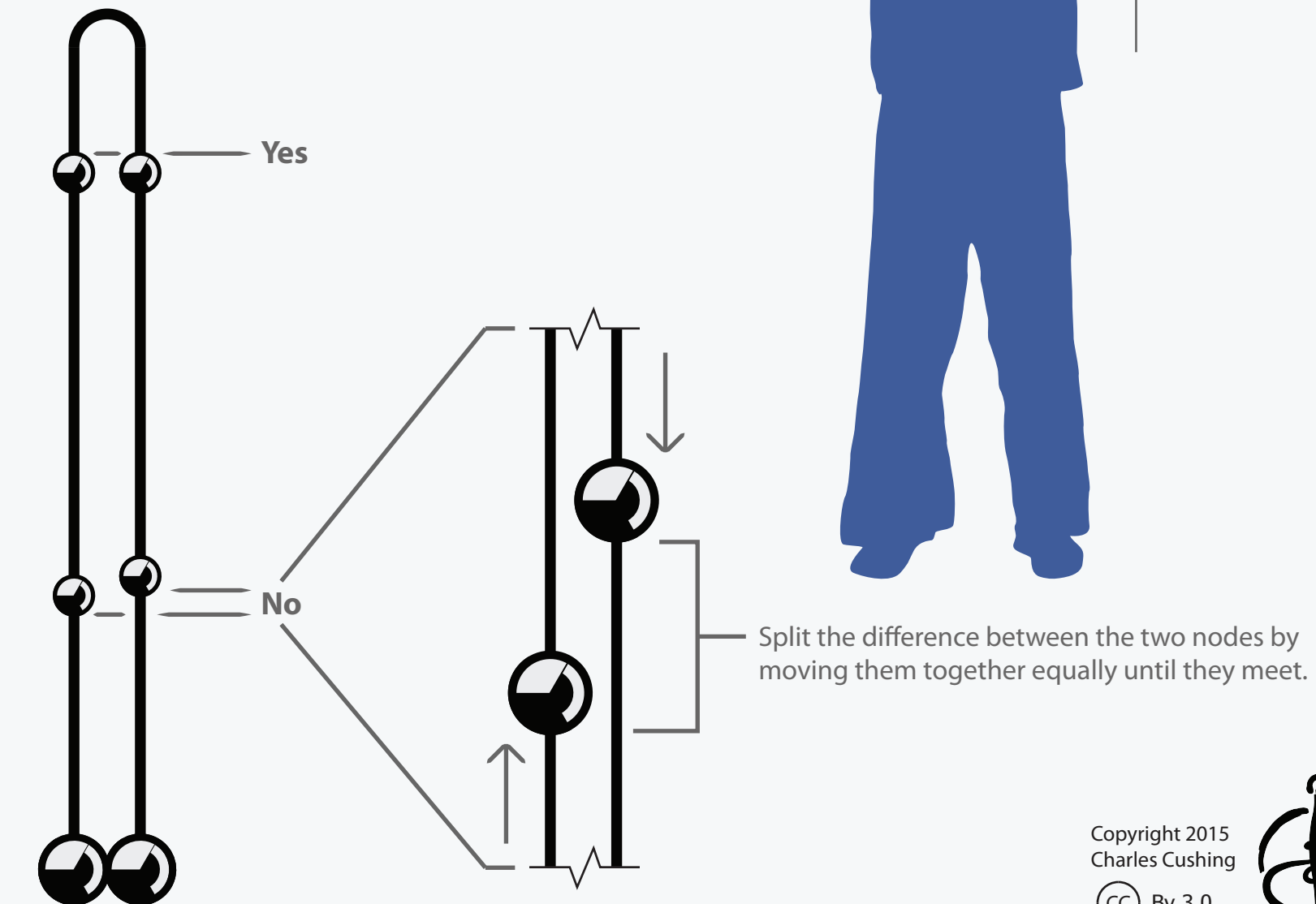
- The heads should be smooth to minimize air friction and maximize disk-feel
- Best size for access to all modes & minimal air friction is $\leq 90\text{mm}$ (3.5") in any axis
- Depending on spinning style, the head mass may be approx. 100 thru 250+ grams:



- Backside (++) Oxbow
- Erect, square posture
- Hands relaxed at sides
- Palms facing forwards

6 Mirroring:

1. Fold the hammer in half
2. Match the ends of the heads
3. Compare corresponding nodes
4. Split the difference



3 Length:

- Hammers are frequently too long because people are used to longer poi
- Overall length is a compromise between poi length and ground clearance



Length Sizing Procedure:

1. Wear the hammer in Backside (++) Oxbow
2. Pinch the tether between thumb and pointer-finger as if holding a fork/spoon
3. Bend arms 90° so that the poi segments meet the elbows
4. Cinch out slack in the yoke until moderately tight around arms/shoulders
5. Adjust the heads so that they fall within the recommended range

Recommended length range (Assuming 90mm/3.5" heads)

- Outside of head meeting elbow:
- Better ground clearance
 - Shorter poi
- Inside of head meeting elbow:
- Worse ground clearance
 - Longer poi

