Woodturning Sharpening Logic

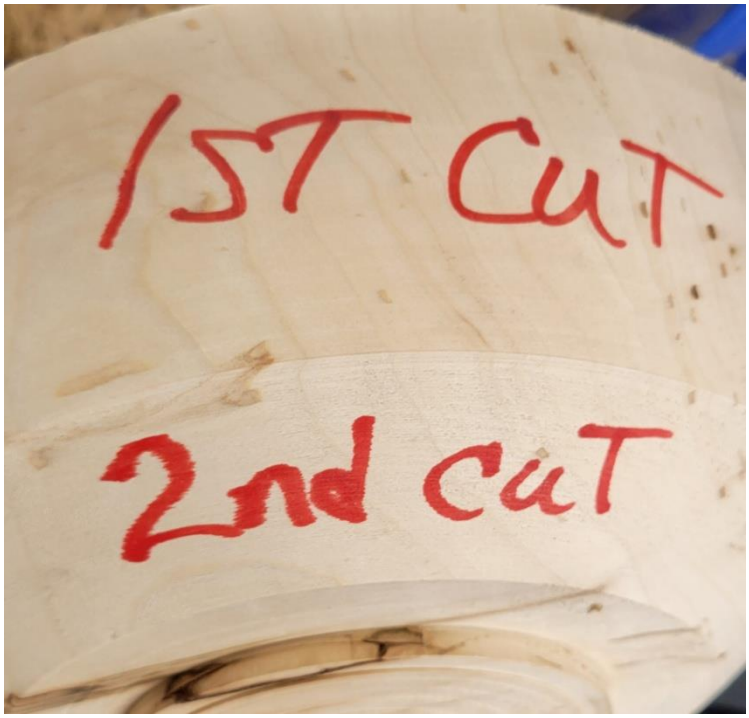
It isn't so much about how sharp the tool is as it is about how often you sharpen!

By; Lyndal Anthony

Accepted logic: Sharpen with a very fine grit wheel for a sharper edge

Reality:

- The sharp edge only lasts a few seconds
- You actually need to sharpen EVERY last/finish cut



The second cut was made right away without re-sharpening from the freshly sharpened gouge

- 99.9% of people start sanding after the last/finish cut, so why worry about the perfect sharpness? The sharpened edge only lasts a few seconds anyhow. Just think about the hard piece of wood where you had to sharpen the tool three times for just one cut!

Gouge sharpened with a 600 grit wheel on the left & Gouge sharpened with an 80 grit wheel on the right. Or is it vice versa?

- Many people will shear scrape, negative rake scrape, or worse yet, just scrape which raises or tears out wood fibers, so you have to sand anyhow.

Accepted logic: Tool Steels; the harder the high speed steel is, the longer the edge lasts.

Reality:

- The harder the steel, the longer it lasts. That is partly true, but the real reference in the hardness is data from machining steel in an industrial setting which does not correlate to woodturning.
- How about cryogenic hardening? Again this correlates to industrial metal machining.

Sharpening geometry & angle;

- Using the proper geometry makes the tools work much better and makes turning easier and more fun.
- There is NO perfect angle. Pick an angle and get used to the “feel” of the cut and tool before experimenting with different angles. Just try a blunter angle on a skew and see how much differently it feels
- A good starting point for angles does happen to be the Stuart Batty 40/40 angle but that is not cast in stone. Sometimes different cuts and grain patterns will turn better with a different angle.
- Don’t be afraid to purchase a lower cost tool so you can easily change the grind angles/shapes to find the angles/shapes that work for you.

- Don’t be afraid to try sharpening to a traditional/transitional/Irish grind wing shape to compare how they cut.

Woodturning reality;

- How often do you turn? Do your skills match production/pro woodturners?
- Does driving a Ferrari make you a better driver than driving an SUV?
- Owning the best tools doesn’t make you a better turner, practice does. There has been some fabulous woodwork made with simple tools.

There are PHYSICS involved in turning!

- It is like flying an airplane!
- Learn what Yaw/Pitch/Roll is and how it affects the cut. Micro adjustments with this can turn crumbly shavings into ribbons instantly and make the cut much easier/smoother!

Time is money;

- Would you rather spend more time sanding than turning?
- How much does sanding cost; sandpaper versus sharpening and replacing a gouge actually cost? Less sanding also reduces exposure to wood dust which is a known carcinogen.
- Improving technique greatly reduces sanding. Improving technique comes from practice, practice, and practice.
- Again; sharpen every finish cut.
- Sharpen your scrapers ten times more often than spindle/bowl gouges. Scraping rolls over the cutting edge within a few seconds of cutting dulling the tool instantly.
- Negative rake scrapers cut cleaner because they push the wood fibers down before shearing them off unlike a regular/neutral rake scraper which tends to pull out wood fibers causing more tear out
- Negative rake scrapers don’t work as well in ALL situations!
- Learn the difference between negative rake scraping and negative rake abrading!