



WHY DO WE SPIN

- For the act of spinning itself
- to relax
- to learn something new
- to be creative
- to experiment
- because we have a specific project in mind

FIBER MATERIAL

Things to take into account when starting to spin:

1. *Composition*: Spinning a fiber of vegetable origin is not the same as spinning one of animal origin, or fibers with 100% content of one fiber or with mixtures.
2. *Staple Length*: How long is a filament of this fiber? Knowing this helps when drafting or stretching the fiber. The fiber separates more easily if you keep your hands this distance apart.
3. *Crimp*: The natural waves in the fiber contribute to the yarn's elasticity. Elasticity is important if you want your yarn to have shape memory so your socks don't sag and your sweaters keep their shape.
4. *Shine*: Does this fiber absorb or reflect light?
5. *Drape*: This fiber is spun to create an elastic yarn or something softer and with a good drape
6. *Spin*: What skill level is this fiber suitable for? Is there a particular way to spin it? Or a type of drafting that will yield better results?
7. *Skin*: How does the fiber feel against the skin? Soft on the neck? Soft on the feet? Head? Hands? Do you need a barrier in between? (Microns)
8. How does it behave when you knit it?

PARK AND DRAFT.

It's a technique that breaks down the gestures and steps needed to pull, or draft, the yarn while spinning with a spindle. This helps control each phase until you gain the necessary fluency to spin without stopping except to wind up the yarn.

The first step is to create a leader, either by spinning it from scratch if the spindle allows it (it has a hook at the top), or by using an existing yarn to attach to the spindle (cotton yarn works very well as a leader).

Three basic steps:

1. Create twist.
2. Draft.
3. Pick up the yarn.

Elaborate explanation:

1. Clamp the yarn to control it at the apex of the drafting triangle.
2. Create twist by rotating the spindle.
3. Stop the spindle and hold it (ideally with your knees).
4. Without releasing the first clamp, stretch the fiber into the drafting triangle.
5. Clamp the top of the stretched fiber.
6. Release the lower clamp (the one from the first step) and allow the twist to pass through.
7. Repeat steps 2 through 6.
8. When the yarn is long enough, and without releasing the clamp controlling the twist, wind it onto the spindle and continue.

TROUBLESHOOTING

1. *The fiber is not separating.*
 - a. The hands (tweezers) are too close together.
 - b. The twist has crept into the stretching zone. Turn the fiber in the opposite direction.
 - c. The fiber is the problem (too compacted, felted); fluff it up if you can.
2. *Thick and thin thread*
 - a. Normal when starting out.
3. *The thread breaks.*
 - a. The spindle is too heavy.
 - b. It has too much twist.
4. *The spindle stops too quickly or spins backward.*
 - a. The yarn is too thick.
 - b. The spindle is too light.
 - c. The leader is too short.
5. *The thread unravels.*
 - a. The thread is too thin.
 - b. There isn't enough twist.
 - c. The spindle is too heavy.
6. *The thread twists upon itself.*
 - a. Too much twist
 - b. Depending on the tightness of that twist, it may not be a problem.
7. *There's no way to make yarn.*
 - a. Stop trying to spin and take a break.
 - b. We need to find another way to spin.

WOOLEN & WORSTED

Woolen and Worsted are both fiber preparation methods and drafting methods, which can be somewhat confusing.

Originally:

- Woolen Preparation —> Woolen Yarn

- Worsted Preparation → Worsted Yarn

As of today... Freedom!

Worsted preparation: The fleece is combed to remove irregular fibers and bits of plant material. The result tends to be compact and smooth, with parallel, aligned fibers of similar length.

Woolen preparation: The fleece is carded, causing the fibers to run in different directions and adding air to the mixture. The result is a preparation with volume and an irregular surface. Spinning woolen+woolen and worsted+worsted emphasizes these preparation characteristics.

TYPES OF PREPARATIONS.

WORSTED, TOP.



- The most common format is the standard commercial one.
- It accommodates all types of materials and colors. Machine combing removes short fibers and inconsistencies, leaving them parallel. It also removes air, making it dense and smooth.
- Tops may have a "direction," like a residual twist as they come off the machine. If this resists spinning, turn the top over and spin it on the other side. Worsted yarn is lustrous and smooth, with excellent stitch definition. Woolen yarn is airier, smoother, and has more volume, creating a lighter yarn. While some definition is lost, warmth and lightness are gained.

WOOLEN, ROVING.



- Roving is the commercial form of woolen yarn.
- Subcategories:

- Sliver, pin roving, pencil roving. It is made on industrial carding machines; the fibers are disorganized, running in many different directions. It has more volume than top-grain yarn. When removed from the carding machine, it may develop some twist as it is wound up. Woolen yarn creates a yarn that is warm and lightweight. Worsted yarn is more compressed, slightly less lightweight, but more durable. Sliver is a finer form than roving, typically made from plant fibers.
- Pin roving is even narrower, with slightly more parallel fibers for fine fibers.
- Pencil roving: the narrowest of all, like a paintbrush. Good for beginners.
- Other Woolen formats:
 - Batts: Carding sheets. They usually blend different fibers of all types. They have a lot of air; if spun in the same direction as the carding, they have volume; if spun in the opposite direction, they have even more volume. Woolen yarn emphasizes volume. The yarn is fluffy and lightweight and can be very delicate. Worsted spinning removes air but can give luster and shine depending on the fiber.
 - Rolags: Created with carding machines or blending boards and wound into a tube. They are spun as smaller versions of batts.
 - Puni: A smaller version of the rolag, tightly wound and usually composed of cotton or other short fibers.
 - Nube: Washed and carded fiber. Especially cashmere, camel, or yak.
 - Curls: Some long-haired sheep breeds have pronounced curls and can be used as is to add texture.



DRAFTING

Drafting, or pulling, is a fundamental technique that can make or break your yarn. It's the mediation between the fiber and the twist, allowing you to determine the yarn's size and even its character.

The ultimate goal of drafting is to create a continuous flow, which requires hours of practice to learn how to coordinate your hands and spindle, or your hands and feet plus a spinning wheel.

DRAFT TRIANGLE

Regardless of the knitting style, worsted or woolen, both have one thing in common: the triangle. Learning to recognize it is essential because it's where the fibers and twist must work together.

Depending on whether or not you allow the twist to enter the triangle, you can differentiate between the two styles:

- Woolen: Inside.
- Worsted: Outside.

WORSTED DRAFTING

This style is for beginners because it's the easiest to control. By preventing twisting in the fiber, the yarn is better controlled.

Steps:

1. Pinch the fiber firmly enough to prevent the twist from shifting.
2. Pull the fiber toward the spindle.
3. Slide your fingers along the yarn toward the triangle.
4. Pinch the top point of the triangle again.
5. This is known as the Pinch-Pull-Slide technique.

WOOLEN DRAFTING

There are thousands of ways to draft in a woolen manner: forward, backward, long draw, long slide draw, long supported draw... When drafting a woolen, the twist enters the fibers before and during the pull.

Method:

1. While your fiber hand pulls it back, the other hand opens and closes, pinching to give the draft some tension but allowing the twist to seep in.

WIDTH CONTROL.

When spinning, it's important to control the width of the yarn. As a general rule:

- Small wool: Less fiber, more twist, slow hands.
- Big wool: More fiber, less twist, fast hands.

PREDRAFTING.

It's not mandatory, but it can help us work more easily. There are different ways to do this pre-draft.

- **Fluffing:** This is done by stretching a top horizontally just a little, to open it up slightly. It's used to give it new air if it's been stored for a long time or if it has felted slightly.
- **Stripping:** This is the process of dividing the top or roving lengthwise. Strips are never made as thin as the desired thickness because it wouldn't be possible to stretch it while spinning. It makes spinning easier. It can also be used to control color changes.

TWIST

WHAT'S TWIST?

Twist is defined as the spiral turns that yarn receives to hold fibers or other yarns together. It can be classified according to two parameters:

- The Direction of Twist
- The Amount of Twist.

DIRECTION OF TWIST

There are two possibilities for the direction of twist: left and right. Plys can also have two directions.

These are usually referred to as S-twist or Z-twist, depending on the transverse orientation of the fibers, that is, their orientation relative to the diagonals of the letters Z and S.



Traditionally, Z is used for short fibers, but it is not a universal and immutable law.

- **S-twist:** a single yarn is said to have this twist when, when held vertically, the fibers inclined on the axis of the yarn form the same inclination as the central position of the letter S. (From left to right).
- **Z-twist:** a single yarn is said to have this twist when, when held vertically, the fibers inclined on the yarn axis form the same inclination as the central position of the letter Z. (From right to left).

AMOUNT OF TWIST

- *Twist 0:* This occurs when a yarn has a TPI (Twist per inch). This only happens in exceptional cases like lettlopi yarns.
- *Very low twist:* between 3 and 5 TPI.
- *Low twist:* between 6 and 8 TPI, produces bulky yarns.
- *Medium-low twist:* The entire range between 9 and 19 TPI is considered balanced but low.
- *Medium twist:* between 20 and 25 TPI (8-10 per cm), is the standard twist for most commercial yarns.
- *Voile twist (Intense):* Between 30 and 40 TPI (12-17 per cm).
- *Crepe twist:* 40-75 TPI (17-30 per cm). The highest tolerable twist.

EFFECTS OF TWIST ON YARN AND FABRIC.

High twist: The higher the twist, the harder the feel because the yarn compacts the fibers. It also reduces the yarn diameter, so the fabric has less coverage, resulting in a stiffer and finer fabric. This type of twist has lower moisture absorption.

Low twist: Yarn made with a low twist will have a soft feel but is more prone to pilling and has low abrasion resistance. It usually has more volume and thickness, making softer and thicker fabrics. It also absorbs moisture easily.

MORE ON TWIST

Yarn is all about twist; without twist, there is no yarn. In fact, we could define yarn as a continuous strand of fibers twisted together so they don't separate. It's the glue that holds everything together, and we spinners are obsessed with the subject. I think it's very interesting for you to learn a little more about how twist influences yarn creation, since even commercial yarns largely adhere to this standard. Novelty and fancy yarns might break it, but the basics, the fundamentals, remain the same.

There are two twist directions:

- S-twist yarn: This occurs when the spinning wheel (or machine, or spindle) rotates counterclockwise. The angle of the yarn tilts to the left, as in the center of the letter S.
- Z-twist yarn: This occurs when the spinning wheel (or machine, or spindle) rotates clockwise. The angle of the yarn tilts to the right, as in the center of the letter Z.

"Normally," yarn is spun in one direction and folded (the threads are brought together) in the opposite direction. And "usually," spinners tend to make singles in one direction and fold them in the opposite direction, always.

Except in cases where we are interested in creating a specific type of yarn that requires us to spin and fold it in a specific way, when we spin unintentionally, for the mere pleasure of spinning, we almost unconsciously have a spinning direction and a folding direction memorized.

FINISHING

Steam: Hold the skein over steam.

- Pros: It's fast.
- Cons: The fiber and twist aren't as stabilized as with the wet method.
- Good for: Delicate yarns, craft yarns with many added elements that can be unraveled when submerged.

Immersion: Submerge the wool in hot, soapy water that doesn't need rinsing for 10 to 15 minutes. Gently wring it out, roll it in a towel, and press the towel to remove excess water. Hang to dry.

- Pros: Easy, hot water relaxes the yarn and redistributes the twist.
- Cons: You have to wait for it to dry, and you have to hang it somewhere.
- Good for: Yarns with little twist.

Snapping: Start the same as the immersion process, before hanging it up place your hands inside the skein and quickly separate them so that it stretches suddenly. Repeat, turning the skein.

- Pros: Excellent twist redistribution.
- Cons: Can break fine yarns.
- Good for: Almost all yarns and fibers.

Hitting: Same as by immersion but before hanging it up it is hit against the floor or the edge of the bathtub.

- Pros: Redistributes a lot of twist, relaxes the yarn, and relaxes us.
- Cons: Abrasive to the yarn surface, can pull out fibers.
- Good for: Yarns with fold and twist patterns, wool that needs to develop a halo effect.

Felting: This is a process that helps to lightly felt the yarn. You will need two basins, one as hot as you can stand and the other with ice water. Alternate placing the skein between the two basins.

- Pros: Stabilizes the yarn, redistributes twist.
- Cons: Doesn't work with superwash yarns.

- Good for: Singles intended for knitting alone.

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- **Yarn-i-tec-ture** de *Jillian Moreno*
- **Respect the Spindle** de *Abby Franquemont*.

It has helped me a lot to read the great teachers Elizabeth Zimmerman, Barbara Walker and Abby Franquemont, plus all the articles, bits of text or corners of notes that I have read throughout the twelve years of Ardilanak's existence



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