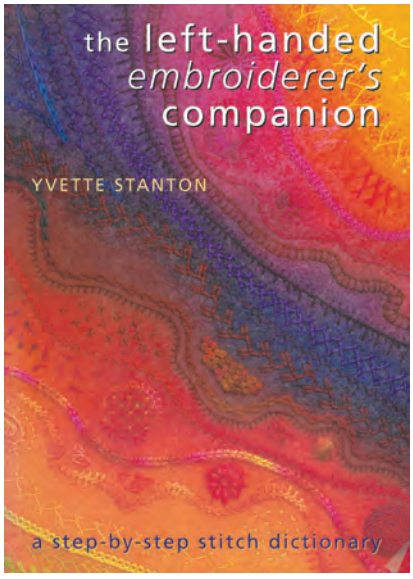
Left, Right, Up, Down, and Around Part 2: Some Handy Instruction Techniques for Opposite-Handed Students

by Marjorie Mann



In a letter I once wrote to my nephew, I commented that being a left-hander in a right-handers' world is like looking at life through a mirror. Complicating matters, some things remain the same no matter how you look at them; only certain other things trip you up. The everyday, never-ending challenge is to identify the confounding spots and figure out how to deal with them.

When it comes to handedness, the needlework environment is especially challenging because one modification does not fit all scenarios. Often, the needlework instructions written for right-handers can and do apply to left-handers as well. In other words, the instructions are neutral. Only in specific spots do we need to intervene and modify the instructions.

In *the left-handed embroiderer's companion*, Yvette Stanton exactly laid out the challenge to left-handed stitchers:

> *The difference between what left- and right-handed stitchers do involves holding the needle and inserting it in the fabric comfortably. Right-handers generally have their needle in their right hand, inserting it from right to left. Left-handers hold their needle in their left hand, inserting it from left to right. Because of this, sometimes left-handers will work their stitches in mirror image to right-handers. However, sometimes it is enough simply to turn the fabric 90 degrees and work up a line instead of from right to left. At other times, the work can be rotated 180 degrees. However, as stitchers also can insert*

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their needle away from and towards themselves, with varying degrees of comfort, very occasionally the stitching can be worked in exactly the same way as for right-handers, because it is constructed ambidextrously. (5)

The focus of this article is to give needlework instructors, ***no matter their handedness***, a series of tips, tricks, and how to's when instructing aspiring students and needleworkers who are of an opposite handedness. These tips are useful for all instructors, whether professional or not, and for all types of students, in all types of learning environments (formal classroom, chapter meetings, or coffee klatches with neighbors). Being able to teach opposite-handed students enables both instructor and student to have a mutually satisfactory and rewarding needlework experience.

While the most common scenario is that of right-handed instructor/left-handed student, on occasion the opposite scenario of left-handed instructor/right-handed student can and does occur. I will attempt to lay out some universal opposite-handedness principles that apply across the board, in both the classroom environment and in written instructions available in workshop packets, stitch guides, craft books, and journal articles. These principles derive from three sources:

1. the experiences of the author, a left-hander of five decades' life experience and a crafter of four decades' experience
2. information from the available needlework literature, such as books and journals
3. an informal poll among experienced needlework instructors conducted in June 2019 by Janet Noble

I lay no claim to this being an exhaustive list. It is instead a first attempt to move beyond the Three Tropes mentioned in the first article of this series (see pages 28–33, *Needle Arts*, December 2019). I also hope to spark a broader discussion of this issue within the needlework community with the long-term goal to create a better, more complete list of opposite-handedness training techniques for needlework instructors.

I also hope to raise awareness among craft publishers, both print and desktop, and encourage them, in their turn, to increase the quality of their printed publications to be handedness inclusive. Individuals can also benefit from these instructions whenever they are helping or teaching others in informal situations, such as teaching a relative at home, showing someone how to work a stitch at a stitch-in, or demonstrating a technique for friends and fellow stitchers in a local stitching group.

Here are three general guidelines for instructors to follow, no matter their handedness nor the specific technique:

1. Use neutral language. As an example, use *dominant hand* and *non-dominant hand* instead of *right hand* or *left hand*. On occasion, there are also technique-specific terms that indicate their function. Although these terms appear rarely in needlework techniques, hypothetical examples might be *needle hand* and *frame hand* (if the needleworker is not using a stand to anchor the frame) to refer to the hand that holds each item.
2. Avoid ambiguous or potentially misleading language. This applies to both written and oral instructions, as well as daily life. The most prominent example by far is the use of the word *right*. ***In all cases,*** avoid using this word when giving praise or feedback. Instead, use the word *correct* or a synonym. Use *right* only to refer to directions.

A personal anecdote illustrates this point. When I received my driver's learning permit at age sixteen, my mother took me out for my first lesson. When we approached my first-ever intersection, she said, "Brake for the intersection." When I did that, she then said, "Right" (meaning "Well done"). I promptly made a right turn and ran over both the curb and a stop sign, almost giving her a heart attack. To this day, the word right is banned between us as a form of encouragement or praise. We mutually learned this lesson the hard way. We pass on this experience as an example of the myriad traps the word right can spring on a person.

Attending to student's needs

3. Note that specific fiber art techniques have specific handedness modifications. In addition, the necessary modifications may directly contradict each other across the boundaries of the various techniques. The instructors mentioned this fact multiple times in the informal survey.

   The most prominent specific example of this general principle is what is variously called a graph, stitch chart, pattern, or diagram. If the overall pattern or diagram is symmetrical, it can remain as is. It is up to the individual stitcher to decide how to approach the stitching. But if the overall diagram is asymmetrical, intervention and modification may be needed (more on this later).

Before laying out guidelines specific to the needlearts, in relation to handedness, four factors must be addressed when providing instructions for any needlework project:

- the handedness of the stitcher
- the three-level hierarchy of stitching organization
- whether to stab or scoop the individual stitches
- whether the project requires some form of stable frame or can be worked in hand

For the latter three, modifications *may* be necessary to adjust for the first, opposite-handedness.

Three-Level Hierarchy

Every needlework project has a three-tier hierarchy of the organization or direction for

- the overall project
- a block or group of stitches and
- forming an individual stitch.

At all three levels, right-handed instructions may need to be modified for left-handers.

As a specific example of this general principle, in most stitch dictionaries, the instructions and their accompanying diagrams are written for right-handed needleworkers. If you look closely, a diagram will show the needle (and the individual stitch) moving from right to left, but the line of stitches goes from left to right. To modify the instructions for left-handed needleworkers, the instructor would modify the diagram to show the needle moving from left to right to form an individual stitch, and the line of stitches going from right to left to form the group of stitches.

As a side note, if needleworkers want to make the most efficient use of the thread (i.e., the greatest possible number of stitches for the least possible amount of thread), they would stitch multiple lines in boustrophedon, a fancy Greek term meaning that they would stitch odd-numbered rows left to right and even-numbered rows right-to-left (or vice versa). Boustrophedon, by its nature, is both handedness neutral and handedness inclusive in that it requires the needleworker to figure out the mirror-reversed version of the stitch.

Stabbing vs. Scooping

Determine whether the instruction and any accompanying illustrations employ the scooping method or the stabbing method of working the stitches.

In general, but only in general, stabbing stitches tends to be handedness-neutral, whereas scooping stitches tends to be handedness-specific. So, if the instruction or illustration adopts the scooping method, it *will* need to be modified for opposite-handers. Stanton's two books (*the left-handed embroiderer's companion* and *the right-handed embroiderer's companion)* give wonderfully specific examples of how to scoop the stitches and modify a stitch based on the handedness of the stitcher.

Frame vs. In Hand

Determine whether the project calls for a frame (hoop, stretcher bars, scroll frame, or similar technology) or is worked in hand. If the project requires a frame, the starting and ending points of the overall project may be different for a stitcher's respective handednesses. In contrast, the classic in-hand instruction, "Place your first stitch in the center, and work out from there" is handedness neutral; it is up to the individual to decide exactly what *out* means.

The consideration of handedness, hierarchical level, stab vs. scoop, and frame vs. in-hand leads to a complicated array of many possible combinations, with three general outcomes:

1. The combination, by its nature, tends not to occur. It is physically difficult, for example, to scoop stitches with the needle when the canvas or ground is tight and rigid within the frame.

INSTRUCTION	HANDEDNESS	
SCOOP		Sensitive
STAB	Neutral	
WORK IN HAND		Sensitive
WORK IN FRAME	Neutral	

2. The combination is handedness neutral. It does not require any intervention or modification.
3. The combination is handedness sensitive and requires intervention and modification.

Arriving finally at specific handedness modifications for the needlearts, all modifications mentioned in the existing needlework literature and the poll of experienced needlework instructors, appear to fall into one of three categories:

1. line direction
2. circular motion
3. mirroring

Keeping these three categories at the forefront unravels a lot of the mystery and confusion as to why right-handed needleworkers prefer to approach their needlework projects a certain way and why left-handed needleworkers prefer a different approach.

As already noted, there is a three-level hierarchy to any needlework project. Line direction and mirroring figure prominently in all three levels, and circular motion figures prominently in the third level, the instructions for the formation of individual stitches.

Line Direction

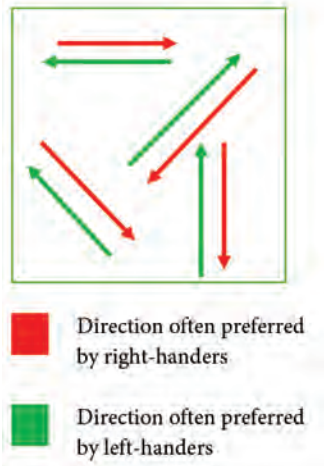
As the first article in the series stated, right-handers have a certain set of preferences for line directions, and left-handers have a certain (opposite) set of preferences for line directions. But line direction is not merely left-to-right or right-to-left. It may also include the up/down pairing or diagonal pairings, ENE/WSW or ESE/WNW.

The left-to-right/right-to-left line preference is the strongest and most intuitive. For right-handers, it is left to right, and for left-handers it is the opposite, right to left.

This directional line preference is more than likely reinforced by our Western writing system. In the scientific literature on handedness, there is a common and logical speculation that the reason right-handers developed a strong preference for left-to-right line direction when learning to write is what I call the ink factor. By writing in a left to right direction, no ink transfers to the writing hand as it moves over the page. However, as any left-hander can sorrowfully tell you, writing in this direction with the left hand inevitably transfers ink from the page to the pinky-edge of the hand.

It is equally logical to speculate that this ink factor plays into the preference of right-handed needleworkers to stitch left-to-right and left-handed needleworkers to stitch right-to-left. This line directionality has a happy result: the newly-formed stitches remain pristine and unsmudged as later stitches are formed and placed on the canvas or ground.

LINE DIRECTION PREFERENCES



It is important to be aware that verbal or written instructions do not always explicitly use the words *right*, *left, up,* or *down* to give a direction. Instead, the direction is implicit in a prepositional phrase, as in the following sentence: "Stitch *toward* your body."

When needlework instructors are composing their instructions, verbal and written, prepositions, such as *toward,* are the potential trap or the yellow warning flag. That preposition probably indicates the preferred line direction for a certain handedness, and the instructor needs to modify the instruction for opposite-handed students by substituting the opposite directional preposition or rewrite the instruction to be handedness neutral. For the above example, the modified instruction would be "Right-handed stitchers may wish to stitch *toward* themselves; left-handed stitchers may wish to stitch *away* from themselves."

To further assist instructors, the table below lists the most common English-language pairs of prepositions that are directional opposites. Note: there may be other, less common directional prepositions that could beneficially be added to this table.

DIRECTIONAL PREPOSITIONS PAIRED OPPOSITES	
toward	away
to	from
come	go
in/into	out
up	down
back	front

Circular Motion

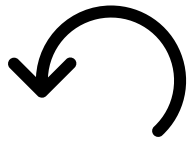
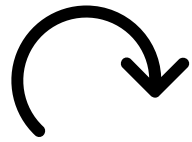
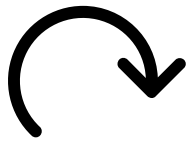
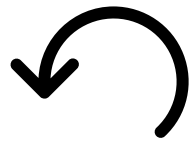
In the informal poll, needlework instructors mentioned multiple times that certain specific stitches are potential troublemakers for needleworkers whose preferred hand for stitching was opposite from the instructor's. The most prominent examples by far were the entire family of knot and bullion stitches. These stitches share one prominent feature: they involve a circular motion.

Fortunately for needleworkers, there are only two possible circular motions, clockwise or counterclockwise. Therefore, modifying instructions potentially comes down to a single, simple substitution. If the printed stitch diagram or the instructor's verbal instruction indicates a clockwise hand motion, the instructor would substitute a counterclockwise motion for the opposite-handed student.

That said, beware of the following trap. Often, the purpose of the circular motion is to wrap the thread around the needle. In these cases, for the stitch to be correctly formed, the thread needs to **consistently** wrap around the needle either clockwise or counterclockwise, regardless of handedness.

Z-twist on the left and S-Twist on the right

THREAD TWIST AND HANDEDNESS

	Left-Handed	Right-Handed
S-TWIST		
Z-TWIST		

Diagrams sometimes show the thread going around the needle with no indication of which hand did the wrapping. Other diagrams may show both the hand and the needle. The key, in the latter case, is to ignore the hand and focus exclusively on the thread direction around the needle, clockwise or counterclockwise, then decide which is the most comfortable hand/needle combination to achieve the correct wrapping.

There is yet another complexity. Certain threads are very cranky about whether they wrap around the needle clockwise or counterclockwise, while others are more forgiving. One of the crankiest, most unforgiving threads when it comes to thread wrapping is rayon. Because it is a Z-twist, its preferred circularity in needle wrapping is directly opposite of what is shown in most stitch dictionaries as the correct way to form a knot or a bullion.

The above table, Thread Twist and Handedness, gives recommended clockwise/counterclockwise motions for needleworkers learning a new stitch that involves a circular motion. These are suggestions. Due to a variety of other factors (*e.g.*, is the purpose of the circular motion to wrap the thread around a needle?), the recommended motion may not turn out to be the most comfortable or give the most pleasing results for the individual needleworker.

Ultimately, the best way for an instructor to teach any type of circular motion is to suggest that students experiment on a doodlecloth with various thread/needle/rotation combinations, using whichever hand they are most comfortable with. Students will find the combination that has the best, most pleasing result for them and can then proceed accordingly with the actual piece, stitching "for real" on the stipulated canvas or ground.

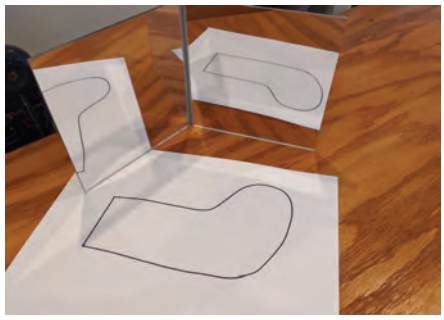
Mirroring

With complex patterns or individual stitches that require multiple steps to form, one of the most potent weapons in the armory of handedness instructions is mirroring. Left-handers learn to employ this weapon early in life. However, the form that the mirroring takes ranges from simple to complex.

The first article in this series listed holding a work up to a mirror as one of the Three Tropes of limited usefulness. We can now further qualify this statement and say that the form of mirroring suggested in the Three Tropes was a simple kind.

USING THE **MIRRORING TECHNIQUE**

The mirroring technique is also very useful in certain situations where handedness plays no role. One common example is with patterns for Christmas stockings. If the pattern has the toe pointing in one direction, but you want it to point in the opposite direction, produce a mirror image. Voilà, the toe now points to the left, and you are all set for happy stitching.



Stocking flopped in the mirror so the toe sits in the opposite direction

If you don't want to use computer software to mirror your pattern, flip the pattern to the reverse side, place it on a light box or tape to a window, place or tape the ground fabric over the mirrored version and trace.

In a classroom setting, mirroring typically takes the form of the needlework instructor suggesting an opposite-handed student look at them dead-on. This method has limited usefulness because the student is not viewing the stitching and the pattern right-side up but upside down. In sum, this method goes part of the way, but not the whole way.

In the mid-range of mirroring techniques, we have both the actual, literal mirror and the transparent page. In the first case, the stitcher would hold the mirror to the side of the printed pattern or stitch diagram and look in the mirror. In the latter case, the instructor would copy the diagram on a photocopier or output it to a printer but print it on a transparent page. Then the transparent page would be flipped and backed with a blank white piece of paper to produce the mirrored version of the pattern, chart, or stitch diagram in a readily accessible form.

At the most advanced level of mirroring, modern technology has given instructors a very powerful way to achieve instant, perfect mirroring, no matter how complex or asymmetric the pattern, group of stitches, or individual stitch. A mirror function is built into most computer software packages and printers.

Consequently, the process for writers, designers, and workshop instructors is very simple: build the pattern or stitch diagram according to their preferred handedness, then direct the software or printer to produce the same pattern or stitch diagram in mirror for the opposite handedness. It is a good idea to retain the original pattern or stitch diagram as a reference for numbers, letters, or symbols within the pattern. These will have to be changed in the mirrored version as they will have become reversed or rendered incorrect.

To round-out our discussion, here are a few more guidelines that apply specifically to preparing for teaching, whether in an informal setting or more formal class or workshop:

- Inquire in advance if you will have any opposite-handed students in the workshop. If so, then create opposite-handed instructions and diagrams to make available to these students.
- Engage pilot stitchers who are your hemispheric opposite when you are creating instructions for a workshop or writing a pattern for publication in a book or journal. The pilot students will read the instructions and stitch the project. They will very quickly find any translation spots you may have missed. They may also identify other editorial errors that do not pertain to the handedness issue.

  One thing to be aware of: On the first pass, a pilot stitcher may render a stitch instruction as handedness neutral, which may may turn out to be incorrect. The pilot stitcher may be cross-lateral (i.e. ambidextrous) or a high-functioning opposite hander who has learned to do many things opposite-handed. In both cases, the pilot stitcher is unaware of doing the task opposite-handed. To be safe, pilot your projects with several opposite-handed people.
- Do the stitch or set of instructions as an opposite-hander yourself. Again, you will quickly locate the spots where the stitch or the instructions should be modified for your opposite-handed students. Working opposite-handed has the added value of enabling you to demonstrate the stitch or needlework technique in a workshop setting to your opposite-handed students.

- Include in your project kit an official doodlecloth. This has three happy outcomes:
  1. You reduce your stash of leftover canvas or ground scraps by putting them to positive use.
  2. You encourage experimentation by all students, no matter their handedness.
  3. You encourage students to get into the doodlecloth habit on all their projects, not just the workshop project itself.

While the thought of preparing to instruct any project for opposite-handedness students may appear daunting, remember most of the project, and the majority of its instructions, are handedness neutral. Some things remain the same no matter how you look at them; only certain other things trip up you and your students.

For example, one of the instructors who participated in the informal poll commented that many needlework instructions for counted-stitch techniques in particular are of the type "Go up at one and down at two." These instructions are handedness neutral.

While this is the case, there is one final, overriding guideline I cannot emphasize enough: Do not automatically assume everything is handedness-neutral. To borrow a phrase from the Cold War era, trust but verify. The task is worth the effort. Your opposite-handed students will definitely notice their inclusion, and they will definitely appreciate your efforts. Terri Bay remarked, "After doing a left-handed demo and then carefully drawing out the chart, I had one student

EXERCISES

Here is an interesting set of exercises to expand your repertoire of instructor skills by further developing your ability to instruct opposite-handed students. All of the exercises focus on knotted stitches and increase in their degree of challenge. Once you have finished this set of exercises, take any other stitch from your favorite stitch dictionary, and follow the same set of exercises.

1. Study the following needlework (textual) instruction that was written for right-handed students. Now, modify it so it specifically applies to left-handed students.

   Hold the thread firmly with your left thumb and forefinger. Wrap the thread around the needle towards you. Wrap it enough times to create two loops around the thread. Place the tip of the needle on the fabric at the desired end position for the stitch. Push the needle through the fabric, maintaining a firm tension on the thread. Pull the thread through.

2. Rewrite the above instruction so that it is now handedness-neutral.
3. Take any stitch dictionary from your bookshelf. Turn to the entry for a French knot. Make sure that the stitch dictionary has a diagram for the stitch. Analyze the diagram. Is it for right-handers? If so, scan the diagram, and view it on your computer. Using the mirror function in your computer's software, flop the diagram to its mirror image. Note: Any available software is fine, so long as it has a mirroring capability.
4. This exercise will depend upon your software's capability to modify diagrams. Using the French knot as an example, and the handedness-neutral textual description you created in exercise 2, create a handedness-neutral diagram for a French knot (i.e. using only the needle and thread, omitting a hand).
5. Using your non-dominant hand and a piece of scrap ground, create the stitch based on the textual description you wrote in either exercise 1 or 2 and the illustration you created in either exercise 3 or 4 (i.e., create a French knot). Note: This may take multiple practice tries before your technique improves.
6. Extra challenge: Using rayon thread, or any other thread with a Z-twist, and a piece of scrap groundcloth, create a French knot with your dominant hand. Then create a second French knot, but reverse the circularity. Compare the results. Which knot is better? As an extra extra challenge, repeat the exercise, but with your non-dominant hand. Compare the results. Which knot is better? Note: This may take multiple practice tries before your technique improves.

say in sheer amazement, "No one has ever done that for me before."

Happy teaching and happy stitching. ■

MARJORIE MANN is a woman of the borders. She was born in the Niagara Falls area on the United States/Canada border and attended universities in both countries. She still resides on the border, but in the western part of the continent. Her family is a true NAFTA family, scattered from Montréal to Mexico. So, it's no surprise that she is a jack-of-all-trades and master of none when it comes to life experiences, job experiences, and fiber-art interests.

BIBLIOGRAPHY

Note: The items in the bibliography refer specifically to the topic of educators instructing left-handed students.

Healey, J. M. *Loving Lefties: How to Raise Your Left-handed Child in a Right-handed World*. New York: Pocket Books, 2001.

Isbell, C. *Everyday Play: Fun Games to Develop the Fine Motor Skills Your Child Needs for School*. Silver Spring, MD: Gryphon House, 2010.

Kelly, E. B., & Phi Delta Kappa. *Left-handed Students: A Forgotten Minority*. Bloomington, IN: Phi Delta Kappa Educational Foundation, 1996.

Milsom, L. *Your Left-handed Child: Making Things Easy for Left-handers in a Right-handed World*. London: Hamlyn, 2008.

Park, H. G. *The Physiology of the Left Hand, with Inferences Therefrom as to its Training*. Toronto: Murray Printing, 1903.

Phillips, A. J. *The Psychology and Pedagogical Significance of Handedness*. Ann Arbor: University of Michigan, Bureau of Educational Reference and Research, 1932.