

a guide to sinistral hand

phaedra charles



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a b c d e f g h i j

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Introduction

Left-handed writers have a notoriously difficult time with handwriting, and for good reason: like a pair of scissors, the alphabet is designed for right-handed use.

My relationship to the alphabet comes from my practice as a lettering artist and type designer. I am left-handed, and have spent quite a bit of my time exploring why my handedness is so problematic for letterforming with traditional calligraphic methods, and only recently have I started to understand why.

My first substantial experience with making letterforms began shortly after graduating from college. I was hired by a local organic food market to create their hand-lettered signage. There was little to no training involved; I was given access to the previous artists tools and expected to work immediately. The tool of choice for the previous signmaker was the broad-edged paint marker, meaning the tool creates weighted strokes when held and moved at a consistent angle.

I had a superficial understanding of the calligraphic letters I was trying to make, but couldn't figure out why they looked so terrible! Undoubtedly, a large part of the problem was my lack of practice. However, there was a deeper, more confusing issue at hand. Only years later would I begin to understand why my left-handedness was a large source of my frustration, and how that could be mitigated.

After attending the Type@Cooper Extended Program at the Cooper Union in 2016, I was able to address these questions in a way that more fully considered

letterform theory. Through my studies, I began to see the connection of the development of type to the written word. Most importantly, an introduction to calligraphy gave me strategies to form letters as a left-handed person—strategies that I have now come to rely on.

One discovery that I have made is that the expression of letterforms is correlated between several specific factors: the writing tool, the writing direction, and the preference for right-handedness across the world. While studying the history of writing, it is interesting to see that almost all of these factors of writing can and has visibly changed—except for handedness. What this means for the left-handed person is that they must alter their orientation of writing in order to reproduce almost all letterforming systems.

The downside of this reorientation is that there is no consistent method of writing for lefties. Many will write with a hook (curling the left hand above the baseline), others with an underhand at a canted angle, and some at a more extreme ninety degrees. Even less commonly, some will write in mirror. Leonardo da Vinci might be one of the most famous examples of a mirror-writer.

The word 'mirror'
written in mirror

mirror

This realization brought me to a couple of conclusions: the first is that writing systems can be made in nearly any direction with any sort of tool. In the Latin languages alone, a tool with a completely foreign angle of writing—such as the pointed brush—can be consistently

used to form writing. The movements dictated by this change in the tool of writing are different than what is traditionally expected, but through repeated exposure to these letterforms, we are able to read them (I assume you're more or less able to read the strange letters on this very page).

The second realization is that if writing and letter-forming for right-handed people can be so varied and unique, why can't this same inventiveness be embraced by left-handed people? If part of the beauty of handwriting lies in its ability to express the habits, experiences, and perspectives of the individual, why are left-handed people expected to hide their handedness by mimicking right-handed models?

These questions led me on a search for what a left-handed model could look like, and how it would work. Edward Johnston's foundational hand served as a revival of formal calligraphy at the turn of the last century, and my hope is that we might form a similar instruction for left-handed writers.

The Latin root for right-handedness is "dextral", and the word for left-handedness is "sinistral". Across cultures, left-handedness is often viewed as abhorrent, sinful, clumsy, and goofy. In the spirit of countering these outmoded beliefs, I propose the following writing model for left-handed people, which I call Sinistral Hand. If similar models exist, I am not aware of them, but would be delighted to find if such models have previously been developed or explored.

Phaedra Charles, March 2018

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An early exploration of Sinistral Hand

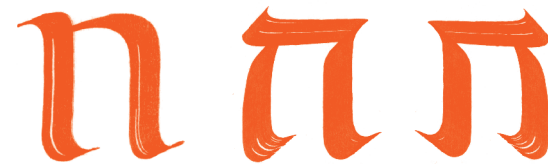


The types of strokes that make up Sinistral Hand

What is Sinistral Hand?

Sinistral Hand is a form of writing oriented to left-handedness for the purpose of reading in the language of the user. Theoretically, this approach could be applied to other languages and different tools. Because my experience deals almost exclusively with the English language, I will focus my attention on the Latin alphabet written with a broad-edged tool.

At first glance, the reader may notice a striking resemblance to Hebrew; this is not a coincidence. In the introduction, I stated that there is a correlation between



From left-to-right:
Roman 'n', Hebrew
'het', Sinistral 'n'

letterform expression and three factors: the tool of writing, the direction of writing, and handedness. If we examine the Latin alphabet and the Hebrew alphabet side-by-side, there is one main factor that changes: the direction of reading. In Latin, because the direction of reading follows the direction of writing, the letters point to the following letter, which we will call forward-momentum writing. In Hebrew, the direction of reading does not follow the direction of writing, meaning the letters do not point to the following letter. We will call this counter-momentum writing.

reading direction

momentum

roman



sinistral



hebrew



Because the Latin alphabet is read from left-to-right, and left-handed writing should consist primarily of right-to-left motions, Sinistral Hand could then be considered counter-momentum writing, similar to Hebrew. We are accustomed to the letters of the Latin alphabet having a forward-momentum, whereas Sinistral forms have counter-momentum.

What follows here is a documentation of how the lowercase letters developed, and why they look the way they do. These forms are not set in stone (although they certainly could be). These letters can serve as guides for exploration and thinking about left-handed movement. Ideally, these forms will evolve over time to include other variations of hand. Hopefully with enough contributions from other calligraphers and designers, Sinistral Hand can ascend to a higher level of aesthetic resolution.

Pen Angle

The experienced calligrapher will notice very quickly that the pen angle used for writing Sinistral is at a foreign angle. There are writing systems that use this angle of writing, such as many Indic scripts. In Latin, this angle of writing in relation to the baseline is viewed as incorrect, and teachers of calligraphy will often correct this angle in left-handed students' writing by rotating their paper counter-clockwise (or less compassionately, forcing them to write with their right hand).



Sinistral assumes that no rotation occurs, and that the left-handed person can consistently and comfortably hold the pen in the same writing position as the right-handed writer. Conversely, this would mean that in order for the right-handed writer to write in Sinistral Hand, they must adapt their orientation of writing in some manner. This is analogous to how a left-handed person must adapt their approach to right-handed writing.



Left-handed writing, rotated right-hand writing, and mirrored right-hand writing

The angle of writing used for this iteration of Sinistral Hand is 45 degrees from the baseline, making the horizontal and vertical strokes equal in weight. A Sinistral alphabet could work at a shallower angle such as 30 degrees. However, a conscious decision was made here to mimic aspects of Hebrew writing by incorporating a steeper angle.

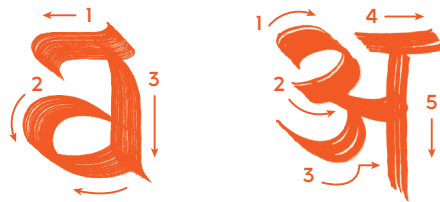
Ductus

There is another factor besides the pen angle that makes Sinistral Hand ideal for left-handedness: the ductus of the writing follows left-handed movement. "Ductus" is the word calligraphers use to describe the stroke order and direction that make up a given character.

Because the pen angle of Sinistral is similar to Indic

scripts, you might assume that Indic scripts are easier for left-handed individuals. This is not the case. For example, the ductus of Devanagari (an indic script) is still based around right-handed movement. In nearly all writing systems, writing movement is pulled away from the body in a left-to-right motion. The ductus of Sinistral follows a motion that is ideal for left-handed movement: right-to-left and away from the body.

Ductus for the Sinistral letter 'a' & the Devanagari letter 'a'



Branching of Strokes



The branching that occurs within Sinistral (circled to the left) is similar to the branching that occurs in the lowercase Roman letterform. However, instead of the branching occurring from left-to-right, the branching occurs from top-to-bottom. If you rotate this book counter-clockwise 90 degrees, you will notice that many of the branching patterns in Sinistral follow that of the minuscule Roman letterform.

Entry of Strokes



The entry of the strokes for Sinistral occur primarily from top-to-bottom, as seen in the horizontal stroke of the 'n', and from right-to-left, as seen in the 'i'.

Spacing & Proportion of Letters

Because left-handed writers are able to keep their hand

gibbled
sinistral
left-kelly
bungling
maladroit
cackhanded

Sinistral Calligraphy by Ethan Cohen

below the baseline while writing Sinistral, they are able to see the preceding letters. This is integral to the act of spacing and proportioning of letters. Additionally, by keeping their hand below the baseline, left-handed writers are able to prevent their writing from smearing.

A Note on Capitals & Italics

This booklet covers a minuscule Sinistral form only. Ideally, the principles outlined here could be applied to capital and slanted forms as well. However, for the sake of brevity, this booklet focuses on the minuscule Sinistral form only.

Why do Sinistral letters look weird?

Why do Sinistral letters look the way they do? To understand, we will group letters according to common shape, and look at them next to their Roman companion. Throughout this section, the black lines overlaying the letters are used to indicate the general pen angle.

Round Characters: a b c d e o p q

The letter 'o' is the root of the round characters. When comparing it to its Roman companion, two things are noticeable: the stress and pen angle are mirrored. Addi-

Sinistral 'o', Roman
'o', Hebrew 'samekh'



tionally, rather than two strokes joining together to form a continuous circle, the 'o' is broken on the top right. This break comes from a desire to compliment the entry strokes seen in the other rounds, such as the 'c e q'. This feature is seen in the Hebrew letter 'Samekh'.



Sinistral 'e', Roman
'e', brush script 'e'

Advancing through the remaining round characters, it's fairly clear how this feature is expressed in the 'b d p q c'. The 'a e' are trickier characters to resolve. The Roman 'a e' are drawn in two strokes. In order for the Sinistral 'a e' to follow the general shape of these forms, it was necessary to break the forms into more strokes. To avoid excessive clogging, the 'e' is left open, similar to the mirrored number '3', which is also similar to the shape of the 'e' seen in brush script letterforms.



Variations of
Sinistral 'a'

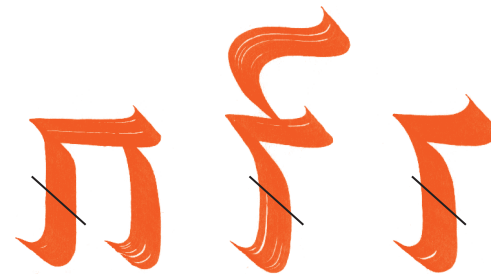
The 'a' was an interesting letter to play with. It can be executed in many different ways, depending on how far the bowl is pulled away from the vertical stroke, creating different expressions.

Let not thy
 left hand
 know what
 thy right
 hand doeth
 matthew 6:3

Sinistral Calligraphy by Ethan Cohen

Straight Characters: 'f h j l m n r t u'

The letter 'n' is the root of the straight characters, and more or less contains the movements that translate to the rest. Two vertical strokes are capped by a horizontal stroke. The right-most stroke on the 'n' has a slight bit of curvature to it to avoid the appearance of a boxy square. That bit of curvature is seen in the right side of the 'm', as well as the stem of the 'f'. For those two characters, the curvature in the stem helps give a little more horizontal length to the crossbar.



comparing the 'n' to the 'f' or 'r', a difference in the crossbar and vertical stem is noticeable

The 't' is most likely the strangest letter of the set. In a Roman 't' with a shallower angle, it's much easier to reconcile the overlapping of a thin horizontal stroke across a vertical stroke. In Sinistral, because of the steeper angle, the overlapping of two strokes with the same visual weight becomes problematic. Because of this, the little flick at the top of the 't' seemed like a sensible solution (circled to the right).



S characters: 'g s y'

The letters 's' and 'g' share a similar root in Roman, and that root is visible in Sinistral as well. The movement of the 's' in Sinistral contains a coordinated movement between

the angle of the brush, the width of the letter, and the transition between horizontal movement, diagonal movement, and then horizontal movement again. It's critical that the spine not reach the thinnest edge of the writing tool; some visual weight must remain in the diagonal of the spine. This can be countered by adjusting the pen angle slightly in relation to the width of the letter, or by drawing a narrower 's'.

Sinistral 's', a less
desirable Sinistral 's',
Roman 's'



Diagonal Characters: 'k v w x z'

The diagonal letters in Sinistral are very similar to their Roman counterparts, simply mirrored. The 'k' is most noticeably different; in order to retain the overall shape, the weight is flipped from bottom to top, counter to what we are used to seeing.

Sinistral 'k', Roman
'k', Sinistral 'w',
Roman 'w'



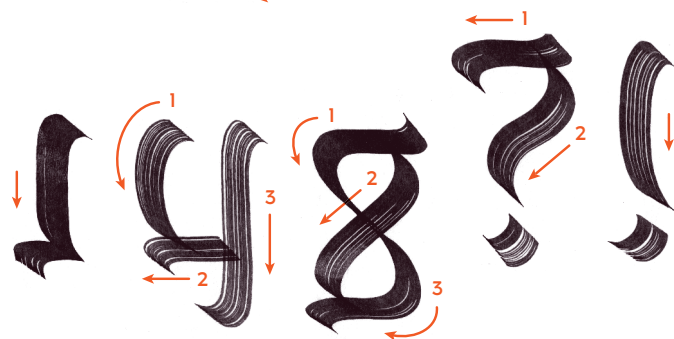
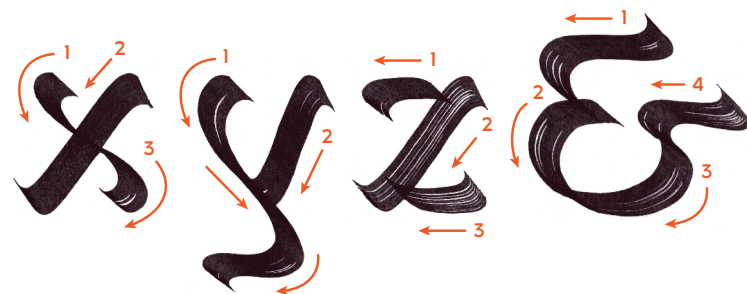
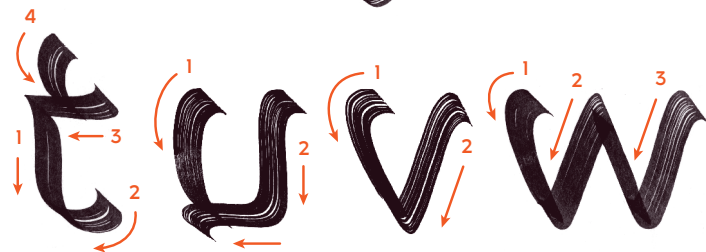
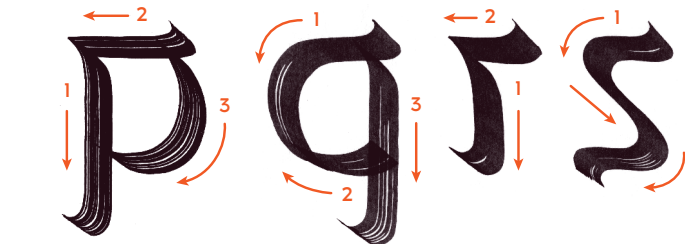
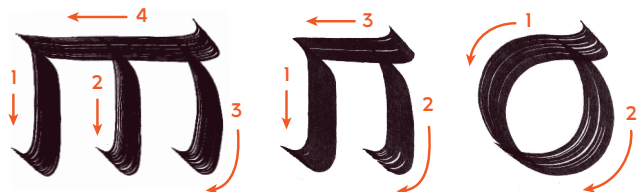
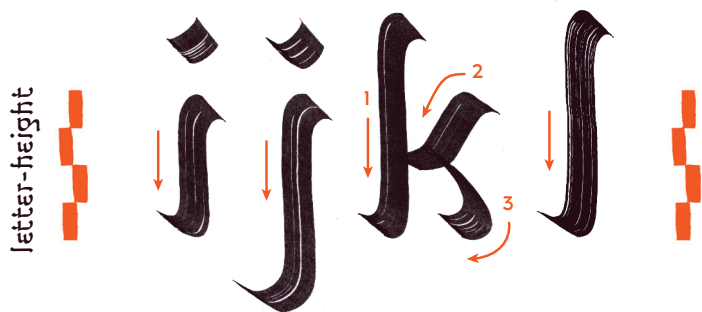
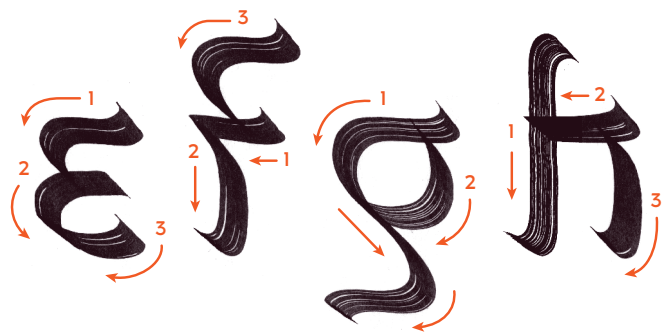
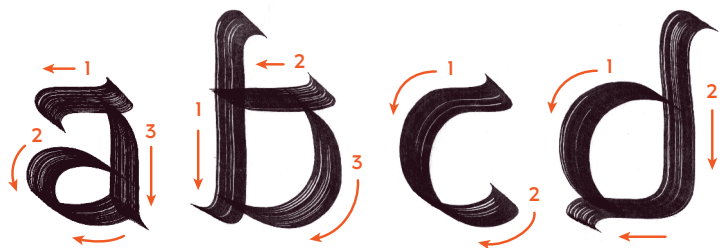
What's next for Sinistral Hand?

Sinistral Hand is far from being a complete writing system. Readers will most likely notice that on the following pages containing the ductus, the numerals and punctuation are incomplete, as are any sort of indication of accents for foreign languages. For Sinistral Hand to work as a highly flexible, multilingual and typographic-minded system, consideration needs to be given to all the above, as well as capital forms (an early iteration shown here in the text) and possibly italic forms. Cumulatively, those demands may necessitate certain changes to the forms currently represented here.

From a calligraphic perspective, there are other practical problems. Because the forms in Sinistral generally need to adhere to the Latin alphabet, the ascenders and descenders are slightly problematic when written at larger sizes; the writer must elevate their hand above the work with a mahlstick to prevent smearing.

Lastly, handwriting as a form of expression and communication is in decline, and the likelihood of a new calligraphic script (especially one designed for such a specific audience) seems extremely unlikely.

Despite these problems, I remain optimistic. By providing a calligraphic form designed with left-handed people in mind, those that have felt discouraged may give calligraphy another shot. So the next time you hear a left-handed person complain about struggling with writing... give them this booklet! 9



Sinistral Type, 36 pt.

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Sinistral Hand is a script alphabet designed for left-handed use. This booklet outlines the design process for this system of writing, & gives practical instruction for left-handed & right-handed individuals alike.

