

They've been called both genius and diabolical; gifted and handicapped; visionary and misfit; creative and mentally ill. Welcome to the world of lefties. A world filled with an incredible amount of misconceptions and myths.

What are some of the myths? Are lefties really more intelligent and creative? Do they actually make better military geniuses and athletes? Why have they been demonized throughout the ages? Who are the most famous lefties in history? And how do we know they were lefties? Finally, what are some of the *halachic* ramifications of being left-handed? These are just some of the questions to explore...

- Yaakov Astor

# On The Other Hand

## Lefties In Science, History & Halachah

**Full Disclosure:** *The author of this article is a lefty (and proud of it)—a member of a group often discriminated against by educational institutions, social customs and even language. However, don't take that to mean he has a chip on his shoulder (his left shoulder, of course). His attitude is let bygones be bygones. (Especially since lefties know who is better...)*



## Ferniehurst Castle—Jedburgh, Scotland.

As a Scottish territorial stronghold, Jedburgh and nearby villages hosted countless clashes, battles and massacres at the hands of, or delivered to, the English. In the late 1400s, Sir Thomas Kerr ordered the construction of Ferniehurst Castle, just south of what is now Jedburgh's center. Because of its location near the border, Ferniehurst was destined to be attacked and recaptured many times over.

Although in many ways a castle like all others, Ferniehurst is unique in at least one way: It boasts a left-handed staircase. While most staircases in manors and castles throughout Scotland were built at that time with a clockwise spiral, Ferniehurst's main staircase spirals counterclockwise.

The reason for this, both legends and historians say, is because the Kerr clan that built and manned the castle was left-handed. Facing down at an ascending enemy, the lefty would be able to wield his sword in the open passage, whereas a right-handed defendant would be encumbered by the center banister, leaving him cramped and less agile.

Indeed, legend has it that the entire Kerr clan was all (or at least disproportionately) left-handed—so much so that the slang *Kerr-handed* and *Corrie-fisted* became terms for a left-handed person in some northern areas of the United Kingdom.

Either way, a staircase favoring left-handers serves as just one of the many reminders that we live in a world dominated by right-handers. Most right-handed people, and many lefties, don't even realize that everyday items, such as for example scissors, doorknobs, locks, screwdrivers, can openers, desks, cooking tools, automobiles, buttons and musical instruments, are designed for right-handed people.

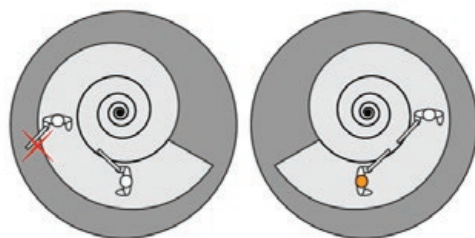
Even language is stacked against lefties. The word *left* in English comes from the Anglo-Saxon word *lyft*, which means weak or broken. The Oxford English Dictionary defines left-handed as meaning crippled, defective, awkward, clumsy, inept, characterized by underhanded dealings, ambiguous, doubtful, questionable, ill-omened, inauspicious and

illegitimate. Phrases in English also suggest a negative view of left-handedness. For example, a "left-handed compliment" is actually an insult.

And it's not just English. In German *linkisch* means left-handed, but it also means awkward, clumsy and maladroit. In Italian, the word *mancino*, which is derived from "crooked" or "maimed" (*mancus*), is also used to mean deceitful or dishonest. In Russian, to be called a left-hander (*levja*) is a term of insult. In Latin, the word for left is *sinister*, related to the noun *sinistrum*. *Ambisinister* means "clumsy on both sides."



Ferniehurst Castle—where the staircase was made for left-handers.



The steps in Ferniehurst Castle were designed to give the left-handed members of the Kerr family an advantage in battle (right).



A typical staircase in the Tower of London.

Yet, despite these disadvantages, left-handers have often fared pretty well in the world. Among people with a college education they tend to be wealthier than right-handers; they are disproportionately represented in sports such as baseball and tennis (as well as among Apollo astronauts); and four of the last five US presidents have been southpaws. Lefties are also said to be over-represented among famous military minds, as well as being in general more intelligent and creative... well, not so fast necessarily, as we shall see.

There is a lot to discuss, so let's dive right in. We will approach the subject from three aspects: 1) lefties in science 2) famous lefties in history and 3) lefties in *halachah*.

## Lefties in Science

### Split Brains and Open Minds

What makes left-handed people different?

The brain is made up of two mostly separate halves, each composed of billions and billions of neural connections. For a reason that is still a mystery to science, control of movement is crisscrossed. That is, the right hand is controlled by the left side of the brain (or more specifically by a certain area of the left hemisphere known as the left motor cortex), which sends the necessary signals to muscles in the right arm. The reverse is true for actions carried out with the left hand.

This control isn't limited to hands. It applies to arms, legs, eyes, ears and indeed almost all motor faculties, which is why people who have had a stroke or tumor on one side of the brain often experience partial or total paralysis on the opposite side of the body. The hemisphere on the same side as a movement isn't entirely silent, but for the most part motor control comes from the opposite hemisphere.

Our two seemingly independent brains are able to work together because they aren't totally isolated from each other. Picture the brain as a melon mostly sliced in half,



We take for granted all the everyday items designed for right-handed people. Here are specially-made left-handed versions of: a can opener, corkscrew (counter-clockwise action), scissors and a peeler.



One example of how lefties are discriminated against.

but with a stringy bundle of tissue still connecting the two halves in the middle. This bundle of nerve fibers running between the two sides of the brain is called the corpus callosum.

Beginning in the 1960s, neurosurgeons performed a rare and radical procedure, cutting the corpus callosum as a last-resort treatment for severe epilepsy. Even though the operation was only moderately successful, the real windfall was not in the treatment of epilepsy but in neuroscience.

Split-brain patients, as they came to be known, offered a window into how each half of the brain performs primarily separate, specialized functions, a process called "lateralization." Nobel Prize-winning pioneer in split-brain research, Roger W. Sperry, conducted an experiment with patients who had the communication pathway between the two sides of the brain severed. When pictures of various objects were projected to the right