"The same stroke can look straight or curved, depending on where you’re standing."

**Stroke Path: Straight or Curved?**

**The answer might surprise you**

We can finally put to rest the age-old question of whether a proper stroke moves the putterhead straight along the target line or on an arc that goes inside the line on the backstroke and inside again on the through-stroke. The answer? It does both—it’s a matter of perspective.

Let me explain. First, look at the photos below of professional golfer Chris Trunzer. In the left photo, the stroke appears to be tracking directly along the target line. In the right photo, it’s clearly moving inside the line. So which is correct? Actually, it’s the same stroke! The only difference is the position of the camera. In the first photo, the camera lens is set up in the same plane that the putterhead is swinging in (about eight inches to the left of the target line), which makes it appear to be moving straight along the target line.

In the second photo, the camera is directly behind the line. This gives the appearance that the stroke is arcing to the inside before and after impact, but the stroke has not changed. In both cases, the putter stayed on plane and the putterface stayed square to that plane. These images reveal the natural swing plane in putting, something I discovered through my research.

To help you visualize this plane, see the image on the next page. Picture a circular piece of glass (a plane) with a hole in the center through which your head and shoulders can protrude. Now imagine getting into your normal putting setup with the putterhead in this plane and your hands sitting below the plane. The glass would be tilted at about 10 degrees from vertical, with your eyes over the ball and the center of the putterface. Now, if you looked down at the bottom edge of this piece of glass—remember your eyes are protruding through it—the swing path along that edge would appear to trace an arc. But if an observer looked at the path from within the plane, the path would look like a straight line. This is perhaps why some people assume you have to make an arcing stroke, and others insist the putter should move straight back and straight through. It’s a matter of the observer’s position relative to the plane.

This is all very interesting to someone like me who studies putting—but hopefully to you, too. It has a massive effect on how well you putt. To achieve this natural plane, my advice is to use the image of the putterhead swinging along the piece of glass. If you try to force an arc, your mind will be trying to tell your body what to do and not letting the stroke happen naturally, leading to another source of error. Instead, let your body do what’s comfortable, without manipulation. It wants to let the shoulders, arms, wrists, hands and putter—the fixed structure—rock back and forth in a pendulum-like fashion, with the rhythm influenced by the inertia of this structure. This allows you to swing within the plane and will naturally limit a lot of the extraneous movements that typically cause you to miss puts. I call these movements “degrees of freedom,” and there are six of them. They include rotating the putterface open or closed; moving the putterhead on a diagonal outside or inside the path, and breaking the wrists. These movements are the culprits in most missed puts.

For more consistency, your goal should be to constrain most of the degrees of freedom except for letting the putter move back and through at a comfortable rhythm. This will happen naturally if you don’t try to manipulate the path. If you practice letting your body do what it wants to do, putting is easy. Just let it happen. —WITH RON KASPRISKE

Frank Thomas is the founder of Frankly Golf and created the Certified Putting Instructor course to help professionals teach putting. He was technical director of the USGA for 26 years and has written four books on golf, most recently The Fundamentals of Putting.