



The changing paths of spin

Applying english, or side spin, to the cue ball by striking it away from the vertical axis, complicates the billiard games considerably because the cue ball will curve each time the axis of rotation changes. Other factors also come into play such as the amount of friction there is between the cue ball and cloth. If they are clean and dry, friction will be reduced to a minimum allowing the cue ball to curve over a longer distance as the axis of rotation changes direction.

Also, stiffer cues generate more spin, for a given hit, than flexible ones which tend to spring away from the cue ball on contact, thus reducing the amount of force applied. Too, softer tips generate more spin than hard ones. In addition, an elevated cue will cause the cue ball to curve more in the direction of the spin than a level one.

Example "A" shows what happens to the cue ball, over a distance of 6 feet, when it is struck $\frac{1}{2}$ inch to the right of the vertical axis at the center of the ball using a medium flexible cue, a medium hard tip, and a level stroke of moderate force. At no time, does the ball curve to the right!

Good players usually make an unconscious adjustment in their aim for the first curve and when the cue ball straightens it looks like it curves to the right.

Example "B" shows the cue ball path for the same hit except that, in this case, the cue is elevated seven or eight inches. This produces three curves, the second of which is a very dramatic curve to the right. Again, the first and third curves are unknown to most players.

These are just two examples of a thousand that could be defined using various cues and cue elevations on differing equipment. The important thing is for you to find out what your cue does to the cue ball on your favorite table under various climatic conditions when side spin is applied. Until you do, many of the hours spent at your favorite billiard game will be frustrating ones.

