

The Myth of Topspin

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Becoming a good player takes a long time and a lot of trial and error. Oh yeah, lots and lots of error. And in pool, the smallest of errors can be costly or humiliating. I believe a solid, clear understanding of ball behavior can chop many years off the brutal learning curve of pool. So let's get clear on a few underlying principles and eliminate some errors.

My experience as an instructor has convinced me that while most of us are working very hard at cueball control and position play, we aren't quite clear enough on what we *really* need to control. On every shot, we have to consider and control three vital aspects: the Angle we're cutting, the Speed we're hitting, and the Spin on the cueball. Most players realize this and are doing their best to control all three. All three matter in producing the result of the shot.

Let's focus on Spin, and let's take a closer look at what topspin really is – and what it really isn't. Players think about where on the back of the cueball they want to align their stick. Often, we try to visualize tip offset from the center of the cueball as some number of tip-widths. This is useful and practical, as the tip is right there anyway. This is a personal measurement, as my "two tips of english" might be different from your "two tips". We think about how we want the cueball to behave. We make decisions about what kind of spin will pocket the ball and get the shape we seek.

Here's the problem. Most players unwittingly think about topspin (follow), backspin (draw), and skid (stun) as if they behaved the same way as sidespin (english). Nope, not the same at all. Here's how they differ:

Sidespin persists in the cueball. When the cueball arrives at an object ball or cushion, much of the sidespin the ball started with will still be in the ball. The collision will wear some of the sidespin off, and finally cloth friction will take the rest.

Backspin wears off quickly. Since backspin breaks the friction with the cloth, it behaves like a brake, rapidly slowing down the cueball. The backspin gets used up by the braking action. If all the backspin gets used up before the cueball hits something, the cueball will skid briefly and then assume natural roll.

Stun is fleeting. Stun is that brief moment when the cueball is skidding. The cueball has just been struck at center or its backspin has just worn off.

Topspin doesn't exist. For the practical purposes of pool playing, there is no such thing as topspin. I cringe when I hear the word. I wince when I see books and columns explaining to "hit this shot with one tip of topspin." Players think of follow as *overspin*, like peeling out with your muscle-car. Overspin means the ball is spinning faster than it's rolling. Doesn't happen.

Realistically, the best you can do is have the cueball start off with natural roll, from the get-go. To do that, the bottom of your tip must hit the cueball at the maximum non-miscue height (figure 1/4th of the way down from the top of the ball). *Hit anywhere between maximum high and center ball and the cueball starts off with skid. The higher you hit it, and the harder you hit it, the farther it will skid before natural roll begins.* There is no overspin; just skid and roll.

Natural roll produces follow. If you want follow, the cueball *has* to be rolling when it hits the object ball. *How fast the cueball is rolling is the biggest factor in producing the follow effect.* This is because most of that forward rotational energy is still in the cueball after it strikes another ball. You can easily see this by hitting a short, straight follow shot at different speeds. If the cueball is rolling, you'll see it stop momentarily because all of its forward energy has been transferred into the object ball. However, the rotational force will still be in the cueball, so it will spin and propel itself forward. You could say this is overspin, but it's not because we *spun* the cueball forward with our stick. The "topspin" remains because the collision with the object ball took the forward energy out of the cueball, leaving only the rotational energy (forward, in this case). It's not how hard you hit, it's how fast the cueball is rolling.

What's it all mean? **It's not your tip height that causes follow. What matters, what you have to consider and control, is what the cueball is doing when it hits an object ball – is it rolling or not, and how fast is it going?** The faster your cueball is rolling, the faster and farther the follow action. I don't care whether you hit the center of the cueball or two tips of follow. What's it doing when it gets where it's going?