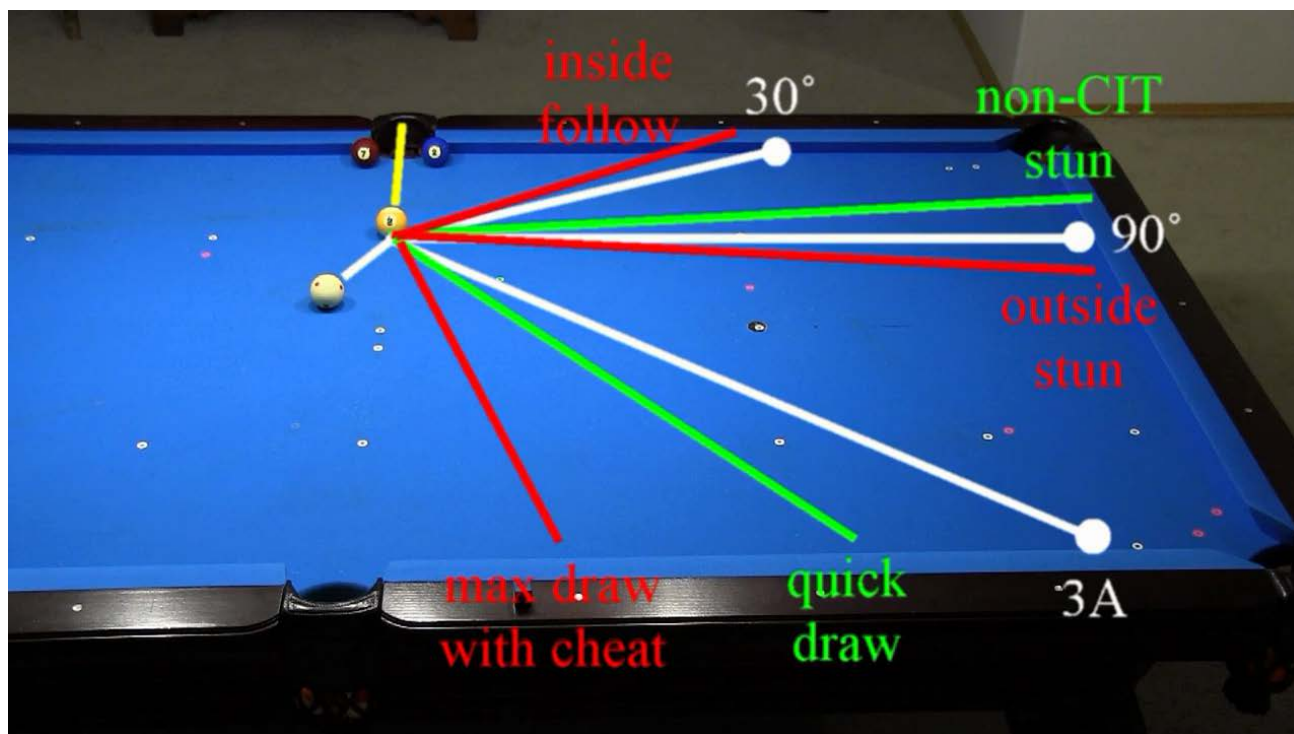


Supporting narrated video (NV) demonstrations, high-speed video (HSV) clips, technical proofs (TP), and all past articles are available online at [billiards.colostate.edu](http://billiards.colostate.edu). Reference numbers used in the articles help you locate the resources on the website.

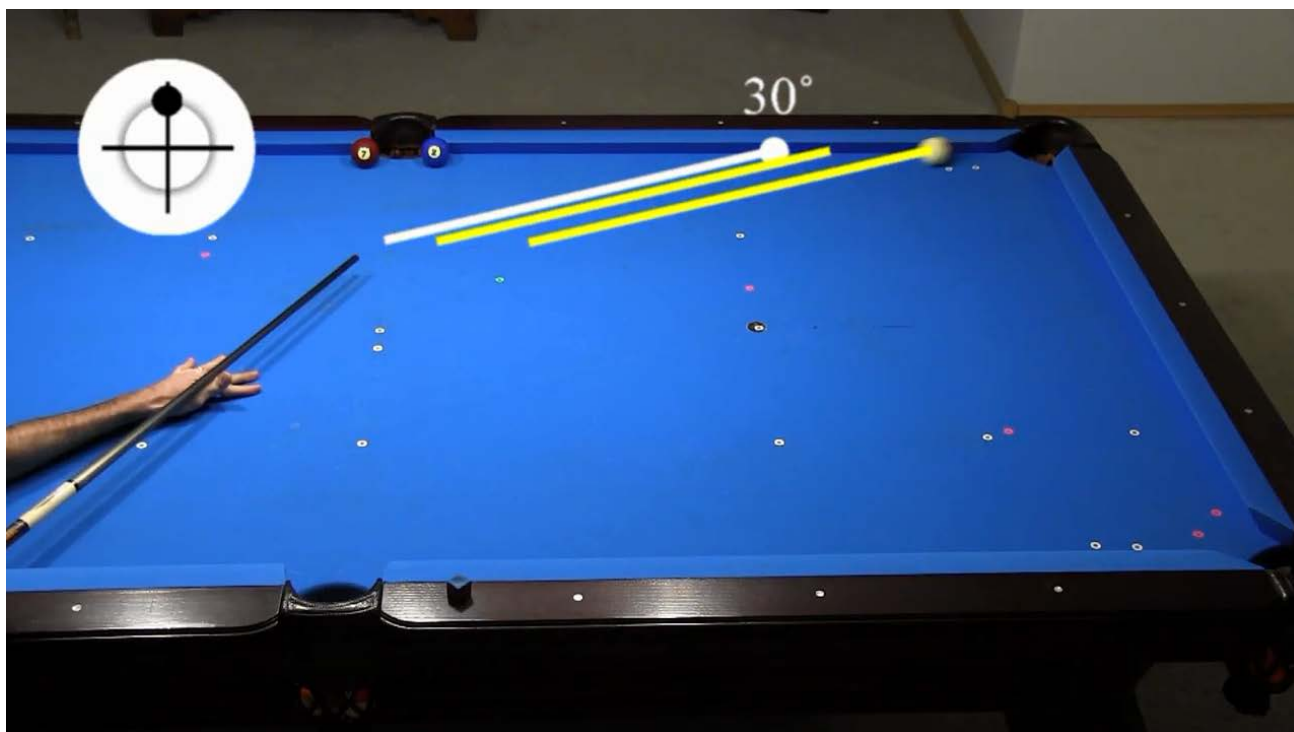
In online video [NV J.25](#), I present the Top 10 Myths of Pool. Myth 3 (“Sidespin affects the path the cue ball (CB) takes off the object ball (OB)”) has resulted in the most online discussion and debate, so I thought I would do a follow-up video ([NV J.26](#)) and article. This material builds on last month’s article looking at important CB control principles and effects demonstrated in online video [NV J.27](#).

**Photo 1** from online video [NV J.26](#) shows important CB control references along with the subtle path differences described in this article. Note that the 2 ball and 7 ball are placed adjacent to the target side pocket as “sentinels” to limit how much the pocket can be cheated. A slow-rolling CB heads in the 30° rule peace-sign natural-angle direction. With a stun shot, the CB heads perpendicular to OB motion in the 90° rule tangent-line direction. And a “good-action” draw shot heads in the 3-times-the-angle (“3A”) direction.



**Photo 1 CB Control Reference Directions**

It is important to know the effect of speed on CB path with follow shots. With more speed, the CB goes down the tangent line longer before curving forward to the final direction. **Photo 2** shows this effect for a fast-speed topspin shot. With draw, speed has a greater effect. If the speed is too slow, the backspin wears off on the way to the OB resulting in less or no draw. And again, with faster speed, the CB heads down the tangent line longer before curving to the final angle.



**Photo 2 30° rule speed shift down the tangent line**

With a stun shot, if you aim at the ideal ghost-ball position the tangent-line motion will be as expected, but the OB will be thrown offline slightly due to cut-induced throw (CIT). If you don't know what throw is, or if you want to learn more about it, see the [throw tutorial page](#) at [billiards.colostate.edu](http://billiards.colostate.edu). As shown in **Photo 3**, to be accurate with where the OB enters the pocket (or if you are playing a long shot into a tight pocket), you can aim to overcut the OB slightly (see the yellow line) and the OB will be thrown into the heart of the pocket (see the red line), but this will create a different tangent line direction (see the “non-CIT stun” path in **Photo 1**). An alternative approach is to target the ideal ghost-ball position and use gearing outside spin to prevent throw. As demonstrated in online video [NV J.26](#), this will send the OB in the desired direction and send the CB down the expected ideal tangent line.



**Photo 3** CIT aim correction with shifted tangent line

If you use more outside spin than the gearing amount, you will throw the OB in the spin-induced throw (SIT) direction (to the left in Photo 3). If shot calls for this much spin, you can get more accurate OB motion by aiming the shot a little full, resulting in the “outside stun” path shown in **Photo 1**. Again, this results in a different tangent-line direction. So with a stun shot, sidespin can cause slight changes in the directions the OB and CB head after contact.

With a rolling-CB shot, side spin can also change the CB trajectory. As shown by the “inside follow” direction in **Photo 1**, inside spin shortens the CB path. As demonstrated in the video, with an elevated cue, this effect can be exaggerated, but this can be difficult to control.

With a “good action” draw shot, the CB heads in the 3-times-the-angle direction (see “3A” in **Photo 1**). One way to get tighter draw is to elevate the cue. This produces what is called “quick draw” (see **Photo 1**). If you remove the sentinel balls, you can cheat the pocket and get even tighter draw (see “max draw with cheat” in **Photo 1**).

Again, **Photo 1** shows the full range of CB directions one can achieve with this shot using combinations of sidespin, cue elevation, and pocket cheat. The myth question concerning whether or not sidespin affects the path the cue ball takes off the object ball has a complex and subtle answer. The main purpose for sidespin is to change the direction the CB heads once it hits a cushion; although, as shown by the “inside follow,” “non-CIT stun,” and “outside stun” directions in **Photo 1**, sidespin can also have a small effect on CB direction off the OB.

I hope the information in my recent articles and online videos help you get a better handle on precise CB control, allowing you to better “keep whitey on a string.” Be sure to watch the videos and practice the drills demonstrated. Only then can you really put the information to use effectively.

Good luck with your game,  
Dr. Dave



normal video

[NV J.25](#) – Top 10 Pool and Billiard Myths Busted and Debunked

[NV J.26](#) – Cue Ball Control Subtleties – Pool Myth Follow-up

[NV J.27](#) – Cue Ball Control ... Everything You Need to Know

**PS:**

- I know other authors and I tend to use lots of terminology, and I know not all readers are totally familiar with these terms. If you ever come across a word or phrase you do not fully understand, please refer to the [online glossary](#) at [billiards.colostate.edu](http://billiards.colostate.edu).

*Dr. Dave is a PBI A Advanced Instructor, Dean of the Billiard University, and author of the book: [The Illustrated Principles of Pool and Billiards](#) and numerous instructional DVD series, all available at: [DrDaveBilliards.com](http://DrDaveBilliards.com).*