"Top 10 Series – Part 1: Shots You Must Know" Dr. Dave Alciatore, PhD

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

This is the first article in a series dealing with a "Top 10" video series I recently posted on YouTube. The clips can be accessed at *billiards.colostate.edu* via online videos <u>NV J.10</u> through <u>NV J.15</u>. This month, I will cover the shots and principles from the first video: "Top 10 Pool Shots Every Player Must Know!!!" The video covers the following categories along with examples of game-situation shots that demonstrate every technique and principle. Any player wishing to improve and excel must learn to master shots in each of these ten categories.

1.) Accurate/Consistent/Reliable/Controlled Stun/Follow/Draw

A critically important skill in all cue sports is the ability to control the cue ball (CB) accurately, consistently, and reliably. You must master the ability to hit stun, follow, and draw shots over a range of distances and speeds. I have written numerous articles about this topic over the years, and **Diagram 1** provides a good summary of the important principles. The 90° rule predicts that when the CB hits the object ball (OB) with stun (no top or bottom spin), the CB heads in the "tangent line" direction perpendicular to OB direction. The 30° rule peace sign allows you to predict CB direction when the CB is rolling into the OB over a wide range of cut angles. And the "3-times-the-angle" or "trisect" system predicts that the total angle between the initial and final CB directions for a "good action" draw shot is three times the cut angle. These CB references can be very helpful, as demonstrated in the video.

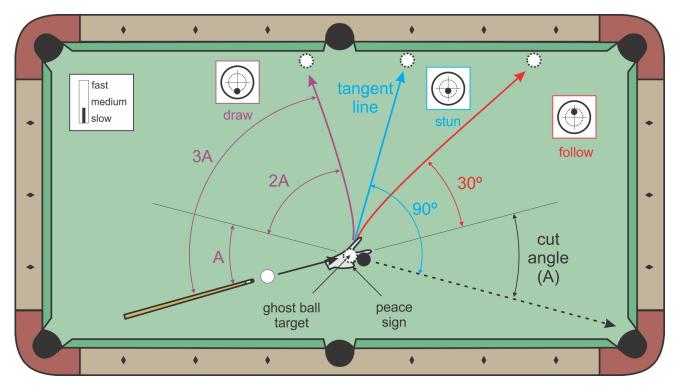
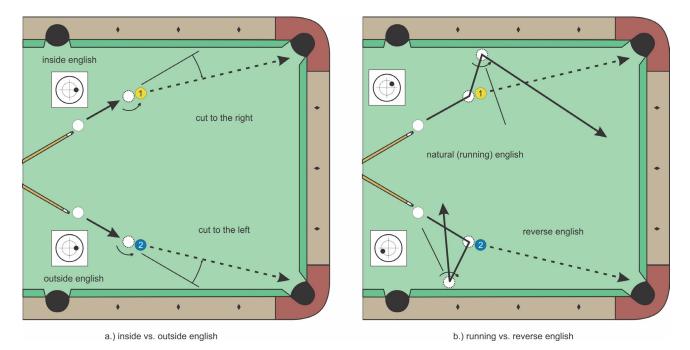


Diagram 1 CB control reference lines

2.) English shots

Using english (sidespin) is critical in advanced position play. It is important to know when and how to use right, left, running, reverse, outside, and inside sidespin. The terminology is illustrated in **Diagram 2**, and game-situation shot examples for each type of sidespin are demonstrated in the video. Many of the shot examples were taken from the "<u>Billiard University English Examples</u>" document available in the "english" FAQ page at <u>billiards.colostate.edu</u>. We use these examples in our annual <u>BU Summer School Boot Camps</u>, where we teach an effective system for aiming using sidespin (which I will cover in a future article). The first two pages of the document are shown in **Diagram 3**.





3.) Rail cut shots

Rail cut shots, where the OB is frozen to a cushion, require special care. First of all, with stun shots, be sure to aim to hit the cushion first to prevent throw into the cushion. To have sidespin take on the cushion after the hit, you need to hit the ball first, or hit the ball while the cushion is still compressing. If you hit the cushion first with sidespin, the sidespin will not be effective. When the angle into the rail is steep, you can hit the cushion first with running sidespin to make the shot much easier. All of these techniques are demonstrated in the video.

4.) Throw shots

When you cut an OB or use sidespin, the OB can be thrown offline due to sideways friction between the balls. It is important to know how to adjust your aim for throw when necessary. It is also important to know how to use throw to your benefit when possible. In the video, I demonstrate how to use throw to help hold the CB, how I adjust aim for throw, and how to use spin to throw a ball in or "twist" a straight-back bank.

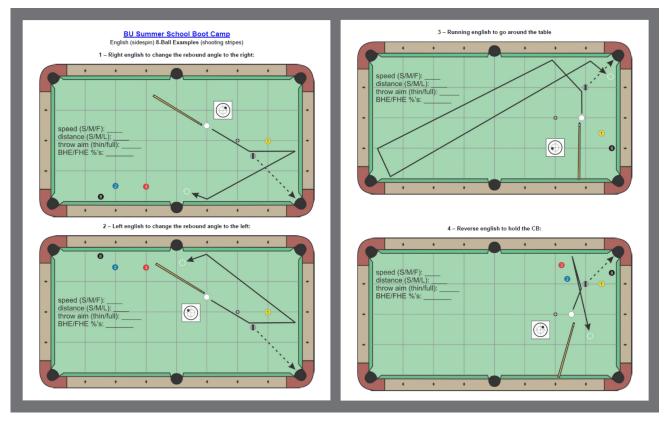


Diagram 3 BU Summer School Boot Camp game-situation english examples

5.) Drag shots

A drag shot is where you hit the CB below center to have the CB slow down and lose backspin on the way to the OB. As demonstrated in the video, a drag shot can be used to:

- 1. Limit table roll-off.
- 2. Help hold the CB.
- 3. Intensify sidespin to help throw a ball in.
- 4. Intensify sidespin to increase the rebound angle change off a cushion.

6.) Carom/kiss shots

Sometimes, the only option is to carom the CB off an OB or kiss an OB off another. As demonstrated in the video, it is easy to aim and predict CB direction for tangent-line and natural caroms or kisses. **Diagram 4** shows an interesting bank-kiss shot demonstrated in the video. Playing stripes with only the 11 remaining, all pockets are blocked for reasonable shots. It would also be very difficult to play an effective safety in this situation. A good option here is to bank the 11 straight back with a stop shot and get the natural angle kiss off the CB.

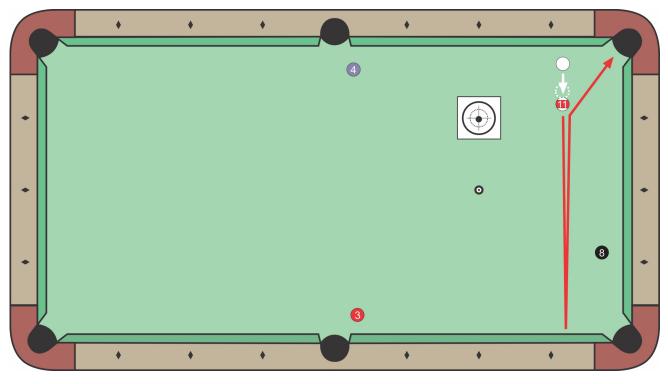


Diagram 4 Bank kiss example

7.) Kick shots

Kick shots are very important in replying to safeties, and for some offensive shots. In the video, the following useful and common aiming systems are demonstrated:

- 1. Contact-point mirror kick.
- 2. Visual equal-distance mirror kick.
- 3. Midpoint parallel-shift two rail kick in and out of a corner.
- 4. Multiple-rail Plus System kick off a short rail
- 5. Multiple-rail Corner Five System kick off a long rail.

As with all topics covered in the video, detailed descriptions, illustrations, and demonstrations of the systems are available via links in the YouTube video description.

8.) Bank shots

Bank shots are extremely important offensive weapons when you need them. As demonstrated in the video, you should know how to aim:

- 1. Slow-roll 2-to-1 banks.
- 2. Fast-speed 1/3-more-than-twice banks.

You should know how to adjust for and use spin-transfer to your benefit.

9.) Jump shots

The jump shot is an extremely important offensive weapon in modern pool. As demonstrated in the video, you should be comfortable jumping over the edge of a ball with a regular cue and jumping over a full ball with a jump cue. You should also be able to control the CB with jumps, both with the "dart stroke" and with a regular stroke.

10.) Massé shots

Finally, when a kick or jump is not a good option, it is important to be able to curve the CB, either with a small swerve shot or using the Coriolis aiming system for a massé shot.

Again, all of the techniques and principles demonstrated in the video are documented in detail on the resource pages linked in the YouTube video description. If you want more information, just click on these links to access illustrations, detailed video demonstration, and pertinent instructional articles.

I hope you enjoy my "Top 10" video and article series. Be sure to watch the videos. Better yet, after watching, try everything out at the table to diagnose and improve your skills.

Good luck with your game, Dr. Dave



<u>NV J.10</u> – Top 10 Pool Shots Every Player Must Know!!!

NV J.13 – Top 10 Things Pool Players Do Wrong ... and How to Fix Them

<u>NV J.14</u> – Top 10 Pool Shots Amateurs Play Wrong ... and How to Play Them Right

NV J.15 – Top 10 Pool Strategy Errors Amateurs Make ... and How to Prevent Them

<u>PS</u>:

 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 <u>online glossary</u> at <u>billiards.colostate.edu</u>.

Dr. Dave is a PBIA Advanced Instructor, Dean of the Billiard University, and author of the book: <u>The</u> <u>Illustrated Principles of Pool and Billiards</u> and numerous instructional DVD series, all available at: <u>DrDaveBilliards.com</u>.