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

This is the second 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 [NV J.10](#), [NV J.13](#), [NV J.14](#) and [NV J.15](#). This month, I will cover the shots and principles from the second video: **“Things Pool Players Do Wrong ... and How to Fix Them.”** The video covers the following categories of technique elements with which many amateurs have trouble. Any player wishing to improve and excel must have solid fundamentals in these areas.

1.) Cue Elevation

One thing pool players do wrong is not keep the cue as level as possible. You don't want the back of the cue elevated more than if necessary to clear the rails. To get the cue more level, you can lower your elbow or bring your whole stance down. As demonstrated in the video, the problem with having the cue elevated is if you hit the cue ball (CB) slightly off center (intentional or not), the CB will not go straight due to swerve. With a level cue, the CB will go much straighter with an off-center hit.

2.) Sloppy Bridge

Some people have sloppy closed bridges that are not stable side to side, have gaps between the cue and fingers, or are too tight, creating too much friction. An open bridge has many advantages. It can be more stable, it provides a very accurate guide for the cue, and it has very little friction. Some people also have sloppy rail bridges, where the cue is not guided very well. As demonstrated in the video, the best way to form a rail bridge is to guide the cue with the thumb, middle finger, and index finger.

3.) High Stance

Some people stand with their head too high. This can make it difficult to see both the CB and object ball (OB) without moving the head or eyes a lot. With the head close to the cue, it is much easier to see the line of the shot, the tip contact point on the CB, and the OB target without having to move the head. An open bridge also provides full view of the entire length of the shaft to help with visual alignment. You can get your head lower by bending at the waist, bending the knees, and/or separating the feet. For me, being tall, I use significant knee bend. This is much easier and more comfortable than bending at the waist, which can cause hamstring, back, and neck discomfort.

4.) Poor Alignment and Aim

Many pool players have poor visual alignment and aim. Accurate and consistent visual alignment is the most important fundamental of pool! With your eyes in the right place relative to the cue, you can visualize the line of the shot and cue alignment correctly. Everybody has a unique head position that works best. For many people, like me, it is with the cue centered between the eyes. For others, it might be with the cue under an eye or somewhere in between the eyes. I call an individual's ideal head position the personal “vision center.”

Diagram 1 shows a good stop-shot drill you can use to test your visual alignment and straight-shot aim. The goal is to pocket the 1 and stop the CB in place. If your aim is not true, the CB might go to your left or right. If you hit too low or with too much speed, the CB might draw back slightly. And if you hit too high or

with too little speed, the CB might follow slightly. If your tip is not centered on the CB, you will get sidespin. It can be more difficult to visualize the center of the CB when your eyes are not aligned properly. However, if your "vision center" is properly aligned, if your tip position is centered, and if your aim is good, the CB should stop in place. If your head is too far to your left, the CB will usually go to the right, even when the shot looks straight to you. And if your head is too far to your right, the CB will usually go to the left, even when the shot looks straight.

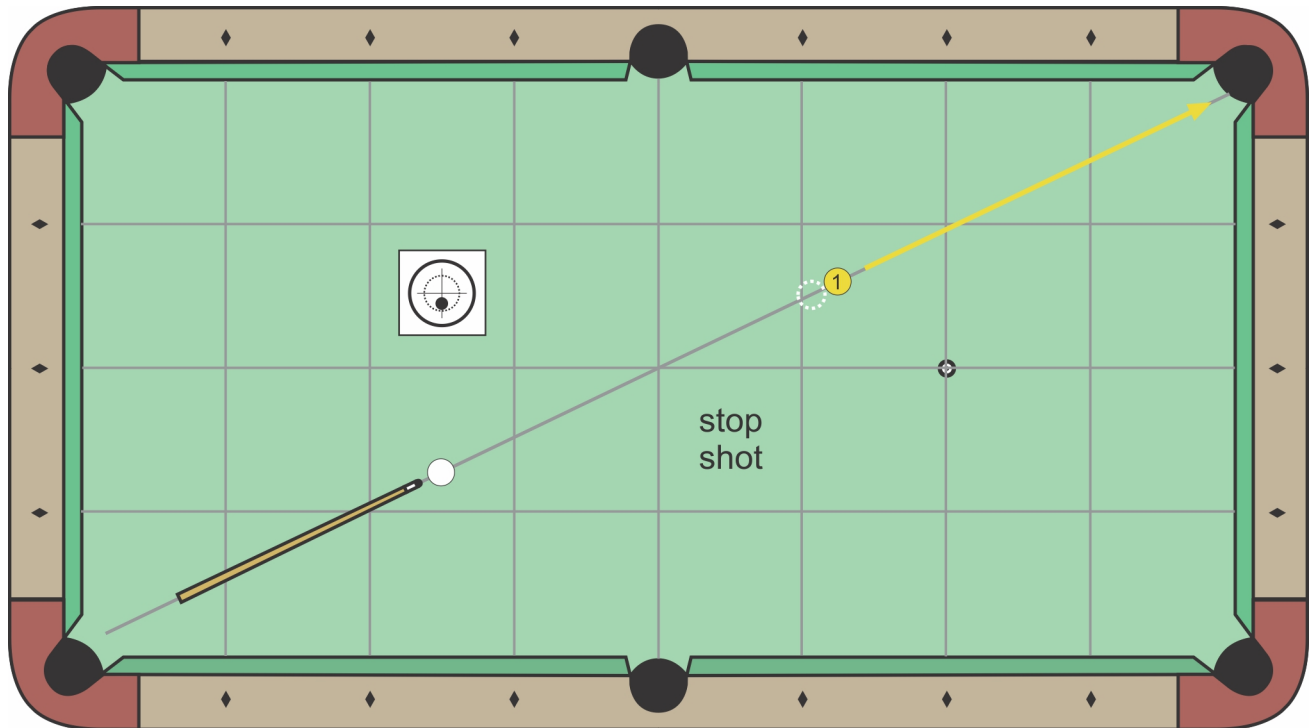


Diagram 1 Vision center drill

In addition to having good visual alignment, you should also keep your face as square to the shot as possible, with your eyes as level as possible. Don't turn or tilt your head away from the shot. With everything aligned and square, you will be much more effective aiming shots consistently. For more information on these topics, see the "[vision](#)" FAQ page at billiards.colostate.edu.

5.) Cue and Eye Motion

While checking your alignment and aim in your stance, don't move your cue and eyes too much. Instead, verify the tip position and alignment with the cue still. And give your eyes time to focus on both the CB and the OB target. Before the final stroke, lock your eyes on the OB target and keep them very still before and during the shot.

6.) No Pre-Shot Routine

One thing many pool players do wrong is not have a consistent and purposeful pre-shot routine. They just get down on the shot and do most of their aiming and thinking while down. Instead, you should think about and visualize the shot and desired CB motion first. Also, make sure the tip is chalked properly. Then aim and align while standing, where you have the best perspective on the shot. Then lock your vision center along the shot line and drop straight down. And then focus only on delivering a straight stroke with the

desired tip contact point, at the desired speed. You should not be thinking or making decisions while you are down on the shot.

7.) Sidespin

Some beginners decide to add sidespin to a shot when it is not necessary. **Diagram 2** shows an example where the 8 ball shot is straight and we need to get down table for a shot at the 9 next. Some people might wrongly think you need left spin here to make the CB go to the left. This will happen only if you send the 8-ball to the shooter's right of pocket center (see the blue shot). If the 8-ball is instead sent to the other side of pocket center, the CB will actually drift to the shooter's right (see the red shot). And if you send the 8 into the center of the pocket, the CB will spin in place. A good way to play this shot is to just "cheat the pocket" with no sidespin at all (see the solid white and black ball paths). Other options demonstrated in the video are to follow forward with left spin, or draw back with right spin.

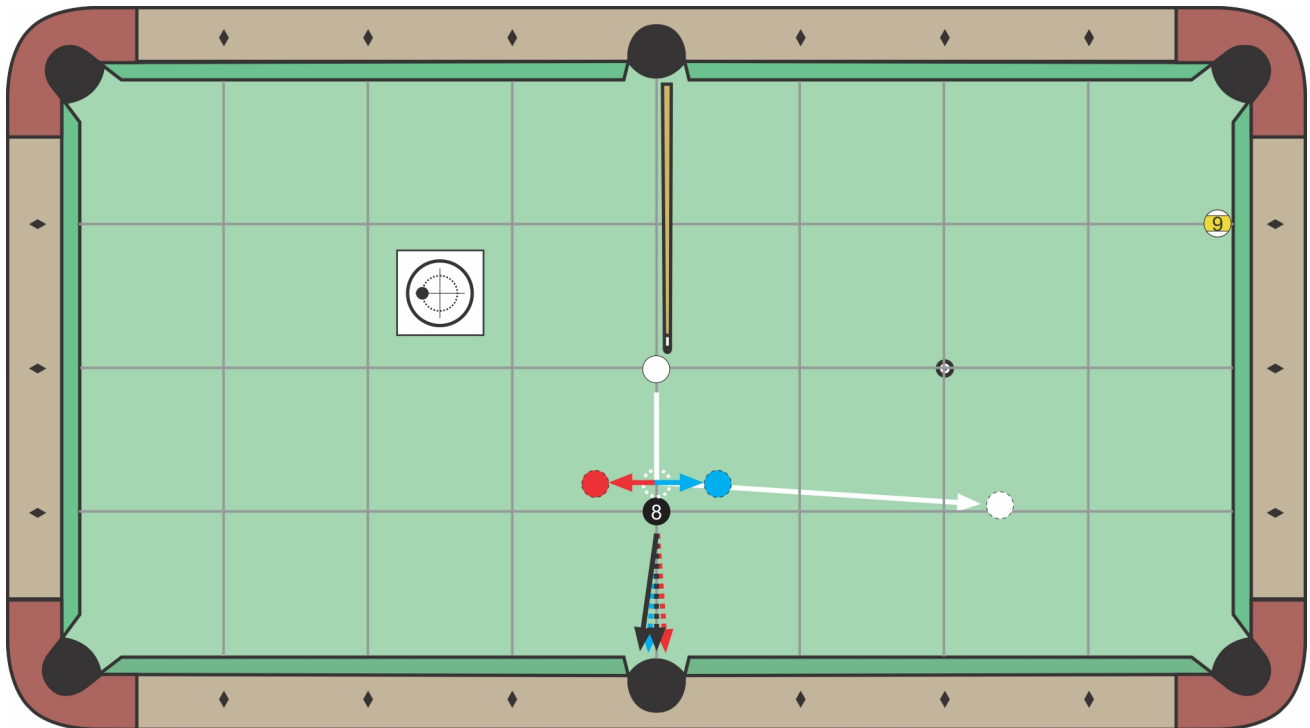


Diagram 2 Sidespin effects

Sidespin is used to change the angle the CB rebounds off a cushion. Sometimes you are forced to use sidespin because natural CB paths are blocked. Left spin makes the CB rebound more to the left, and right spin makes it rebound more to the right.

8.) Tight Grip

A very common pool mistake is tightening your grip during the stroke. When you do this, it causes the tip to move down. As demonstrated in the video, that can cause you to miscue and scoop under draw shots. Keep your grip relaxed during the entire stroke if you want the tip to hit the CB where you are aiming. To help ensure your grip is relaxed during practice, you can wiggle your grip fingers before and after the shot, as demonstrated in the video.

9.) Bad Stroke

There are many things people do wrong with their stroke. One thing is jerking the transition between the back and forward stroke, during both the warm-up strokes, and during the final stroke. When you jerk the cue forward, the stroke will usually also involve unwanted body motion. Instead, bring the cue back slowly, pause slightly, and then accelerate forward smoothly. You don't need a deliberate pause before the forward stroke ... just don't rush the transition.

Another common mistake is moving the shoulder and dropping the elbow. One problem with this is the tip will rise up causing you to hit the CB higher than expected. You will also sometimes clang the cue into the rail. If you keep the shoulder and elbow still during the stroke, you will likely be much more accurate and consistent. Now, if you can drop your elbow perfectly straight and the same amount each time, it is not a problem; but most people don't do this. Many people typically "chicken wing" their elbow out when it drops. This is not good for accuracy or consistency.

10.) Head and Body Motion

Another common stroke flaw is moving the head or body during the shot. You should keep your eyes, head, and body still during and after the shot. Don't watch where the ball goes. And don't jump up on the shot. And don't use "body English" or swoop the stroke sideways. Instead, as demonstrated in the video, be a "relaxed statue" during and after the shot.

If you want to diagnose and fix some flaws in your fundamentals, check out the "best practices" check list on my website. The link is in the YouTube video description along with links to resource pages providing additional information and demonstrations related to every topic in the video.

I hope you are enjoying 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



[NV J.10](#) – Top 10 Pool Shots Every Player Must Know!!!

[NV J.13](#) – Top 10 Things Pool Players Do Wrong ... and How to Fix Them

[NV J.14](#) – 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

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.

Dr. Dave is a PBIA 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.