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

In a recent online video ([NV L.71](#)), I demonstrated many ways to reach shots that are tough to reach. I show and discuss some of the most useful techniques here. One way to reach long shots is to simply move your grip to the end of the cue and increase your bridge length. You just need to be careful to keep things as still as possible during the stroke. Because it is difficult to keep a longer stroke straight with a really long bridge, it helps to use a shorter stroke. Having a longer cue can help, especially when a long reach is required. Because I am tall, I keep a joint extension in my cue. This lets me reach longer shots with greater ease. A common alternative is to use a temporary butt extension. Just be aware that extensions add weight to the cue, so it can affect your speed and spin control. As with all techniques discussed, see the video for demonstrations and shot examples.

To reach a long shot, it can help to lean on and over the table as shown in **Image 1a**. When you are stretched and a little uncomfortable like this, it is very important to try to be as still as possible during the stroke since there is a natural tendency to move out of the position. For a long stretch, you can even put one leg up on the table as shown in **Image 1b**. And for shots close to a rail, you can lean on and reach over the table from the side as shown in **Image 1c**. Do your best to keep your vision center over the cue; otherwise, you won't perceive the line of the shot correctly.

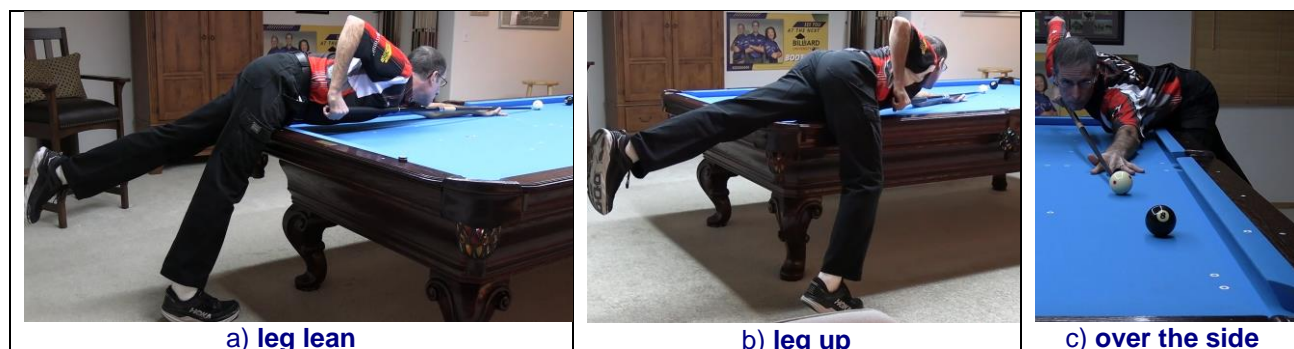
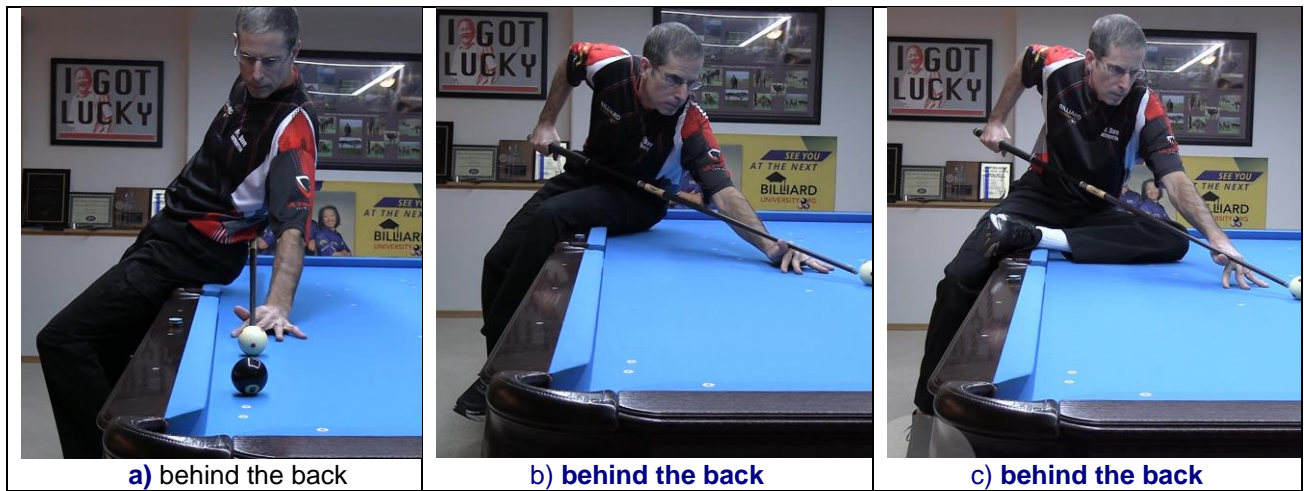


Image 1 Leaning

Sometimes, it helps to sit on the rail to reach a shot, shooting behind your back if necessary (see **Image 2a**). Be aware that the rules require that part of at least one foot must be in contact with the floor. It is difficult to stroke straight with the cue behind the back like this; but with a little practice, it can be reliable. Sitting on the table, again with one foot on the floor, also helps with shots like the one shown in **Image 2b**. If you put a bent leg on top of the table, you can get even closer, assuming you are flexible (see **Image 2c**). It helps to have long legs, to be able to reach the floor with the other foot.



a) behind the back

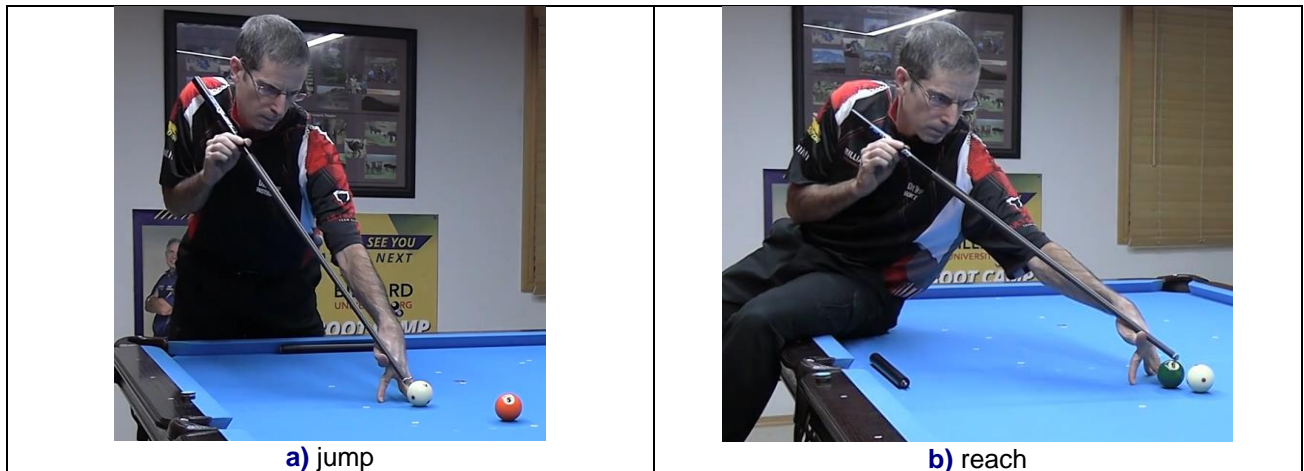
b) behind the back

c) behind the back

[Image 2](#) **Sitting**

An alternative to reaching behind your back is to just use the opposite hand to shoot. I am not very good at this because I have never really practiced it before, and I'm a little spastic with my left hand. Because there are so many other effective options, I don't really see a need to try to learn to shoot well with my opposite hand. But if you are at least a little ambidextrous, this might be a good option. Otherwise, I think time is better spent learning to master the mechanical bridge or other techniques.

Image 3a shows an example jump shot that is difficult to reach with either a standard stance or a sidarm stance. But using a dart stroke with a shortened jump cue instead, it is very easy and comfortable to reach. The dart stroke jump technique is very easy to master. See the videos on the [jump shot advice](#) resource page at billiards.colostate.edu if you want to learn it. The dart stroke can also be used for other elevated shots like when reaching over an obstacle ball (see **Image 3b**). Even though I'm not hitting a jump shot, the jump cue and dart stroke make it easy to reach this shot.



a) jump

b) reach

[Image 3](#) **Dart stroke**

When none of the other methods work effectively, you can instead use a mechanical bridge. The videos on the [mechanical bridge technique advice](#) resource page at billiards.colostate.edu cover everything in great detail, but the main tips are (see **Image 4a**): Get as low as possible, stabilize the bridge on the table with the non-shooting hand, and hold your elbow out to the side with a dart type grip, being careful to move the cue as straight as possible. With a cue extension, you can instead use a regular stance and stroke with a mechanical bridge (see **Image 4b**). I prefer this method when I need more power or control since it feels more natural. When you need to reach far and over an obstacle ball, using a taller bridge is necessary, but most

bridge heads can be turned to provide the necessary height (see **Image 4c**). For a shot like this, I prefer to point my elbow down instead, for a standard dart stroke. And if you need to reach over a group of balls, stacking and extending one bridge on another can get the job done (see the video for a demonstration).



Image 4 Mechanical bridge

If there are no balls in the way, you can lay the cue on the table, pinch under the cue at the joint to raise the tip a little, and hit the butt of the cue with your hand (see **Image 5a**). I can easily create draw for shape on the 8 in the side. This technique is surprisingly reliable. Give it a try. Another alternative is a reverse stroke. One approach (see **Image 5b**) is to place the cue on the table along the required line of aim, and bridge from the pocket side, with the hand held firmly on the table. I need to be careful not to double hit the 11, so I use a dart-type grip close to the bridge hand. Flicking the wrist into the bridge hand with a high tip position will enable the cue ball to go forward with a single hit. Another reverse stroke useful if there are many balls in the way of other techniques is shown in **Image 5b**. I'm using a jump cue (for short length) and bridging on my leg on the table for support. This type of reverse stroke is a nice trick to know if you ever need it.

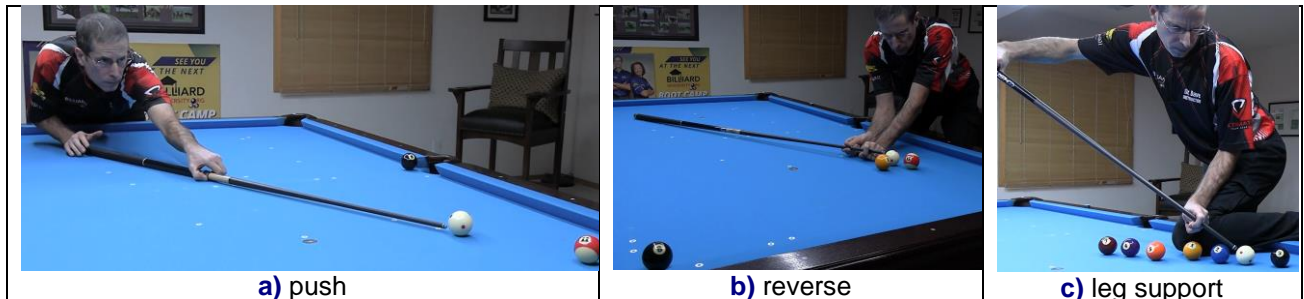


Image 5 Specialty bridges

I hope you learned a few new ways to be effective when needing to reach for shots. As always, be sure to watch the online video ([NV L.71](#)) to see demonstrations of everything, and click on the links in the YouTube video description for more information and examples.

Good luck with your game,
Dr. Dave



[NV L.71](#) – Pool Made Simple ... HOW TO REACH Tough-to-Reach SHOTS

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 Master 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.