

Bob Jewett



# 99 Critical Points

Bob Jewett splits some important hairs.

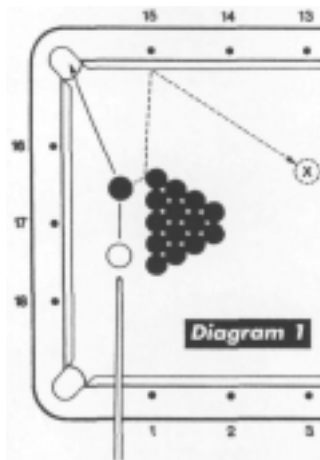
In the May issue was an extensive review of the top billiard instruction books. Among the cream was Ray Martin's "The 99 Critical Shots in Pool and Billiards," which was the best pool book available when it was published in 1977. While other books are now better, as a first book for beginners, "99CS" remains required reading for any serious cue student.

I have found that there are many layers to understanding. I recall when I was first learning pool from Willie Mosconi's "Winning Pocket Billiards" 40 years ago, that on each of four or five readings that were perhaps three months apart, I learned something new from each review. Part of it was that my game was developing at the same time, and Willie's help on draw shots couldn't do me much good — or really make any sense — until my arm moved more or less straight. With each new reading, more parts fit.

As my game and understanding have progressed further, I now see that there's more than one mistake in Willie's book, and some of them can seriously hold up a student's progress beyond the beginner level. It could be that in another 40 years I'll have a very different take. A sad part of this further learning is the loss of an old friend. Well, maybe not a loss, but it can hurt to see a friend in a new, clearer light that shows features you wish weren't there.

When "99CS" was reissued ten years ago, I was glad to see this classic available again for a new generation of pool fanatics, but I was not so happy to see that Ray didn't take the opportunity to update the book and fix some of "the features we wish weren't there." Here are some of the things I hope will find their way into a second edition.

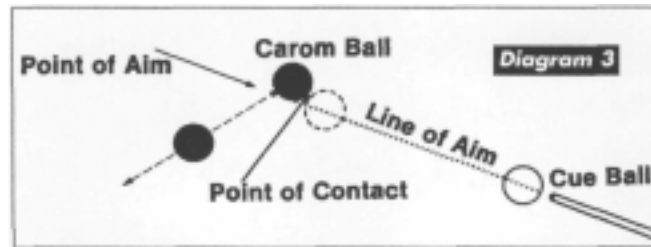
The diagrams need to be fixed. Pool is a geometrical game, and scale, proportion, and accuracy are important. In **Diagram 1**



is an example straight-pool break shot taken from the book (p.141). The cue ball and object ball are larger than the pocket. Notice that the balls in the rack are smaller. It would help to show the cue applying right English, but this is shown in a separate inset about where to hit the ball.

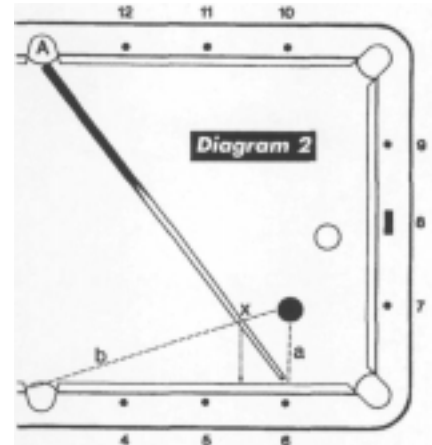
Another problem is the shading of the balls. The rack balls are supposed to be gray, but in both the original paperback and the reprint, they are very hard to tell from the black of the main object ball. In the illustrated shot, this isn't important, but other shots can only be deciphered if you can figure out which ball is very, very dark gray but not black.

The path the cue ball takes also needs to be fixed, and this applies to nearly all the diagrams in the book. The cue ball in Diagram 1 is shown leaving the object ball from the middle of the object ball, when in fact it comes from a location a ball closer to the shooter. This means that the cue ball will not hit the indicated rack ball first, but its neighbor. The details are hard to see because the balls aren't even close to the right size. Also, when the cue ball hits the



rail, the contact point and turning should be shown at the rail groove, where the center of the cue ball makes its turn.

Martin doesn't have the worst diagrams in billiards. There are some carom diagrams where the balls are the size of pumpkins. Most of the time it's possible to puzzle out what Ray means, but diagrams should be clear enough that you don't have to solve a



puzzle to understand them. Two examples of authors with excellent diagrams are Byrne and Capelle — open both "99CS" and one of their books and compare for yourself.

Finally, to the shot itself. The line of the stick is nearly parallel to the end rail. Willie says to use left, not right, English for this shot, and I think Willie was right. Try the shot yourself, and see which works the best for you, and then make a note in "99CS" about what you discovered.

The fundamental how-to-play section at the start of "99CS" is quite good, but could use some updates. Few people now recommend using 600-grit sandpaper to clean shafts. Modern cue papers seem to be at least twice as fine as that. The photos for bridge and stance are excellent, but the open bridge and the snooker-player stance deserve a more positive mention — just watch the top players on TV for examples.

In **Diagram 2** is the banking system that Martin explains as Shot 27. Maybe there is someone, somewhere, who actually shoots banks this way, but I doubt it. Willie shows the same system. Both of them actually have the ideal construction wrong, but the ideal construction doesn't work anyway. I think the student would be better off spending time with the mirror system, which is much easier to visualize but which Ray doesn't mention.

In my very first column for this magazine, in 1992, I asked the reader to do an experi-

ment to find the best way to run a frozen ball down the cushion without English on the cue ball. All the experimenters found the same thing: you must land the cue ball about a quarter-inch up the cushion from the object ball. The reason, of course, is collision-induced throw; the motion of the cue ball across the object ball drags it towards the cushion. Koehler had shown the same thing in his 1989 book, "The Science of Pocket Billiards," complete with diagrams of the changes with inside and outside English. It's high time that all billiard authors expunge this myth of "hit ball and cushion at the same time."

Shot 42 of 99 shows an example of what I call the "twice as full system," in which the cue ball is blocked from the desired path by a close ball. The system as described doesn't have the geometry quite right, but more importantly, it doesn't have the cue ball frozen to the object ball, which is absolutely required for this shot to be legal and to work well.

In **Diagram 3** is the carom system explained in Shot 43. Unfortunately, it doesn't even come close for a half-ball hit. The point of aim — the point on the first object ball your stick is aimed at — is the point on the first object ball that is closest to the target ball, and Martin says to play it

as a stop or stun shot, with no spin on the cue ball. This is the sort of bogus system that can be debunked with a few examples. If the second object ball is at a right angle to the line of your stick, the system says to aim your stick at the edge of the first object ball. This is our old friend the half-ball hit, and the cue ball is deflected 60 degrees on the shot and not 90. Even worse, if the object ball is ahead of the right-angle line, the system says to hit the first object ball even fuller, which means you will miss the second object ball by even more.

A very interesting kiss situation is illustrated in **Diagram 4**, drawing from its appearance in both the examples on page 165 of "99CS." A ball is frozen between two others. Where does it go if struck into both of them simultaneously? You might think that it will go along one of the kiss lines (A or B), but in fact it will seem to ignore both balls and go nearly straight away from the cue ball. You could make a proposition shot from this. In "99CS," the ball is incorrectly said to go along one of the kiss lines.

Finally, I have a bone to pick about the rules listed at the back of the book. They were the official Billiards Congress of America rules in 1977 when the BCA was on Michigan Avenue in Chicago (as listed),

but the BCA address has changed at least twice, and the rules a dozen times, since then. The old rules may be okay for beginners to start with, but they are likely to cause confusion among better players who try to play in tournaments. For example, in 9-ball, you are no longer permitted to push out at the start of every turn at the table — yes, people really did play like that in the last millennium.

The above is not an exhaustive list. As you read or re-read "99CS," or any other book about pool, be sure you do it critically. Maybe you don't have to be so tough on the author the first time through; go for comprehension of what he may have been trying to say. But if you ever hope to get past that first, superficial layer of understanding, you will need to get out your microscope and fine-toothed comb and put away your mercy.

