Joe Tucker’s Parallel Aiming System

By Bob Jewett (originally published in Billiards Digest, June 2005)

No matter how many times I protest that in the long run you will have to depend on your pool sense for aiming, people continue to seek out new systems. If you’re still developing a feel for how much of the ball to hit on various shot, maybe the new system described below will help you.

The first aiming system I was exposed to was in Willie Mosconi’s 1965 book “Winning Pocket Billiards,” which is still in print 40 years later. In Diagram 1 is the main idea. You start with the line from the pocket to the object ball, and imagine that line going through the object ball. That line is white in the picture and a ring has been drawn around the object ball to aid your imagination.

A line parallel to that white line is drawn through the cue ball, and a similar ring has been drawn around the cue ball. To make the shot, all you have to do is drive the cue ball forward so the two rings touch so that they are both pointing towards the pocket. If you hit the object ball too full, it’s ring will line up on the left of where it should be in the diagram, and too thin a hit will put the cue ball’s ring beyond the ring on the object ball.

In Diagram 2 is Bob Byrne’s take on this system from his 1978 “Standard Book of Pool and Billiards.” He recommends this system especially for thin hits where it allows you to easily pick out how much of the cue ball needs to overlap with the object ball. (For fuller hits, Byrne recommends the ghost ball method.) Notice the two parallel lines, again, A and B.

When Mosconi first showed me the system in 1965, I didn’t really try to work with it. The explanation seemed reasonable enough, and I had already developed a little feel for angles, and I was more interested in making the masse shot from the “Hustler,” which is shown in the back of Willie’s book.

Joe Tucker’s new take on this old method is designed to get you involved and keep you involved. For full immersion, you will need to get a special cue and object ball set that’s made by Aramith, as shown in Diagram 3. You also get a booklet of instructions and drills and two disks, shown n Diagram 4, to help illustrate shots. The disks are marked like the balls, with angles marked from 0 to 9 to the left and right for cut angles from 0 to 90 degrees. It’s called the “Aiming by the Numbers Method” and should be available at better billiard retailers everywhere. It’s strongly endorsed by newest Hall of Fame member Mike Massey.
How does the system work? First consider a corner pocket shot with the object ball and cue ball in any position. You rotate the object ball to make the 0-9 numbers aligned so the 9s are nearest the side cushions, and facing away from the pocket. The cue ball is rotated so its 9s are also towards the side rails, and the numbers face the end with the corner pocket you’re going for. It took me a little while to convince myself that this always works out. Now for the amazing part. Look on the object ball for which number is farthest from the pocket. Suppose that’s the 3 (which means 30 degrees -- the angle of the shot relative to the long cushion). All you have to do is make the 3 on the cue ball contact the 3 on the object ball.

Where did the parallel lines go? They are actually still there, but with the numbers on the balls, you don’t have to visualize them. If you must, draw a line from the object ball to the pocket, and through the 3 in this example. Draw another line from the center of the cue ball through its corresponding 3. Because the balls are numbered the way they are, these two lines are guaranteed to be parallel.

Note that the numbers (0-9) don’t tell you the angle of the cut -- they just tell you the angle of the parallel lines in the Mosconi and Byrne diagrams. You can actually calculate the cut angle by subtracting the normal number and the 0-9 number that your stick is aligned with on the cue ball.

The booklet that comes with the balls also includes extensive drills to work on each of the major angles. Note that the object ball aiming number is determined by its position alone and not at all by the cue ball. This is very different from fractional ball aiming. This means that you can figure out the object ball number from the diamond on the opposite side cushion from the intended pocket, using the straight line from pocket to object ball to diamond. The booklet gives the diamond locations that correspond to the object ball numbers, and if you invest a little time in memorizing these, you can pick out the object ball number very quickly. Or, you can just just the two pop-out diagrams in the booklet which illustrate all the diamond intersections.

For side pocket shots, the system is modified some, but works much the same way. I think the whole package is the clearest, most complete explanation of any system aiming available. Joe Tucker is also developing a more extensive workout book as well as a training DVD. Look for them soon. Bank shots are included.