

Vision Center

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To properly perceive the center of the cue ball, line of the shot, and cue alignment, your head and eyes must be in a consistent position relative to the line of the shot, which can be different for everyone.

Visual perception resulting from different head/eye positions:



a.) vision left of center

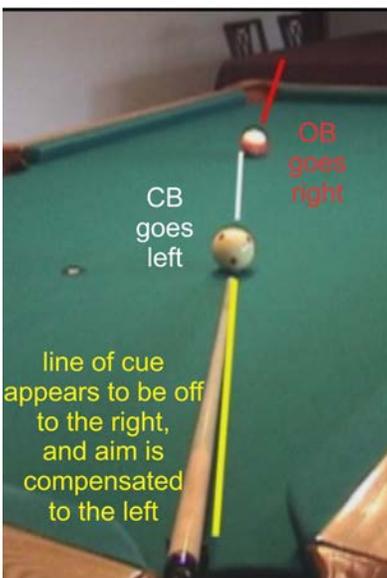


b.) vision centered

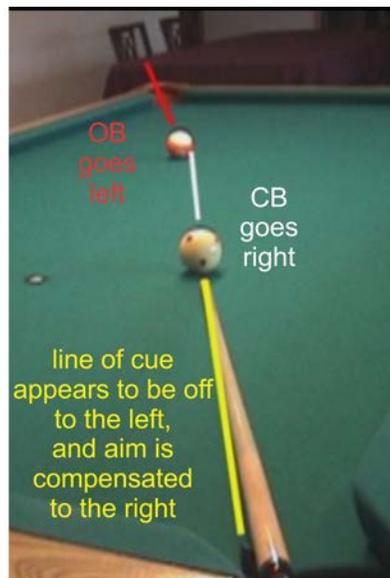


c.) vision right of center

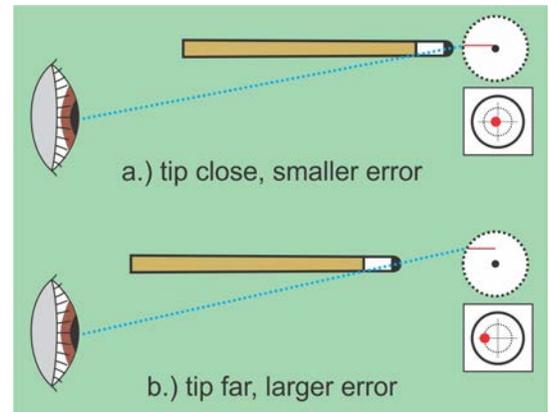
Perceptions errors resulting from vision center being off the line of the shot:



a.) head right of "vision center"

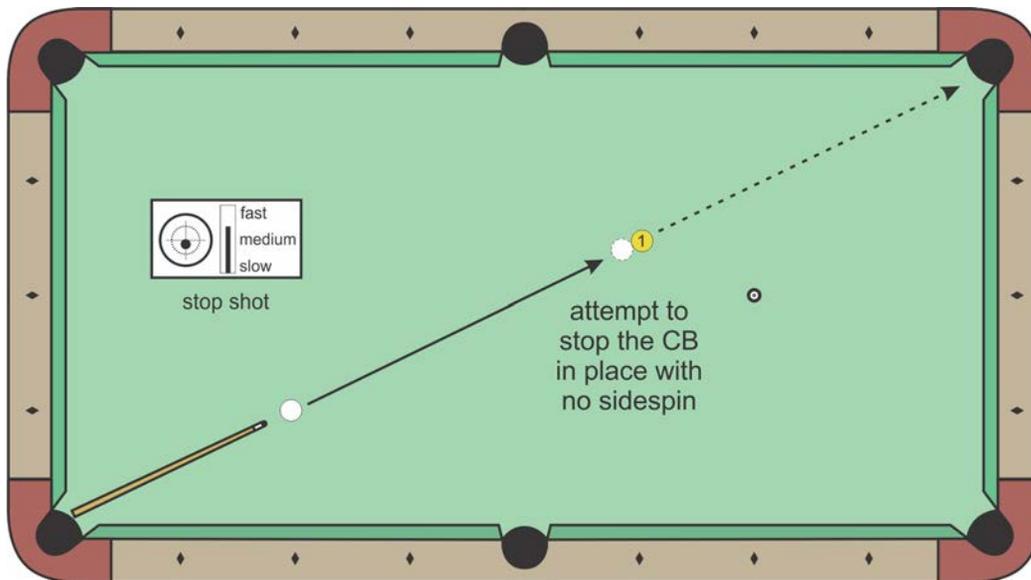


b.) head left of "vision center"



A **useful technique to find your "vision center"** is to set up a straight-in shot with the CB and OB along the diagonal of the table, with the balls roughly equidistant from each other and the corner pockets (see the diagram on the next page). Tap down on the balls and mark the spots with donuts. Then use a donut to mark where the cue should cross the pocket when aligned properly at the center of the CB and along the straight line of the shot. Also put a donut halfway between the CB and pocket along the same line. Then get down into your stance and position the cue over the donuts placed previously, with the tip close to and in the center of the CB. Then move your head left and right, without tilting or turning, keeping the cue over the donuts, until the tip position looks centered and the shaft and shot alignment look perfectly straight. Then note where your nose or chin is relative to the cue so you can duplicate this position later.

Useful drill for testing and correcting your head alignment:



Shoot the shot 10 times, attempting to perfectly stop the CB. If the CB has no sidespin after hitting the OB, and if the OB goes into the center of the pocket consistently, then you have your vision center properly aligned (and you have a good stroke). If not, then shifting your head will probably help.

If the CB consistently goes to the right of target, causing the OB to go left of the pocket, your left eye is probably dominating the perception of the line of the cue and shot. This causes you to position the cue a little to the left of center and to pivot the cue a little to the right of the desired line of aim. With your eye alignment to the left of center, you perceive the shifted and pivoted cue position as centered and straight, but it is not. If this is the case, **try shifting your head to the right** a little, and then try another set of stop shots. **If you are consistently missing the CB target to the left** instead, with the OB missing the pocket to the right, **try shifting your head to the left.**

After you find the head alignment that results in the best accuracy (i.e., stop shot with no CB spin, and OB in the center of the pocket), you will have found your personal **vision center**. When you are done, try to remember how the stance feels and/or where your nose or chin is relative to the cue (e.g., by glancing down) so you can check and duplicate it later during practice and play.

For video demonstrations, additional drills, and more information, see the vision center FAQ resource page here:

billiards.colostate.edu/faq/eyes/vision-center