

“Billiards on the Big Screen – *The Color of Money*”

Note: Supporting narrated video (NV) demonstrations, high-speed video (HSV) clips, and technical proofs (TP) can be accessed and viewed online at billiards.colostate.edu. The reference numbers used in the article (e.g., **NV A.7**) help you locate the resources on the website. If you don't have access to the Internet, or if you have a slow connection (e.g., a modem), you may want to view the resources from a CD-ROM instead. To order one, send a check or money order (payable to David Alciatore) for \$21.45 (includes S&H) to: Pool Book CD; 626 S. Meldrum St.; Fort Collins, CO 80521. The CD-ROM is compatible with both PCs and MACs.

This is the second article in my “Billiards on the Big Screen” series, where I illustrate and describe interesting shots from movies with major billiards themes. Last month, I presented some shots from the classic billiards flick: “*The Hustler*.” By the way, if you want to refer back to any of my previous articles and online resources, you can access them online at billiards.colostate.edu. This month's article deals with the huge box-office success: “*The Color of Money*.” In my next two articles, I will show shots from “*Pool Hall Junkies*” and “*Donald in Mathmagic Land*.”

“*The Color of Money*” (1986, Touchstone Pictures) is the story of two hustlers who teach each other a few things about pool and life. Fast Eddie Felson (played by Paul Newman), a seasoned hustler, discovers Vincent (played by Tom Cruise), an immature and young hustler with great talent and potential. Fast Eddie convinces Vincent and Vincent's girlfriend (Carmen, played by Mary Elizabeth Mastrantonio) to tour the country together to work hustles at local pool halls. Vincent's ego and showiness often get in the way of efficient hustling, and Fast Eddie's and Vincent's relationship becomes strained. Fast Eddie becomes disenchanted with Vincent and dedicates himself to regaining the skill he once had. The movie leads to a dramatic confrontation between Fast Eddie and a more seasoned Vincent during a tournament at the end of the movie. The story has interesting similarities with “*The Hustler*” (see last month's article), but the role of Eddie Felson is reversed (from young hustler to older manager). Although, Fast Eddie is a better, kinder, and more lovable mentor figure than the manager (Bert) in the original film. Like “*The Hustler*,” “*The Color of Money*” did wonders for increasing the popularity of billiards. It also helped create a more positive, almost glamorous, image of our great sport.

Diagram 1 illustrates a shot Tom Cruise makes fairly early in the movie after a smart-ass opponent plays what he thinks is a great safety shot during a game of 9-ball. The cue ball is snookered behind the 8-ball, blocking a direct path to the 7-ball. “Luckily,” the 7-ball is frozen to the 9-ball and lined up perfectly for an easy carom shot into the bottom-right corner pocket. The two-rail kick shot shown in the diagram is a fairly easy shot to execute, and it allows an easy run-out for a victory. The shot has a wide margin of error due to the frozen 9-ball. The cue ball can hit the 7-ball anywhere on the near side (away from the target pocket) and the 7-ball will carom off the 9-ball into the pocket. **NV A.7** shows a demonstration of the shot. **Diagram 1** shows one possible final table layout for the cue ball and 9-ball that leads to an easy run-out. The final layout in **NV A.7** is different, but the run-out is still fairly easy.

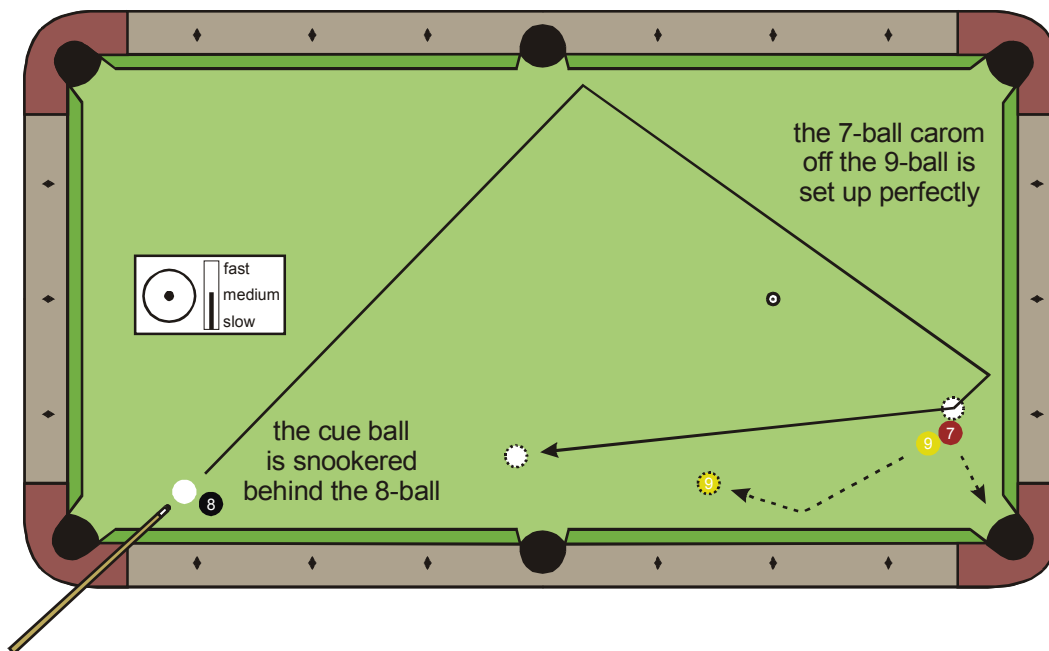


Diagram 1 Post-safety, dead-on, frozen-carom, two-rail kick shot



NV A.7 – Post-safety, dead-on, frozen-carom, two-rail kick shot

Diagram 2 is from the scene where Fast Eddie (Paul Neuman) is being sharked by another hustler (Amos, played by Forest Whitaker) during his comeback. This is a setup (“trick”) shot with the goal of pocketing both the 8-ball and 9-ball in the same corner pocket. As shown in the diagram, the 8-ball is frozen to the 9-ball, which is also frozen to the rail. Note that the 8-ball-9-ball impact line is not perpendicular to the rail. Because of this, an amateur player might think the 9-ball would bounce off the rail away from the target pocket. However, the cut angle on the 8-ball creates a sideways friction force on the 9-ball that creates “throw” and imparts clockwise spin to the 9-ball, both of which redirect the 9-ball’s rebound path up towards the target pocket. The really tricky part of this shot is getting the 8-ball to rattle off both corner pocket points at just the right angle to send it towards the same target pocket as the 9-ball. Unfortunately, after many attempts by me, with many unfruitful minor adjustments, I was not able to execute the shot successfully. Like many difficult setup shots like this, the exact placement of the balls is critical. If things are not setup perfectly for your table and ball conditions, you will not be able to make the shot, regardless of how much skill you have. Even with a perfect set-up, you still have to stroke the shot perfectly. In **NV A.8**, I show some of my attempts to give you a feel for how it should work, and I show how each ball should make its way to the target pocket individually. I hope this shot does not cause you as much grief as it caused me if you decide to try it out. Good luck! I also hope that the shot was at least a small challenge (and took numerous attempts) for the pro “stand-in” that executed the shot for the actor in the movie.

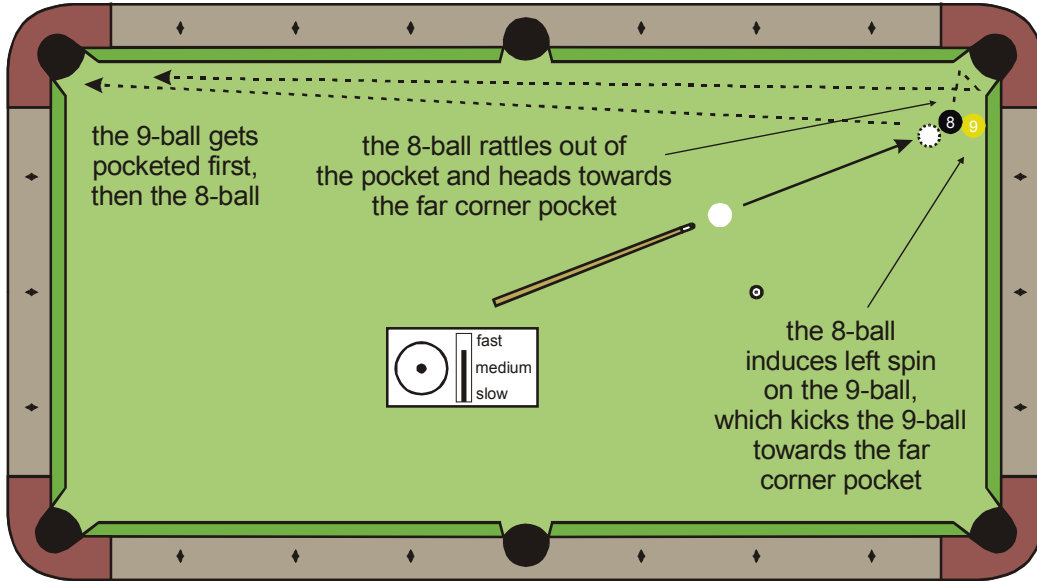


Diagram 2 Frozen-bank, corner-rattle artistic shot



NV A.8 – Frozen-bank, corner-rattle artistic shot

The shots in Diagrams 3 and 4 are also from Fast Eddie's comeback, when he is starting to regain his confidence. In **Diagram 3**, the 8-ball is frozen to the cue ball, which is also frozen to the rail. The goal of the shot is to pocket the 8-ball in the top-left corner pocket to win a game of 8-ball. The proper technique to execute this shot is to elevate the cue stick over the 8-ball and use top-left English with the aiming line a little off the rail perpendicular (see **NV A.9**). The left English causes the cue ball to rebound back towards the 8-ball after rail compression, which helps cut and throw the 8-ball towards the target pocket. I will present throw, English transfer, and frozen-ball effects in detail in future "Illustrated Principles" articles.

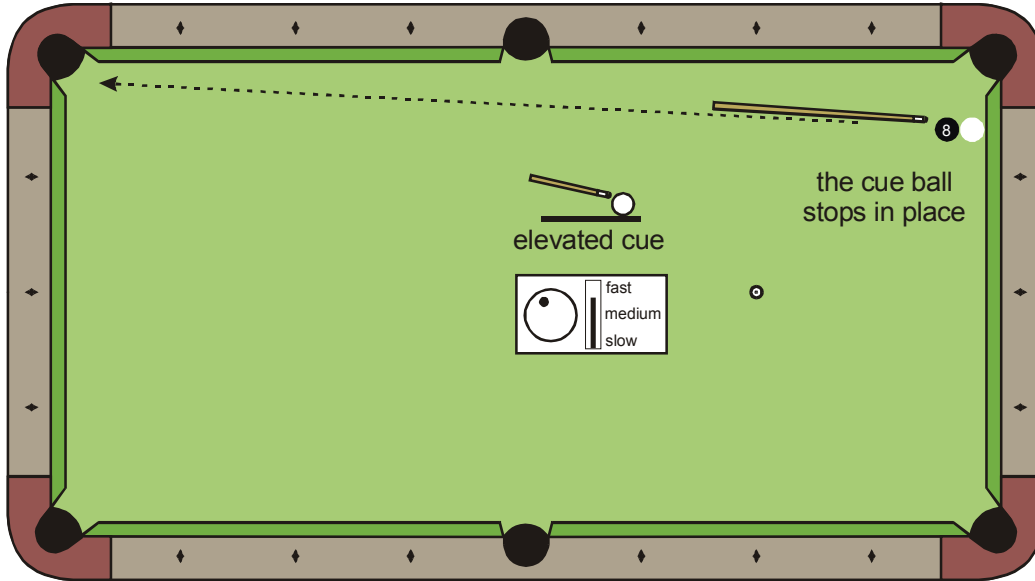


Diagram 3 Frozen kick off the rail shot



NV A.9 – Frozen kick off the rail shot

Diagram 4 shows a difficult table layout that Fast Eddie was faced with at the end of a game of 9-ball. The 8-ball and 9-ball are both frozen to the end rail, so you need to be careful with your cue ball position for the 8-ball shot. The shaded area in the diagram shows the most desirable cue ball position for the 8-ball shot to allow for easy position on the game-winning 9-ball shot. In this shot, the most reasonable method to reliably reach the desired area is to use a power draw shot (see **NV A.10**). In a future article, I will discuss how to visualize a desired cue ball position area and how to plan position-play based on the area shape.

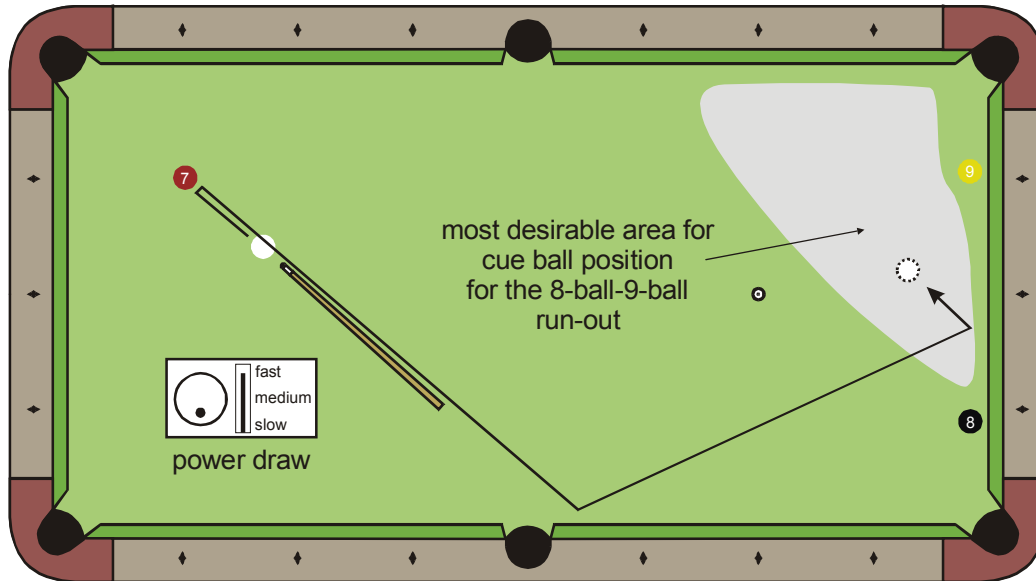


Diagram 4 Power-draw for run-out position



NV A.10 – Power-draw for run-out position

Diagram 5 shows a shot Vincent (Tom Cruise) was faced with during a 9-ball tournament late in the movie. The 3-ball is the lowest numbered ball remaining, so it must be hit first. Unfortunately, the 7-ball and 8-ball block the direct path to the 3-ball, and the 6-ball blocks a reasonable 1-rail kick shot possibility. The best alternative is to use a jump shot. “Fortunately,” not much cue ball height is required to clear the gap between the 7-ball and 8-ball. You only need to jump over a portion of each ball. **NV A.11** explains and shows how the shot is executed. This shot is not that difficult, but it still seemed like the shot was executed by a pro “stand-in” in the movie (based on the editing). As **Principle 5** summarizes, “stand-ins” are often necessary when the level of difficulty of a shot is above the skill level of the actor. I wish I had a pro “stand-in” I could call on when I’m trying to demonstrate the really tough shots (e.g., the shot in **Diagram 2** and **NV A.8**).

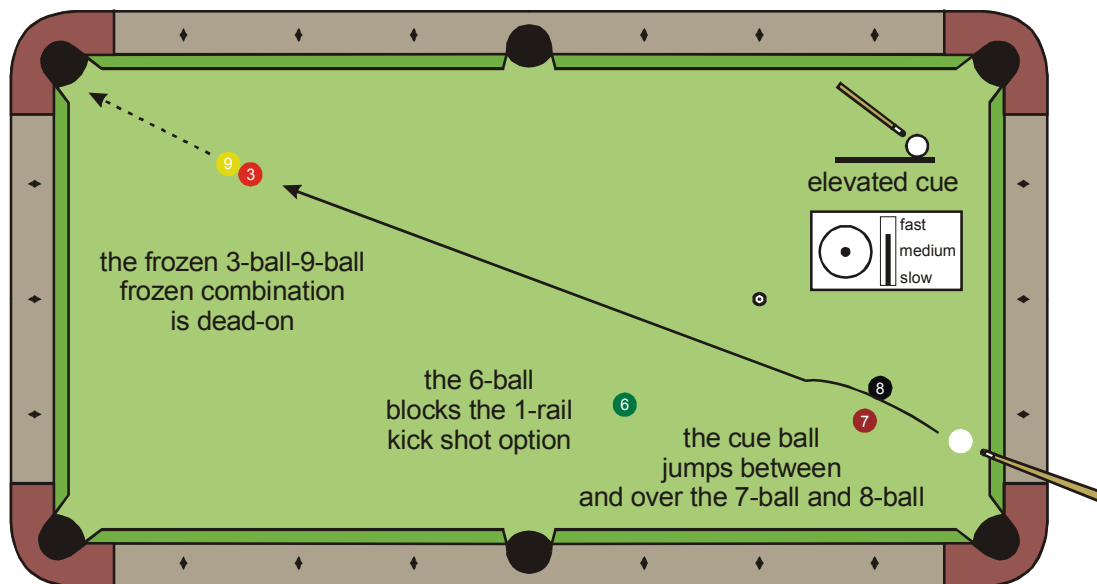


Diagram 5 Partial jump, dead-on combination shot



NV A.11 – Partial jump, dead-on combination shot

Principle 5 Hollywood stand-ins

Difficult shots in the movies are usually executed by stand-in pros, a fact often veiled by fancy editing and production.

- Examples include **NV A.6** from the movie “*The Hustler*” (see my previous article), and **NV A.8** from the movie “*The Color of Money*.”



NV A.6 – Massé-draw carom (billiard) shot

I hope you are enjoying my “*Billiards on the Big Screen*” series. Good luck with your game, and practice hard,
Dr. Dave

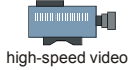
PS:

- As with all instructional articles, I encourage you to try out and practice the illustrated shots. Understanding principles is important, but nothing beats practice for improving your game.
- I recently added some high-speed video clips to my book website at: billiards.colostate.edu

Two clips (**HSV A.23** and **HSV A.24**) show super-slow-motion footage of two shots (the frozen bank shot and the draw-masse shot) illustrated in my previous article for the movie “*The Hustler*.” By the way, if you like looking at super-slow-motion videos of pool shots, you might also enjoy my collection of non billiards clips posted at:

high_speed_video.colostate.edu

On that site, you can find everything from a cube of Jello bouncing off a countertop, to a pellet gun shooting through a shaken-up pop can, to a dog catching a done off her nose. I hope you enjoy them. My students always find them entertaining.



HSV A.23 – "The Hustler" frozen bank shot
HSV A.24 – "The Hustler" draw-massé shot

Dr. Dave is a mechanical engineering professor at Colorado State University in Fort Collins, CO. He is also author of the book: "The Illustrated Principles of Pool and Billiards" (2004, Sterling Publishing).