

JUMP SHOT DIVERSITY: KYRIE IRVING IS EXHIBIT A

By Robert Tiltz

Kyrie Irving made the shots that won the 2016 NBA championship, culminating with the decisive whole-body reachback jump shot pictured below. Irving also regularly shoots a second type of whole-body jump shot, the reachup jump shot. The two different whole-body jump shots have different specialties that between them cover almost all jump shot contingencies. Now you know why Irving has forged ahead in the NBA's arms race. Call it jump shot diversity. It provides multi-pronged attack capability through mastery of tactically complementary whole-body jump shots. There are other whole-body jump shot complementary combinations that can achieve jump shot diversity. But this analysis will concentrate on the living blueprint provided by Irving's jump shot diversity.



Three different views of Kyrie Irving's last-minute championship-winning jump shot for the Cleveland Cavaliers against the Golden State Warriors in the 2016 NBA Finals.

The reachback jump shot works best on strongside mid-range lateral moves and post-up strongside fallaways. Irving's lateral step to his dominant right side that preceded his game-winner was a mini strongside lateral move, sort of a lateral move in a phone booth. The move might not have been supercharged athletically, but it gave Irving enough momentum to get a good jump for his jump shot. The jump became a fallaway jump mostly because of the backward momentum created by Irving's reachback.

But there is more to the reachback jump shot than the strongside lateral move and the reachback. The reachback to set up the shooting position for the start of the release of the reachback jump shot rolls the shoulders back, which activates the shooting shoulder as a primary source of whole-body athleticism and whole-body power when it engages with the release mechanism. The subsequent forward rotation of the shooting shoulder is a primary power source both for the reachback jump shot's leveraged straightstroke-pull release and for the rotation of the square-in-the-air jump that many strongside lateral pull-up jump shots require and all could use.

The release of the reachback jump shot is sourced from the shooting shoulder and develops as a leveraged straightstroke-pull. The reachback jump shot's leveraged straightstroke-pull release consists of forward rotation of the shooting shoulder, out-and-up full extension of the shooting arm including a stretched-out forearm stroke and, toward the end of the extension of the shooting arm, hand action by the shooting hand that brushes the basketball for control.

In addition, the forward rotation of the shooting shoulder during the reachback jump shot's leveraged straightstroke-pull release helps to reverse the fallaway jump and right the jumpshooter's body, which was bent backward by the reachback. Prior to the reversal, the reachback initiated fallaway jump and the backward bend of the upper body cause the Kobe kick to commence with the feet swinging out ahead of the jumpshooter's body in midair for balance. The reversal of the fallaway jump completes the Kobe kick by returning the feet underneath the jumpshooter's body for a safe landing.

So the rollback, the engagement and the activation of the shooting shoulder were all crucial to the whole-body athleticism and the whole-body power of Irving's championship-winning jump shot. In fact, take away the shooting shoulder from the release of Irving's reachback jump shot and you get a very different, much less effective jump shot. For proof, you need look no farther than the typically vertical posture of the not very frequent strongside reachback jump shot of Irving's ex-teammate LeBron James. To set up his release, James does reach back. But you don't usually see the torso bend back or the fallaway jump or the Kobe kick. Those omissions indicate that despite the reachback James does not activate the shooting shoulder by engaging it with the release mechanism. The results speak for themselves. James is nowhere near the strongside lateral reachback jumpshooter that Irving is.



Kyrie Irving's whole-body reachback jump shot: The backward bend of the upper body and the Kobe kick indicate shooting shoulder involvement in the release.

Irving doesn't use his reachback jump shot off to-the-basket moves because the reachback produces backward momentum that clashes with the forward momentum of to-the-basket moves. The reachback's backward momentum and the fallaway jump it induces are ideal for lateral moves. But a fallaway jump is a bad match for to-the-basket pull-up jump shots because they require a vertical or forward jump. That's the reason why Irving regularly shoots a second whole-body jump shot. Irving's second whole-body jump shot, the reachup jump shot, might not have been the championship clincher, but it certainly contributed mightily to the cause.

On the plus side, the reachup jump shot is athletic and well-protected via near full extension arm action that helps to power the jump and elevates the release. Power can be a problem, but Irving uses supplementary power production techniques to solve that problem. The arm action that raises the basketball to the reachup jump shot's near fully extended shooting position for the start of the start of its abbreviated release can also help power the jump of the jump shot. The same

raising arm action can merge in one motion with the reachup jump shot's release to add supplementary power for the release. The reachup jump shot's near fully extended shooting position is the key to its protection.

On the minus side, the reachup jump shot's reachup to its near fully extended shooting position rolls the shooting shoulder up prior to the release, which rules out forward rotation of the shooting shoulder during the release. A lot of athleticism and power are lost as a result. Without forward rotation of the shooting shoulder during the release, the reachup jump shot loses a primary power source both for the release and for the rotation of the square-in-the-air jump that most strongside pull-up jump shots require and all could use. That means that the reachup jump shot has a power deficit and strongside limitations. Whole-body supplementary power production techniques, such as shooting on the rise and a one-continuous-motion release, partially compensate for the reachup jump shot's weak release.

The reachup jump shot's straightstroke-push release is shortened by its near fully extended shooting position, which is why heavy brush hand action during the release is often a primary power source. Despite the reduced role of the shooting shoulder during the release, the reachup jump shot still qualifies as a shooting-shoulder-centric whole-body jump shot because it uses the shooting shoulder to channel the athleticism and the power of the jump of the jump shot into the release. Irving does not attempt to compensate for the poor power of the reachup jump shot's release with a reachback during the release, which would disrupt the reachup jump shot's vertical flow. In the end, Irving is able to shore up the reachup jump shot's release to the extent that he can use it to shoot strongside forward and moderately angled strongside lateral pull-up jump shots from both mid-range and long range.



Kyrie Irving's reachup jump shot: The shooting shoulder rotates up to set up the near fully extended shooting position for the start of the reachup jump shot's release.

Irving also excels at weakside jump shots. Although weakside jump shots are not first-rate attack jump shots, they do add an obvious element of diversity that should not be discounted. Squaring weakside jump shots is counterproductive because it rotates the shooting shoulder away from the direction of the release and the basket. So weakside jumpshooters usually set up in a semi-sideways shooting stance prior to the jump of the jump shot that originates from the player's posture at the completion of the weakside move. The weakside semi-sideways jump shot is popular because it is easy to set up its shooting grip off the dribble, it is easy to set up its

shooting position and it is easy to shoot. The easy parts are also fast, which gives the weakside semi-sideways jump shot a respectable level of athleticism. The weakside semi-sideways jump shot does have a protection problem because it exposes the basketball as it is being raised to the shooting position during the jump of the jump shot, which results in too many stepback jump shots. But the protection problem appears to be a price that weakside semi-sideways jumpshooters are willing to pay in exchange for its easy parts.

Weakside jump shots are exalted by many coaches and players. Mastery of the weakside jump shot is mistakenly thought of as a refined-skill and the consummation of strongside-weakside jump shot balance, as if that's the offensive ideal. But that's bad jump shot theory. Strongside-weakside jump shot balance is basically a one-off that requires a lot of time to restart if the first foray is stopped. On the other hand, strongside-shoot-drive balance transitions and restarts instantaneously. Strongside-shoot-drive balance unifies the main components of the strongside game. Strongside-shoot-drive balance also benefits teamwork because it can disrupt the opposing team's entire defense.

Irving shoots most of his weakside jump shots from a semi-sideways shooting stance. Irving mostly uses a straightstroke-push release with his weakside semi-sideways jump shot. Irving's weakside semi-sideways jump shot definitely contributes to his jump shot diversity. However, Irving mostly shoots strongside pull-up jump shots.



Kyrie Irving's weakside jump shot: The midair shooting stance is usually semi-sideways.

Irving's arsenal of jump shots includes one more. Actually, it's not a jump shot. It's a semi-jump shot. That description is not meant to disparage it. Most well-rounded jumpshooters have a semi-jump shot in their arsenal. The semi-jump shot is mostly used for long-range standing-start 3-point shots. The effort that goes into shooting a standing-start semi-jump shot, not a jump, is what gets it in the air.

Irving's long-range standing-start semi-jump shot sets up its shooting position head-high with an out-front and horizontal shooting elbow pointed at the basket. It looks like a strokesnap power failure waiting to happen. But Irving replaces the strokesnap with an up-and-out straightstroke-push. The resulting elbow-in semi-jump shot has more than adequate long-range power because of its straightstroke-push release.



Kyrie Irving's long-range standing-start semi-jump shot gets into the air because of the effort that goes into shooting it, not a jump.

Finally, please note that Kyrie Irving's jump shot diversity is at odds with NBA reality. Although most NBA players shoot just one type of jump shot, and often not very well, Irving is a master of two different types of strongside pull-up jump shots. Irving's two different strongside pull-up jump shots are tactically complementary because each one has a different specialty that in combination cover almost all jump shot contingencies. So Irving is almost always able to attack with one or the other of his strongside pull-up jump shots. On top of that, Irving's jump shot diversity includes the ability to adapt his whole-body jump shots to long-range, mid-range and short-range distances.

Update: In the years since he dominated the 2016 NBA Finals with his jump shot diversity, it appears that Kyrie Irving has replaced his whole-body reachup jump shot with an elbow-in-push jump shot. Irving's elbow-in-push jump shot is forward oriented, so it works as an effective tactical counterbalance to Irving's laterally-oriented whole-body reachback jump shot, which keeps his jump shot diversity intact. But there is a performance problem. Although it is hard to quarrel with Irving's jump shot diversity no matter its make-up, the opinion here is that replacing the vertically athletic reachup jump shot with the somewhat compressed, low-starting and low-finishing elbow-in-push jump shot has downgraded Irving's jump shot attack capability. In other words, the somewhat compressed, low-starting and low-finishing elbow-in-push jump shot effectively makes Irving smaller than he is in reachup mode. Whichever way it is described, without the fully-extended reachup release Irving is less able to quickly and decisively attack and dominate the defense with the jump shot. Instead, elbow-in-push Irving resorts to dazzling but time- and energy-consuming ballhandling routines to create jump shot opportunities inferior to those the reachup jump shot facilitates at a faster, more teamwork-friendly speed. As to why Irving replaced his whole-body reachup jump shot with an elbow-in-push jump shot, it could be that over time he simply bought into the elbow-in shooting position more and more.