

## **JUMP SHOT THEORY: THE OLD VS THE NEW**

*By Robert Tiltz*

The old but still prevailing jump shot theory does not have a name. Because its major components are the elbow-in shooting position, the forearm stroke and the wrist snap, I call it the elbow-in-strokesnap jump shot theory. My new jump shot theory reflects my analyses of the greatest jumpshooters in NBA history and their jump shots. For reasons that will become evident, I call the whole-body jump shot theory. Both theories will be evaluated in terms of how well they work off the dribble at mid-range with primary focus on the strongside pull-up jump shot, which, when well executed, is by far the best attack jump shot. Because pulling up off strongside moves and run-ups requires a jump shot with a high level of athleticism and power, those are the main criteria by which the two jump shot theories will be judged.

The shooting stance/position is where the comparison of the old and the new jump shot theories will begin. The elbow-in strokesnap jump shot's shooting position is designed for the control of direction. For precision, the elbow-in shooting position points the shooting elbow at the basket. But the aligned-with-the-basket elbow-in shooting position sets up too far out front, which disconnects the strokesnap release from the jumpshooter's body. The elbow-in shooting position also sets up at right angles to the squared-to-the-basket shoulders, which locks in the direction of the jump shot but also, in combination with an external rotation of the shooting hand that is required to locate it behind or underneath the basketball, thoroughly stiffens the elbow-in-strokesnap jump shot. The out front, right-angled construction of the elbow-in shooting position effectively removes the body's athleticism and power from the elbow-in-strokesnap jump shot and replaces it with locked-in stiffness and weakness. Therefore it is fair to say that the elbow-in-strokesnap jump shot's athleticism and power get off to a poor start.

The whole-body shooting stance/position varies with the several different whole-body jump shots. The two foremost are the whole-body elbow-out jump shot, which specializes in strongside forward and moderately angled strongside lateral pull-ups, and the whole-body reachback jump shot, which specializes in strongside lateral pull-ups at moderate and extreme angles. The elbow-out and the reachback whole-body jump shots have different shooting positions, but both are designed for athleticism and power. The shooting position for both whole-body jump shots locates the start of the release forehead-high or higher and within the scope of the body, either close in front for the elbow-out or farther back for the reachback. Either way, the locations of the whole-body shooting positions advance athleticism and power. The whole-body shooting position advances athleticism because the arm action that raises the basketball to the whole-body forehead-high-or-higher shooting positions helps to power the jump of the jump shot and because locating the shooting position within the scope of the body streamlines the shooting stance. The whole-body shooting position advances power because a close-to-the-body or farther back start of the release allows for a full extension of the shooting arm. In addition, the close-in-front or farther back whole-body shooting positions automatically roll the shooting shoulder back for power and to channel, via forward rotation of the shooting shoulder during the release, the athleticism and power of the jump into the release.

Next comes the release of the jump shot. The elbow-in strokesnap jump shot's release mainly consists of only a forearm stroke and a wrist snap, which are relatively small and weak power production techniques. Consequently, the strokesnap release has poor power and related control problems. The poor power of the strokesnap release often results in overall control problems

because attempts to compensate for the weak release with greater exertion lead to excessive effort that frequently disrupts shooting mechanics and shooting form.

The strokesnap release causes other problems too. Initiating the strokesnap release from a pointed-at-the-basket, right-angled elbow-in shooting position is OK for accuracy on stationary standing-start shots, but an impediment when trying to shoot off-the-dribble strongside pull-up jump shots. Delegating control to the fingertips and the fingerpads of the shooting hand is an obsolete vestige of the two-hand set shot era when the release was two-handed. The fingertips and the fingerpads of one hand are too small and too weak to control the jump shot. The arcing motion of the strokesnap release unnecessarily complicates the jump shot's already challenging airborne calculus of direction and distance.

The release of whole-body jump shots is sourced from the shooting shoulder, which must first roll back to activate as a source of whole-body athleticism and whole-body power by way of engagement with the release mechanism. Then the shooting shoulder rotates forward to help power the release along with full extension of the shooting arm including a stretched-out forearm stroke. The shooting hand should lead the extension of the shooting arm straight into the arc of the jump shot. Toward the end of the straightstroke extension of the shooting arm, the shooting hand should brush the basketball to fine-tune distance, to generate backspin for touch and to soften the shot by slowing its velocity. The forward rotation of the shooting shoulder during the whole-body release is a primary power source for the rotation of the square-in-the-air jump that many strongside pull-up jump shots require and all could use. And the forward rotation of the shooting shoulder during the whole-body release is the dynamic that channels the athleticism and the power of the jump of the jump shot into the release of the whole-body jump shots. There are structural and mechanical differences in the release of the two whole-body jump shots. Those differences account for the differences in their performance specialties.

To a great extent, the whole-body jump shots rely on the shooting hand for control. The shooting hand exercises control through its bent-back half-hand shooting grip. The initial bent-back half-hand grip sets up on top of the basketball soon after it is grabbed off the strongside dribble. The initial bent-back half-hand grip automatically evolves into the underneath bent-back half-hand shooting grip when the basketball is raised to the shooting position for the start of the release. The shooting hand controls direction for both whole-body jump shots by leading the extension of the shooting arm during the release. The shooting hand should remain bent back until near the end of the extension of the shooting arm during the release. At that point, brushing the basketball with the shooting hand, which is the whole-body jump shot theory's ultimate control technique, reverses the backward bend of the shooting hand as it fine-tunes distance, generates backspin for touch and slows velocity.

After comparing the old but still prevailing elbow-in-strokesnap jump shot theory and my new whole-body jump shot theory two conclusions stand out. First, the whole-body jump shots are far superior because of their athleticism and power and their brushing hand action control. Second, the physical demands of pulling up off strongside moves and run-ups that the elbow-in-strokesnap jump shot cannot handle are actually beneficial to the whole-body jump shots.