



Watch the on-going coverage of this year's MLB Playoffs and one of the hot topics with commentators is tipping pitches. During one of the pre-game shows on Fox Sports 1 last week, Alex Rodriguez applauded former teammate Carlos Beltran for his masterful work in discovering wrist/glove angle variations on an opposing pitcher.

We can see hitters giggling and whispering in the dugout as they share intel to teammates, or opponents scouring over video footage with the hope of identifying any sort of trait that may predict pitch type. Certainly this is an advantage to the hitter when the information pans out, at least until the pitcher fixes any perceived mistakes. At the minor league and college levels, tipping pitches can be an even greater problem.

In addition to third-party help, great hitters—or good hitters during a "hot streak"—also have to trust their own eyes for clues that video or teammates can't see. What do the best "eyes" in the game do to gain an advantage in these pitcher-hitter battles?

Besides video scouting and dugout angles of pitchers, elite hitters also see "stuff" live from the batter's box that gives them an advantage prior to the pitcher's release. Hitters will regularly be asked after a great at-bat what pitch was thrown or how they knew they were getting a certain type of pitch. Often, the hitter will answer something along the lines of, "I don't know" or "I don't recall."

Make no mistake about it, though. A hitter's visual search strategy (VSS) saw something that the brain perceived to be of importance at that given time. Because the hitter can't articulate or remember what they saw only confirms that much of visual processing and decision-making occurs at the subconscious level. Put another way, a hitter's ability to stay in open focus—a non-judgmental visual mechanism that allows the eyes to process whatever is important at a certain time—during the pitcher's delivery allows for pre-pitch intel to show up in their swing decision.

Recent research and clinical studies regarding gaze locations and scan paths of top-level athletes reveal a constant scanning and curiosity search strategy before the action occurs. Specifically, elite athletes wander further away from the release point or striking point of the opposing player in an effort to gain crucial information before the ball is released. Conversations related to what, when and how hitters are paying attention to prior to the "action" is becoming the the norm within the industry. It also explains how hitters, at times, can stay "visually neutral" longer during ball flight based on the visual cues seen before the ball enters the "tunnel."



The slow-motion ball flights seen during televised games seem to suggest that the fastball and slider are staying on the exact same path for an extended period of time. This is not entirely accurate. The tunnel concept pitchers and commentators talk about is not as narrow and tight as described. Variations in ball angles, shapes and directions early in ball flight are still available to hitters that front-side track—or position their field of vision slightly in front of the ball for better tracking efficiency—and avoid the hard focus as the ball is released.

Be careful telling struggling hitters to "see the spin." While some hitters swear they see spin—what they are actually seeing are movement patterns from a specific spin—other hitters are regressing with this advice, as it tends to restrict hitters' field vision and creates an over-fixation—or hard focus—on the ball. Once the hitter switches to narrow or fine focus, the eyes lose valuable information—spatial awareness and angle shifts of the ball—which explains why offspeed pitches, in particular, get hitters to miss or chase. While watching the current MLB Playoffs, how many times did we see hitters swing and miss at sliders out of the strike zone? There are many reasons why, but one of the reasons is that the visual intel they used to make a decision on when and where to swing was slightly off.

Listed below is a sampling of tips shared by hitting and pitching coaches on what to watch for during live or video reviews of opposing pitchers.

- Rubber posture
- Back-leg flex in balance
- Glove angles on break
- Eye drops
- Breathing patterns
- Back-side peeks
- Glove height
- Arm slot
- Wrist curl
- Elbow pinch
- Shoulder levels
- Knee height and speed
- Stride toe angle
- Glove swim lines
- Head tilt
- Facial tension
- Hold times
- Blink rates
- Exit angles

Hitters need to continue to take advantage of video and other people's observations when it comes to gathering intel on pitch-tipping. But with that in mind, hitters also need to trust their eyes and realize that the best intel they receive after barreling up a changeup or refusing to chase a slider will never be shared or talked about.