



COMMAND AND WHERE IT IS DECIDED

The Firing *Point*

Command is not settled at release. It is settled at foot contact, the last stable frame before everything spins, and the variability people try to drill out of the arm turns out to be the mechanism that saves the pitches that started wrong.

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Chasing a repeatable release is chasing the wrong frame. **The frame that predicts where the ball goes is the one where the front foot lands.**

What happens after that is too fast to steer and, more importantly, is where the athlete's late corrections live. Driveline's command work found that consistency in a couple of specific positions at foot plant tracked with how far pitchers missed by, while variability nearer release was associated with *better* command rather than worse. Which inverts the usual instruction: make the entry consistent and leave the exit alone.

The funnel

A useful model for what a good delivery actually does with variation.

Wide at the top

THE ENTRY

Leg lift, stride and the whole approach vary pitch to pitch, and that is fine. Nobody starts identically and trying to is a waste of attention on the phase that matters least.

Narrow in the middle

FOOT CONTACT, THE FIRING POINT

Everything converges here. Varied entries funnel into a consistent firing position. This is the frame where consistency has been associated with smaller miss distance, and it is the only place repeatability is worth coaching.

Wide again at the bottom

THE RELEASE

Diverges deliberately. Late adjustments at the arm and hand compensate for whatever was slightly off earlier. Variability in the arm near peak layback and in how the hand turns at release was associated with **better** command, because that is the correction happening.

Why this matches the sequencing research

The same shape shows up in joint coordination work: the chest and hips settle to their minimum variability *before* foot contact, while the shoulder does not settle until peak layback. Skilled pitching is not less variability, it is variability organised so that the base is repeatable and the arm carries the adjustment.

Two independent lines of evidence, same conclusion. **Repeatable in the base, adjustable in the arm.**

What to make consistent

Two positions specifically, at one frame.

AT FOOT CONTACT

Glove shoulder height

Where the glove side shoulder sits at the moment the front foot lands. Consistency here correlated significantly with miss distance in Driveline's analysis.

It is also a position most pitchers have never thought about, which makes it unusually available to work on.

AT FOOT CONTACT

Chest lean, side to side

How far the torso is tilted laterally at the same instant. Same finding: consistency tracked with smaller misses.

Note that both of these are **front side** positions. Command work turns out to be glove arm work more than throwing arm work.

What not to chase

DO NOT Drill a repeatable release point Some release variation is the correction mechanism working. Removing it removes the thing that rescues a pitch that started slightly wrong, and the miss gets bigger rather than smaller.	DO NOT Cue strikes during development work Accuracy pressure produces a linear, chest first, pushing arm action. It is on Tread's list of causes for a pushing arm for exactly this reason, and it costs velocity to buy command it does not actually deliver.	DO NOT Standardise the windup The entry to the funnel is supposed to be wide. Attention spent making leg lift identical is attention not spent on foot contact.
DO NOT Add cues mid delivery Reactive cueing after a missed pitch multiplies fast. Driveline documented one athlete's single focus becoming seven separate mechanical thoughts, which prevents learning rather than accelerating it.	DO NOT Treat every miss as mechanical If the intention is clear and the target is specific, missed attempts are the athlete searching for a movement solution, not evidence that something is broken.	DO NOT Assume command and velocity trade off They interact rather than trade. Velocity buys margin for error, which is a different relationship and it changes what you should spend training time on.

Velocity buys margin

Which axis he is short on decides where the time goes

A high velocity arm can carry average command, because the hitter has less time to solve a mistake. A below average velocity arm needs command that is genuinely good, because every mistake is available to be hit.

That is not an argument for ignoring command on hard throwers. It is an argument for **knowing which axis is the constraint** before allocating a training block. A pitcher at 88 with fringe command has two problems and the cheaper one to fix may not be the one being worked on.

It also reframes the usual worry about velocity programs costing command. The relevant question is whether the total package improved, not whether one of the two numbers moved backward temporarily.

How to train it

STEP 1

Measure the right frame

Command work starts with capturing foot contact, front on, across a session rather than on one pitch.

- **Glove shoulder height and chest lean at foot contact**, pitch to pitch
- Look at the **spread** across pitches, not the average position
- Compare that spread against miss distance in the same session
- Capture release variability separately, and expect it to be higher. That is not the problem

STEP 2

Build repeatability into the entry, not the exit

The target is arriving at the same firing position from whatever the approach happened to be.

- Constraint drills that force a consistent landing position rather than cueing one
- Varied entries on purpose, converging to the same foot contact, which trains the funnel rather than a single pattern
- Glove side work, since both predictive positions are front side

STEP 3

Coach intention, not mechanics

Driveline's model separates the two: mechanical work belongs in plyo ball and drill work, and mound work belongs to intention.

- **Outward focused cues** — throw through the catcher's glove — rather than body part instructions
- Let the athlete own which mechanical question is being worked on rather than supplying a new one per pitch
- Keep mechanical adjustments out of the throwing session that is supposed to be about competing

STEP 4

Fix the things that make foot contact inconsistent

A landing position that varies is usually varying for a reason further upstream.

- **Stride direction and length**, since a landing that wanders makes every position at that frame wander
- **Front hip range**, because a hip that cannot rotate produces a different landing each time depending on how much he compensates
- **Glove arm behaviour**, which is directly one of the two predictive positions
- **Fatigue**, since the landing drifts across an outing and takes command with it

Sources

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- Driveline — [The Interaction of Biomechanics and Command](#)
 - Skilled pitching is not less joint variability but better structured joint variability, SportRxiv
 - Driveline — [A Different Model for Cueing Pitching Mechanics](#)
 - Driveline — [Pitching Assessments and Changing Mechanics](#)
 - Tread Athletics — [How to Fix a Pushing Arm Action, strike cueing as a cause](#)
 - Relationship of Glove Arm Kinematics With Established Pitching Kinematic and Kinetic Variables
 - ASMI — [The Clinician's Guide to Baseball Pitching Biomechanics](#)
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Consistent where the foot lands, adjustable where the ball leaves. The second half is the part that saves pitches.