Coordination Fallacy

Style-based teaching assumes one visible pattern is the mechanical standard. A second-order error appears when that assumption meets a stroke it cannot explain: an unconventional-looking swing that nonetheless produces reliable results.

The error is not treating one pattern as standard—it is what happens next. Rather than revising the assumption that the visible pattern is the mechanism, the observer preserves it by assigning causal priority to a compensating trait: the golfer's success is attributed to exceptional hand-eye coordination or natural feel, standing in for mechanics the observer cannot locate. The unfamiliar swing is read as evidence that mechanics were absent, and the personal trait fills the explanatory gap left by the failed model.

This confuses appearance with mechanism. A stroke can look unlike an instructional norm because it is a different configuration of the same underlying mechanical problem, not because mechanics were dispensed with. If that configuration still satisfies Balance, Constraint, and Alignment, the stroke is mechanically organized regardless of its resemblance to any teaching system's preferred visual pattern.

The sequence to follow is therefore not to treat an unusual-looking swing as evidence of deficient or absent mechanics that extraordinary coordination then compensates for. It is to recognize the swing as a different mechanical configuration, and then determine whether that configuration satisfies the governing constraints.

Hand-eye coordination cannot supply the missing mechanism in real time. The interval available during the release is too short for a mechanical deviation to be detected through visual or proprioceptive feedback, processed, converted into a corrective motor command, and expressed through the hands soon enough to reconstruct the geometry that has already been lost. Once the club is in motion, the release interval is ballistic: the golfer is executing an organization established beforehand, not repairing it through sensory feedback while it unfolds. Coordination can express an organized stroke; it cannot substitute for the mechanical organization the stroke requires. Offsetting conflicting alignments consumes energy that would otherwise produce speed: “tremendous energy can be consumed in trying to offset conflicting alignments, without ever achieving the player’s full speed potential” (Kelley p. 38).

A late corrective force also cannot simply reposition the clubhead. The club already carries angular momentum, so any corrective torque applied to redirect its center of gravity simultaneously perturbs its rotational state. The attempted correction therefore creates an additional rotational consequence rather than restoring the original relationship cleanly. What is commonly attributed to extraordinary hand-eye coordination must therefore be explained upstream, in the organization of the stroke itself.

A golfer’s consistent results do not explain themselves. The task is to identify the mechanical relationships that make those results repeatable.