

LESSONS LEARNED FROM



# THE DEBRIEF

BY JON BECKER

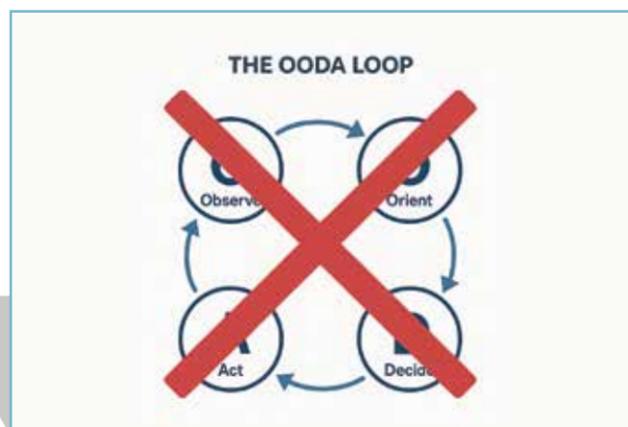
## BEYOND THE LOOP: WHY EVERYTHING YOU KNOW ABOUT OODA MAY BE WRONG

In episode 65 of *The Debrief*, I sat down with Mark McGrath, a former Marine artillery officer who has dedicated years to studying and teaching John Boyd's work. McGrath's mission is to preserve Boyd's doctrine and ensure practitioners understand the real OODA framework, not the reductionist, linear interpretation that has proliferated through tactical and business circles. What he said challenged the popular conception of OODA (a simple circular diagram cycling through Observe, Orient, Decide, Act) and made it clear this view is not merely incomplete — it's just plain wrong.

For modern tactical operators, this distinction matters. According to McGrath, the linear "OODA loop" builds brittle systems that will collapse under pressure. In his words, "You won't be able to see changes in the environment, much less respond to them." Understanding Boyd's actual work, especially the concept of orientation, can mean the difference between mission success and catastrophic failure.

### Orientation is primary

McGrath emphasizes that orientation is not one component among four; it is the component that matters most. "Orientation is a human's cognitive operating system ..." he says. "It shapes what we notice, value, believe and think is possible. Observation, decision and action are merely out-



This type of linear OODA loop diagram has led to a great deal of misunderstanding about what Boyd actually meant.

puts of its current configuration. Orientation is not one box in a sequence; it is the nervous system of adaptation."

Many of us think whoever spins the loop fastest wins the fight. Nothing could be further from the truth. What really matters is how accurately your orientation aligns with reality and how quickly you adjust it to new circumstances. Speed helps only when it is aimed by correct orientation.

Boyd believed humans must continuously deconstruct and reconstruct their mental models, which he termed "correspondence to reality." Think of updating a device's operating system: Failure to continuously revise one's cognitive framework results in vulnerability to emerging threats and operational failure.

In Boyd's 1995 OODA "loop" sketch, orientation is the largest object and occupies the central position. McGrath teaches that orientation functions as "a high-level model of the human brain: stuff goes in (observations, experience, signal); other stuff comes out (action selection, hypothesis formation). And in between? Judgment. Filtering. Repertoire. Projection. Pattern-matching."

### What shapes your orientation

Orientation is comprised of your genetic heritage, cultural traditions, previous experiences, new information, and most critically, analytical and synthetic capabilities, the capacity for destruction and creation. As Boyd wrote, orientation is "an interactive process of many-sided implicit cross-referencing projections, empathies, correlations, and rejections." This is how humans detect mismatches and adapt under ambiguity.

McGrath uses a straightforward illustration: "My worldview derives from my upbringing as an Army dependent. I attended secondary school in Pittsburgh. I maintain season tickets for the Pittsburgh Steelers. I harbor antipathy toward the Cleveland Browns. These attitudes stem from my orientation, my cultural tradition, upbringing and previous experience. When I observe a Steelers-Browns contest, I perceive a positive outcome because Pittsburgh prevailed. Individuals from Cleveland, possessing different orientations, will examine identical facts and reach entirely different conclusions."

For tactical operators, this has profound implications. An experienced SWAT operator with 3,500 high-risk entries possesses an orientation that renders certain threat indicators immediately recognizable. A novice officer observing the identical situation processes it through an entirely different cognitive framework. The veteran's orientation has been continuously refined through feedback, making pattern recognition nearly automatic.

### How orientation drives action

McGrath teaches that orientation shapes observations and actions through what Boyd called "implicit guidance and control." This proves critical for understanding how elite operators function: "We do not think our way through every decision. Under pressure, trained orientation maps cues to action."

This explains why immediate-action drills work. Tactical operators practice specific responses until they become automatic. When threats manifest, these operators transition directly from observation to action because their orientation responds reflexively. As McGrath notes: "We live in the present moment. That's when action happens. That's when judgment must perform. And the most decisive moves are the ones you don't need to consciously decide, because your orientation is already doing the work."

Superior orientation enables minimal cognitive processing between perception and action, freeing mental capacity for reorientation. However, McGrath warns of the vulnerability this creates: The same foundation that enables rapid, appropriate responses to familiar threats can produce inappropriate responses to novel situations.

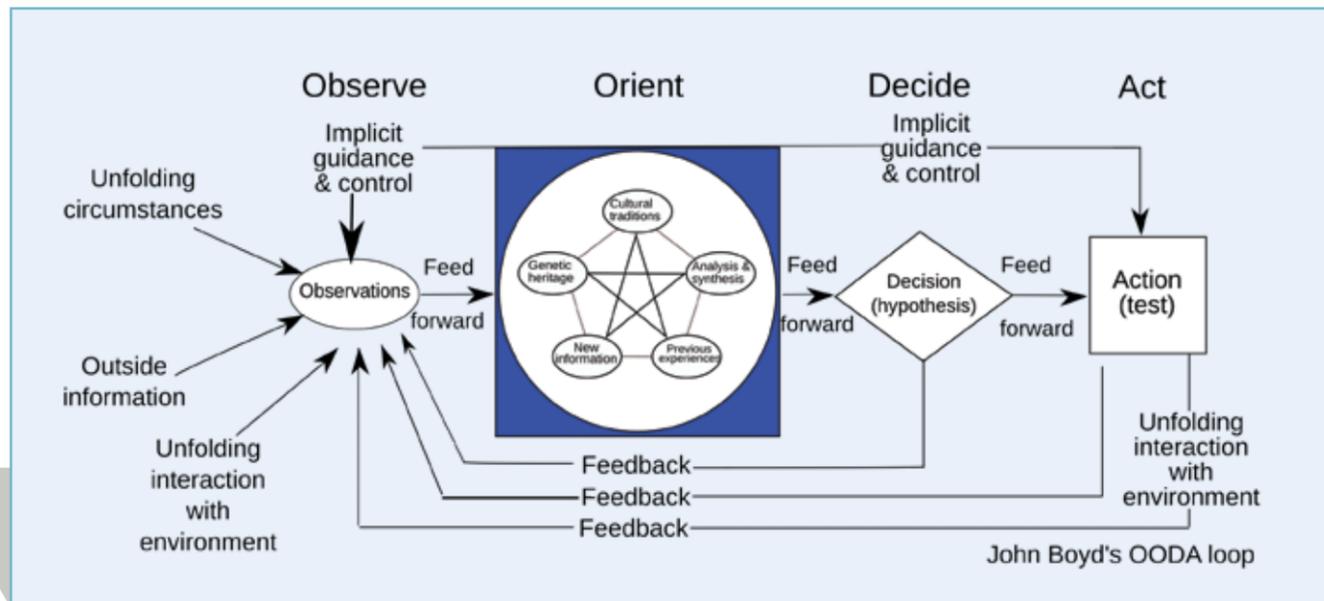
### Decisions as hypotheses, actions as tests

McGrath emphasizes a crucial principle: "You never have the full picture. You never will. Treat every decision as a hypothesis; every action as a test that feeds orientation."

This reframes the entire decision-action relationship. In the linear interpretation of OODA, operators stop to observe, stop to orient, stop to decide, stop to act, then start over. McGrath argues this is precisely how you lose: "The enemy is trying to make you freeze. Don't do their job for them. Keep moving. Keep testing. Keep adjusting."

Treat each action as a probe that generates feedback, not as a final commitment requiring perfect information. As McGrath explains: "Strategy is not about certainty. It's about continuous experimentation under fire." The feedback from actions flows directly back into orientation, enabling rapid adjustment. This is why McGrath insists that "if you're not reorienting, you're not orienting." The system must remain in constant motion, continuously testing assumptions against reality.

**SUPERIOR ORIENTATION ENABLES MINIMAL COGNITIVE PROCESSING BETWEEN PERCEPTION AND ACTION, FREEING MENTAL CAPACITY FOR REORIENTATION.**



Actual OODA loop sketch as drawn by Boyd. Note the central and key role of orientation, as well as the implicit guidance and control of orientation over action and observation.

**The double-edged sword**

Here's where things get interesting. Your orientation can be both your greatest asset and your fatal weakness. Experience makes you better at sensing threats and opportunities, but it can also blind you to novel situations. An orientation optimized for one set of circumstances may prove inadequate when those circumstances change fundamentally.

McGrath used the example of Kodak, which invented digital photography in the 1970s but killed it because their orientation, shaped by decades of success in film, couldn't adapt to the new reality. "Think of really successful board members with houses in the Hamptons, apartments on Fifth Avenue, great stock options, golden parachutes. These kids are coming in telling us about digital photography. How did my success at Kodak orient me when something novel that seemed risky appeared? I can orient to reality, or I can orient to my own comfort, my own biases."

This is why diversity of perspective matters. McGrath explains that Boyd's concept reveals the mechanism behind effective team decision-making: "A team's orientation is a multitude of perspectives. If you're at a firm where diversity means we look different, but we all think alike, versus we look different, think different, talk different, act different, see the world differently, that diversity is unstoppable. That's orientation."

**The challenge of rapid reorientation in dynamic operations**

Boyd's theoretical framework finds its concrete expression in tactical situations. Hostage rescue operations present

particularly difficult challenges for reorientation, as circumstances can shift from barricade containment to immediate crisis intervention, or from crisis intervention to containment, with minimal warning.

Standard tactical training prepares teams for specific scenarios: barricade situations, hostage rescue, active threats. What gets less attention is the transition between these scenarios, the moments when teams must fundamentally shift their operational framework. Two recent operations covered on The Debrief illustrate these challenges and demonstrate why orientation matters more than speed.

**Pierce County, Washington (EP 63): Immediate upshift to crisis entry**

On Nov. 17, 2023, Pierce County Sheriff's Office SWAT, supported by Kitsap County SWAT and Washington State Patrol SWAT, responded to a barricaded homicide suspect. The operation proceeded methodically for seven hours according to established barricade protocols. Teams utilized armored vehicles to contain the suspect who had fired on officers early in the incident. The suspect's girlfriend, a non-cooperative domestic violence victim, had been safely evacuated early on and transported to a hotel miles away. Teams successfully contained the threat, eventually pinning the suspect's vehicle inside the garage with the suspect in it.

At 10 a.m., circumstances changed instantaneously. The previously secured victim voluntarily breached the perimeter and entered the garage. Within 60 seconds, she was pulled into the vehicle with the suspect holding a firearm to her head. The teams were forced to transition from a barricade



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operation to an immediate hostage rescue under extremely challenging conditions: a debris-filled garage with minimal clearance around the pinned vehicle.

For seven hours, the teams' orientation had been appropriately calibrated for patient, methodical containment. When the victim unexpectedly returned, successful resolution required complete tactical reorientation within seconds rather than hours.

Unfortunately, in the ensuing crisis entry the hostage was hit in the crossfire and died, as did the suspect. The operation demonstrates the extraordinary difficulty of rapid reorientation under operational stress. These teams had all trained extensively for both barricade operations and hostage rescues as distinct problems. The instantaneous and unexpected transition between modalities was a reorientation requirement that exceeded the parameters of standard training scenarios.

**Surprise, Arizona (EP56): Immediate downshift to barricade operations**

On May 17, 2024, Surprise Police Department SWAT confronted the challenge of recognizing when immediate crisis intervention should transition to deliberate operations. A suspect had taken his former girlfriend and their 7-month-old infant hostage, killed the family dog and threatened both victims. When the woman escaped, officers discovered the suspect actively shooting from the residence into neighboring homes.

The team executed an immediate crisis entry with patrol officers augmenting SWAT operators. Moving through the structure, they located the infant in an overturned bouncer. The child had sustained four gunshot wounds and required immediate medical intervention.

This moment represented a critical decision point. Should they immediately downshift from crisis operations to deliberate containment or continue to pursue the suspect dynamically? Despite having operational momentum deep within the structure without suspect contact, the team recognized achievement of their primary objective: securing the hostage. As a result, they immediately downshifted back to a barricade posture. As Officer Travis Carpalo explained: "We have separation ... We can take this out of the house, and we've got tools and training and tactics to handle this properly and safely."

The reorientation was immediately shared with the entire team as one operator transmitted: "Everybody calm down. Slow down. We are down to barricade procedures." This conscious reset transformed the operational tempo from crisis intervention to deliberate containment. The team withdrew with the infant, transitioned to barricade posture and secured the perimeter. The suspect ultimately perished in a fire he started. The infant survived.

The Surprise Police Department operation demonstrates successful reorientation under conditions that typically preclude deliberate decision-making. The team's orientation, shaped by training, doctrine and a clear understanding of the desired end state, enabled recognition that continuing crisis operations did not make sense. Their capacity to reorient from hostage rescue to barricade operations mid-mission, against physiological and psychological momentum, exemplifies orientation guiding action even under extreme stress.

**What these operations teach us**

Pierce County required instantaneous upshift from deliberate to crisis operations. The Surprise Police Department required immediate downshift from crisis to deliberate operations. Both validate McGrath's emphasis on orientation as the critical component. Execution speed proved less determinative than accuracy of orientation. The Pierce County teams moved with appropriate speed, yet circumstances demanded reorientation at a tempo that challenged even experienced operators and placed the team at a significant disadvantage. The Surprise PD team was able to use orientation to enable deceleration when circumstances warranted. Obviously, it is more complex to immediately upshift into a crisis entry than to downshift away from one but, in either case, orientation drives the correct course of action.

**What your team can do to improve orientation**

McGrath's guidance emphasizes rejecting the circular linear tactical model in favor of understanding the actual complexity of the OODA framework. Rather than pursuing speed of decisions, focus should center on building effective orientation, both individual and organizational. The goal isn't cycling faster, but more accurately aligning with reality. McGrath suggests several things teams can do to enhance their operational orientation.

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**IT IS MORE COMPLEX TO IMMEDIATELY UPSHIFT INTO A CRISIS ENTRY THAN TO DOWNSHIFT AWAY FROM ONE BUT, IN EITHER CASE, ORIENTATION DRIVES THE CORRECT COURSE OF ACTION.**



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**1. Make orientation central to your operations and planning**

Stop treating orientation as one step in a sequence. Make it the foundation of how your team prepares, decides and acts.

Start every planning session by explicitly discussing orientation: What do we think we're dealing with? What assumptions are we making? What have we learned from similar situations?

In briefings, don't just cover the tactical plan. Cover the team's shared understanding of the situation. What indicators matter? What could change our understanding? The goal is to calibrate the team's orientation before anyone makes entry.

After operations, judge yourselves first on orientational accuracy before judging tactical execution. Speed and precision matter, but only if they're applied to the right problem.

Build a culture where updating your mental model is valued, not seen as weakness. The team that can say "We were wrong, here's what we see now" will outperform the team that commits to the first guess and rides it into the ground.

**2. Train for transitions between mission states:**

**Be ready to change**

Most training builds skill sets for distinct problems: barricade, hostage rescue, vehicle assault or active threat. This is necessary, but not sufficient. The shift between mission states is its own skill. Train it on purpose.

**Write recognition cues.** Create a list of triggers that tell you the fight just changed. Keep it short and blunt.

**Assign authority.** Name who owns the call to upshift or downshift. Make it a role, not the loudest voice.

**Standardize language.** Pick short phrases that cannot be confused. "Back to barricade." "Upshift to crisis." "Reset." Train the same phrases in pre-briefs, live runs and AARs.

**Run repetitions under stress.** Put the team in scenarios where the mode flips at the worst time. Build the habit of changing minds cleanly at speed.

**3. Use debriefs and after-actions to calibrate your orientation**

Most teams do AARs. Few use them to shape orientation on purpose. This is something easy to fix. Start by asking: What did we think the fight was? When did it change? What signs told us? Who saw them? What will we notice sooner next time?

Pay attention to the cues you discover and build them in the next brief. Over time you build a living list that fits your team. That list isn't borrowed doctrine; it's experience turned into guidance.

Also, reward the moment someone called a reset that wasn't popular. Reward the moment someone voiced an early indicator that mattered. If you want people to speak up, make it safe to be early even if this is occasionally wrong.

**4. Invest in cognitive diversity and avoid groupthink**

A team's orientation is the sum of its perspectives. If everyone thinks alike, you've created a blind spot that adversaries can exploit. You want people who notice different things, ask different questions and reject stale answers.

While safety protocols remain non-negotiable, leaders should encourage creative problem-solving. Excessive conformity breeds predictability, which is exactly what opponents want. The key is developing teams that can synthesize new solutions when existing doctrine doesn't fit the situation.

**Conclusion**

McGrath's central message challenges decades of tactical training: Boyd's OODA framework is far more than a decision cycle. It's "a living abstraction, a dynamic model of how orientation generates perception, decision, action and adaptation in conditions of stress, ambiguity and conflict."

The circular diagram that populates tactical manuals isn't just incomplete; it actively misleads. "To treat the OODA 'loop' as a checklist is to intentionally blind yourself," McGrath argues. "That framing builds brittle systems that collapse under pressure. You won't be able to see changes in the environment, much less respond to them."

The real power of Boyd's work lies in understanding that orientation shapes observation and action, that it requires continuous revision, and that "the capacity to deconstruct and reconstruct mental models, to synthesize novel solutions from disparate elements, distinguishes successful organizations from failed ones." Victory doesn't come from cycling through steps faster. It comes from continuously reorienting quicker than opponents while acting more effectively.

Understanding Boyd's real work, particularly that "orientation is not one box in a sequence, it is the nervous system of adaptation," provides tactical operators with the cognitive framework necessary for survival and success. As McGrath puts it simply: "You're either reorienting or you're irrelevant."

*Acknowledgement:* The author thanks Mark McGrath for his assistance with this article. His patience in explaining (and re-explaining) Boyd was truly appreciated.

**RESOURCES TO LEARN MORE**

- No Way Out Podcast (Mark McGrath)
- The Whirl of Reorientation (Substack)
- Boyd: The Fighter Pilot Who Changed the Art of War by Robert Coram
- AGLX Consulting: AGLX.com
- Destruction and Creation (Boyd, 1976)
- Science, Strategy and War: The Strategic Theory of John Boyd (Frans P.B. Osinga)

# KEY TAKEAWAYS

1

**REJECT THE LINEAR MODEL:**  
OODA is not a circular loop.

2

**ORIENTATION IS EVERYTHING:**  
Your orientation shapes what you observe and how you act.

3

**SPEED DOESN'T KILL, ORIENTATION DOES:**  
Moving fast in the wrong direction is worse than moving slowly in the right one.

4

**CONSTANTLY REORIENT:**  
Your mental models must be continuously revised to match new realities.

5

**SEEK DIVERSE PERSPECTIVES:**  
A team's orientation is the sum of its perspectives.

6

**REWARD INNOVATION:**  
Don't punish creative thinking. Conformity breeds predictability.

7

**READ THE SOURCE MATERIAL:**  
Start with Boyd's "Destruction and Creation" (1976).



**VICTORY DOESN'T COME FROM CYCLING THROUGH STEPS FASTER. IT COMES FROM CONTINUOUSLY REORIENTING QUICKER THAN OPPONENTS WHILE ACTING MORE EFFECTIVELY.**