



by Nate Bump

In our modern world, complexities abound. As a result, many assume more specialists focusing on challenges like 'strategic competition' is the answer. However, evidence supports officers specializing as generalists via a multidisciplinary method of thinking can offer an asymmetric advantage against a backdrop of wicked problem sets.

This post will not advocate for abolishing specialization in the military; however, the necessity to identify, develop and recognize the utility of our military's multidisciplinary leaders at all levels, ranks, and functions in an era of increasing uncertainty offers a pathway to recapture our competitive advantage in the cognitive domain.

### **Complexity and Uncertainty in the Globalized Landscape**

The [2022 National Defense Strategy \(NDS\) Fact Sheet](#) lists 'Integrated Deterrence' as the central concept intending to advance the Defense Department's goals. This entails:

"...developing and combining our strengths to maximum effect, by working seamlessly across warfighting domains, theaters, the spectrum of conflict, other instruments of U.S. national power, and our unmatched network of Alliances and partnerships."

Integrated Deterrence then is a holistic, interconnected approach to confront a host of challenges driving the necessity for all leaders to operate with, and in, complexity. The new transregional, in this sense, is the entire world! Additionally, the newly released [National Security Strategy](#) (NSS) themes continue in this vein, listing a host of interrelated global challenges the US must confront while using the phrase “Allies and Partners” 47 times (nearly once per page!).

Beyond the NDS and NSS, [NATO's Strategic Concept 2022](#) embraces the central role of transregional, multi-domain threats and the imperative to counter non-region state actors such as China seeking closer alignment with traditional regional adversaries like Russia. NATO, including more non-traditional challenges, and the alliance's acknowledgment of increasing complexity across multiple domains, is entirely new. The approach also demands a unique view on leading...one in which complexity and uncertainty are not only accounted for, and par for the course no matter your 'core specialty.'

Even in regions like U.S. Southern Command, where DoD's 'operational footprint' is low, a military imperative exists to counter nuanced, complex, and uncertain threats. Whether it's transnational organized crime, irregular migration, natural disasters, or external state actor influence, there has never been more demand for a multidisciplinary approach in a relatively peaceful, non-kinetic region. Focusing on the Western Hemisphere, [Dr. Evan Ellis argues](#) “DoD must also develop new strategic concepts for its role as part of an internationally coordinated, whole-of-government effort against such rivals [non-region state actors] in the hemisphere.”

This confluence of factors from state, non-state, intergovernmental, and multi-national sources presents the ideal ground for a multidisciplinary leadership approach.

These examples illustrate the necessity to have leaders who, at their core, are 'seamless' in their mindset and training to effectively confront increasingly complex threats as deep specialization can be a liability when put up against dynamic challenges. In the next section, I will highlight the [research](#) and case studies from the likes of Dr. Phil Tetlock and Daniel Epstein confirming generalists outperform their specialist counterparts in good judgment and decision-making precisely because they lack the 'cognitive blinders' (aka biases) coming with deep specialization as complexity and uncertainty increase.

## **The Tale of the Fox and the Hedgehog**

Although the generalist concept isn't novel, recent works on the subject bring to light new insights about its effectiveness. Phil Tetlock rekindles [the idea of the fox and hedgehog](#) in

his book [Superforecasting](#). With decades of research and [several books on judgment and decision-making](#), he shows non-expert 'super forecasters' (foxes) perform exceptionally better than specialists (hedgehogs) when answering prediction questions across a spectrum of complex issues.

Another surprising result of Tetlock's work showed as experts accrued more knowledge within their field, the more dogmatically (and disastrously at times) they held onto original positions despite the emergence of new evidence unsupportive of their long-held views! Conversely, super forecasters' synthesized and updated mindset, especially when collaborating, consistently outperformed expert hedgehogs answering questions within their specialty. And although this was an exercise in prediction, it shows how those [using a particular model of thinking](#) can make more accurate decisions and thus exercise better judgment.

Beyond showing the cognitive agility of foxes to consistently and accurately forecast events, the book describes how fox traits translate to a tradition of superior military leadership and thinking. Using [Field Marshal Helmuth von Moltke's](#) Prussian model of developing military officers via a liberal arts education focusing on critical thinking, Tetlock describes how the Prussian model harmonized an officer's independent thinking with the necessity of taking decisive action. The Germans dubbed this *Auftragstaktik*, what we know today as Mission Command. These officers would become emblematic of the Prussian General Staff model and an example of traits for military strategists of today to cultivate.

From a leadership perspective, Tetlock proposes "[the] super forecaster model can help make good leaders superb and the organizations they lead smart, adaptable, and effective." In both cases of super forecasters and Prussian military officer development, the key to their superior performance is not what they think, but HOW.

More recent evidence of the fox approach comes via [Range](#) by David Epstein who offers a host of poignant examples highlighting how generalists excel vis-à-vis specialists. This is particularly true as complexity or uncertainty increases. Essentially, generalists who pursue a multidisciplinary path early on are more adept at working in, and through, complexity or uncertainty. They are also some of the most successful specialists in the long run. Paradoxically, many of history's best specialists were first classically trained generalists ranging from the great German astronomer Kepler to tennis legend Roger Federer. Epstein also pays homage to and builds on Tetlock's super forecasting work when he describes foxes as those who "take ravenously from specialists and integrate their views."

These habits of mind and decision-making models are traits all leaders can develop. Below

are some attributes found in the 'foxiest of foxes' identified not only by Tetlock but [a host of works on polymathic learning](#) for leaders to consider for increasing their range and improving performance in complex and uncertain scenarios.

### **Philosophic Outlook**

*NOTHING is certain.* Foxes are cautious but not to the point of paralysis. Foxes acknowledge upfront that they and those they lead cannot know everything. Thus, their constant imperative is to harmonize what is known with what must be done to achieve success.

*Reality is infinitely complex.* Multidisciplinary leaders feed off a host of sources for learning. From the arts, science, and philosophy they remain ardent in understanding complexity as a part of the world around us. They recognize historical patterns but do so through a lens of utilizing them as broad indicators vice a perfect fit for the problem at hand.

### **Abilities and Thinking Styles**

*When information or assumptions change, they change.* Foxes are [Actively Open-Minded](#): Despite the inclination to seek out what confirms their already-held beliefs, they can change course in the face of new evidence.

*Be intellectually Curious...about nearly everything.* Multidisciplinary leaders are constantly observing, reading, writing, and thinking about the world around them. They are genuinely interested in just about any subject able to stimulate their intellectual side. They harness and direct their curiosity to discover new insights for old and new problems alike. Military officers have a unique opportunity to maintain their curiosity mindset given most change jobs or roles within units annually.

*Be reflective, introspective, and self-critical.* Foxes are constantly reflecting on what they miss when results do not match their expectations. They will typically start with themselves and first ask, 'what did I miss?'

### **Methods**

- Pragmatic: Not wedded to any theoretical idea or agenda
- Analytical: Stepping back and considering other views
- 'Dragonfly-eyed': Value diverse views and synthesize them into their own
- Collaborative: Effective team builder and information sharer

- Intuitive psychologists: Value checking thinking for cognitive or emotional biases

Multidisciplinary leaders consider the host of views on a particular subject and will take from others what they deem most relevant on a case-by-case basis. They are self-aware of their own cognitive and emotional biases and will work to identify and lessen teammate biases in a team-based approach.

### **Developing Fox Skillsets**

One of the biggest obstacles to leveraging multidisciplinary thinking is our society's baked-in incentives for specializing early (quickest path to high income, status, and large-scale efficiencies, to name a few). The military, especially in the first five to seven years of an officer's career, is no different as its requirements demand subject matter experts at the tactical and operational levels. So, what can be done to lure the foxes out of their system-imposed hedgehog ways? Also, what about those hedgehogs? How can we effectively leverage both types of leaders while encouraging them to harmonize the positive aspects of each style?

*Understand what's NOT on the official record.* Leaders study official records, but many times it is exactly what is not in subordinates' written records where clues to their strengths lie. For example, just because their undergraduate degree (or even their postgraduate degree) is within a specific field doesn't mean their current interests line up. Further, are you observing subordinates voluntarily learning or developing skills outside their current specialty or role outside regular duty hours? Big picture—don't assume their record matches their interests...ask, task, and observe.

*Consider the level of complexity or uncertainty in tasks.* Leaders who understand task complexity can better match the right personnel with a higher tolerance for the inevitable uncertainty. They can also pair those lacking this tolerance with more 'foxy' individuals if there is sufficient time and low risk for 'operational reps' to improve.

*Create intellectual development space.* A significant barrier to encouraging fox traits like curiosity is the seemingly large amount of time leaders must provide without giving much detail as to what personnel are to do with it. Our task-oriented culture often demands detailed objectives or a specific deliverable from a professional development program or event (reading a book, doing a presentation, etc.). However, polymathic learning and development need time and the endorsement of authority (i.e., YOU). Further, given the ability of individuals to quickly access and study diverse information thanks to technology, self-directed learning can take place quicker and better than ever before. We must

recognize the return on investment for self-directed, multidisciplinary learning will likely not emerge for months or even years in most people just as vital, long-term unit projects conclude many times well after leaders depart an assignment. However, once it does come to fruition the payoffs can be exponential.

### **Be the Fox AND the Hedgehog**

Bottom line—leaders must operate on a fox-hedgehog spectrum as it's essential to consider what types of challenges you're undertaking to achieve specific results as our operating environment becomes increasingly complex and uncertain. Today, this is vital even at the tactical level given the enduring necessity of developing specialists who can carry out mission-type orders to effectively achieve military objectives. Further, military leaders must strive to cultivate a multidisciplinary culture of learning and exploring complex problems if we seek to adequately confront the seemingly disparate yet interconnected challenges of our modern world.

*Lt Col Nate Bump currently serves on the Air Force Staff with a focus on international affairs in the Europe, NATO, and Russia region. He is a Mobility Air Forces pilot, and SOUTHCOM Foreign Area Officer, writing previously on the subjects of [foundational leadership behaviors](#) and [squadron command](#). He is also an aspiring multidisciplinary leader and can be reached via his LinkedIn profile <https://www.linkedin.com/in/nate-bumpa095b310/>*

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